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

DaimlerChrysler Corporation
2004 Chrysler Pacifica MPV
NHTSA Number: C40307
TRC Inc. Test Number: S040419

Transportation Research Center Inc.
10820 State Route 347
East Liberty, OH 43319

Test Date: April 19, 2004
Report Date: April 30, 2004

Final Report

Prepared For:
U. S. Department of Transportation
National Highway Traffic Safety Administration
Enforcement
Office of Vehicle Safety Compliance (NVS-220)
400 Seventh Street, S.W., Room No. 6115
Washington, DC 20590
This Final Test Report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, under Contract No. DTNH22-03-D-01002.

This publication is distributed by the U. S. Department of Transportation, National Highway Traffic Safety Administration, in the interest of information exchange. The opinions, findings, and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade or manufacturers' names or products are mentioned, it is only because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

Test Performed By: Ronald D. Stoner, Engineering Technician

Report Approved By:

Jeffery W. Sankey, Manager Project Operations
Transportation Research Center Inc.

Final Report Accepted By:

Contracting Officer’s Technical Representative (COTR),
NHTSA, Office of Vehicle Safety Compliance
An FMVSS 208 Section 13 compliance sled test was conducted on a 2004 Chrysler Pacifica MPV, NHTSA No.C40307, in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP208S-01 for the determination of FMVSS 208 compliance. Possible test failures identified were as follows:

None
# Table of Contents

<table>
<thead>
<tr>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>1</td>
</tr>
<tr>
<td>Test Procedure</td>
<td>2</td>
</tr>
<tr>
<td>Test Results Summary</td>
<td>3</td>
</tr>
<tr>
<td>Sled Test Summary</td>
<td>6</td>
</tr>
<tr>
<td>General Test and Vehicle Parameter Data for the Sled Test Vehicle</td>
<td>7</td>
</tr>
<tr>
<td>Post-Impact Data</td>
<td>11</td>
</tr>
<tr>
<td>Seat and Steering Column Positioning Data</td>
<td>12</td>
</tr>
<tr>
<td>Dummy Measurement Data for Front Seat Occupants</td>
<td>13</td>
</tr>
<tr>
<td>Vehicle Accelerometer Placement</td>
<td>18</td>
</tr>
<tr>
<td>Vehicle Data Summary and Accelerometer Locations</td>
<td>19</td>
</tr>
<tr>
<td>Vehicle Targeting Measurements</td>
<td>21</td>
</tr>
<tr>
<td>Camera Positions</td>
<td>22</td>
</tr>
<tr>
<td>Motion Picture Camera Locations</td>
<td>23</td>
</tr>
<tr>
<td>FMVSS 208 Occupant Injury Data</td>
<td>24</td>
</tr>
<tr>
<td>FMVSS 208 Certification Label and Tire Placard Information</td>
<td>26</td>
</tr>
<tr>
<td>FMVSS 208 Rear Outboard Seating Position Seat Belts</td>
<td>27</td>
</tr>
<tr>
<td>FMVSS 208 Air Bag Labels</td>
<td>28</td>
</tr>
<tr>
<td>FMVSS 208 Readiness Indicator</td>
<td>39</td>
</tr>
<tr>
<td>FMVSS 208 Passenger Air Bag Manual Cut-Off Device</td>
<td>40</td>
</tr>
<tr>
<td>FMVSS 208 Lap Belt Lockability</td>
<td>43</td>
</tr>
<tr>
<td>FMVSS 208 Seat Belt Warning System Check</td>
<td>58</td>
</tr>
<tr>
<td>FMVSS 208 Belt Contact Force</td>
<td>60</td>
</tr>
<tr>
<td>FMVSS 208 Latch Plate Access</td>
<td>72</td>
</tr>
<tr>
<td>FMVSS 208 Seat Belt Retraction</td>
<td>80</td>
</tr>
<tr>
<td>FMVSS 208 Seat Belt Guides and Hardware</td>
<td>86</td>
</tr>
<tr>
<td>Appendix A - Photographs</td>
<td>A-1</td>
</tr>
<tr>
<td>Appendix B - Data Plots</td>
<td>B-1</td>
</tr>
<tr>
<td>Appendix C - Manufacturer Provided Test Information</td>
<td>C-1</td>
</tr>
<tr>
<td>Appendix D - Miscellaneous Test Information</td>
<td>D-1</td>
</tr>
</tbody>
</table>
List of Photographs

<table>
<thead>
<tr>
<th>Figure</th>
<th>Photograph Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-1.</td>
<td>Pre-Test Front View of Test Vehicle Mounted to Sled</td>
<td>A-2</td>
</tr>
<tr>
<td>A-2.</td>
<td>Pre-Test Left Side View of Test Vehicle Mounted to Sled</td>
<td>A-3</td>
</tr>
<tr>
<td>A-3.</td>
<td>Pre-Test Right Side View of Test Vehicle Mounted to Sled</td>
<td>A-4</td>
</tr>
<tr>
<td>A-4.</td>
<td>Pre-Test Windshield View</td>
<td>A-5</td>
</tr>
<tr>
<td>A-5.</td>
<td>Post-Test Windshield View</td>
<td>A-6</td>
</tr>
<tr>
<td>A-6.</td>
<td>Pre-Test Driver Dummy Position View with Door Open</td>
<td>A-7</td>
</tr>
<tr>
<td>A-7.</td>
<td>Post-Test Driver Dummy Position View with Door Open</td>
<td>A-8</td>
</tr>
<tr>
<td>A-8.</td>
<td>Pre-Test Driver Seat Track Position View</td>
<td>A-9</td>
</tr>
<tr>
<td>A-10.</td>
<td>Pre-Test Driver Dummy Position Front View</td>
<td>A-11</td>
</tr>
<tr>
<td>A-11.</td>
<td>Post-Test Driver Dummy Position Front View</td>
<td>A-12</td>
</tr>
<tr>
<td>A-12.</td>
<td>Pre-Test Passenger Dummy Position View with Door Open</td>
<td>A-13</td>
</tr>
<tr>
<td>A-13.</td>
<td>Post-Test Passenger Dummy Position View with Door Open</td>
<td>A-14</td>
</tr>
<tr>
<td>A-14.</td>
<td>Pre-Test Passenger Seat Track Position View</td>
<td>A-15</td>
</tr>
<tr>
<td>A-16.</td>
<td>Pre-Test Passenger Dummy Position Front View</td>
<td>A-17</td>
</tr>
<tr>
<td>A-17.</td>
<td>Post-Test Passenger Dummy Position Front View</td>
<td>A-18</td>
</tr>
<tr>
<td>A-19.</td>
<td>Post-Test Driver Dummy Removed from Vehicle Overall View</td>
<td>A-20</td>
</tr>
<tr>
<td>A-20.</td>
<td>Post-Test Driver Head Contact - View 1</td>
<td>A-21</td>
</tr>
<tr>
<td>A-21.</td>
<td>Post-Test Driver Head Contact - View 2</td>
<td>A-22</td>
</tr>
<tr>
<td>A-22.</td>
<td>Post-Test Passenger Airbag View</td>
<td>A-23</td>
</tr>
<tr>
<td>A-23.</td>
<td>Post-Test Passenger Dummy Removed from Vehicle Overall View</td>
<td>A-24</td>
</tr>
<tr>
<td>A-24.</td>
<td>Post-Test Passenger Head Contact - View 1</td>
<td>A-25</td>
</tr>
<tr>
<td>A-25.</td>
<td>Post-Test Passenger Head Contact - View 2</td>
<td>A-26</td>
</tr>
<tr>
<td>A-26.</td>
<td>Post-Test Passenger Head Contact - View 3</td>
<td>A-27</td>
</tr>
<tr>
<td>A-27.</td>
<td>Post-Test Passenger Glove Box View</td>
<td>A-28</td>
</tr>
<tr>
<td>A-28.</td>
<td>Pre-Test Steering Column Linkage in Engine Compartment View</td>
<td>A-29</td>
</tr>
<tr>
<td>Figure</td>
<td>Photograph Title</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>A-29.</td>
<td>Post-Test Steering Column Linkage in Engine Compartment View</td>
<td>A-30</td>
</tr>
<tr>
<td>A-30.</td>
<td>Pre-Test Vehicle Certification Label View</td>
<td>A-31</td>
</tr>
</tbody>
</table>
Purpose

This Federal Motor Vehicle Safety Standard (FMVSS) 208 compliance sled test is part of the FMVSS compliance test program conducted for the National Highway Traffic Safety Administration (NHTSA) by the Transportation Research Center Inc. (TRC Inc.) under Contract No. DTNH22-03-D-01002. The purpose of this test was to determine if the subject vehicle, a 2004 Chrysler Pacifica MPV, NHTSA No.C40307, 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 sled test vehicle was instrumented with four (4) accelerometers to measure longitudinal accelerations. The sled was instrumented with one (1) longitudinal accelerometer, which is prefiltered with an analog filter to 200 Hz as an integral part of the sled firing circuit, and two (2) additional accelerometers: the primary accelerometer for pulse and integrated velocity determination and a backup accelerometer. In addition, the sled was instrumented with one (1) light trap to measure velocity and four (4) airbag firing timing circuits.

The sled test vehicle contained two (2) Part 572 E 50th percentile adult male anthropomorphic test devices (dummies). The dummies were positioned in the front outboard designated seating positions according to the dummy placement procedure specified in Appendix B of the Laboratory Test Procedure. The dummies were not restrained by seat belts.

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

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

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

This FMVSS 208 compliance sled test was conducted by TRC Inc. on April 19, 2004.

The test vehicle, a 2004 Chrysler Pacifica MPV, NHTSA No. C40307, does appear 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.

<table>
<thead>
<tr>
<th></th>
<th>FMVSS 208 Max. Allowable Injury Assessment Values</th>
<th>Driver</th>
<th>Passenger</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIC</td>
<td>1000</td>
<td>246</td>
<td>194</td>
</tr>
<tr>
<td>Chest g</td>
<td>60 g</td>
<td>30.7</td>
<td>39.0</td>
</tr>
<tr>
<td>Chest Displacement</td>
<td>3 inches</td>
<td>0.9</td>
<td>0.4</td>
</tr>
<tr>
<td>Left Femur</td>
<td>2250 lbs</td>
<td>658</td>
<td>1084</td>
</tr>
<tr>
<td>Right Femur</td>
<td>2250 lbs</td>
<td>500</td>
<td>957</td>
</tr>
<tr>
<td>Neck Extension</td>
<td>57 Nm</td>
<td>16.8</td>
<td>16.0</td>
</tr>
<tr>
<td>Neck Flexion</td>
<td>190 Nm</td>
<td>58.3</td>
<td>83.7</td>
</tr>
<tr>
<td>Neck Tension</td>
<td>3300 N</td>
<td>775</td>
<td>467</td>
</tr>
<tr>
<td>Neck Compression</td>
<td>4000 N</td>
<td>189</td>
<td>2269</td>
</tr>
<tr>
<td>Neck Shear</td>
<td>3100 N</td>
<td>1052</td>
<td>1460</td>
</tr>
</tbody>
</table>

The subject vehicle, a 2004 Chrysler Pacifica MPV, NHTSA No. C40307, appears to meet the other FMVSS 208 requirements for which it was tested. These results are shown in the data sheets that are included in this report.

The sled test vehicle was equipped with air bags at the driver and passenger seating positions. The dummies were not restrained by seat belts. The sled carriage was accelerated to 16.9 g with an integrated velocity change of 29.6 mph. The primary stages of the airbags were triggered at 20.16 milliseconds after 0.5 g acceleration was measured by the firing circuit. The secondary stages of the airbags were triggered at 25.12 milliseconds after 0.5 g
acceleration was measured by the firing circuit. Following subsequent digital data processing and filtering the acceleration signal to Channel Class 60, the primary stages airbag event trigger signal was 20.72 ms after the 0.5 g acceleration level was indicated and the secondary stages airbag event trigger signal was 25.68 ms after the 0.5 g acceleration level was indicated.
Data Acquisition Explanations

The front view driver and passenger high-speed film cameras ran slower than the requested 1000 frames/s.
Sled Test Summary

NHTSA number: C40307
Test type: Alternate 208
Test date: 04/19/04
Test time: 14:45
Ambient temperature at impact area: 69.5°F

Vehicle year/make/model/body style: 2004/Chrysler/Pacifica/MPV

Dummy Info:
Type: Hybrid III 50th
Location: Left Front
Restraint: Airbag
Number of data channels: 15

Driver #229
Front Passenger #230
Hybrid III 50th
Right Front
Airbag
15

Number of Cameras:
Real-time: 1
High-speed: 6

Door Opening Data:
Left Front: Easy
Right Front: Easy

Front Seat Data:
Seat track failure: None
Seat back failure: None

Visible Dummy Contact Points:
Head: Airbag, sunvisor, headliner
Airbag, sunvisor, windshield, head restraint

Chest: Airbag

Left knee: Knee bolster
Glove box
Right knee: Knee bolster
Glove box
General Test and Vehicle Parameter Data for the Sled Test Vehicle

Test Vehicle Information:
Vehicle year/make/model/body style: 2004/Chrysler/Pacifica/MPV
Color: Silver Metallic
VIN: 2C4GM68464R624863
NHTSA number: C40307

Engine data:
Placement: Transverse
Cylinders: 6
Displacement: 3.5
Transmission data: 4-speed, _manual, X-automatic, X-overdrive
Final drive: _X_fwd, _rwd, _4wd
Date vehicle received: 3/8/2004
Odometer reading: 39
Dealer's name and address: Hardin Motors Inc.
South Main Street
Mt. Victory, Ohio 43340

Major Options:
Power steering: Yes Other: None
Power brakes: Yes
Power windows: Yes
Air conditioning: Yes
Power door locks: Yes

Remarks: None
General Test and Vehicle Parameter Data for the Sled Test Vehicle, Cont'd.

Data from Vehicle's Certification Label:
Vehicle manufactured by: DaimlerChrysler Corporation
Date of manufacture: 02-04
VIN: 2C4GM68464R624863
GVWR: 5700 lbs
GAWR: Front: 2826 lbs
       Rear: 2899 lbs

Data from Vehicle's Tire Placard:
Tire pressure with maximum capacity vehicle load:
   Front: 44 psi
   Rear: 44 psi
Recommended tire size: P235/65R17
Load range: N/A lbs
Recommended cold tire pressure:
   Front: 33 psi
   Rear: 33 psi
Size of tires on vehicle: P235/65R17
Spare tire: T155/90D18
Vehicle capacity data:
Type of front seats: Bucket
Number of occupants:
   Front: 2
   Mid: 2
   Rear: 2
   Total: 6
Remarks: None
General Test and Vehicle Parameter Data for the Sled Test Vehicle, Cont’d.

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

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight (lbs)</th>
<th>Component</th>
<th>Weight (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right front</td>
<td>1203.7</td>
<td>Right rear</td>
<td>955.7</td>
</tr>
<tr>
<td>Left front</td>
<td>1266.5</td>
<td>Left rear</td>
<td>972.2</td>
</tr>
<tr>
<td>Total front</td>
<td>2470.2</td>
<td>(56.2% of total vehicle weight)</td>
<td></td>
</tr>
<tr>
<td>Total rear</td>
<td>1927.9</td>
<td>(43.8% of total vehicle weight)</td>
<td></td>
</tr>
<tr>
<td>Total delivered</td>
<td>4398.1</td>
<td>lbs</td>
<td></td>
</tr>
</tbody>
</table>

Calculation of test vehicle's target test weight:

\[ \text{RCLW} = \text{Rated Cargo and Luggage Weight} \]
\[ \text{UDW} = \text{Unloaded Delivered Weight (4398.1 lbs)} \]
\[ \text{DSC} = \text{Designated Seating Capacity (6)} \]
\[ \text{RCLW} = 300.0 \text{ lbs} \]
\[ \text{Target test weight} = \text{UDW} + \text{RCLW} + (\text{Number of Hybrid III dummies } \times 167 \text{ lbs per dummy}) \]
\[ \text{Target test weight} = 4398.1 + 300.0 + 334.0 = 5032.1 \text{ lbs} \]

Weight of test vehicle with two dummies and 298.8 lbs of cargo weight:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight (lbs)</th>
<th>Component</th>
<th>Weight (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right front</td>
<td>1276.4</td>
<td>Right rear</td>
<td>1191.6</td>
</tr>
<tr>
<td>Left front</td>
<td>1325.0</td>
<td>Left rear</td>
<td>1237.9</td>
</tr>
<tr>
<td>Total front</td>
<td>2601.4</td>
<td>(52% of total vehicle weight)</td>
<td></td>
</tr>
<tr>
<td>Total rear</td>
<td>2429.5</td>
<td>(48% of total vehicle weight)</td>
<td></td>
</tr>
<tr>
<td>Total test</td>
<td>5030.9</td>
<td>lbs</td>
<td></td>
</tr>
</tbody>
</table>

Remarks:

Weight of ballast secured in vehicle cargo area: None

Components removed to meet target test weight: None
General Test and Vehicle Parameter Data for the Sled Test Vehicle, Cont'd.

Test Vehicle Attitude:
As delivered door sill angle: 1.4° Nose down
As tested door sill angle: 1° Nose down
Fully loaded door sill angle: 0.5° Nose down
Vehicle Wheelbase: N/A inches

Fuel System Data:
Fuel system capacity from owner's manual: 23 gallons
Useable capacity figure furnished by COTR: 23.0 gallons

Remarks: The roll angle measurements were within 1 inch of each other.
The left and right side measurements were 33.9 inches and 33.9 inches respectively.
Post-Impact Data

Test number: S040419
NHTSA number: C40307
Test date: 04/19/04
Test time: 14:45
Test type: Alternate 208
Impact angle: 0°
Ambient temperature at impact area: 69.5° F
Temperature in occupant compartment: 69.5° F

Sled carriage velocity:
Integrated velocity from the integration of the entire sled acceleration: 29.6 mph
Measured velocity from the light trap device attached to the sled (backup): 29.0 mph
Specified integrated velocity range: 28 to 30 mph

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

Sled carriage acceleration duration:
Time from T-0(-0.5 g) to 0.0 g: 126.0 ms
Specified acceleration duration: 120 - 130 ms

The sled acceleration curve was within the specified corridor.
Seat and Steering Column Positioning Data

Vehicle: 2004/Chrysler/Pacifica/MPV
NHTSA No.: C40307

Nominal Design Riding Position:

Driver Seat: Seat Back Angle = 20.9°
Passenger Seat: Seat Back Angle = 20.1°

Seat Fore and Aft Positions:

Driver Seat: Set to the middle of the available fore/aft travel
Passenger: Set to the middle of the available fore/aft travel

Steering Column Adjustments:

Set to 9° down from highest locked position. Total range for vehicle is 20°.
## Dummy Measurement Data for Front Seat Occupants

<table>
<thead>
<tr>
<th>Designation</th>
<th>Type of Measurement</th>
<th>Driver (Serial #229)</th>
<th>Passenger (Serial #230)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WA</td>
<td>Windshield angle</td>
<td>27.8°</td>
<td>N/A</td>
</tr>
<tr>
<td>SWA</td>
<td>Steering wheel angle</td>
<td>67.7°</td>
<td>N/A</td>
</tr>
<tr>
<td>SCA</td>
<td>Steering column angle</td>
<td>22.3°</td>
<td>N/A</td>
</tr>
<tr>
<td>SA</td>
<td>Seat back angle</td>
<td>20.9°</td>
<td>20.1°</td>
</tr>
<tr>
<td>HZ</td>
<td>Head to roof</td>
<td>9.4 in</td>
<td>7.8 in</td>
</tr>
<tr>
<td>HH</td>
<td>Head to header</td>
<td>14.3 in</td>
<td>14.4 in</td>
</tr>
<tr>
<td>HW</td>
<td>Head to windshield</td>
<td>25.4 in</td>
<td>24.4 in</td>
</tr>
<tr>
<td>HR</td>
<td>Head to side header</td>
<td>9.1 in</td>
<td>7.9 in</td>
</tr>
<tr>
<td>NR</td>
<td>Nose to rim</td>
<td>15.7 in</td>
<td>N/A</td>
</tr>
<tr>
<td>NA</td>
<td>Nose to rim angle</td>
<td>7.7°</td>
<td>N/A</td>
</tr>
<tr>
<td>CD</td>
<td>Chest to dash</td>
<td>19.8 in</td>
<td>21.6 in</td>
</tr>
<tr>
<td>CS</td>
<td>Steering wheel to chest</td>
<td>12.8 in</td>
<td>N/A</td>
</tr>
<tr>
<td>RA</td>
<td>Rim to abdomen</td>
<td>6.9 in</td>
<td>N/A</td>
</tr>
<tr>
<td>KDL</td>
<td>Left knee to dash</td>
<td>6.3 in</td>
<td>5.7 in</td>
</tr>
<tr>
<td>KDR</td>
<td>Right knee to dash</td>
<td>5.7 in</td>
<td>7.1 in</td>
</tr>
<tr>
<td>KDA</td>
<td>Outboard knee to dash angle</td>
<td>47.0°</td>
<td>27.3°</td>
</tr>
<tr>
<td>PA</td>
<td>Pelvis angle</td>
<td>24.3°</td>
<td>22.6°</td>
</tr>
<tr>
<td>TA</td>
<td>Tibia angle</td>
<td>48.9°</td>
<td>42.0°</td>
</tr>
<tr>
<td>KK</td>
<td>Knee to knee</td>
<td>10.6 in</td>
<td>10.6 in</td>
</tr>
<tr>
<td>ST(^1)</td>
<td>Striker to head</td>
<td>22.8 in</td>
<td>23.8 in</td>
</tr>
<tr>
<td></td>
<td>Striker to head angle</td>
<td>78.1°</td>
<td>84.7°</td>
</tr>
<tr>
<td>SK(^1)</td>
<td>Striker to knee</td>
<td>2.6 in</td>
<td>25.4 in</td>
</tr>
<tr>
<td></td>
<td>Striker to knee angle</td>
<td>0.5°</td>
<td>-0.5°</td>
</tr>
<tr>
<td>SH(^1)</td>
<td>Striker to H-point</td>
<td>10.2 in</td>
<td>9.2 in</td>
</tr>
<tr>
<td></td>
<td>Striker to H-point angle</td>
<td>26.2°</td>
<td>15.1°</td>
</tr>
<tr>
<td>SHY</td>
<td>Striker to H-point (Y dir.)</td>
<td>11.0 in</td>
<td>11.0 in</td>
</tr>
<tr>
<td>HS</td>
<td>Head to side window</td>
<td>15.0 in</td>
<td>14.0 in</td>
</tr>
<tr>
<td>HD</td>
<td>H-point to door</td>
<td>4.9 in</td>
<td>4.4 in</td>
</tr>
<tr>
<td>AD</td>
<td>Arm to door</td>
<td>6.9 in</td>
<td>6.0 in</td>
</tr>
</tbody>
</table>

The seat back angle (SA°) is measured relative to vertical.
All other angles are measured relative to horizontal.
\(^1\) A negative angle indicates the measurement point was located below the striker.
Dummy Measurement Locations for Front Seat Occupants
Descriptions of Dummy Measurements

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

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

* HH  Head to Header, taken from the point where the dummy’s nose meets his forehead (between his eyes) to the furthest point forward on the header.

* HW  Head to Windshield, taken from the point where the dummy’s nose meets his forehead (between his eyes) to a point on the windshield. Use a level.

HZ  Head to Roof, taken from the point where the dummy’s nose meets his forehead (between his eyes) to the point on the roof directly above it. Use a level.

* CS  Steering Wheel to Chest, taken from the center of the steering wheel hub to the dummy’s chest. Use a level.

* CD  Chest to Dash, place a tape measure on the tip of the dummy’s chin and rotate five inches of it downward toward the dummy to the point of contact on the transverse center of the dummy’s chest. Then measure from this point to the closest point on the dashboard either between the upper part of the steering wheel between the hub and the rim, or measure to the dashboard placing the tape measure above the rim, whichever is a shorter measurement. See diagram.

RA  Steering Wheel Rim to Abdomen, taken from the bottommost point of the steering wheel rim horizontally rearward to the dummy. Use a level.

NR  Nose to Rim, taken from the tip of the dummy’s nose to the closest point on the top of the steering wheel rim. Also indicate the angle this line makes with respect to the horizontal (NA).

* Measurement used in Data Tape Reference Guide
Descriptions of Dummy Measurements, Cont'd.

*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 diagram.

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 diagram.

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

HS  Head to Side Window, taken from the point where the dummy's nose meets his forehead (between his eyes) to the outside of the side window. In order to make this measurement, roll the window down to the exact height which allows a level measurement. Use a level. See diagram.

* AD  Arm to Door, taken from the outer surface of the elbow pivot bolt on a Hybrid II dummy to the first point it hits on the door. In the case of a Hybrid III dummy, measure from the bolt on the outer biceps. When a SID is used make the measurement from the center of the bottom of the arm segment where it meets the dummy's torso.

* HD  H-point to Door, taken from the H-point on the dummy to the closest point on the door. Use a level.

* HR  Head to Side Header, measure the shortest distance from the point where the dummy's nose meets his forehead (between his eyes) to the side edge of the header just above the window frame, directly adjacent to the dummy.

* Measurement used in Data Tape Reference Guide
1 Only outboard measurement is referenced in Data Tape Reference Guide
Descriptions of Dummy Measurements, Cont’d.

SHY Striker to H-point, taken from a rod rigidly connected to the forward most center point on the striker to the H-point. Use a level. See diagram.

KK Knee to Knee, for Hybrid II dummies measure the distance between knee pivot bolt head outer surfaces. For Hybrid III dummies measure the distance between the outboard knee clevis flange surfaces. (This measurement may not be exactly transverse.)

Angles

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

PA Pelvis or Femur Angle, taken by inserting the pelvic angle gauge into the H-point gauging hole on the SID or the Hybrid III dummies and taking this angle with respect to the horizontal. Measure the angle of the line connecting the H-point hole and the outer knee pivot bolt hole on a Hybrid II dummy with respect to the horizontal, to find the femur angle.

SWA Steering Wheel Angle, find this by placing a straight edge against the steering wheel rim along the longitudinal plane. Then measure the acute angle of the straight edge with respect to the horizontal.

SCA Steering Column Angle, measured with respect to the horizontal by placing an inclinometer on the center of the underside of the steering column.

NA Measure the angle made when taking the measurement NR with respect to the horizontal.

KDA Knee to Dash Angle, the angle that the measurement KD is taken at with respect to the horizontal. Only get this angle for the outboard knee. See diagram.

WA Windshield Angle, place an inclinometer along the transverse center of the windshield exterior (measurement is made with respect to horizontal).

TA Tibia 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.

* Measurement used in Data Tape Reference Guide
### Vehicle Data Summary and Accelerometer Locations

<table>
<thead>
<tr>
<th>TEST NUMBER: S040419</th>
<th>X</th>
<th>Y</th>
<th>Z</th>
<th>POSITIVE DIRECTION¹</th>
<th>NEGATIVE DIRECTION¹</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NO. LOCATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 SLED ACCELERATION</td>
<td>165.6 in</td>
<td>-1.0 in</td>
<td>NA</td>
<td>0.6 g @ 155.1 ms</td>
<td>16.9 g @ 56.4 ms</td>
</tr>
<tr>
<td>PRIMARY</td>
<td></td>
<td></td>
<td></td>
<td>0.7 g @ 149.0 ms</td>
<td>17.0 g @ 56.9 ms</td>
</tr>
<tr>
<td>2 SLED ACCELERATION</td>
<td>165.6 in</td>
<td>-1.0 in</td>
<td>NA</td>
<td>0.7 g @ 149.0 ms</td>
<td>17.0 g @ 56.9 ms</td>
</tr>
<tr>
<td>BACKUP REDUNDANT</td>
<td></td>
<td></td>
<td></td>
<td>0.7 g @ 149.0 ms</td>
<td>17.0 g @ 56.9 ms</td>
</tr>
<tr>
<td>3 SLED VELOCITY</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0.0 mph @ 9.8 ms</td>
<td>29.0 mph @ 145.2 ms</td>
</tr>
<tr>
<td>MEASURED INTEGRATED²</td>
<td></td>
<td></td>
<td></td>
<td>29.5 mph @ 145.9 ms</td>
<td></td>
</tr>
<tr>
<td>4 LEFT BODY AT REAR</td>
<td>56.9 in</td>
<td>-17.3 in</td>
<td>NA</td>
<td>2.0 g @ 131.4 ms</td>
<td>17.8 g @ 59.8 ms</td>
</tr>
<tr>
<td>SEAT LONGITUDINAL</td>
<td></td>
<td></td>
<td></td>
<td>2.0 g @ 131.4 ms</td>
<td>17.8 g @ 59.8 ms</td>
</tr>
<tr>
<td>5 RIGHT BODY AT</td>
<td>56.1 in</td>
<td>17.3 in</td>
<td>NA</td>
<td>1.9 g @ 131.4 ms</td>
<td>17.8 g @ 60.4 ms</td>
</tr>
<tr>
<td>REAR SEAT</td>
<td></td>
<td></td>
<td></td>
<td>1.9 g @ 131.4 ms</td>
<td>17.8 g @ 60.4 ms</td>
</tr>
<tr>
<td>LONGITUDINAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 TOP ENGINE</td>
<td>175.4 in</td>
<td>1.2 in</td>
<td>NA</td>
<td>6.3 g @ 136.6 ms</td>
<td>19.1 g @ 51.4 ms</td>
</tr>
<tr>
<td>LONGITUDINAL</td>
<td></td>
<td></td>
<td></td>
<td>6.3 g @ 136.6 ms</td>
<td>19.1 g @ 51.4 ms</td>
</tr>
<tr>
<td>7 REAR AXLE</td>
<td>38.0 in</td>
<td>0.0 in</td>
<td>NA</td>
<td>2.7 g @ 131.0 ms</td>
<td>18.3 g @ 59.4 ms</td>
</tr>
<tr>
<td>LONGITUDINAL</td>
<td></td>
<td></td>
<td></td>
<td>2.7 g @ 131.0 ms</td>
<td>18.3 g @ 59.4 ms</td>
</tr>
<tr>
<td>8 DRIVER PRIMARY AIR</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1.0 volt @ 20.7 ms</td>
<td>1.0 volt @ 20.7 ms</td>
</tr>
<tr>
<td>BAG EVENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Vehicle Data Summary and Accelerometer Locations, Cont’d.

<table>
<thead>
<tr>
<th>TEST NUMBER: S040419</th>
<th>X</th>
<th>Y</th>
<th>Z</th>
<th>POSITIVE DIRECTION(^1)</th>
<th>NEGATIVE DIRECTION(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 DRIVER SECONDARY</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1.0 volt @ 25.7 ms</td>
<td>---</td>
</tr>
<tr>
<td>AIRBAG EVENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 PASSENGER PRIMARY</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1.0 volt @ 20.7 ms</td>
<td>---</td>
</tr>
<tr>
<td>AIRBAG EVENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 PASSENGER SECONDARY</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1.0 volt @ 25.7 ms</td>
<td>---</td>
</tr>
<tr>
<td>AIRBAG EVENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 DRIVER KNEE</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1.0 volt @ 20.7 ms</td>
<td>---</td>
</tr>
<tr>
<td>BOLSTER AIRBAG EVENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

\(^1\) Sign convention per SAEJ211 March 1995.  
\(^2\) No positive data in time frame of interest.
Vehicle Targeting Measurements

REFERENCE PHOTO TARGETS

LEFT SIDE VIEW
Camera Positions

Top View

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

Real-Time Camera

Left Side View
# Motion Picture Camera Locations

Vehicle year/make/model/body style: 2004/Chrysler/Pacifica/MPV  
NHTSA No.: C40307  
Test Number: S040419

<table>
<thead>
<tr>
<th>Camera Number</th>
<th>View</th>
<th>Camera Positions¹</th>
<th>Camera Angle²</th>
<th>Film Plane to Head Target</th>
<th>Camera Lens</th>
<th>Film Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pre- and Post-Test panning and documentary</td>
<td>94.2 in 304.4 in 47.0 in</td>
<td>-1.1°</td>
<td>287.0 in</td>
<td>6.7 mm</td>
<td>30 frames/s</td>
</tr>
<tr>
<td>2</td>
<td>Left side view wide</td>
<td>75.0 in 73.1 in 61.1 in</td>
<td>5.2°</td>
<td>54.5 in</td>
<td>13 mm</td>
<td>1000 frames/s</td>
</tr>
<tr>
<td>3</td>
<td>Left side view over shoulder</td>
<td>97.8 in 48.6 in 62.9 in</td>
<td>14.8°</td>
<td>34.5 in</td>
<td>8 mm</td>
<td>1150 frames/s</td>
</tr>
<tr>
<td>4</td>
<td>Right side view wide</td>
<td>77.2 in 73.0 in 60.6 in</td>
<td>3.0°</td>
<td>55.7 in</td>
<td>13 mm</td>
<td>1000 frames/s</td>
</tr>
<tr>
<td>5</td>
<td>Right side view over shoulder</td>
<td>99.4 in 48.8 in 61.2 in</td>
<td>12.5°</td>
<td>34.1 in</td>
<td>8 mm</td>
<td>1027 frames/s</td>
</tr>
<tr>
<td>6</td>
<td>Front view - driver</td>
<td>28.7 in 14.6 in 59.4 in</td>
<td>8.7°</td>
<td>53.5 in</td>
<td>8 mm</td>
<td>--³ frames/s</td>
</tr>
<tr>
<td>7</td>
<td>Front view - passenger</td>
<td>29.2 in 16.2 in 60.2 in</td>
<td>4.4°</td>
<td>52.8 in</td>
<td>8 mm</td>
<td>210⁴ frames/s</td>
</tr>
</tbody>
</table>

¹ X: Film plane to front of sled  
₂ Y: Film plane to sled centerline  
₃ Z: Film plane to top of sled  
₄ Angle: Film plane of camera downward from horizontal plane  
₅ Camera ran too slow to time.  
₆ Camera ran slower than 1,000 frames/s desired film speed.
FMVSS 208 Occupant Injury Data

Vehicle: 2004/Chrysler/Pacifica/MPV  NHTSA No.: C40307  Date:04/19/04

<table>
<thead>
<tr>
<th>Maximum Acceleration Values: (g)</th>
<th>Driver Dummy #229</th>
<th>Passenger Dummy #230</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Channel X</td>
<td>-60.4</td>
<td>-51.3</td>
</tr>
<tr>
<td>Head Channel Y</td>
<td>6.8</td>
<td>-24.5</td>
</tr>
<tr>
<td>Head Channel Z</td>
<td>-28.9</td>
<td>30.8</td>
</tr>
<tr>
<td>HEAD RESULTANT</td>
<td>60.7</td>
<td>61.2</td>
</tr>
<tr>
<td>Chest Channel X</td>
<td>-29.9</td>
<td>-36.2</td>
</tr>
<tr>
<td>Chest Channel Y</td>
<td>-3.3</td>
<td>3.8</td>
</tr>
<tr>
<td>Chest Channel Z</td>
<td>12.4</td>
<td>19.0</td>
</tr>
<tr>
<td>CHEST RESULTANT</td>
<td>31.8</td>
<td>39.5</td>
</tr>
</tbody>
</table>

Head Injury Criteria (HIC) Values:

<table>
<thead>
<tr>
<th>HIC</th>
<th>246</th>
<th>194</th>
</tr>
</thead>
<tbody>
<tr>
<td>$t_1 = \text{(ms)}$</td>
<td>114.40</td>
<td>92.16</td>
</tr>
<tr>
<td>$t_2 = \text{(ms)}$</td>
<td>129.84</td>
<td>119.52</td>
</tr>
</tbody>
</table>

The maximum HIC time interval from $t_1$ to $t_2$ is 36 milliseconds.

Chest Injury Criteria (Clip) Values:

<table>
<thead>
<tr>
<th>CLIP (g)</th>
<th>30.7</th>
<th>39.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>$t_1 = \text{(ms)}$</td>
<td>90.59</td>
<td>107.65</td>
</tr>
<tr>
<td>$t_2 = \text{(ms)}$</td>
<td>93.55</td>
<td>110.61</td>
</tr>
<tr>
<td>Chest Deflection (in)</td>
<td>0.9</td>
<td>0.4</td>
</tr>
</tbody>
</table>
**FMVSS 208 Occupant Injury Data, Cont’d.**

Vehicle: 2004/Chrysler/Pacifica/MPV  
NHTSA No.: C40307  
Date: 04/19/04

<table>
<thead>
<tr>
<th>Max. Compressive Femur Forces:</th>
<th>Driver Dummy #229</th>
<th>Passenger Dummy #230</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left Side (lbs)</td>
<td>657</td>
<td>1084</td>
</tr>
<tr>
<td>Right Side (lbs)</td>
<td>499</td>
<td>957</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Neck Injury Criteria:</th>
<th>Driver Dummy #229</th>
<th>Passenger Dummy #230</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak Flexion Bending Moment (N-m)</td>
<td>58.3</td>
<td>83.7</td>
</tr>
<tr>
<td>Peak Extension Bending Moment (N-m)</td>
<td>16.8</td>
<td>16.0</td>
</tr>
<tr>
<td>Peak Axial Tension (N)</td>
<td>775</td>
<td>467</td>
</tr>
<tr>
<td>Peak Axial Compression (N)</td>
<td>189</td>
<td>2269</td>
</tr>
<tr>
<td>Peak Positive X-axis Shear (N)</td>
<td>1052</td>
<td>1460</td>
</tr>
<tr>
<td>Peak Negative X-axis Shear (N)</td>
<td>208</td>
<td>334</td>
</tr>
</tbody>
</table>
DATA SHEET 3
Certification Label and Tire Placard Information

NHTSA No. C40307 Test Date: 03/30/04
Laboratory: TRC Inc. Test Technician(s): Michael S. Postle

1. Certification Label
   Manufacturer DaimlerChrysler Corporation
   Date of Manufacture 02/04
   VIN 2C4GM68646R624863
   Vehicle certified as: Passenger car MPV Truck Bus
   Front axle GVWR 2826 lbs
   Rear axle GVWR 2698 lbs
   Total GVWR 5700 lbs

2. Tire Placard
   N/A – Vehicle is not a passenger car and does not have a tire placard.
   This is not a passenger car (see the item 1 above), but all or part of this information is still contained on a vehicle label and is reported here.
   Vehicle Capacity Weight 1302.9 lbs
   Designated seating capacity front 2
   Designated seating capacity rear 2
   Total Designated seating capacity 6
   Recommended cold tire inflation pressure front 33 psi
   Recommended cold tire inflation pressure rear 33 psi
   Recommended tire size P235/65R17
DATA SHEET 4
REAR OUTBOARD SEATING POSITION SEAT BELTS

NHTSA No. C40307 Test Date: 03/30/04
Laboratory: TRC Inc. Test Technician(s): Ronald Stoner, Michael S. Postle

Do all rear outboard seating positions have type 2 seat belts? Yes X 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 seat belt was not installed.

REMARKS:
DATA SHEET 5
AIR BAG LABELS (S4.5.1)

NHTSA No. C40307 Test Date: 03/30/04

Laboratory: TRC Inc. Test Technician(s): Ronald Stoner, Michael S. Postle

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 air bag?
      __ Yes (Go to 1.2); X No (Go to 2)
   1.2 Does the vehicle have a label specifying air bag maintenance or replacement?
      __ Yes-Pass; __No-FAIL
   1.3 Does the label contain one of the following?
      __ Yes-Pass; __No-FAIL
      Check applicable schedule
      __ Schedule on label specifies month and year (Record date __________)
      __ Schedule on label specifies vehicle mileage (Record mileage ________)
      __ Schedule on label specifies interval measured from date on certification label
      (Record interval __________)
   1.4 Is the label permanently affixed within the passenger compartment such that it cannot be removed without destroying or defacing the label or the sunvisor?
      __ 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?
      __ Height of letters and numerals
      __ Yes-Pass; __No-FAIL
   1.8 Does the owner’s manual set forth the recommended schedule for maintenance or replacement?
      __ Yes-Pass ___No-FAIL

2. Does the owner’s manual: (S4.5.1(f))
   2.1 Include a description of the vehicle’s air bag system in an easily understandable format?
      X Yes-Pass; __No-FAIL
   2.2 Include a statement that the vehicle is equipped with an air bag and a lap/shoulder belt at the front outboard seating positions?
      X Yes-Pass; __No-FAIL
   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 air bag 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 ensure 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
2.7 Is the vehicle certified to meet the requirements of S14.5, S15, S17, S19, S21, S23, and S25?  
(Obtain the answer to this question from the COTR.) (S4.5.1(f)(2))

☐ Yes (go to 2.7.1); ☐ No (go to 3)

2.7.1 Explain the proper functioning of the advanced air bag system? (S4.5.1(f)(2))

☐ Yes-Pass; ☐ No-FAIL

2.7.2 Provide a summary of the actions that may affect the proper functioning of the system?  
(S4.5.1(f)(2))

☐ Yes-Pass; ☐ No-FAIL

2.7.3 Present and explain the main components of the advanced passenger air bag system?  
(S4.5.1(f)(2)(i))

☐ Yes-Pass; ☐ No-FAIL

2.7.4 Explain how the components function together as part of the advanced passenger air bag system? (S4.5.1(f)(2)(ii))

☐ Yes-Pass; ☐ No-FAIL

2.7.5 Contain the basic requirements for proper operation, including an explanation of the actions that may affect the proper functioning of the system? (S4.5.1(f)(2)(iii))

☐ Yes-Pass; ☐ No-FAIL

2.7.6 Is the vehicle certified to the requirements of S19.2, S21.2 or S23.2 (automatic suppression)?

☐ Yes, continue with 2.7.6

☐ No, go to 2.7.7

2.7.6.1 Contain a complete description of the passenger air bag suppression system installed in the vehicle, including a discussion of any suppression zone? (S4.5.1(f)(2)(iv))

☐ Yes-Pass: ☐ No-FAIL

2.7.6.2 Discuss the telltale light, specifying its location in the vehicle and explaining when the light is illuminated?

☐ Yes-Pass; ☐ No-FAIL

2.7.7 Explain the interaction of the advanced passenger air bag system with other vehicle components, such as seat belts, seats or other components? (S4.5.1(f)(2)(v))

☐ Yes-Pass; ☐ No-FAIL

2.7.8 Summarize the expected outcomes when child restraint systems, children and small teenagers or adults are both properly and improperly positioned in the passenger seat, including cautionary advice against improper placement of child restraint systems? (S4.5.1(f)(2)(vi))

☐ Yes-Pass; ☐ No-FAIL

2.7.9 Provide information on how to contact the vehicle manufacturer concerning modifications for persons with disabilities that may affect the advanced air bag system?  
(S4.5.1(f)(2)(vii))

☐ Yes-Pass; ☐ No-FAIL

3. Sun Visor Air Bag Warning Label (S4.5.1 (b)) Check only one of the following:

☐ The vehicle is not certified to meet the requirements of S19, S21, and S23.  
(Obtain the answer to this question from the COTR.) (S4.5.1(b)(1)) Go to 3.1 and skip 3.2 and 3.3

☐ The vehicle is certified to meet the requirements of S19, S21, and S23 before 9/1/03.  
(Obtain the answer to this question from the COTR.) (S4.5.1(b)(2)) Go to 3.2 and skip 3.1 and 3.3

☐ The vehicle is certified to meet the requirements of S19, S21, and S23 on 9/1/03 or later.  
(Obtain the answer to this question from the COTR.) (S4.5.1(b)(3)) Go to 3.3 and skip 3.1 and 3.2

3.1 Vehicles not certified to meet the requirements of S19, S21, and S23.
3.1.1 Is the label permanently affixed (including permanent marking on the visor material or molding into the visor material) to either side of the sun visor at each front outboard seating position such that it cannot be removed without destroying or defacing it? (S4.5.1(b)(1))
   Driver side ___ Yes-Pass ___ No-FAIL
   Passenger side ___ Yes-Pass ___ No-FAIL

3.1.2 Does the label conform in content to the label shown in either Figure 6a or 6b (Figure 6b is for vehicles with passenger air bag on-off switches), as appropriate, at each front outboard seating position? (S4.5.1(b)(1)) (Vehicles without back seats may omit the statement: "The BACK SEAT is the SAFEST place for children." (S4.5.1(b)(1)(iv)))
   Driver side ___ Yes-Pass ___ No-FAIL
   Passenger side ___ Yes-Pass ___ No-FAIL

3.1.3 Is the label heading area yellow with the word "WARNING" and the alert symbol in black? (S4.5.1(b)(1)(i))
   Driver side ___ Yes-Pass ___ No-FAIL
   Passenger side ___ Yes-Pass ___ No-FAIL

3.1.4 Is the message area white with black text? (S4.5.1(b)(1)(ii))
   Driver side ___ Yes-Pass ___ No-FAIL
   Passenger side ___ Yes-Pass ___ No-FAIL

3.1.5 Is the message area at least 30 cm²? (S4.5.1(b)(1)(ii))
   Driver side: Length 8.0, Width 4.2
   Passenger side: Length 8.0, Width 4.2
   Actual message area 34 cm²
   Driver side ___ Yes-Pass ___ No-FAIL
   Passenger side ___ Yes-Pass ___ No-FAIL

3.1.6 Is the pictogram black with a red circle and slash on a white background? (S4.5.1(b)(2)(iii))
   Driver side ___ Yes-Pass ___ No-FAIL
   Passenger side ___ Yes-Pass ___ No-FAIL

3.1.7 Is the pictogram at least 30 mm in diameter? (S4.5.1(b)(2)(iii))
   Actual diameter 31 mm
   Driver side ___ Yes-Pass ___ No-FAIL
   Passenger side ___ Yes-Pass ___ No-FAIL

3.2 Vehicles certified to meet the requirements of S19, S21, and S23 before 9/1/03. (S4.5.1(b)(2))

3.2.1 Is the label permanently affixed (including permanent marking on the visor material or molding into the visor material) to either side of the sun visor at each front outboard seating position such that it cannot be removed without destroying or defacing the label or the sun visor? (S4.5.1(b)(2))
   Driver side ___ Yes-Pass ___ No-FAIL
   Passenger side ___ Yes-Pass ___ No-FAIL

3.2.2 Does the label conform in content to the label shown in Figure 8 or Figure 11 at each front outboard seating position? (S4.5.1(b)(2)) (Vehicles without back seats may omit the statement: "The BACK SEAT is the SAFEST place for children." (S4.5.1(b)(2)(iv)) Vehicles without back seats or the back seat is too small to accommodate a rear-facing child restraint may omit the statement "Never put a fear-facing child seat in the front." (S4.5.1(b)(2)(vi)))
   Driver side ___ Yes-Pass ___ No-FAIL
   Passenger side ___ Yes-Pass ___ No-FAIL

3.2.3 Is the label heading area yellow with the word "WARNING" and the alert symbol in black? (S4.5.1(b)(2)(i))
   Driver side ___ Yes-Pass ___ No-FAIL
   Passenger side ___ Yes-Pass ___ No-FAIL

3.2.4 Is the message area white with black text? (S4.5.1(b)(2)(ii))
   Driver side ___ Yes-Pass ___ No-FAIL
   Passenger side ___ Yes-Pass ___ No-FAIL
3.2.5 Is the message area at least 30 cm²? (S4.5.1(b)(2)(ii))
Driver side: Length ________, Width ________
     Passenger side: Length ________, Width ________
Driver actual message area ________ cm²
     Passenger actual message area ________ cm²
Driver side __ Yes-Pass ___ No-FAIL
     Passenger side __ Yes-Pass ___ No-FAIL
3.2.6 Is the pictogram black on a white background? (S4.5.1(b)(2)(iii))
Driver side __ Yes-Pass ___ No-FAIL
     Passenger side __ Yes-Pass ___ No-FAIL
3.2.7 Is the pictogram at least 30 mm (1.2 in) in length? (S4.5.1(b)(2)(iii))
Driver side: Length ________
     Driver side __ Yes-Pass ___ No-FAIL
     Passenger side __ Yes-Pass ___ No-FAIL
3.3 Vehicles certified to meet the requirements of S19, S21, and S23 on 9/1/03 and later. (S4.5.1(b)(3))
3.3.1 Is the label permanently affixed (including permanent marking on the visor material or molding into the visor material) to either side of the sun visor at each front outward seating position such that it cannot be removed without destroying or defacing the label or the sun visor? (S4.5.1(b)(3))
Driver side __ Yes-Pass ___ No-FAIL
     Passenger side __ Yes-Pass ___ No-FAIL
3.3.2 Does the label conform in content to the label shown in Figure 11 at each front outward seating position? (S4.5.1(b)(2)) (Vehicles without back seats may omit the statement: “The BACK SEAT is the SAFEST place for children.” (S4.5.1(b)(3)(iv)) Vehicles without back seats or the back seat is too small to accommodate a rear-facing child restraint may omit the statement “Never put a rear-facing child seat in the front.” (S4.5.1(b)(3)(v)))
Driver side __ Yes-Pass ___ No-FAIL
     Passenger side __ Yes-Pass ___ No-FAIL
3.3.3 Is the label heading area yellow with the word “WARNING” and the alert symbol in black? (S4.5.1(b)(3)(i))
Driver side __ Yes-Pass ___ No-FAIL
     Passenger side __ Yes-Pass ___ No-FAIL
3.3.4 Is the message area white with black text? (S4.5.1(b)(3)(ii))
Driver side __ Yes-Pass ___ No-FAIL
     Passenger side __ Yes-Pass ___ No-FAIL
3.3.5 Is the message area at least 30 cm²? (S4.5.1(b)(3)(ii))
Driver side: Length ________, Width ________
     Passenger side: Length ________, Width ________
Driver actual message area ________ cm²
     Passenger actual message area ________ cm²
Driver side __ Yes-Pass ___ No-FAIL
     Passenger side __ Yes-Pass ___ No-FAIL
3.3.6 Is the pictogram black on a white background? (S4.5.1(b)(3)(iii))
Driver side __ Yes-Pass ___ No-FAIL
     Passenger side __ Yes-Pass ___ No-FAIL
3.3.7 Is the pictogram at least 30 mm in length? (S4.5.1(b)(3)(iii))
Driver side: Length ________
     Driver side __ Yes-Pass ___ No-FAIL
     Passenger side __ Yes-Pass ___ No-FAIL
3.4 Is the same side of the sun visor that contains the air bag warning label free of other information with the exception of the air bag maintenance label and/or the rollover-warning label? (S4.5.1 (b)(5)(i))

Driver side: Yes-Pass No-FAIL
Passenger side: Yes-Pass No-FAIL

3.5 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 and/or the rollover-warning label? (S4.5.1 (b)(5)(ii))

Driver side: Yes-Pass No-FAIL
Passenger side: Yes-Pass No-FAIL

3.6.1 Does the driver side visor contain a rollover-warning label on the same side of the visor as the air bag warning label?

Yes (go to 3.6.1); No (go to 4., skipping 3.6.1 through 3.6.3)

3.6.1 Are both the rollover-warning label and the air bag warning label surrounded by a continuous solid-lined border?

Yes (go to 3.6.2 and skip 3.6.3); No (go to 3.6.3 and skip 3.6.2.)

3.6.2 Is the shortest distance from the border of the rollover label to the border of the air bag warning label at least 1 cm? (575.105 (d)(1)(iv)(B))

Actual distance

Yes-Pass No-FAIL

3.6.3 Is the shortest distance from any of the lettering or graphics on the rollover-warning label to any of the lettering or graphics of the air bag warning label at least 3 cm? (575.105(d)(1)(iv)(A))

Actual distance

Yes-Pass No-FAIL

4. Air Bag Alert Label (S4.5.1(c)) (A “Rollover Warning Label” or “Rollover Alert Label” may be on the same side of the driver’s sun visor as the “Air Bag Alert Label.” 575.105(d))

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

Driver side: Yes No
Passenger side: Yes No

If yes, for driver and passenger go to 5.

4.2 Is the air bag alert label permanently affixed (including permanent marking on the visor material or molding into the visor material) to the sun visor at each front outboard seating position such that it cannot be removed without destroying or defacing the label or the sun visor? (S4.5.1(c))

Driver side: Yes-Pass No-FAIL
Passenger side: Yes-Pass No-FAIL

4.3 Is the air bag alert label visible when the visor is in the stowed position? (S4.5.1(c))

Driver side: Yes-Pass No-FAIL
Passenger side: Yes-Pass No-FAIL

4.4 Does the label conform in content to the label shown in Figure 6c? (S4.5.1(c))

Driver side: Yes-Pass No-FAIL
Passenger side: Yes-Pass No-FAIL

4.5 Is the message area black with yellow text? (S4.5.1(c)(1))

Driver side: Yes-Pass No-FAIL
Passenger side: Yes-Pass No-FAIL

4.6 Is the message area at least 20 cm²? (S4.5.1(c)(1))

Driver side: Length Width Actual message area cm²
Passenger side: Length Width Actual message area cm²

Driver side: Yes-Pass No-FAIL
Passenger side: Yes-Pass No-FAIL

4.7 Is the pictogram black with a red circle and slash on a white background? (S4.5.1(c)(2))

Driver side: Yes-Pass No-FAIL
Passenger side: Yes-Pass No-FAIL
4.8 Is the pictogram at least 20 mm in diameter? (S4.5.1(c)(2))
   Driver side: diameter __________
   Passenger side: diameter __________
   Driver side ___ Yes-Pass    ___ No-FAIL
   Passenger side ___ Yes-Pass    ___ No-FAIL

5. Label On the Dashboard
5.1 Is the vehicle certified to meet the requirements of S19, S21, and S23? (Obtain the
   answer to this question from the COTR.) (S4.5.1(e)(2))
   ___ Yes (go to 5.1.1 and skip 5.2)
   X No (go to 5.2, skipping 5.1.1 through 5.1.6)
5.1.1 Does the vehicle have a label on the dash or steering wheel hub? (S4.5.1(e)(2))
   ___ Yes-Pass    ___ No-FAIL
5.1.2 Is the label clearly visible from all front seating positions? (S4.5.1(e)(2))
   ___ Yes-Pass    ___ No-FAIL
5.1.3 Does the label conform in content to the label shown in Figure 9? (S4.5.1(e)(2))
   (Vehicles without back seats may omit the statement: “The back seat is the safest
   place for children.” (S4.5.1(e)(2)(iii)))
   ___ Yes-Pass; ___ No-Fail
5.1.4 Is the heading area yellow with black text? (S4.5.1(e)(2)(i))
   ___ Yes-Pass; ___ No-FAIL
5.1.5 Is the message white with black text? (S4.5.1(e)(2)(ii))
   ___ Yes-Pass; ___ No-FAIL
5.1.6 Is the message area at least 30 cm²? (S4.5.1(e)(2)(ii))
   Length __________, Width __________
   Actual message area __________ cm²
   ___ Yes-Pass; ___ No-FAIL
5.2 Does the vehicle have a label on the dash or steering wheel hub? (S4.5.1(e)(1))
   X Yes-Pass    ___ No-FAIL
5.2.1 Is the label clearly visible from all front seating positions? (S4.5.1(e)(1))
   X Yes-Pass    ___ No-FAIL
5.2.2 Does the label conform in content to the label shown in Figure 7? (S4.5.1(e)(1)(iii))
   (Vehicles without back seats may omit the statement: “The back seat is the safest
   place for children 12 and under.” (S4.5.1(e)(2)(iii)))
   X Yes-Pass; ___ No-Fail
5.2.3 Is the heading area yellow with the word “WARNING” and the alert symbol in black?
   (S4.5.1(e)(1)(i))
   X Yes-Pass; ___ No-FAIL
5.2.4 Is the message white with black text? (S4.5.1(e)(1)(ii))
   X Yes-Pass; ___ No-FAIL
5.2.5 Is the message area at least 30 cm²? (S4.5.1(e)(1)(i))
   Length 8.4, Width 3.5
   Actual message area 33 cm²
   X Yes-Pass; ___ No-FAIL
WARNING

DEATH or SERIOUS INJURY can occur if

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

Figure 6a. Sun Visor Label Visible When Visor is in Down Position.

WARNING

DEATH or SERIOUS INJURY can occur if

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

Figure 6b. Sun Visor Label Visible When Visor is in Down Position.
Figure 6c. Sun Visor Label Visible When Visor is in Up Position.

Figure 7. Removable Label on Dash.
WARNING

EVEN WITH ADVANCED AIR BAGS

- Children can be killed or seriously injured by the air bag
- The back seat is the safest place for children
- Always use seat belts and child restraints
- See owner's manual for more information about air bags

Figure 8. Sun Visor Label Visible when Visor is in Down Position.
This Vehicle is Equipped with Advanced Air Bags

Even with Advanced Air Bags
Children can be killed or seriously injured by the air bag.
The back seat is the safest place for children.
Always use seat belts and child restraints.
See owner's manual for more information about air bags.

Figure 9. Removable Label on Dash.
Figure 11. Sun Visor Label Visible when Visor is in Down Position.

- Children can be killed or seriously injured by the air bag
- The back seat is the safest place for children
- Never put a rear-facing child seat in the front
- Always use seat belts and child restraints
- See owner's manual for more information about air bags
DATA SHEET 6
FMVSS 208 READINESS INDICATOR (S4.5.2)

NHTSA No. _C40307________ Test Date: _03/30/04_

Laboratory: _TRC Inc._ Test Technician(s): _Ronald Stoner, Michael S. Postle_

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 to Lawrence F. Henneberger on behalf of Breed)

_X_ 1. Is the system totally mechanical? Yes__; No__X__
(If YES this Data Sheet is complete.)

_X_ 2. Describe the location of the readiness indicator: _Left side of instrument cluster_

_X_ 3. Is the readiness indicator clearly visible to the driver?
_X merit; ___No-FAIL

_X_ 4. Is a list of the elements in the occupant restraint system, being monitored by the readiness indicator, provided on a label or in the owner's manual?
_X merit; ___No-FAIL

_X_ 5. Does the vehicle have an on-off switch for the passenger air bag?
__Yes (go to 6) _X_ No (this form is complete)

_X_ 6. Is the air bag readiness indicator off when the passenger air bag switch is in the off position?
__Yes-Pass; ___No-FAIL

REMARKS:
DATA SHEET 7

Passenger Air Bag Manual Cut-Off Device (S4.5.4)

NHTSA No. C40307 Test Date: 04/14/04

Laboratory: TRC Inc. Test Technician(s): Ronald Stoner

1. Is the vehicle equipped with an on-off switch that deactivates the air bag installed at the right front outboard seating position?
   - Yes, go to 2
   - No, this sheet is complete

2. Does the vehicle have any forward-facing rear designated seating positions? (S4.5.4(a))
   - Yes, go to 3
   - No, go to 4

3. Verification of the lack of room for a child restraint in the rear seat behind the driver’s seat. (S4.5.4(b))
   3.1 Position the seat’s adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)
      - N/A - No lumbar adjustment
   3.2 Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
      - N/A - No additional support adjustment
   3.3 If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S16.2.10.3.1)
      - N/A - No independent fore-aft seat cushion adjustment
   3.4 If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (S16.2.10.3.1)
      - N/A - No independent seat cushion height adjustment.
   3.5 Put the seat in its full rearward position. (S16.2.10.3.1)
      - N/A - The seat does not have a fore-aft adjustment
   3.6 If the seat height is adjustable, put it in the full down position. (S16.2.10.3.1)
      - N/A - No seat height adjustment
   3.7 Draw a horizontal reference line on the side of the seat cushion.
   3.8 Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.
      - N/A - The seat does not have a fore-aft adjustment.
   3.9 Using only the controls that change the seat in the fore-aft direction, place the seat in the full rearward position and then place the seat in the middle fore-aft position. (S8.1.2)
      - N/A - The seat does not have fore-aft adjustment.
      - Mid position
      If there is no mid position, put the seat in the closest adjustment position to the rear of the midpoint. Describe the location of the seat:

   3.10 If seat adjustments, other than fore-aft, are present and the horizontal reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal.
      - N/A - No adjustments

Angle of reference line as tested
3.11. The seat back angle, if adjustable, is set at the manufacturer’s nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer.

(S4.5.4.1(b) and S8.1.3)

- N/A – No seat back angle adjustment
- Manufacturer’s design seat back angle
- Tested seat back angle

3.12. Is the driver seat a bucket seat?
- Yes, go to 3.12.1 and skip 3.12.2.
- No, go to 3.12.2 and skip 3.12.1.

3.12.1 Bucket seats:

3.12.1.1 Locate and mark a vertical Plane B through the longitudinal centerline of the seat driver’s seat cushion. (S22.2.1.3) The longitudinal centerline of a bucket seat cushion is determined at the widest part of the seat cushion. Measure perpendicular to the longitudinal centerline of the vehicle.

Record the width of the seat.

Record the distance from the edge of the seat to Plane B.

3.12.1.2 Locate the longitudinal horizontal line in plane B that is tangent to the highest point of the rear seat cushion behind the driver’s seat. Measure along this line from the front of the seat back of the rear seat to the rear of the seat back of the driver’s seat.

_____ mm distance
- less than 720 mm – Pass
- more than 720 mm – FAIL

Go to 4

3.12.2 Bench seats (including split bench seats):

3.12.2.1 Locate and mark a vertical Plane B through the center of the steering wheel parallel to the vehicle longitudinal centerline.

3.12.2.2 Locate the longitudinal horizontal line in plane B that is tangent to the highest point of the rear seat cushion. Measure along this line from the front of the seat back of the rear seat to the rear of the seat back of the front seat.

_____ mm distance
- less than 720 mm – Pass
- more than 720 mm – FAIL

Go to 4

4. Does the device turn the air bag on and off using the vehicle’s ignition key? (S4.5.4.2)

- Yes – Pass
- No – FAIL

5. Is the on-off device separate from the ignition switch? (S4.5.4.2)

- Yes – Pass
- No – FAIL

6. Is there a telltale light that comes on when the passenger air bag is turned off? (S4.5.4.2)

- Yes – Pass
- No – FAIL

7. Telltale light (S4.5.4.3)

7.1 Is the light yellow? S4.5.4.3(a)

- Yes – Pass
- No – FAIL

7.2 Are the words “PASSENGER AIR BAG OFF” (S4.5.4.3(b))

7.2.1 on the telltale?

- Yes – Pass, go to 7.3
- No – go to 7.2.2

7.2.2 within 25 mm of the telltale? _____ mm from the edge of the telltale light

- Yes – Pass
- No – FAIL
7.3 Does the telltale remain illuminated while the air bag is turned off? (S4.5.4.3c) (Leave the air bag off for 5 minutes.)
   __Yes – Pass
   __No – FAIL

7.4 Is the telltale illuminated while the air bag is turned on? (S4.5.4.3d)
   __Yes – FAIL
   __No – Pass

7.5 Is the telltale combined with the air bag readiness indicator? (S4.5.3(e))
   __Yes – PASS
   __No – PASS

8. Owner’s manual
   8.1 Does the owner’s manual contain complete instructions on the operation of the on-off switch? (S4.5.4.4(a))
       __Yes – PASS
       __No – FAIL

   8.2 Does the owner’s manual contain a statement that the on-off switch should only be used when a member of one of the following risk groups is occupying the right front passenger seating position? (S4.5.4.4(b))
       Infants: there is no back seat
       the rear seat is too small to accommodate a child restraint
       there is a medical condition that must be monitored constantly
       Children aged 1 to 12: there is no back seat
       space is not always available in the rear seat
       there is a medical condition that must be monitored constantly
       Medical condition: medical risk causes special risk for passenger
       greater risk for harm than with the air bag on
       __Yes – PASS
       __No – FAIL

8.3 Does the owner’s manual contain a warning about the safety consequences of using the on-off switch at other times?
   __Yes – PASS
   __No – FAIL
DATA SHEET 8
LAP BELT LOCKABILITY
Passenger cars, trucks, buses, and multipurpose passenger vehicles with a GVWR of 10,000 pounds or less. (S7.1.1.5)

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

NHTSA No. C40307 Test Date: 04/15/04

Laboratory: TRC Inc. Test Technician(s): Ronald Stoner, Michael S. Postie

DESIGNATED SEATING POSITION: Right front passenger

_N/A – No retractor is at this position
_N/A – The retractor is an automatic locking retractor ONLY

_X 1. Record test fore-aft seat position. Mid (S7.1.1.5(c)(1))
   (Any position is acceptable.)
   X Yes-Pass; _No-FAIL

_X 2. 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

_X 3. 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

_X 4. Buckle the seat belt. (S7.1.1.5(c)(1))

_X 5. Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))

_X 6. 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))

_X 7. Does the vehicle user need to take some action to activate the locking feature on the lap belt portion of the seat belt in any forward-facing seat or seat that can be adjusted to forward-facing?
   _Yes; X No (If yes, go to 7.1. If no, go to 8.)

7.1 Does the vehicle owner's manual include a description in words and/or diagrams describing how to activate the locking feature so that the seat belt assembly can tightly secure a child restraint system and how to deactivate the locking feature to remove the child restraint system. (S7.1.1.5(b))
   _Yes-Pass; _No-FAIL

_X 8. 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) & S7.1.1.5(c)(1))

_X 9. Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))
   Measured distance between A and B _65.4 inches

_X 10. 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))
11. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))
Measured force application angle 10 degrees (spec. 5 - 15 degrees)

12. 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 54.5 inches

13. 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 restraints are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))
Record onset rate 25 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))
Measured distance between A and B 54.8 inches (S7.1.1.5(c)(6))

14. Subtract the measurement in 13 from the measurement in 12. Is the difference 2 inches or less? (S7.1.1.5(c)(7)) 12-13 = 0.3 inches;
X Yes-Pass; __No-FAIL

15. Subtract the measurement in 9 from the measurement in 13. Is the difference 3 inches or more? (S7.1.1.5(c)(8)) 9-13 = 10.6 inches;
X Yes-Pass; __No-FAIL

REMARKS:
Insert Webbing to Rest Against This Surface

1/4 Inch Diameter (Steel)

Direction of Pull

Dimension A - Width of Webbing Plus 1/2 Inch
Dimension B - 1/2 of Dimension A

Figure 5. - Webbing Tension Pull Device
DATA SHEET 8
LAP BELT LOCKABILITY
Passenger cars, trucks, buses, and multipurpose passenger
vehicles with a GVWR of 10,000 pounds or less. (S7.1.1.5)

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

NHTSA No. C40307 Test Date: 04/15/04

Laboratory: TRC Inc. Test Technician(s): Ronald Stoner, Michael S. Postle

DETERMIBED SEATING POSITION: 2nd Row right outboard passenger

_N/A – No retractor is at this position
_N/A – The retractor is an automatic locking retractor ONLY

X.1. Record test fore-aft seat position. Mid
(S7.1.1.5 (c)(1))
(Any position is acceptable.)

X.2. 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

X.3. 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

X.4. Buckle the seat belt. (S7.1.1.5(c)(1))

X.5. Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))

X.6. 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))

X.7. 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; X No (If yes, go to 7.1. If no, go to 8.)

7.1 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

X.8. 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) & S7.1.1.5(c)(1))

X.9. 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 _62.3_ inches

X.10. 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))
X 11. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. \((S7.1.1.5(4))\)  
Measured force application angle \(10.0\) \(\text{degrees}\) (spec. 5 - 15 degrees)

X 12. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. \((S7.1.1.5(4))\)  
Measured distance between A and B \(42.3\) \(\text{inches}\)

X 13. 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 restraints 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. \((S7.1.1.5(5))\)  
Record onset rate \(25\) \(\text{lb/sec}\) (spec. 10 to 50 \(\text{lb/sec}\)) \((S7.1.1.5(5))\)  
Measured distance between A and B \(42.8\) \(\text{inches}\) \((S7.1.1.5(6))\)

X 14. Subtract the measurement in 13 from the measurement in 12. Is the difference 2 inches or less? \((S7.1.1.5(7))\) 13-12= \(0.5\) \(\text{inches}\);  
\text{Yes-Pass; } \text{No-FAIL}

X 15. Subtract the measurement in 9 from the measurement in 13. Is the difference 3 inches or more? \((S7.1.1.5(8))\) 9-13= \(19.5\) \(\text{inches}\);  
\text{Yes-Pass; } \text{No-FAIL}

REMARKS:
Figure 5. - Webbing Tension Pull Device

Dimension A - Width of Webbing Plus 1/2 Inch
Dimension B - 1/2 of Dimension A
DATA SHEET 8
LAP BELT LOCKABILITY
Passenger cars, trucks, buses, and multipurpose passenger
vehicles with a GVWR of 10,000 pounds or less. (S7.1.1.5)

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

NHTSA No. C40307 ____________________________ Test Date: 04/15/04

Laboratory: TRC Inc. ________________ Test Technician(s): Ronald Stoner, Michael S. Postle

DESIGNATED SEATING POSITION: 2nd Row left outboard passenger

N/A — No retractor is at this position

N/A — The retractor is an automatic locking retractor ONLY

X.1. Record test fore-aft seat position. Mid

(S7.1.1.5 (c)(1))
(Any position is acceptable.)

X.2. 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

X.3. 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

X.4. Buckle the seat belt. (S7.1.1.5(c)(1))

X.5. Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))

X.6. 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))

X.7. Does the vehicle user need to take some action to activate the locking feature on the lap
belt portion of the seat belt in any forward-facing seat or seat that can be adjusted to
forward-facing?

__Yes; X No (If yes, go to 7.1. If no, go to 8.)

7.1 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

X.8. 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) & S7.1.1.5(c)(1))

X.9. 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 __60.0 ____________ inches

X.10. 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))
X.11. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))

Measured force application angle 10.0 _______ (spec. 5 - 15 degrees)

X.12. 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 49.5 _______ inches

X.13. 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 retractor are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))

Record onset rate 25 _______ lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))

Measured distance between A and B 50.5 _______ inches (S7.1.1.5(c)(6))

X.14. Subtract the measurement in 13 from the measurement in 12. Is the difference 2 inches or less? (S7.1.1.5(c)(7))

13-12= 1.0 _______ inches;  
X Yes-Pass;  No-FAIL

X.15. Subtract the measurement in 9 from the measurement in 13. Is the difference 3 inches or more? (S7.1.1.5(c)(8))

9-13= 9.5 _______ inches;  
X Yes-Pass;  No-FAIL

REMARKS:
Figure 5. - Webbing Tension Pull Device
DATA SHEET 8
LAP BELT LOCKABILITY
Passenger cars, trucks, buses, and multipurpose passenger vehicles with a GVWR of 10,000 pounds or less. (S7.1.1.5)

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

NHTSA No. C40307
Test Date: 04/15/04

Laboratory: TRC Inc. Test Technician(s): Ronald Stoner, Michael S. Postle

DESIGNATED SEATING POSITION: 3rd Row left outboard passenger

N/A – No retractor is at this position
N/A – The retractor is an automatic locking retractor ONLY

X 1. Record test fore-aft seat position. Fixed
   (S7.1.1.5 (c)(1))
   (Any position is acceptable.)

X 2. 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

X 3. 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

X 4. Buckle the seat belt. (S7.1.1.5(c)(1))

X 5. Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))

X 6. 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))

X 7. Does the vehicle user need to take some action to activate the locking feature on the lap belt portion of the seat belt in any forward-facing seat or seat that can be adjusted to forward-facing?
   __ Yes; X No (If yes, go to 7.1. If no, go to 8.)

X 7.1 Does the vehicle owner's manual include a description in words and/or diagrams describing how to activate the locking feature so that the seat belt assembly can tightly secure a child restraint system and how to deactivate the locking feature to remove the child restraint system. (S7.1.1.5(b))
   __ Yes-Pass; __ No-FAIL

X 8. 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) & S7.1.1.5(c)(1))

X 9. 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 54.3 inches

X 10. 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))
X 11. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))
Measured force application angle 10.0 degrees (spec. 5 - 15 degrees)

X 12. 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 43.2 inches

X 13. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))
Record onset rate 25 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))
Measured distance between A and B 44.7 inches (S7.1.1.5(c)(6))

X 14. Subtract the measurement in 13 from the measurement in 12. Is the difference 2 inches or less? (S7.1.1.5(c)(7)) 13-12= 1.5 inches;
X Yes-Pass; __No-FAIL

X 15. Subtract the measurement in 9 from the measurement in 13. Is the difference 3 inches or more? (S7.1.1.5(c)(8)) 9-13= 9.6 inches;
X Yes-Pass; __No-FAIL

REMARKS:
Figure 5. - Webbing Tension Pull Device

- Insert Webbing to Rest Against This Surface
- 1/4 Inch Diameter (Steel)
- Dimension A - Width of Webbing Plus 1/2 Inch
- Dimension B - 1/2 of Dimension A
DATA SHEET 8
LAP BELT LOCKABILITY
Passenger cars, trucks, buses, and multipurpose passenger
vehicles with a GWWR of 10,000 pounds or less. (S7.1.1.5)

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

NHTSA No.    C40307                                          Test Date: 04/15/04
Laboratory: TRC Inc.                                      Test Technician(s): Ronald Stoner, Michael S. Postle

DESIGNATED SEATING POSITION: 3rd Row right outboard passenger
___N/A – No retractor is at this position
___N/A – The retractor is an automatic locking retractor ONLY

X 1. Record test fore-aft seat position. Fixed
(S7.1.1.5 (c)(1))
(Any position is acceptable.)

X 2. 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

X 3. 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

X 4. Buckle the seat belt. (S7.1.1.5(c)(1))

X 5. Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))

X 6. 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))

X 7. Does the vehicle user need to take some action to activate the locking feature on the lap
belt portion of the seat belt in any forward-facing seat or seat that can be adjusted to
forward-facing?
___Yes; X No (If yes, go to 7.1. If no, go to 8.)

X 7.1 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

X 8. 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) & S7.1.1.5(c)(1))

X 9. 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 __52.0__________ inches

X 10. 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))
X.11. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S.1.1.5(c)(4))
Measured force application angle: 10.0° (spec. 5 - 15 degrees)

X.12. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S.1.1.5(c)(4))
Measured distance between A and B: 40.0 inches

X.13. 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. (S.1.1.5(c)(5))
Record onset rate: 25 lb/sec (spec. 10 to 50 lb/sec) (S.1.1.5(c)(5))
Measured distance between A and B: 40.8 inches (S.1.1.5(c)(6))

X.14. Subtract the measurement in 13 from the measurement in 12. Is the difference 2 inches or less? (S.1.1.5(c)(7)) 13-12= 0.8 inches;
Yes-Pass; __No-FAIL

X.15. Subtract the measurement in 9 from the measurement in 13. Is the difference 3 inches or more? (S.1.1.5(c)(8)) 9-13= 11.2 inches;
Yes-Pass; __No-FAIL

REMARKS:
Figure 5. - Webbing Tension Pull Device

Dimension A - Width of Webbing Plus 1/2 Inch
Dimension B - 1/2 of Dimension A
DATA SHEET 9

FMVSS 208 SEAT BELT WARNING SYSTEM CHECK (S7.3)

NHTSA No. C403607
Test Date: 04/14/04

Laboratory: TRC Inc. Test Technician(s): Ronald Stoner

X.1. The occupant is in the driver's seat.
X.2. The seat belt is in the stowed position.
X.3. The key is in the "on" or "start" position.
X.4. The time duration of the audible signal beginning with key "on" or "start" is 6 seconds.
X.5. The occupant is in the driver's seat.
X.6. The seat belt is in the stowed position.
X.7. The key is in the "on" or "start" position.
X.8. The time duration of the warning light beginning with key "on" or "start" is >60 seconds.
X.9. The occupant is in the driver's seat.
X.10. The seat belt is in the latched position and with at least 4 inches of belt webbing extended.
X.11. The key is in the "on" or "start" position.
X.12. The time duration of the audible signal beginning with key "on" or "start" is 0 seconds.
X.13. The occupant is in the driver's seat.
X.14. The seat belt is in the latched position and with at least 4 inches of belt webbing extended.
X.15. The key is in the "on" or "start" position.
X.16. The time duration of the warning light beginning with key "on" or "start" is 7 seconds.
X.17. Complete the following table with the data from 4, 8, 12 and 16 to determine which option is used.

<table>
<thead>
<tr>
<th>S7.3 (a)(1)</th>
<th>Belt latched &amp; Key on or start</th>
<th>Item 16</th>
<th>Warning light specification</th>
<th>Item 12</th>
<th>Audible signal specification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Belt stowed &amp; Key on or start</td>
<td>Item 8</td>
<td>&gt;60 seconds minimum</td>
<td>Item 4</td>
<td>4 to 8 seconds</td>
</tr>
<tr>
<td>S7.3 (a)(2)</td>
<td>Belt latched &amp; Key on or start</td>
<td>Item 16</td>
<td>4 to 8 seconds</td>
<td>Item 12</td>
<td>0 seconds**</td>
</tr>
<tr>
<td></td>
<td>Belt stowed &amp; Key on or start</td>
<td>Item 8</td>
<td>4 to 8 seconds</td>
<td>Item 4</td>
<td>4 to 8 seconds</td>
</tr>
</tbody>
</table>

* 49 USCS @ 30124 does NOT allow an audible signal to operate for more than 8 seconds.
** 0 seconds means the light or audible signal are NOT permitted to operate under these conditions. See 7/12/00 interpretation to Patrick Raher of Hogan and Hartson

1 Light stays on continuously.

58

S040419
X.18. The seat belt warning system meets the requirements of (manufacturers may comply with either section)
   X S7.3 (a)(1)
   __ S7.3 (a)(2)
   __ FAIL - Does NOT meet the requirements of either option
X.19. Note wording of visual warning; (S7.3(a)(1) and S7.3(a)(2))
   __ Fasten Seat Belts
   __ Fasten Belts
   X Symbol 101
   __ FAIL – Does not use any of the above wording or symbol
DATA SHEET 10
BELT CONTACT FORCE (S7.4.3)

NHTSA No. C40307 Test Date: 04/15/04
Laboratory: TRC Inc. Test Technician(s): Michael S. Postle

DESIGNATED SEATING POSITION: Driver

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.

X 1. Does the vehicle incorporate a webbing tension-relieving device?
   - Yes (this form is complete)
   - X No (continue with this check sheet)

X 3. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)
   - X N/A - No lumbar adjustment

X 4. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
   - X N/A - No additional support adjustment

X 5. If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S16.2.10.3.1)
   - X N/A - No independent fore-aft seat cushion adjustment

X 6. If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (S16.2.10.3.1)
   - N/A - No independent seat cushion height adjustment.

X 7. Put the seat in its full rearward position. (S16.2.10.3.1)
   - N/A - the seat does not have a fore-aft adjustment

X 8. If the seat height is adjustable, put it in the full down position. (S16.2.10.3.1)
   - N/A - No seat height adjustment

X 9. Draw a horizontal reference line on the side of the seat cushion.

X 10. Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.
   - N/A - The seat does not have a fore-aft adjustment.

X 11. Using only the controls that change the seat in the fore-aft direction, place the seat in the full rearward position and then place the seat in the middle fore-aft position for this test. (S8.1.2)
   - X Mid position. If there is no mid position, put the seat in the closest adjustment position to the rear of the midpoint. Describe the location of the seat:

X 12. If seat adjustments other than fore-aft are present and the horizontal reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. (S16.2.10.3.2.1)
   - N/A - No adjustments

Reference line angle as tested 0.0
X13. The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S4.5.4.1 (b) and S8.1.3)
   __ N/A – No seat back angle adjustment
   Manufacturer's design seat back angle  20.0
   Tested seat back angle  20.0

X14. Position the test dummies according to dummy position placement instructions in Appendix B and include the positioning check sheets.

X15. Fasten the seat belt latch.

X16. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy’s chest.

X17. Locate the point where the centerline of the upper torso belt webbing crosses the midsagittal line on the dummy’s chest. At that point pull the belt webbing out 3 inches from the dummy’s chest and release until it is within one inch from the dummy’s chest. (S10.8) Using a force measuring gage with a full scale range of no more than 1.5 pounds, measure the contact force perpendicular to the dummy’s chest exerted by the belt webbing.
   Contact force  0.41 lb.
   __ 0.0 to 0.7 pounds - Pass
   __ greater than 0.7 pounds - FAIL
DATA SHEET 10
BELT CONTACT FORCE (S7.4.3)

NHTSA No. C40307 Test Date: 04/15/04
Laboratory: TRC Inc. Test Technician(s): Michael S. Postle

DESIGNATED SEATING POSITION: Right front passenger

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.

X.1. Does the vehicle incorporate a webbing tension-relieving device?
   ___ Yes (this form is complete)
   X. No (continue with this check sheet)

X.3. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)
   X. N/A - No lumbar adjustment

X.4. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
   X. N/A - No additional support adjustment

X.5. If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S16.2.10.3.1)
   X. N/A - No independent fore-aft seat cushion adjustment

X.6. If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (S16.2.10.3.1)
   X. N/A - No independent seat cushion height adjustment.

X.7. Put the seat in its full rearward position. (S16.2.10.3.1)
   ___ N/A - the seat does not have a fore-aft adjustment

X.8. If the seat height is adjustable, put it in the full down position. (S16.2.10.3.1)
   ___ N/A - No seat height adjustment


X.10. Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.
   ___ N/A - The seat does not have a fore-aft adjustment.

X.11. Using only the controls that change the seat in the fore-aft direction, place the seat in the full rearward position and then place the seat in the middle fore-aft position for this test. (S8.1.2)
   X. Mid position. If there is no mid position, put the seat in the closest adjustment position to the rear of the midpoint. Describe the location of the seat:

X.12. If seat adjustments other than fore-aft are present and the horizontal reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. (S16.2.10.3.2.1)
   X. N/A - No adjustments
   Reference line angle as tested 0.0

62
X.13. The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S4.5.4.1 (b) and S8.1.3)
   — N/A — No seat back angle adjustment
   Manufacturer's design seat back angle 20.0
   Tested seat back angle 20.0

X.14. Position the test dummies according to dummy position placement instructions in Appendix B and include the positioning check sheets.

X.15. Fasten the seat belt latch.

X.16. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest.

X.17. Locate the point where the centerline of the upper torso belt webbing crosses the midsagittal line on the dummy's chest. At that point pull the belt webbing out 3 inches from the dummy's chest and release until it is within one inch from the dummy's chest. (S10.8) Using a force measuring gage with a full scale range of no more than 1.5 pounds, measure the contact force perpendicular to the dummy's chest exerted by the belt webbing.
   Contact force 0.38 lb.
   X 0.0 to 0.7 pounds - Pass
   greater than 0.7 pounds — FAIL
DATA SHEET 10

BELT CONTACT FORCE (S7.4.3)

NHTSA No. C40307 Test Date: 04/15/04

Laboratory: TRC Inc. Test Technician(s): Michael S. Postle

DESIGNATED SEATING POSITION: 2nd Row right outboard passenger

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.

X 1. Does the vehicle incorporate a webbing tension-relieving device?
   _Yes (this form is complete)
   X No (continue with this check sheet)

X 3. Position the seat’s adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)
   X N/A – No lumbar adjustment

X 4. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
   X N/A – No additional support adjustment

X 5. If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S16.2.10.3.1)
   X N/A – No independent fore-aft seat cushion adjustment

X 6. If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (S16.2.10.3.1)
   X N/A – No independent seat cushion height adjustment.

X 7. Put the seat in its full rearward position. (S16.2.10.3.1)
   _N/A - the seat does not have a fore-aft adjustment

X 8. If the seat height is adjustable, put it in the full down position. (S16.2.10.3.1)
   _N/A - No seat height adjustment

X 9. Draw a horizontal reference line on the side of the seat cushion.

X 10. Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.
   _N/A - The seat does not have a fore-aft adjustment.

X 11. Using only the controls that change the seat in the fore-aft direction, place the seat in the full rearward position and then place the seat in the middle fore-aft position for this test. (S8.1.2)
   X Mid position. If there is no mid position, put the seat in the closest adjustment position to the rear of the midpoint. Describe the location of the seat: __________________________

X 12. If seat adjustments other than fore-aft are present and the horizontal reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. (S16.2.10.3.2.1)
   X N/A – No adjustments
   Reference line angle as tested __________________________
X.13. The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S4.5.4.1 (b) and S8.1.3)
   ___ N/A – No seat back angle adjustment
   Manufacturer's design seat back angle 20.0
   Tested seat back angle 21.0

X.14. Position the test dummies according to dummy position placement instructions in Appendix B and include the positioning check sheets.

X.15. Fasten the seat belt latch.

X.16. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest.

X.17. Locate the point where the centerline of the upper torso belt webbing crosses the midsagittal line on the dummy's chest. At that point pull the belt webbing out 3 inches from the dummy's chest and release until it is within one inch from the dummy's chest. (S10.8) Using a force measuring gage with a full scale range of no more than 1.5 pounds, measure the contact force perpendicular to the dummy's chest exerted by the belt webbing.
   Contact force 0.55 lb.
   X 0.0 to 0.7 pounds - Pass
   ____ greater than 0.7 pounds – FAIL
DATA SHEET 10

BELT CONTACT FORCE (S7.4.3)

NHTSA No. C40307 ____________________ Test Date: 04/15/04

Laboratory: TRC Inc. ____________ Test Technician(s): Michael S. Postle

DESIGNATED SEATING POSITION: 2nd Row left outboard passenger

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.

X.1. Does the vehicle incorporate a webbing tension-relieving device?
   __ Yes (this form is complete)
   X. No (continue with this check sheet)

X.3. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)
   X. N/A - No lumbar adjustment

X.4. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
   X. N/A - No additional support adjustment

X.5. If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S16.2.10.3.1)
   X. N/A - No independent fore-aft seat cushion adjustment

X.6. If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (S16.2.10.3.1)
   X. N/A - No independent seat cushion height adjustment.

X.7. Put the seat in its full rearward position. (S16.2.10.3.1)
   __ N/A - the seat does not have a fore-aft adjustment

X.8. If the seat height is adjustable, put it in the full down position. (S16.2.10.3.1)
   __ N/A - No seat height adjustment


X.10. Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.
   __ N/A - The seat does not have a fore-aft adjustment.

X.11. Using only the controls that change the seat in the fore-aft direction, place the seat in the full rearward position and then place the seat in the middle fore-aft position for this test. (S8.1.2)
   X. Mid position. If there is no mid position, put the seat in the closest adjustment position to the rear of the midpoint. Describe the location of the seat:

X.12. If seat adjustments other than fore-aft are present and the horizontal reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. (S16.2.10.3.2.1)
   X. N/A - No adjustments

Reference line angle as tested ________

66  S040419
X 13. The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S4.5.4.1 (b) and S8.1.3)
   __ N/A – No seat back angle adjustment
   Manufacturer's design seat back angle 20.0
   Tested seat back angle 21.0
X 14. Position the test dummies according to dummy position placement instructions in Appendix B and include the positioning check sheets.
X 15. Fasten the seat belt latch.
X 16. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest.
X 17. Locate the point where the centerline of the upper torso belt webbing crosses the midsagittal line on the dummy's chest. At that point pull the belt webbing out 3 inches from the dummy's chest and release until it is within one inch from the dummy's chest. (S10.8) Using a force measuring gage with a full scale range of no more than 1.5 pounds, measure the contact force perpendicular to the dummy's chest exerted by the belt webbing.
   Contact force 0.28 lb.
   __ 0.0 to 0.7 pounds - Pass
   __ greater than 0.7 pounds - FAIL
DATA SHEET 10
BELT CONTACT FORCE (S7.4.3)

NHTSA No. C40307 ___________________________ Test Date: 04/15/04

Laboratory: TRC Inc. ________________________ Test Technician(s): Michael S. Postle

DESIGNATED SEATING POSITION: 3rd Row left outboard passenger

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.

X 1. Does the vehicle incorporate a webbing tension-relieving device?
   Yes (this form is complete)
   X  No (continue with this check sheet)

X 2. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)
   X  N/A - No lumbar adjustment

X 4. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
   X  N/A - No additional support adjustment

X 5. If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S16.2.10.3.1)
   X  N/A - No independent fore-aft seat cushion adjustment

X 6. If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (S16.2.10.3.1)
   X  N/A - No independent seat cushion height adjustment.

X 7. Put the seat in its full rearward position. (S16.2.10.3.1)
   X  N/A - the seat does not have a fore-aft adjustment

X 8. If the seat height is adjustable, put it in the full down position. (S16.2.10.3.1)
   X  N/A - No seat height adjustment

X 9. Draw a horizontal reference line on the side of the seat cushion.

X 10. Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.
   X  N/A - The seat does not have a fore-aft adjustment.

X 11. Using only the controls that change the seat in the fore-aft direction, place the seat in the full rearward position and then place the seat in the middle fore-aft position for this test. (S8.1.2)
   __Mid position. If there is no mid position, put the seat in the closest adjustment position to the rear of the midpoint. Describe the location of the seat: No adjustments

X 12. If seat adjustments other than fore-aft are present and the horizontal reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. (S16.2.10.3.2.1)
   X  N/A - No adjustments
   Reference line angle as tested __________
X 13. The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S4.5.4.1 (b) and S8.1.3)
   X N/A – No seat back angle adjustment
   Manufacturer's design seat back angle ___________
   Tested seat back angle ___________

X 14. Position the test dummies according to dummy position placement instructions in Appendix B and include the positioning check sheets.

X 15. Fasten the seat belt latch.

X 16. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest.

X 17. Locate the point where the centerline of the upper torso belt webbing crosses the midsagittal line on the dummy's chest. At that point pull the belt webbing out 3 inches from the dummy's chest and release until it is within one inch from the dummy's chest. (S10.8) Using a force measuring gage with a full scale range of no more than 1.5 pounds, measure the contact force perpendicular to the dummy's chest exerted by the belt webbing.
   Contact force 0.34 lb.
   X 0.0 to 0.7 pounds - Pass
   ___________ greater than 0.7 pounds – FAIL
DATA SHEET 10
BELT CONTACT FORCE (S7.4.3)

NHTSA No. C40307 Test Date: 04/15/04
Laboratory: TRC inc. Test Technician(s): Michael S. Postle

DESIGNATED SEATING POSITION: 3rd Row right outboard passenger

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.

X.1. Does the vehicle incorporate a webbing tension-relieving device?
   Yes (this form is complete)
   X. No (continue with this check sheet)

X.3. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)
   X. N/A - No lumbar adjustment

X.4. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
   X. N/A - No additional support adjustment

X.5. If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S16.2.10.3.1)
   X. N/A - No independent fore-aft seat cushion adjustment

X.6. If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (S16.2.10.3.1)
   X. N/A - No independent seat cushion height adjustment.

X.7. Put the seat in its full rearward position. (S16.2.10.3.1)
   X. N/A - the seat does not have a fore-aft adjustment

X.8. If the seat height is adjustable, put it in the full down position. (S16.2.10.3.1)
   X. N/A - No seat height adjustment


X.10. Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.
   X. N/A - The seat does not have a fore-aft adjustment.

X.11. Using only the controls that change the seat in the fore-aft direction, place the seat in the full rearward position and then place the seat in the middle fore-aft position for this test. (S8.1.2)
   X. Mid position. If there is no mid position, put the seat in the closest adjustment position to the rear of the mid-point. Describe the location of the seat: No adjustments.

X.12. If seat adjustments other than fore-aft are present and the horizontal reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. (S16.2.10.3.2.1)
   X. N/A - No adjustments
   Reference line angle as tested
X 13. The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer.
(S4.5.4.1 (b) and S8.1.3)
X N/A – No seat back angle adjustment
Manufacturer's design seat back angle ___________
Tested seat back angle ___________

X 14. Position the test dummies according to dummy position placement instructions in Appendix B and include the positioning check sheets.

X 15. Fasten the seat belt latch.

X 16. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest.

X 17. Locate the point where the centerline of the upper torso belt webbing crosses the midsagittal line on the dummy's chest. At that point pull the belt webbing out 3 inches from the dummy's chest and release until it is within one inch from the dummy's chest.
(S10.8) Using a force measuring gage with a full scale range of no more than 1.5 pounds, measure the contact force perpendicular to the dummy's chest exerted by the belt webbing.
Contact force 0.42 lb.
X 0.0 to 0.7 pounds - Pass
Greater than 0.7 pounds – FAIL
DATA SHEET 11
LATCHPLATE ACCESS (S7.4.4)

NHTSA No. C40307  Test Date: 04/15/04

Laboratory: TRC Inc.  Test Technician(s): Michael S. Postle

DESIGNATED SEATING POSITION:  Driver

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.

X.1. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S16.2.10.2.1)  
X. N/A – No lumbar adjustment

X.2. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
X. N/A – No additional support adjustment

X.3. If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S16.2.10.3.1)
X. N/A – No independent fore-aft seat cushion adjustment

X.4. If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (S16.2.10.3.1)
X. N/A – No independent seat cushion height adjustment.

X.5. Put the seat in its full rearward position. (S16.2.10.3.1)
X. N/A - The seat does not have a fore-aft adjustment

X.6. If the seat height is adjustable, put it in the full down position. (S16.2.10.3.1)
X. N/A – No seat height adjustment

X.7. Draw a horizontal reference line on the side of the seat cushion

X.8. Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.
X. N/A - The seat does not have a fore-aft adjustment.

X.9. Using only the controls that change the seat in the fore-aft direction, place the seat in the full rearward position and then place the seat in the forwardmost fore-aft position for this test. (S10.7)

X.10. If seat adjustments, other than fore-aft, are present and the horizontal reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal.
X. N/A – No adjustments

Reference line angle as tested 0.0
11. The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S4.5.4.1 (b) and S8.1.3)
   _N/A_ - No seat back angle adjustment
   Manufacturer's design seat back angle 20.0
   Tested seat back angle 20.0

12. Position the test dummy using the procedures in Appendix A. (Some modifications to the positioning procedure may need to be made because the seat is in its forward most position. Note on the Appendix A positioning check sheet any deviations necessary to position the Part 572, Subpart E dummy.) Include the positioning check sheet with this form.

13. Position the adjustable seat belt anchorage in the manufacturer's nominal design position for a 50th percentile adult male occupant.

14. Attach the inboard reach string to the base of the head following the instructions on Figure 3.

15. Attach the outboard reach string to the torso sheath following the instructions on Figure 3.

16. Place the latch plate in the stowed position.

17. Extend inboard reach string in front of the dummy and then backward and outboard to the latch plate to generate an arc of the reach envelope of the test dummy's arms. Is the latch plate within the reach envelope?
   _X Yes - Pass_ _NO_

18. Extend outboard reach string in front of the dummy and then backward and outboard to the latch plate to generate an arc of the reach envelope of the test dummy's arms. Is the latch plate within the reach envelope?
   _X Yes - Pass_ _NO_

19. Is the latch plate within the inboard (item 17) or outboard (item 18) reach envelope?
   _X Yes - Pass_ _NO - FAIL_

20. Using the clearance test block, specified in Figure 4, 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_
Attach the inboard Reach String (19 1/2" long) at the base of the head on centerline.

Rear view: 50th percentile dummy, seated in foremost seat adjustment position.

Attach the Outboard Reach String (28" long) at this point on the torso sheath.

A—Using flexible tape measure 8" from back centerline 10-1/2" from front centerline to find anchor point below arm pit on torso sheath.

Seat Plane is 90° to the Torso Line

Figure 3. Location of Anchoring Points for Latchplate Reach Limiting Chains or Strings to Test for Latchplate Accessibility Using Subpart E Test Device.
(Note corners are rounded off to reduce snagging.)

Figure 4—USE OF CLEARANCE TEST BLOCK TO DETERMINE HAND/ARM ACCESS
DATA SHEET 11

LATCHPLATE ACCESS (S7.4.4)

NHTSA No. C40307 Test Date: 04/15/04

Laboratory: TRC Inc. Test Technician(s): Michael S. Postle

DESIGNATED SEATING POSITION: Right front passenger

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.

X.1. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S.1.3)
   X N/A - No lumbar adjustment

X.2. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
   X N/A - No additional support adjustment

X.3. If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (S16.2.10.3.1)
   X N/A - No independent fore-aft seat cushion adjustment

X.4. If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (S16.2.10.3.1)
   X N/A - No independent seat cushion height adjustment.

X.5. Put the seat in its full rearward position. (S16.2.10.3.1)
   _ N/A - the seat does not have a fore-aft adjustment

X.6. If the seat height is adjustable, put it in the full down position. (S16.2.10.3.1)
   _ N/A - No seat height adjustment

X.7. Draw a horizontal reference line on the side of the seat cushion

X.8. Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.
   _ N/A - The seat does not have a fore-aft adjustment.

X.9. Using only the controls that change the seat in the fore-aft direction, place the seat in the full rearward position and then place the seat in the forwardmost fore-aft position for this test. (S10.7)

X.10. If seat adjustments, other than fore-aft, are present and the horizontal reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal.
   X N/A - No adjustments

Reference line angle as tested 0.0
X.11. The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S4.5.4.1 (b) and 88.1.3)  
__N/A – No seat back angle adjustment  
Manufacturer's design seat back angle 20.0  
Tested seat back angle 20.0  

X.12. Position the test dummy using the procedures in Appendix A. (Some modifications to the positioning procedure may need to be made because the seat is in its forward most position. Note on the Appendix A positioning check sheet any deviations necessary to position the Part 572, Subpart E dummy.) Include the positioning check sheet with this form.  

X.13. Position the adjustable seat belt anchorage in the manufacturer's nominal design position for a 50th percentile adult male occupant.  

X.14. Attach the inboard reach string to the base of the head following the instructions on Figure 3.  

X.15. Attach the outboard reach string to the torso sheath following the instructions on Figure 3.  

X.16. Place the latch plate in the stowed position.  

X.17. Extend inboard reach string in front of the dummy and then backward and outboard to the latch plate to generate an arc of the reach envelope of the test dummy's arms. Is the latch plate within the reach envelope?  
__X Yes - Pass __NO  

X.18. Extend outboard reach string in front of the dummy and then backward and outboard to the latch plate to generate an arc of the reach envelope of the test dummy's arms. Is the latch plate within the reach envelope?  
__X Yes - Pass __NO  

X.19. Is the latch plate within the inboard (item 17) or outboard (item 18) reach envelope?  
__X Yes - Pass __NO - FAIL  

X.20. Using the clearance test block, specified in Figure 4, 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
Attach the Inboard Reach String (59" long) at the base of the head on centerline.

Rear view of 50th percentile dummy, seated in foremost seat adjustment position.

Attach the Outboard Reach String (28" long) at this point on the torso sheath.

A—Using flexible tape measure 8" from back centerline 10-1/2" from front centerline to find anchor point below arm pit on torso sheath.

Seat Plane is 90° to the Torso Line

Figure 3. Location of Anchoring Points for Latchplate Reach Limiting Chains or Strings to Test for Latchplate Accessibility Using Subpart E Test Device
Figure 4—USE OF CLEARANCE TEST BLOCK TO DETERMINE HANDIARMS ACCESS
DATA SHEET 12
SEAT BELT RETRACTION (S7.4.5)

NHTSA No. C40307 Test Date: 04/14/04

Laboratory: TRC Inc. Test Technician(s): Ronald Stoner

DESIGNATED SEATING POSITION: Driver

GVWR: 5700 lbs

Test all front outboard 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.

X.1. Is the vehicle a passenger car or walk-in van-type vehicle?
   ___ Yes, this form is complete
   X No

X.2. Position the seat’s adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)
   X N/A – No lumbar adjustment

X.3. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
   X N/A – No additional support adjustment

X.4. If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position.) (S16.2.10.3.1)
   X N/A – No independent fore-aft seat cushion adjustment

X.5. If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (S16.2.10.3.1)
   X N/A – No independent seat cushion height adjustment.

X.6. Put the seat in its full rearward position.
   X N/A - the seat does not have a fore-aft adjustment

X.7. If the seat height is adjustable, put it in the full down position. (S8.1.2)
   ___ N/A – No seat height adjustment

X.7. Draw a horizontal line on the side of the seat cushion.

X.8. Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.
   ___ N/A - The seat does not have a fore-aft adjustment.

X.9. Using only the controls that change the seat in the fore-aft direction, place the seat in the middle fore-aft position. (S8.1.2)
   If there is no mid position, put the seat in the closest adjustment position to the rear of the midpoint. Describe the location of the seat: ________________________________

X.10. If seat adjustments, other than fore-aft, are present and the reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. (S16.2.10.3.2)
   ___ N/A – No seat adjustments
   Reference angle as tested 0.0
11. The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S8.1.3)
   _N/A_ - No seat back angle adjustment
   Manufacturer's design seat back angle: 20.0
   Tested seat back angle: 20.0

12. If adjustable, set the head restraint at the full up and full forward position. (S8.1.3) Any adjustment of the head restraint shall be used to position it full forward. For example, if it rotates, rotate it such that the head restraint extends as far forward as possible.
   _N/A_ - No head restraint adjustment

13. Place any adjustable seat belt anchorages at the vehicle manufacturer's nominal design position for a 50th percentile adult male occupant (S8.1.3)
   _N/A_ - No adjustable upper seat belt anchorage
   Manufacturer's specified anchorage position: _2nd position down from top_
   Tested anchorage position: _2nd position down from top_

14. Is the driver seat a bucket seat?
   X Yes, go to 14.1 and skip 14.2.
   _No_, go to 14.2 and skip 14.1.

14.1 Bucket seats:
   Locate and mark a vertical Plane B through the longitudinal centerline of the seat. The longitudinal centerline of a bucket seat cushion is determined at the widest part of the seat cushion. Measure perpendicular to the longitudinal centerline of the vehicle.
   Record the width of the seat: 22.0 inches
   Record the distance from the edge of the seat to Plane B: 11.0 inches

14.2 Bench seats (including split bench seats):
   _Driver seat:_ Locate and mark a vertical Plane B through the center of the steering wheel parallel to the vehicle longitudinal centerline.
   _Passenger seat:_ Locate and mark a vertical longitudinal Plane B on the seat that is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel.
   Distance from the vehicle centerline to the center of the steering wheel
   Distance from the vehicle centerline to Plane B

15. Stow outboard armrests that are capable of being stowed. (S7.4.5)

16. Remove the arms of a Subpart E dummy and place it in the seat such that the midsagittal plane is coincident with Plane B and the upper torso rests against the seat back. (S10.4.1.1 & S10.4.1.2)

17. Rest the thighs on the seat cushion.

18. Position the H-point of the dummy within 0.5 inch of the vertical dimension and 0.5 inch of the horizontal dimension of a point 0.25 inch below the H-point determined by using the equipment and procedures specified in SAE J826 (APR 1980). (S10.4.2.1) Then measure the pelvic angle with respect to the horizontal using the pelvic angle gage. Adjust the dummy position until these three measurements are within the specifications. (S10.4.2.1 and S10.4.2.2)
   _0.3_ horizontal inches from the point 0.25 below the determined H-point (0.5 inch max.)
   (S10.4.2.1)
   _0.1_ vertical inches from the point 0.25 below the determined H-point (0.5 inch max.)
   (S10.4.2.1)
   _23.0_ pelvic angle (20° to 25°)
   _vertical inches from the point 0.25 below the determined H-point (0.5 inch max.)
   (S10.4.2.1)
   _pelvic angle (20° to 25°) (S10.4.2.2)

19. Set the distance between the outboard knee clevis flange surfaces at 10.6 inches.

20. To the extent practicable keep the thighs and the legs in a vertical plane (S10.5) and rest the thighs on the seat cushion while resting the feet on the floorpan or toe board.

21. Fasten the seat belt around the dummy.
X 22. Remove all slack from the lap belt portion. (S10.9)
X 23. Pull the upper torso webbing out of the retractor and allow it to retract; repeat this four times. (S10.9)
X 24. Apply a 2 to 4 pound tension load to the lap belt. (S10.9)
   4 pound load applied
X 25. Is the belt system equipped with a tension relieving device?
   Yes, continue
   X No, go to 26
   25.1 Introduce the maximum amount of slack into the upper torso belt that is recommended by the vehicle manufacturer in the vehicle owner’s manual. (S10.9). Go to 25.
X 26. Check the statement that applies to this test vehicle:
   26.1 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. ___Pass
   X 26.2 The torso and lap belt webbing of the seat belt system automatically retracts when the seat belt latch plate is released. X Pass
   26.3 Neither A or B apply. ___FAIL
X 27. 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
X 28. If this test vehicle has an open body (without doors) and has a belt system with a tension-relieving device, does the belt system fully retract when the tension-relieving device is deactivated?
   X N/A
   ___Yes - Pass ___NO - FAIL
DATA SHEET 12
SEAT BELT RETRACTION (S7.4.5)

NHTSA No. C40307 ................................................. Test Date: 04/14/04

Laboratory: TRC Inc. ........................................... Test Technician(s): Ronald Stoner

DESIGNATED SEATING POSITION: Right front passenger

GVWR: 5700 lbs

Test all front outboard 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.

X 1. Is the vehicle a passenger car or walk-in van-type vehicle?
   ____ Yes, this form is complete
   X  No

X 2. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest,
   retracted or deflated adjustment position. (S8.1.3)
   X  N/A - No lumbar adjustment

X 3. Position any adjustable parts of the seat that provide additional support so that they are
   in the lowest or most open adjustment position. (S16.2.10.2)
   X  N/A - No additional support adjustment

X 4. If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment
   to the full rearward position.) (S16.2.10.3.1)
   X  N/A - No independent fore-aft seat cushion adjustment

X 5. If the seat cushion height adjusts independent of the seat back, set this adjustment to
   the full down position. (S16.2.10.3.1)
   X  N/A - No independent seat cushion height adjustment.

X 6. Put the seat in its full rearward position.
   X  N/A - the seat does not have a fore-aft adjustment

X 7. If the seat height is adjustable, put it in the full down position. (S8.1.2)
   ____ N/A - No seat height adjustment

X 8. Draw a horizontal line on the side of the seat cushion.
   X  N/A - The seat does not have a fore-aft adjustment.

X 9. Using only the controls that change the seat in the fore-aft direction, mark the fore-aft
   seat positions. Mark the side of the seat and a reference position directly below on a part
   of the vehicle that does not adjust. For manual seats, move the seat forward one detent
   at a time and mark each detent as was done for the full rearward position. For power
   seats, mark only the full rearward, middle, and full forward positions. Label three of
   the positions with the following: F for full forward, M for mid-position (if there is no mid
   position, label the closest adjustment position to the rear of the mid-point), and R for full
   rearward.
   ____ N/A - The seat does not have a fore-aft adjustment.

X 10. If seat adjustments, other than fore-aft, are present and the reference line is no longer
      horizontal, use those adjustments to maintain the reference line as closely as possible to
      the horizontal. (S16.2.10.3.2)
      ____ N/A - No seat adjustments
      Reference angle as tested  0.0
X.11. The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S8.1.3)

--- N/A – No seat back angle adjustment

Manufacturer's design seat back angle: 20.0°

Tested seat back angle: 20.0°

X.12. If adjustable, set the head restraint at the full up and full forward position. (S8.1.3) Any adjustment of the head restraint shall be used to position it full forward. For example, if it rotates, rotate it such that the head restraint extends as far forward as possible.

--- N/A – No head restraint adjustment

X.13. Place any adjustable seat belt anchorages at the vehicle manufacturer's nominal design position for a 50th percentile adult male occupant (S8.1.3)

--- N/A – No adjustable upper seat belt anchorage

Manufacturer's specified anchorage position: 2nd position down from top

Tested anchorage position: 2nd position down from top

X.14. Is the driver seat a bucket seat?

X. Yes, go to 14.1 and skip 14.2.

--- No, go to 14.2 and skip 14.1.

X.14.1 Bucket seats:

Locate and mark a vertical Plane B through the longitudinal centerline of the seat. The longitudinal centerline of a bucket seat cushion is determined at the widest part of the seat cushion. Measure perpendicular to the longitudinal centerline of the vehicle.

Record the width of the seat: 22.0 inches

Record the distance from the edge of the seat to Plane B: 11.0 inches

--- 14.2 Bench seats (including split bench seats):

--- Driver seat: Locate and mark a vertical Plane B through the center of the steering wheel parallel to the vehicle longitudinal centerline.

--- Passenger seat: Locate and mark a vertical longitudinal Plane B on the seat that is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel.

Distance from the vehicle centerline to the center of the steering wheel:

Distance from the vehicle centerline to Plane B:

X.15. Stow outboard armrests that are capable of being stowed. (S7.4.5)

X.16. Remove the arms of a Subpart E dummy and place it in the seat such that the midsagittal plane is coincident with Plane B and the upper torso rests against the seat back. (S10.4.1.1 & S10.4.1.2)

X.17. Rest the thighs on the seat cushion.

X.18. Position the H-point of the dummy within 0.5 inch of the vertical dimension and 0.5 inch of the horizontal dimension of a point 0.25 inch below the H-point determined by using the equipment and procedures specified in SAE J826 (APR 1980). (S10.4.2.1) Then measure the pelvic angle with respect to the horizontal using the pelvic angle gage. Adjust the dummy position until these three measurements are within the specifications. (S10.4.2.1 and S10.4.2.2)

--- 0.2 horizontal inches from the point 0.25 below the determined H-point (0.5 inch max.)

--- 0.0 vertical inches from the point 0.25 below the determined H-point (0.5 inch max.)

--- 22.5 pelvic angle (20° to 25°)

--- vertical inches from the point 0.25 below the determined H-point (0.5 inch max.)

--- pelvic angle (20° to 25°) (S10.4.2.2)

X.19. Set the distance between the outboard knee clevis flange surfaces at 10.6 inches. (X) measured distance (10.6 inches) (S10.5)

X.20. To the extent practicable keep the thighs and the legs in a vertical plane (S10.5) and rest the thighs on the seat cushion while resting the feet on the floorpan or toe board.

X.21. Fasten the seat belt around the dummy.
22. Remove all slack from the lap belt portion. (S10.9)
23. Pull the upper torso webbing out of the retractor and allow it to retract; repeat this four times. (S10.9)
24. Apply a 2 to 4 pound tension load to the lap belt. (S10.9)
   4 pound load applied
25. Is the belt system equipped with a tension relieving device?
   Yes, continue
   No, go to 26
25.1 Introduce the maximum amount of slack into the upper torso belt that is recommended by the vehicle manufacturer in the vehicle owner’s manual. (S10.9). Go to 25.
26. Check the statement that applies to this test vehicle:
   26.1 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.
       Yes - Pass
       No - FAIL
   26.2 The torso and lap belt webbing of the seat belt system automatically retracts when the seat belt latch plate is released.
       Yes - Pass
       No - FAIL
   26.3 Neither A or B apply.
       Yes - Pass
       No - FAIL
27. With the webbing and hardware in the stowed position are the webbing and hardware prevented from being pinched when the door is closed?
   Yes - Pass
   No - FAIL
28. If this test vehicle has an open body (without doors) and has a belt system with a tension-relieving device, does the belt system fully retract when the tension-relieving device is deactivated?
   Yes - Pass
   No - FAIL
DATA SHEET 13
SEAT BELT GUIDES AND HARDWARE (S7.4.6)

NHTSA No. C40307                                   Test Date: 04/14/04

Laboratory: TRC Inc.                                Test Technician(s): Michael S. Postle

DESIGNATED SEATING POSITION: Driver

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.

X 1. Is the seat cushion movable so that the seat back serves a function other than seating? (S7.4.6.1 (b))
   Yes; this form is complete
   X No; got to 2

X 2. Is the seat removable? (S7.4.6.1(b))
   Yes; this form is complete
   X No; got to 3

X 3. Is the seat movable so that the space formerly occupied by the seat can be used for a secondary function? (S7.4.6.1(b))
   Yes; this form is complete
   X No; got to 4

X 4. Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back? (S7.4.6.1(a))
   Yes; go to 5
   X No: this form is complete.

X 5. 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)? (S7.4.6.1(a))
   Yes – Pass
   __NO – FAIL
   Identify the part(s) on top or above the seat.
   _seat belt latch plate; _buckle; _seat belt webbing

X 6. Are the remaining two seat belt parts accessible under normal conditions?
   Yes – Pass
   __NO - FAIL

X 7. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the belt is completely retracted or, if the belt is nonretractable, the belt is unlatched. (S7.4.6.2)
   Yes - Pass __NO - FAIL

X 8. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat is moved to any position to which it is designed to be adjusted. (S7.4.6.2)
   Yes - Pass __NO - FAIL

X 9. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat back, if foldable, is folded forward as far as possible and then moved backward into position. (S7.4.6.2)
   Yes - Pass __NO - FAIL

X 10. Is the inboard receptacle end of the seat belt assembly, installed in the front outboard designated seating position, accessible with the center armrest in any position to which it can be adjusted (without moving the armrest)? (S7.4.6.2)
    Yes - Pass __NO - FAIL.
DATA SHEET 13
SEAT BELT GUIDES AND HARDWARE (S7.4.6)

NHTSA No. C40307 ___________________________ Test Date: 04/14/04

Laboratory: TRC Inc. _______________ Test Technician(s): Michael S. Postie

DESIGNATED SEATING POSITION: Right front passenger

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.

1. Is the seat cushion movable so that the seat back serves a function other than seating? (S7.4.6.1 (b))
   ___Yes; this form is complete
   X No; got to 2

2. Is the seat removable? (S7.4.6.1(b))
   ___Yes; this form is complete
   X No; got to 3

3. Is the seat movable so that the space formerly occupied by the seat can be used for a secondary function? (S7.4.6.1(b))
   ___Yes; this form is complete
   X No; got to 4

4. Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back? (S7.4.6.1(a))
   ___Yes: go to 5.
   X No: this form is complete.

5. 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)? (S7.4.6.1(a))
   ___Yes – Pass
   ___NO – FAIL
   Identify the part(s) on top or above the seat.
   ____ seat belt latch plate; ____ buckle; ____ seat belt webbing

6. Are the remaining two seat belt parts accessible under normal conditions?
   ___Yes – Pass
   ___NO – FAIL

7. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the belt is completely retracted or, if the belt is nonretractable, the belt is unlatched. (S7.4.6.2)
   ___Yes – Pass ___NO – FAIL

8. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat is moved to any position to which it is designed to be adjusted. (S7.4.6.2)
   ___Yes – Pass ___NO – FAIL

9. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat back, if foldable, is folded forward as far as possible and then moved backward into position. (S7.4.6.2)
   ___Yes – Pass ___NO – FAIL

10. Is the inboard receptacle end of the seat belt assembly, installed in the front outboard designated seating position, accessible with the center armrest in any position to which it can be adjusted (without moving the armrest)? (S7.4.6.2)
    ___Yes – Pass ___NO – FAIL.
DATA SHEET 13
SEAT BELT GUIDES AND HARDWARE (S7.4.6)

NHTSA No. C40307 Test Date: 04/14/04

Laboratory: TRC Inc. Test Technician(s): Michael S. Postle

DESIGNATED SEATING POSITION: 2nd Row right outboard passenger

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.

1. Is the seat cushion movable so that the seat back serves a function other than seating? (S7.4.6.1(b))
   - Yes; this form is complete
   - No; got to 2

2. Is the seat removable? (S7.4.6.1(b))
   - Yes; this form is complete
   - No; got to 3

3. Is the seat movable so that the space formerly occupied by the seat can be used for a secondary function? (S7.4.6.1(b))
   - Yes; this form is complete
   - No; got to 4

4. Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back? (S7.4.6.1(a))
   - Yes: go to 5.
   - No: this form is complete.

5. 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)? (S7.4.6.1(a))
   - Yes - Pass
   - NO - FAIL
   Identify the part(s) on top or above the seat.
   - seat belt latch plate; __buckle; _seat belt webbing

6. Are the remaining two seat belt parts accessible under normal conditions?
   - Yes - Pass
   - NO - FAIL

7. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the belt is completely retracted or, if the belt is nonretractable, the belt is unlatched. (S7.4.6.2)
   - Yes - Pass ___NO - FAIL

8. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat is moved to any position to which it is designed to be adjusted. (S7.4.6.2)
   - Yes - Pass ___NO - FAIL

9. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat back, if foldable, is folded forward as far as possible and then moved backward into position. (S7.4.6.2)
   - Yes - Pass ___NO - FAIL

10. Is the inboard receptacle end of the seat belt assembly, installed in the front outboard designated seating position, accessible with the center armrest in any position to which it can be adjusted (without moving the armrest)? (S7.4.6.2)
    - Yes - Pass ___NO - FAIL.
DATA SHEET 13
SEAT BELT GUIDES AND HARDWARE (S7.4.6)

NHTSA No. C40307 Test Date: 04/14/04

Laboratory: TRC Inc. Test Technician(s): Michael S. Postle

DESIGNATED SEATING POSITION: 2nd Row left outboard passenger

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.

X 1. Is the seat cushion movable so that the seat back serves a function other than seating? (S7.4.6.1 (b))
   _Yes; this form is complete
   X No; go to 2

X 2. Is the seat removable? (S7.4.6.1(b))
   _Yes; this form is complete
   X No; go to 3

X 3. Is the seat movable so that the space formerly occupied by the seat can be used for a secondary function? (S7.4.6.1(b))
   _Yes; this form is complete
   _No; go to 4

_4. Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back? (S7.4.6.1(a))
   _Yes; go to 5.
   _No; this form is complete.

_5. 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)? (S7.4.6.1(a))
   _Yes – Pass
   _NO – FAIL
   Identify the part(s) on top or above the seat.
   _seat belt latch plate; _buckle; _seat belt webbing

_6. Are the remaining two seat belt parts accessible under normal conditions?
   _Yes – Pass
   _NO – FAIL

_7. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the belt is completely retracted or, if the belt is nonretractable, the belt is unlatched. (S7.4.6.2)
   _Yes – Pass _NO – FAIL

_8. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat is moved to any position to which it is designed to be adjusted. (S7.4.6.2)
   _Yes – Pass _NO – FAIL

_9. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat back, if foldable, is folded forward as far as possible and then moved backward into position. (S7.4.6.2)
   _Yes – Pass _NO – FAIL

_10. Is the inboard receptacle end of the seat belt assembly, installed in the front outboard designated seating position, accessible with the center armrest in any position to which it can be adjusted (without moving the armrest)? (S7.4.6.2)
   _Yes – Pass _NO – FAIL.
DATA SHEET 13
SEAT BELT GUIDES AND HARDWARE (S7.4.6)

NHTSA No. C40307 Test Date: 04/14/04

Laboratory: TRC Inc. Test Technician(s): Michael S. Postie

DESIGNATED SEATING POSITION: 3rd Row left outboard passenger

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.

X 1. Is the seat cushion movable so that the seat back serves a function other than seating? (S7.4.6.1(b))
   __Yes; this form is complete
   X No; got to 2

X 2. Is the seat removable? (S7.4.6.1(b))
   __Yes; this form is complete
   X No; got to 3

X 3. Is the seat movable so that the space formerly occupied by the seat can be used for a secondary function? (S7.4.6.1(b))
   X Yes; this form is complete
   _No; got to 4

_4. Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back? (S7.4.6.1(a))
   __Yes: go to 5.
   _No: this form is complete.

_5. 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)? (S7.4.6.1(a))
   __Yes – Pass
   __NO – FAIL
   Identify the part(s) on top or above the seat.
   __seat belt latch plate; __buckle; __seat belt webbing

_6. Are the remaining two seat belt parts accessible under normal conditions?
   __Yes – Pass
   __NO – FAIL

_7. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the belt is completely retracted or, if the belt is nonretractable, the belt is unlatched. (S7.4.6.2)
   __Yes - Pass __NO - FAIL

_8. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat is moved to any position to which it is designed to be adjusted. (S7.4.6.2)
   __Yes - Pass __NO - FAIL

_9. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat back, if foldable, is folded forward as far as possible and then moved backward into position. (S7.4.6.2)
   __Yes - Pass __NO - FAIL

_10. Is the inboard receptacle end of the seat belt assembly, installed in the front outboard designated seating position, accessible with the center armrest in any position to which it can be adjusted (without moving the armrest)? (S7.4.6.2)
   __Yes - Pass __NO - FAIL.
DATA SHEET 13
SEAT BELT GUIDES AND HARDWARE (S7.4.6)

NHTSA No. C40307 Test Date: 04/14/04

Laboratory: TRC Inc. Test Technician(s): Michael S. Postle

DESIGNATED SEATING POSITION: 3rd Row right outboard passenger

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.

X 1. Is the seat cushion movable so that the seat back serves a function other than seating? (S7.4.6.1 (b))
   ___ Yes; this form is complete
   X No; got to 2

X 2. Is the seat removable? (S7.4.6.1(b))
   ___ Yes; this form is complete
   X No; got to 3

X 3. Is the seat movable so that the space formerly occupied by the seat can be used for a secondary function? (S7.4.6.1(b))
   X Yes; this form is complete
   ___ No; got to 4

X 4. Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back? (S7.4.6.1(a))
   ___ Yes: go to 5.
   ___ No: this form is complete.

X 5. 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)? (S7.4.6.1(a))
   ___ Yes – Pass
   ___ NO - FAIL

Identify the part(s) on top or above the seat:
   ___ Seat belt latch plate: ___ Buckle: ___ Seat belt webbing

X 6. Are the remaining two seat belt parts accessible under normal conditions?
   ___ Yes – Pass
   ___ NO - FAIL

X 7. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the belt is completely retracted or, if the belt is nonretractable, the belt is unlatched. (S7.4.6.2)
   ___ Yes - Pass ___ NO - FAIL

X 8. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat is moved to any position to which it is designed to be adjusted. (S7.4.6.2)
   ___ Yes - Pass ___ NO - FAIL

X 9. The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat back, if foldable, is folded forward as far as possible and then moved backward into position. (S7.4.6.2)
   ___ Yes - Pass ___ NO - FAIL

X 10. Is the inboard receptacle end of the seat belt assembly, installed in the front outboard designated seating position, accessible with the center armrest in any position to which it can be adjusted (without moving the armrest)? (S7.4.6.2)
   ___ Yes - Pass ___ NO - FAIL.

91
Appendix A

Photographs
Figure A-1  Pre-Test Front View of Test Vehicle Mounted to Sled
Figure A-3  Pre-Test Right Side View of Test Vehicle Mounted to Sled
Figure A-5 Post-Test Windshield View
Figure A-6 Pre-Test Driver Dummy Position View with Door Open
Figure A-7 Post-Test Driver Dummy Position View with Door Open
Figure A-9 Post-Test Driver Seat Track Position View
Figure A-11 Post-Test Driver Dummy Position Front View
Figure A-12  Pre-Test Passenger Dummy Position View with Door Open
Figure A-13 Post-Test Passenger Dummy Position View with Door Open
Figure A-15 Post-Test Passenger Seat Track Position View
Figure A-18 Post-Test Driver Airbag View
Figure A-19 Post-Test Driver Dummy Removed from Vehicle Overall View
Figure A-22  Post-Test Passenger Airbag View
Figure A-23 Post-Test Passenger Dummy Removed from Vehicle Overall View
Figure A-28. Pre-Test Steering Column Linkage in Engine Compartment View
Figure A-29 Post-Test Steering Column Linkage in Engine Compartment View
Appendix B

Data Plots
C40307 / 2004 CHRYSLER PACIFICA
PASSENGER SECONDARY AIRBAG EVENT
FMVSS 208 SLED TEST
TEST NUMBER: S040419

TRC NUMBER: S040419Z

VOLTAGE (V x 10^-2)

B-6

-10 -20 10 40 70 100 130 160 190 220 250 280 310
TIME (MS)

CHANNEL: PABET2  FILTER: CH. CLASS 1000  PEAK DATA: 1.00 V @ 25.12 MS; 0.00 V @ -20.00 MS
C40307 / 2004 CHRYSLER PACIFICA
SLED ACCELERATION
FMVSS 208 SLED TEST
TEST NUMBER: S040419

TRC NUMBER: S040419F

CHANNEL: SLUXG FILTER: CH. CLASS 60
PEAK DATA: 0.62 G @ 155.12 MS; -16.86 G @ 56.40 MS

ACCELERATION (G x 10^-1)

TIME (MS)

-186
-154
-122
-90
-58
-26
6

-20 10 40 70 100 130 160 190 220 250 280 310
C40307 / 2004 CHRYSLER PACIFICA
SLED ACCELERATION - BACKUP

FMYSS 208 SLED TEST

TEST NUMBER: S040419

TRC NUMBER: S040419F

ACCELERATION (G x 10^-1)

CHANNEL: SLDXGR  FILTER: CH. CLASS 60

PEAK DATA: 0.69 G @ 149.04 MS; -16.99 G @ 56.89 MS

TIME (MS)

-20  10  40  70  100  130  160  190  220  250  280  310
TRC NUMBER: S040419F

C40307 / 2004 CHRYSLER PACIFICA
SLED VELOCITY (INTEGRATED)
FMVSS 208 SLED TEST
TEST NUMBER: S040419

CHANNEL: SLOXVI   FILTER: CH. CLASS 100

VELOCITY (MPH X 10^-1)

TIME (MS)

-324
-310
-280
-270
-256
-216
-162
-108
-54
0

-20  10  40  70  100  130  160  190  220  250  280  310

PEAK DATA: 0.00 MPH @ -20.00 MS, -29.55 MPH @ 145.92 MS
C40307 / 2004 CHRYSLER PACIFICA
PASSENGER SECONDARY AIRBAG EVENT
FMVSS 208 SLED TEST
TEST NUMBER: S040419

TRC NUMBER: S040419F

VOLTAGE (V x 10^-2)

-10 -20 10 40 70 100 130 160 190 220 250 280 310

TIME (MS)

CHANNEL: PABET2  FILTER: CH. CLASS 1000

PEAK DATA: 1.00 V @ 25.68 MS, 0.00 V @ -20.00 MS
C40307 / 2004 CHRYSLER PACIFICA
DRIVER NECK Y-AXIS SHEAR FORCE
FMYSS 209 SLED TEST
TEST NUMBER: S040419

CHANNEL: NEKYF1
FILTER: CH. CLASS 1000
PEAK DATA: 47.68 N @ 36.72 MS, -52.27 N @ 134.24 MS
C40307 / 2004 CHRYSLER PACIFICA
DRIVER NECK Z-AXIS AXIAL FORCE
FMVSS 208 SLED TEST
TEST NUMBER: S040419

TRC NUMBER: S040419F

FORCE (N x 10^1)

TIME (MS)

CHANNEL: NEKF1
FILTER: CH. CLASS 1000

PEAK DATA: 775.20 N @ 91.52 MS, -169.01 N @ 44.08 MS
C40307 / 2004 CHRYSLER PACIFICA
DRIVER NECK MOMENT ABOUT Y AXIS OCCIPITAL CONDYLE
FMVSS 208 SLED TEST
TEST NUMBER: S040419

TORQUE (N·m)

60
47
34
21
8

-5

-18

TIME (MS)

-20 10 40 70 100 130 160 190 220 250 280 310

CHANNEL: NEKOMI FILTER: CH. CLASS 600
PEAK DATA: 58.29 N·m @ 129.92 MS, -16.80 N·m @ 156.08 MS
CJ0307 / 2004 CHRYSLER PACIFICA
DRIVER CHEST X-AXIS ACCELERATION
FMVSS 208 SLED TEST

TRC NUMBER: S040419F
TEST NUMBER: S040419

ACCELERATION (G X 10^-1)

-324
-266
-200
-150
-92
-34
23

TIME (MS)
-20 10 40 70 100 130 160 190 220 250 280 310

CHANNEL: CSTXG1 FILTER: CH. CLASS 100
PEAK DATA: 2.26 G @ 244.08 MS; -29.85 G @ 91.84 MS
C40307 / 2004 CHRYSLER PACIFICA
DRIVER CHEST Z-AXIS ACCELERATION
FMYSS 208 SLED TEST

TRC NUMBER: S040419F
TEST NUMBER: S040419

ACCELERATION (G \times 10^{-1})

B-35

-38 -20 10 40 70 100 130 160 190 220 250 280 310

TIME (MS)

-8

CHANNEL: CSTZ61 FILTER: CH. CLASS 100

PEAK DATA: 12.38 G @ 93.76 MS, -3.54 G @ 45.20 MS
C40307 / 2004 CHRYSLER PACIFICA
DRIVER RIGHT FEMUR FORCE
FMVSS 208 SLED TEST

TRC NUMBER: S040419F
TEST NUMBER: S040419

FORCE (LBF X 10^4)

-53
-43
-33
-23
-13
-3

TIME (MS)
-20
10
40
70
100
130
160
190
220
250
280
310

S040419

CHANNEL: RFMZF1
FILTER: CH. CLASS 600
PEAK DATA: 55.75 LBF @ 216.00 MS, 499.00 LBF @ 76.40 MS
C40307 / 2004 CHRYSLER PACIFICA
RIGHT FRONT PASSENGER HEAD RESULTANT ACCELERATION
FMYSS 208 SLED TEST

CHANNEL: HEDRC2 FILTER: CH. CLASS 1000
PEAK DATA: 61.21 G @ 106.40 MS; 0.03 G @ -20.00 MS
C40307 / 2004 CHRYSLER PACIFICA
RIGHT FRONT PASSENGER NECK Y-AXIS SHEAR FORCE
FMVSS 208 SLED TEST
TEST NUMBER: S040419

FORCE (N X 10^1)

-12 -20 10 40 70 100 130 160 190 220 250 280 310

TIME (MS)

CHANNEL: NEKYF2 FILTER: CH. CLASS 1000
PEAK DATA: 895.50 N @ 124.88 MS; -115.94 N @ 189.36 MS
C40307 / 2004 CHRYSLER PACIFICA
RIGHT FRONT PASSENGER NECK Z-AXIS AXIAL FORCE
FMVSS 208 SLED TEST

FORCE (N X 10^1)

TIME (MS)

CHANNEL: NEKZF2 FILTER: CH. CLASS 1000
PEAK DATA: 466.63 N @ 174.16 MS; -2269.45 N @ 108.96 MS
C40307 / 2004 CHRYSLER PACIFICA
RIGHT FRONT PASSENGER NECK MOMENT ABOUT Z AXIS
FMYSS 208 SLED TEST
TEST NUMBER: S040419

TRC NUMBER: S040419F

CHANNEL: NEKZM2 FILTER: CH. CLASS G00
PEAK DATA: 36.42 N M @ 133.92 MS, -10.21 N M @ 210.88 MS

TIME (MS)

TORQUE (N M)

-20 10 40 70 100 130 160 190 220 250 280 310

-20 0 10 20 30 40

B-49
C40307 / 2004 CHRYSLER PACIFICA

RIGHT FRONT PASSENGER CHEST X-AXIS ACCELERATION

TRC NUMBER: S040419F
FMVSS 208 SLED TEST
TEST NUMBER: S040419

ACCELERATION (G x 10^-2)

-394
-325
-256
-187
-49

TIME (MS)

-20
10
40
70
100
130
160
190
220
250
280
310

CHANNEL: CSTXG2
FILTER: CH. CLASS 100

PEAK DATA: 1.90 G @ 193.20 MS, -36.17 G @ 110.72 MS
Appendix C

Manufacturer's Vehicle Information
December 12, 2003

Mr. Harry Thompson, Chief
Office of Vehicle Safety Compliance
National Highway Traffic Safety Administration
U.S. Department of Transportation
400 Seventh Street, S. W., Room 6111
Washington, DC 20590

Dear Mr. Thompson

Reference: NYS-221CCa/QA-208-031016-D; FMVSS 208
2004 MY Chrysler Pacifica

The following is provided in response to your October 28, 2003 information request.

Q1. Restraint system information:
   1.1 Describe the difference between the MY 2004 air bag restraint system and the 2003 system.
   1.2 Describe what other restraint system changes have been made.
   1.3 Describe other vehicle changes that may affect FMVSS 208 performance.
   1.4 Describe any features that may affect occupant protection performance with respect to children and out of position occupants.
   1.5 State whether the vehicle is equipped with a FMVSS 208 air bag on-off switch for the passenger frontal air bag.

   A1.1 The Chrysler Pacifica is an all new vehicle design for the 2004 MY. Therefore, this question does not apply.
   A1.2 The Chrysler Pacifica is an all new vehicle design for the 2004 MY. Therefore, this question does not apply.
   A1.3 The Chrysler Pacifica is an all new vehicle design for the 2004 MY. Therefore, this question does not apply.
   A1.4 The 2004 MY Chrysler Pacifica has multi-stage air bag inflators that inflate at different rates depending upon impact severity.
   A1.5 The 2004 MY Chrysler Pacifica does not qualify for a manual air bag on-off switch.

Q2. Advanced air bag vehicles - State whether the vehicle model is certified to the advanced air bag requirements of section S14 of FMVSS 208.
   2.1 Crash tests:
      2.1.1 A copy of the certification test reports for belted and unbelted crash tests: (frontal, angular, and offset) using the 5th percentile female dummy and the 50th percentile male dummy.
2.1.2 The width of the vehicle as defined in S18.2.4, the location at which the maximum dimension was measured, and any other information and measurements used to position the vehicle for the offset crash test at 40 percent overlap.

2.2 5th female low risk deployment:

2.2.1 A copy of the 5th female low risk deployment certification tests.

2.2.2 For air bags with dual stage or multi-stage inflators, describe the inflator stage or combination of inflator stages or time delay between successive inflator stages used for low risk deployment.

2.2.3 A copy of the tests and analyses that were used to determine the inflator stage or combination of inflator stages or time delay between successive inflator stages used for the low risk deployment test. (S26.4)

2.2.4 The location of the "geometric center of the opening through which the air bag deploys into the occupant compartment."

2.2.5 Describe how to disconnect the air bags and trigger the appropriate inflator stages.

2.3 Children low risk deployment (if applicable) – State the low risk deployment sections (S19.3, S21.4, and S23.4) of FMVSS 208 to which the vehicle model is certified.

2.3.1 When certified to low risk deployment for children, a copy of the certification test report for each child restraint (12-month-old) and/or child position (3-year-old, 6-year-old).

2.3.2 For air bags with dual stage or multi-stage inflators, describe the inflator stage or combination of inflator stages or time delay between successive inflator stages used for low risk deployment.

2.3.3 A copy of the tests and analyses that were used to determine the inflator stage or combination of inflator stages or time delay between successive inflator stages used for the low risk deployment tests. (S20.4.9, S22.4.4 and S24.4.4)

2.3.4 The location of the "geometric center of the opening through which the air bag deploys into the occupant compartment."

2.3.5 Describe how to disconnect the air bags and trigger the appropriate inflator stages.

2.4 Suppression (if applicable) – State the low risk deployment sections (S19.2, S21.2, and S23.2) of FMVSS 208 to which the vehicle model is certified.

2.4.1 A representative test report for each type of suppression test (12-month-old, 3-year-old, 6-year-old) and a reactivation test report using a 5th percentile female dummy.

2.4.2 State whether dummies or humans were used. If humans were used provide the method to deactivate the air bag during suppression tests, identify any parts or equipment necessary for deactivation, and provide the method to assure that the same test results would be obtained if the air bag were not deactivated.

2.4.3 Describe how the suppression system works and its components.

2.4.4 State whether the air bag is suppressed when the seat is empty and whether the telltale on the dash is lit when the seat is empty. If the telltale is not lit when the seat is empty, describe the mechanism used to determine whether the air bag is suppressed or activated and describe the equipment and procedure necessary to verify the air bag is suppressed.

2.4.5 Describe the telltale and its location.
A2. The 2004 MY Chrysler Pacifica is not certified to the advanced air bag requirements of S14 of FMVSS 208. Therefore, this question does not apply.

Q3. Non-advanced air bag vehicles certified unbelted in a 40 km/h or 48 km/h barrier crash test — State the sections (S5.1.2(a)(1), S5.1.2(a)(2)) of FMVSS 208 to which the vehicle model is certified. A copy of the certification test reports for belted and unbelted crash tests (frontal and angular).

A3. The 2004 MY Chrysler Pacifica is not certified to the unbelted tests of S5.1.2 of FMVSS 208. Instead the vehicle is certified using the optional impact simulator test contained in S13.

Q4. Non-advanced air bag vehicles certified unbelted in a sled test — State whether the vehicle model is certified to section S13 of FMVSS 208.
   4.1 A copy of the certification sled test.
   4.2 A copy of the certification test reports for belted crash tests (frontal and angular).
   4.3 Describe how to disconnect the air bags from the vehicle sensors and connect them to the triggering mechanism used in the sled test.
   4.4 For air bags with dual stage or multi-stage inflators, describe the inflator stage or combination of inflator stages or time delay between successive inflator stages used in the sled test.
   4.5 For air bags with dual stage or multi-stage inflators, provide a copy of the tests and analyses that were used to determine the inflator stage or combination of inflator stages or time delay between successive inflator stages that would occur in a crash of similar severity.

A4.1. The 2004 MY Chrysler Pacifica is certified to the unbelted sled test specified in S13 of FMVSS 208. A copy of the certification test is attached to this letter as Appendix A.

A4.2. Certification test reports for the belted crash tests required by S5.1.1(a) of FMVSS 208 are attached to this letter in Appendix B.

A4.3. The wiring harness is disconnected at the occupant restraint control (ORC) module located in the center console and an instrumentation wiring harness is connected to the squib circuits. Air bag wiring schematics for the 2004 MY Chrysler Pacifica are attached to this letter as Appendix C.

A4.4. The front air bag inflators are a multi-stage design. For the sled test, the delay between inflator stages is 5 milliseconds for both the driver and passenger air bags. The driver side inflatable knee bolster is energized at the same time as the frontal air bag first stage inflators.

A4.5. The 30 MPH delta-v crash pulse is used as input to the air bag control module algorithm to determine the appropriate air bag deployment stages. For the impact simulation test, the worst case air bag deployment delay that could ever occur for a 30 MPH delta-v crash (5 ms between stages) was selected. Deployment times for the 2004 MY Chrysler Pacifica as determined by the algorithm are attached to this letter as Appendix D.

Q5. Other information
   5.1 Describe the seat adjustment controls (manual and power) available for this model, including any adjustment controls on seats rearward of the front outboard
designated seating positions, and the seat movements associated with each individual control.

5.2 Describe the headrest adjustments available for this model.

5.3 State for each safety belt system in the subject vehicles 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.

5.4 State for each crash test (frontal, angular, and offset) whether the moveable windows and vents were opened or closed.

5.5 Submit dummy placement measurements, including diagrams or photographs that show exactly where each measurement was taken. For the subject vehicles certified to the advanced air bag requirements, provide measurements for both the 50th percentile male and the 5th percentile female. 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.

5.6 State whether the subject vehicles have a footrest for the driver.

5.7 Provide the seat positioning, steering column positioning, and fuel tank data on the enclosed form. If more than one front seating configuration, steering column or fuel tank configuration are available on this vehicle, provide separate information for each. For certification tests using the 5th percentile female, provide the seat fore-aft position, seat height, and seat back angle used in the certification test.

5.8 Provide the seating reference point (SrRP) for the driver designated seating position and every other designated seating position required to comply with the lockable seat belt requirement in S7.1.1.5.

5.9 If there are adjustable seat belt anchorages at front and/or rear designated seating positions, provide the manufacturer's nominal design position for a 50th percentile adult male occupant and, if certified to the advanced air bag requirements, the position for the 5th percentile female.

5.10 For all tests that are performed to certify the subject vehicles to injury assessment performance requirements of FMVSS 208, provide a summary of the injury results. In addition, for crash tests provide the measured test speed.

5.11 When vehicle components must be removed to obtain the proper test weight for crash tests, list the components you recommend for removal, and in the priority order you recommend for removal.

5.12 If the subject vehicles use 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.

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

A5.1 The 2004 MY Chrysler Pacifica has front power seats as standard equipment. Controls for moving the seats are located on the door trim panels. The second row seats fore-aft adjustment is a "towel-bar" located under the seat cushion and the seat back is adjusted by a handle located on the outboard side of the seat cushion.

A5.2 The first two rows of seats are equipped with height adjustable headrests. The headrests do not adjust in the fore-aft direction.

A5.3 The 2004 MY Chrysler Pacifica does not have seatbelts that use a tension relieving device.
A5.4 Certification crash tests for the 2004 MY Chrysler Pacifica were conducted with moveable windows in the open position.

A5.5 The average dummy placement measurements for vehicle crash tests used to certify the 2004 MY Chrysler Pacifica are attached to this letter as Appendix E.

A5.6 The 2004 MY Chrysler Pacifica is not equipped with a footrest for the driver.

A5.7 The requested data for the 2004 MY Chrysler Pacifica is attached to this letter as Appendix F.

A5.8 The requested data for the 2004 MY Chrysler Pacifica is attached to this letter as Appendix F.

A5.9 The 2004 MY Chrysler Pacifica has four detents in the front seat belt adjustable turning loops. The recommended adjustable turning loop height for the 50th percentile adult male is the second detent from the full up position.

A5.10 Summary tables of certification test reports that contain the requested information for the 2004 MY Chrysler Pacifica are attached to this letter as Appendix G.

A5.11 Should it be necessary to remove vehicle components to obtain the proper test weight, please remove them in this order: spare tire, 3rd row seats, 2nd row seats, rear fascia skin (not bumper reinforcement), rear speakers, 3rd row seat belts, liftgate interior trim.

A5.12 The 2004 MY Chrysler Pacifica uses a pressure vessel to inflate the passenger air bag. A test letter from the supplier that certified the inflator to the requirements of S9.1 of FMVSS 208 is attached to this letter as Appendix H.

A5.13 The 2004 MY Chrysler Pacifica uses explosive devices to inflate both driver and passenger air bags. Test letters from the supplier are attached to this letter as Appendix H.

If you have any questions regarding the information provided, please direct them to Mr. Martin A. Heitkamp of my staff at (313) 493-2132.

Sincerely,

[Signature]

Stephan J. Speth
Attachments
Appendix C
<table>
<thead>
<tr>
<th>COLOR CODE</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>BL</td>
<td>BLUE</td>
</tr>
<tr>
<td>BK</td>
<td>BLACK</td>
</tr>
<tr>
<td>BR</td>
<td>BROWN</td>
</tr>
<tr>
<td>DB</td>
<td>DARK BLUE</td>
</tr>
<tr>
<td>DG</td>
<td>DARK GREEN</td>
</tr>
<tr>
<td>GY</td>
<td>GRAY</td>
</tr>
<tr>
<td>LB</td>
<td>LIGHT BLUE</td>
</tr>
<tr>
<td>LG</td>
<td>LIGHT GREEN</td>
</tr>
<tr>
<td>OR</td>
<td>ORANGE</td>
</tr>
<tr>
<td>PK</td>
<td>PINK</td>
</tr>
<tr>
<td>RD</td>
<td>RED</td>
</tr>
<tr>
<td>TN</td>
<td>TAN</td>
</tr>
<tr>
<td>VT</td>
<td>VIOLET</td>
</tr>
<tr>
<td>WT</td>
<td>WHITE</td>
</tr>
<tr>
<td>YL</td>
<td>YELLOW</td>
</tr>
<tr>
<td>*</td>
<td>WITH TRACER</td>
</tr>
</tbody>
</table>
Appendix E
DESCRIPTIONS OF DUMMY MEASUREMENTS

When a level is to be used, it is to ensure that the line containing the two points described is either parallel or perpendicular to the ground. If a measurement to be made is less than 10 inches ignore the directions to use a level and approximate a level measurement.

1. The following measurements are to be recorded on the Driver Side within a vertical longitudinal plane.

CH - Chest to Steering Wheel Hub: Taken from a point on the dummy's chest 9 inches below the dummy's chin to the center of the steering wheel hub.

NR - Nose to Rim: Taken from the tip of the dummy's nose to the closest point on rear (closest to occupant) of the steering wheel rim.

NH - Nose to Hub: Taken from the tip of the dummy's nose to the center of the steering wheel hub.

2. The following measurements are to be recorded on the Passenger Side within a vertical transverse plane.

HW - Head to Windshield: Taken from the bridge of the dummy's nose (where the nose meets the forehead, between his eyes) level to windshield.

CD - Chest to I/P: Taken from a point on the dummy's chest 9 inches below the dummy's chin level to the closest point on the I/P (dashboard).

B - Ear Target to Windshield: Taken from the outboard ear target center level to the windshield.

3. The following measurements are to be recorded on Driver and Passenger Sides within a vertical transverse plane.

KSDL, KSDR - Left and Right Knee Skin to Dashboard: Taken from the leading edge of the knee skin to the closest point forward acquired by swinging the tape measure in continually larger arcs until it contacts the dashboard (knee bolster).

PBL, PBL - Pelvis to Belt: Taken by laying a flat plate across the dummy's thighs and measuring form the plate to the top and bottom edges of the torso belt at the dummy centerline.

Complete the chart on the next page describing the dummy positioning information. The measurements in the chart are to be the averages taken from the compliance tests listed in the Compliance Report.
# DESCRIPTIONS OF DUMMY MEASUREMENTS

<table>
<thead>
<tr>
<th>Diagram Reference</th>
<th>Description</th>
<th>Dimension (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH (Driver)</td>
<td>Chest to Hub</td>
<td>11.3</td>
</tr>
<tr>
<td>NR (Driver)</td>
<td>Nose to Rim</td>
<td>15.6</td>
</tr>
<tr>
<td>NH (Driver)</td>
<td>Nose to Hub</td>
<td>15.5</td>
</tr>
<tr>
<td>KSDL (Driver)</td>
<td>Left Knee to Bolster</td>
<td>3.7</td>
</tr>
<tr>
<td>KSDR (Driver)</td>
<td>Right Knee to Bolster</td>
<td>3.4</td>
</tr>
<tr>
<td>PBU (Driver)</td>
<td>Plate to Belt Upper</td>
<td>14.2</td>
</tr>
<tr>
<td>PBL (Driver)</td>
<td>Plate to Belt Lower</td>
<td>11.6</td>
</tr>
<tr>
<td>HW (Passenger)</td>
<td>Head to Windshield</td>
<td>23.9</td>
</tr>
<tr>
<td>CD (Passenger)</td>
<td>Chest to I/P</td>
<td>19.1</td>
</tr>
<tr>
<td>B (Passenger)</td>
<td>Ear Target to Windshield</td>
<td>27.4</td>
</tr>
<tr>
<td>KSDL (Passenger)</td>
<td>Left Knee to Dash</td>
<td>3.8</td>
</tr>
<tr>
<td>KSDR (Passenger)</td>
<td>Right Knee to Dash</td>
<td>4.3</td>
</tr>
<tr>
<td>PBU (Passenger)</td>
<td>Plate to Belt Upper</td>
<td>13.5</td>
</tr>
<tr>
<td>PBL (Passenger)</td>
<td>Plate to Belt Lower</td>
<td>10.2</td>
</tr>
</tbody>
</table>
Appendix F
TEST VEHICLE INFORMATION

Vehicle Model Year & Make: 2004 Chrysler
Vehicle Model & Body Style: Pacifica Sports Tourer

1. NOMINAL DESIGN RIDING POSITION --
For adjustable driver and passenger seat backs, describe how to position the inclinometer to measure the seat back angle. Include description of the location of the adjustment latch detent if applicable. Indicate, if applicable, how the detents are numbered (is the first detent A0" or A1"?). Indicate if the seat back angle is measured with the dummy in the seat.

Seat back angle for driver's seat = 20°.
Measurement Instructions:
Remove seatback cover to expose seat frame.
Level vehicle sill to horizontal. Set seat frame to 70 degrees. This results in a seatback angle of 20 degrees, with a corresponding OSCAR angle of 22 degrees.

Seat back angle for passenger's seat = 20°.
Measurement Instructions:
Same as driver 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, indicate how the detents are numbered (is the first detent A0" or A1"?). Provide information to locate the detent in which the seat track is to be locked.

Positioning of the driver’s seat:
Driver seat is power. Position to full-down. Move seat to full-forward & mark seat track. Move seat to full-rear & mark seat track. Mid-track will be the mid-point between the fore and aft extremes. Exact distance is 104 mm from either end.
Positioning of the passenger’s seat (if applicable):
Same as driver.

Rear seat positioning is accomplished by setting the seat at mid-track (50 mm from either fore or aft extreme).
The Oscar torso angle should be 22 degrees,
To set seat back angle, remove load floor panel and set seat back frame to 18 degrees from vertical.
When properly positioned, the load floor angle will be at 17 degrees from vertical.

3. FUEL TANK CAPACITY DATA --
3.1  A. "Usable Capacity" of standard equipment fuel tank = 23.0 gallons.
B. "Usable Capacity" of optional equipment fuel tank = no optional tank gallons.
C. "Usable Capacity" of vehicle(s) used for certification testing to requirements of FMVSS 301 = 21.7 gallons.

Operational instructions:
Fill tank through fuel filler door on left rear quarter panel.
TEST VEHICLE INFORMATION

3.2 Amount of Stoddard solvent added to vehicle(s) used for certification test(s) = 21.7 gallons

3.3 Is vehicle equipped with electric fuel pump? ☒ YES ☐ NO

If YES, does pump normally operate when vehicle's electrical system is activated?
☒ YES ☐ NO

4. ADJUSTABLE UPPER ANCHORAGE POSITION:
Adjustable anchorage has four positions. Place Anchorage in Top Position, #1. Move anchorage down one index click to Test Position #2.

5. 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 tilting, non-telescoping column is standard equipment on the Pacifica. The tilt head has a total range of motion of 20 degrees. From the highest locked position, lower tilt head 9 degrees. Ensure tilt head is latched. This represents a typical steering wheel angle of 66 to 67 degrees, as measured in-vehicle with the driver sill at level.

6. SEATING REFERENCE POINT (SRP)

Provide drawing which shows the driver’s SRP location.

7. FUEL TANK LOCATION

Provide drawing which shows the undercarriage view of the vehicle.
Pacifica all wheel drive underbody


SEAT REFERENCE POINT (SRP) AND TORSO ANGLE DATA

(All dimensions in mm)

Model Year: 2004  Make: Chrysler  Model: Pacifica  Body Style:  
Seat Style:  Front Row: Low-Bk  Second Row: Bucket  Third Row: Bucket

![Diagram of vehicle seating and torso angles]

Table 1. Seating Positions and Torso Angles

<table>
<thead>
<tr>
<th></th>
<th>Left (Driver Side)</th>
<th>Center (if any)</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>353</td>
<td></td>
<td>353</td>
</tr>
<tr>
<td>A2</td>
<td>292</td>
<td></td>
<td>292</td>
</tr>
<tr>
<td>A3</td>
<td>171</td>
<td></td>
<td>171</td>
</tr>
<tr>
<td>B</td>
<td>302</td>
<td></td>
<td>302</td>
</tr>
<tr>
<td>C</td>
<td>1186</td>
<td></td>
<td>1186</td>
</tr>
<tr>
<td>D</td>
<td>1981</td>
<td></td>
<td>1981</td>
</tr>
<tr>
<td>Torso Angle (degree)</td>
<td>Front Row 22</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Second Row 22</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Third Row 22</td>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>

Note: 1. All dimensions are in mm. If not, provide the unit used.
SEATING REFERENCE POINT

(All dimensions in mm)

Model Year: 2004  Make: Chrysler  Model: Pacifica  Body Style: 
Seat Style: Front Row: Low-Bk  Second Row: Bucket  Third Row: Bucket
SEATING REFERENCE POINT

(All dimensions in mm)

Table 2. Seating Reference Point

<table>
<thead>
<tr>
<th>Seating Reference Point (SRP)</th>
<th>Distance from Driver’s front outboard seat adjuster anchorage¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Row</td>
<td></td>
</tr>
<tr>
<td>E1</td>
<td>191</td>
</tr>
<tr>
<td>B2</td>
<td>N/A</td>
</tr>
<tr>
<td>E2</td>
<td>N/A</td>
</tr>
<tr>
<td>B3</td>
<td>302</td>
</tr>
<tr>
<td>E3</td>
<td>991</td>
</tr>
<tr>
<td>Second Row</td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>1186</td>
</tr>
<tr>
<td>F1</td>
<td>191</td>
</tr>
<tr>
<td>C2</td>
<td>N/A</td>
</tr>
<tr>
<td>F2</td>
<td>N/A</td>
</tr>
<tr>
<td>C3</td>
<td>1186</td>
</tr>
<tr>
<td>F3</td>
<td>991</td>
</tr>
<tr>
<td>Third Row</td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>1981</td>
</tr>
<tr>
<td>G1</td>
<td>343</td>
</tr>
<tr>
<td>D2</td>
<td>N/A</td>
</tr>
<tr>
<td>G2</td>
<td>N/A</td>
</tr>
<tr>
<td>D3</td>
<td>1981</td>
</tr>
<tr>
<td>G3</td>
<td>836</td>
</tr>
</tbody>
</table>

Note: 1. Use the center of anchorage.
Appendix G
# OCCUPANT CRASH PROTECTION

## 2004 CS BODY

**MVSS 208-S13**

**IMPACT SIMULATOR: DRIVER & PASSENGER**

<table>
<thead>
<tr>
<th>Test Number</th>
<th>Test Date</th>
<th>HIC (36ms)</th>
<th>Chest G's</th>
<th>Deflect. (cm)</th>
<th>Femur Load (lbs)</th>
<th>Neck Moment (Nm)</th>
<th>Neck Shear Fx (N)</th>
<th>Neck Axial Fx (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MVSS 208Limits</td>
<td></td>
<td>1000</td>
<td>60</td>
<td>7.6 cm</td>
<td>2250</td>
<td>2250</td>
<td>190 Nm</td>
<td>3100 N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-3100 N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4000 N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-3300 N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2250 lbf = 10000 N</td>
</tr>
</tbody>
</table>

**DRIVER**

<table>
<thead>
<tr>
<th>Test Number</th>
<th>Test Date</th>
<th>HIC (36ms)</th>
<th>Chest G's</th>
<th>Deflect. (cm)</th>
<th>Femur Load (lbs)</th>
<th>Neck Moment (Nm)</th>
<th>Neck Shear Fx (N)</th>
<th>Neck Axial Fx (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS 22648</td>
<td>10/24/2002</td>
<td>112.3</td>
<td>31.9</td>
<td>2.33</td>
<td>3578.2 N</td>
<td>2567.7 N</td>
<td>39.8</td>
<td>12.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>745.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-140.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>357.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-961.3</td>
</tr>
</tbody>
</table>

Leather Bucket Seat with Power Adjusters, Til Steering Column.

**PASSENGER**

<table>
<thead>
<tr>
<th>Test Number</th>
<th>Test Date</th>
<th>HIC (36ms)</th>
<th>Chest G's</th>
<th>Deflect. (cm)</th>
<th>Femur Load (lbs)</th>
<th>Neck Moment (Nm)</th>
<th>Neck Shear Fx (N)</th>
<th>Neck Axial Fx (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS 22648</td>
<td>10/24/2002</td>
<td>132.3</td>
<td>43.1</td>
<td>1.02</td>
<td>5395.2 N</td>
<td>5514.0 N</td>
<td>81.7</td>
<td>19.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1758.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-298.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1488.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-365.9</td>
</tr>
</tbody>
</table>

Leather Bucket Seat with Power Adjusters.

**Notes:**

- IMPACT SIMULATOR TIME INTERVAL BETWEEN 0 - 210 ms.
- TIME INTERVAL CHOSEN TO INCLUDE ALL SIGNIFICANT DATA.
- HYBRID III DUMMY RESTRAINED BY "AIRBAG ONLY" ON IMPACT SIMULATOR.
- FOR IS 22648 THE AIRBAG DEPLOYMENT TIMES ARE PRIMARY @ 19.9 ms AND SECONDARY @ 24.9 ms AFTER CARRIAGE ACCELERATION REACHES 0.5 G's.
- FOR INFLATABLE KNEE BLOCKER THE TIME TO DEPLOY IS 19.9 ms (PRIMARY ONLY).
## OCCUPANT CRASH PROTECTION

**2004 CS BODY**  
MVSS 208 / CMVSR 208  
BARRIER CRASH - DRIVER

### ASSESSMENT CRITERIA

<table>
<thead>
<tr>
<th>HIC</th>
<th>Chest G's</th>
<th>Chest Deflect.</th>
<th>Left Femur</th>
<th>Right Femur</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 @ 36ms</td>
<td>60</td>
<td>3.0 in</td>
<td>2250 lbs</td>
<td>2250 lbs</td>
</tr>
<tr>
<td>700 @ 15ms</td>
<td>NA</td>
<td>50 mm</td>
<td>10000 N</td>
<td>10000 N</td>
</tr>
</tbody>
</table>

#### FLAT FRONTAL

<table>
<thead>
<tr>
<th>TEST NUMBER</th>
<th>DATE</th>
<th>WT. Lbs</th>
<th>COMMENTS:</th>
<th>HIC</th>
<th>Chest</th>
<th>Femur Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>VC 10384</td>
<td>1/8/2003</td>
<td>5042</td>
<td>FMVSS 208 Limits (FF &amp; Angular)</td>
<td>224 @ 36 ms</td>
<td>34.8 G's</td>
<td>1.24 in</td>
</tr>
<tr>
<td>CSC 6236</td>
<td>30.3</td>
<td></td>
<td>CMVSR 208 Limits (FF Only)</td>
<td>125 @ 15 ms</td>
<td>NA</td>
<td>31.5 mm</td>
</tr>
<tr>
<td>VC 10461</td>
<td>2/11/2003</td>
<td>4894</td>
<td>3.5L FWD FMVSS</td>
<td>232 @ 36 ms</td>
<td>32.1 G's</td>
<td>1.32 in</td>
</tr>
<tr>
<td>CSY6432</td>
<td>30.6</td>
<td></td>
<td>CMVSR</td>
<td>137 @ 15 ms</td>
<td>NA</td>
<td>33.6 mm</td>
</tr>
</tbody>
</table>

#### LEFT ANGULAR

<table>
<thead>
<tr>
<th>TEST NUMBER</th>
<th>DATE</th>
<th>WT. Lbs</th>
<th>COMMENTS:</th>
<th>HIC</th>
<th>Chest</th>
<th>Femur Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>VC 10209</td>
<td>11/6/2002</td>
<td>5077</td>
<td>3.5L AWD FMVSS</td>
<td>306 @ 36 ms</td>
<td>41.2 G's</td>
<td>1.54 in</td>
</tr>
<tr>
<td>CSC 6140</td>
<td>30.3</td>
<td></td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>39.1 mm</td>
</tr>
<tr>
<td>VC 10468</td>
<td>2/15/2003</td>
<td>4899</td>
<td>3.5L FWD FMVSS</td>
<td>292 @ 36 ms</td>
<td>36.7 G's</td>
<td>1.41 in</td>
</tr>
<tr>
<td>CSY6399</td>
<td>30.5</td>
<td></td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>35.7 mm</td>
</tr>
</tbody>
</table>

#### RIGHT ANGULAR

<table>
<thead>
<tr>
<th>TEST NUMBER</th>
<th>DATE</th>
<th>WT. Lbs</th>
<th>COMMENTS:</th>
<th>HIC</th>
<th>Chest</th>
<th>Femur Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>VC 10201</td>
<td>11/1/2002</td>
<td>5078</td>
<td>3.5L AWD FMVSS</td>
<td>213 @ 36 ms</td>
<td>33.4 G's</td>
<td>1.30 in</td>
</tr>
<tr>
<td>CSC 6131</td>
<td>30.1</td>
<td></td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>33.1 mm</td>
</tr>
<tr>
<td>VC 10469</td>
<td>2/6/2003</td>
<td>4906</td>
<td>3.5L FWD FMVSS</td>
<td>187 @ 36 ms</td>
<td>31.2 G's</td>
<td>1.21 in</td>
</tr>
<tr>
<td>CSY6397</td>
<td>30.3</td>
<td></td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>30.7 mm</td>
</tr>
</tbody>
</table>

### NOTES:
- VC TIME INTERVAL BETWEEN 0 - 300MS, PER STANDARD CHRYSLER PRACTICE
- TIME INTERVALS WERE CHOSEN TO INCLUDE ALL SIGNIFICANT DATA
- HYBRID III DUMMIES RESTRAINED BY "AIRBAG & SEATBELT" ON BARRIER CRASH
- CMVSR 208 APPLIES ONLY TO FLAT FRONTAL TEST MODE
- NA = Not Applicable
# OCCUPANT CRASH PROTECTION
2004 CS BODY
MVSS 208 / CMVSR 208
BARRIER CRASH - PASSENGER

<table>
<thead>
<tr>
<th>TEST NUMBER</th>
<th>DATE</th>
<th>WT. Lbs</th>
<th>VEHICLE</th>
<th>SP. Mph</th>
<th>COMMENTS:</th>
<th>HIC</th>
<th>CHEST</th>
<th>FEMUR LOAD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>G's</td>
<td>Deflect.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FMVSS 208 Limits (FTF &amp; Angular)</td>
<td></td>
<td>1000 @ 36ms</td>
<td>60</td>
<td>3.0 in</td>
<td>2250 lbs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CMVSR 208 Limits (FFF Only)</td>
<td></td>
<td>700 @ 15ms</td>
<td>NA</td>
<td>50 mm</td>
<td>10000 N</td>
</tr>
</tbody>
</table>

## FLAT FRONTAL
VC 10384  1/8/2003  5042  3.5L AWD  FMVSS  175 @ 36 in  33.1 G's  1.34 in  792 lbs  229 lbs
VC 10461  2/21/2003  4894  3.5L FWD  FMVSS  201 @ 36ms  35.4 G's  1.57 in  657 lbs  247 lbs

## LEFT ANGULAR
VC 10269  11/6/2002  5077  3.5L AWD  FMVSS  250 @ 36  34 G's  1.18 in  920 lbs  156 lbs
VC 10468  2/15/2003  4899  3.5L FWD  FMVSS  208 @ 36ms  31.9 G's  1.28 in  928 lbs  287 lbs

## RIGHT ANGULAR
VC 10201  11/1/2002  5078  3.5L AWD  FMVSS  210 @ 36ms  39.7 G's  0.93 in  472 lbs  622 lbs
VC 10469  2/6/2003  4901  3.5L FWD  FMVSS  230 @ 36ms  37.7 G's  1.47 in  459 lbs  441 lbs

## NOTES:
- VC TIME INTERVAL BETWEEN 0 - 300MS, PER STANDARD CHRYSLER PRACTICE
- TIME INTERVALS WERE CHOSEN TO INCLUDE ALL SIGNIFICANT DATA
- HYBRID III DUMMIES RESTRAINED BY "AIRBAG & SEATBELT" ON BARRIER CRASH
- CMVSR 208 APPLIES ONLY TO FLAT FRONTAL TEST MODE
- NA = Not Applicable
When the lock switch is pressed the window controls on the passenger doors will not illuminate and the passenger windows will be disabled.

**Auto Down Feature**
All the power window switches have an auto down feature. Press the window switch to the second detent, release, and the window will go down automatically.

To open the window part way, press the window switch to the first detent and release it when you want the window to stop.

The power window switches remain active for up to 45 seconds after the ignition switch has been turned off. Opening either front door will cancel this feature.

**Wind Buffeting**
Wind buffeting can be described as the perception of pressure on the ears or a helicopter type sound in the ears. Your vehicle may exhibit wind buffeting with the windows down, or the sunroof (if equipped) in certain open or partially open positions. This is a normal occurrence and can be minimized. If the buffeting occurs with the rear windows open, open the front and rear windows together to minimize the buffeting. If the buffeting occurs with the sunroof open, adjust the sunroof opening to minimize the buffeting.

**OCCUPANT RESTRAINTS**
Some of the most important safety features in your vehicle are the restraint systems. These include the front and rear seat belts for the driver and all passengers, front airbags for both the driver and front passenger, driver inflatable knee blocker and if equipped, left and right side curtain airbags for the driver and passengers seated next to a window. If you will be carrying children too small for adult-size seat belts, your seat belts or the LATCH feature (refer to the Child Restraint section in this manual), can be used to hold infant and child restraint systems.
Please pay close attention to the information in this section. It tells you how to use your restraint system properly to keep you and your passengers as safe as possible.

**WARNING**

In a collision, you and your passengers can suffer much greater injuries if you are not properly buckled up. You can strike the interior of your vehicle or other passengers, or you can be thrown out of the vehicle. Always be sure you and others in your vehicle are buckled up properly.

Buckle up even though you are an excellent driver, even on short trips. Someone on the road may be a poor driver and cause a collision that includes you. This can happen far away from home or on your own street.

Research has shown that seat belts save lives, and they can reduce the seriousness of injuries in a collision. Some of the worst injuries happen when people are thrown from the vehicle. Seat belts reduce the possibility of ejection and the risk of injury caused by striking the inside of the vehicle. Everyone in a motor vehicle should be belted at all times.

**Lap/Shoulder Belts**

All the seats in your vehicle are equipped with Lap/Shoulder Belts.

The belt webbing retractor is designed to lock during very sudden stops or collisions. This feature allows the shoulder part of the belt to move freely with you under normal conditions. But in a collision, the belt will lock and reduce the risk of your striking the inside of the vehicle or being thrown out.

**WARNING**

- It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed.
- Do not allow people to ride in any area of your vehicle that is not equipped with seats and seat belts.
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.

**WARNING**

- Wearing a seat belt incorrectly is dangerous. Seat belts are designed to go around the large bones of your body. These are the strongest parts of your body and can take the forces of a collision the best.
- Wearing your belt in the wrong place could make your injuries in a collision much worse. You might suffer internal injuries, or you could even slide out of part of the belt. Follow these instructions to wear your seat belt safely and to keep your passengers safe, too.
- Two people should never be belted into a single seat belt. People belted together can crash into one another in a collision, hurting one another badly. Never use a lap/shoulder belt or lap belt for more than one person, no matter what their size.
Lap/Shoulder Belt Operating Instructions

1. Enter the vehicle and close the door. Sit back and adjust the seat.

2. The seat belt latch plate is near the seatback of the front seats and next to your arm in the rear seats. Grasp the latch plate and pull out the belt. Slide the latch plate up the webbing as far as necessary to allow the belt to go around your lap.

3. When the belt is long enough to fit, insert the latch plate into the buckle until you hear a “click”.

- A belt that is buckled into the wrong buckle will not protect you properly. The lap portion could ride too high on your body, possibly causing internal injuries. Always buckle your belt into the buckle nearest you.
- A belt that is too loose will not protect you as well. In a sudden stop you could move too far forward, increasing the possibility of injury. Wear your seat belt snugly.
- A belt that is worn under your arm is very dangerous. Your body could strike the inside surfaces of the vehicle in a collision, increasing head and neck injury. A belt worn under the arm can cause internal injuries. Ribs aren’t as strong as shoulder bones. Wear the belt over your shoulder so that your strongest bones will take the force in a collision.
- A shoulder belt placed behind you will not protect you from injury during a collision. You are more likely to hit your head in a collision if you do not wear your shoulder belt. The lap and shoulder belt are meant to be used together.
4. Position the lap belt across your thighs, below your abdomen. To remove slack in the lap belt portion, pull up on the shoulder belt. To loosen the lap belt if it is too tight, tilt the latch plate and pull on the lap belt. A snug belt reduces the risk of sliding under the belt in a collision.

5. Position the shoulder belt on your chest so that it is comfortable and not resting on your neck. The retractor will withdraw any slack in the belt.

6. To release the belt, push the red button on the buckle. The belt will automatically retract to its stowed position. If necessary, slide the latch plate down the webbing to allow the belt to retract fully.

**WARNING**

A frayed or torn belt could rip apart in a collision and leave you with no protection. Inspect the belt system periodically, checking for cuts, frays, or loose parts. Damaged parts must be replaced immediately. Do not disassemble or modify the system. Seat belt assemblies must be replaced after a collision if they have been damaged (bent retractor, torn webbing, etc.).

**Adjustable Upper Shoulder Belt Anchorage**

In the front seats, the shoulder belt anchorage can be adjusted upward or downward to help position the belt away from your neck. Press the button to release the anchorage, and then move it up or down to the position that serves you best.
As a guide, if you are shorter than average, you will prefer a lower position, and if you are taller than average, you'll prefer a higher position. When you release the anchorage, try to move it up or down to make sure that it is locked in position.

**Lap/Shoulder Belt Untwisting Procedure**

Use the following procedure to untwist a twisted lap/shoulder belt.

1. Position the latch plate as close as possible to the anchor point.

2. At about 6 to 12 inches (15 to 30 cm) above the latch plate, grasp and twist the belt webbing 180° to create a fold that begins immediately above the latch plate.

3. Slide the latch plate upward over the folded webbing. The folded webbing must enter the slot at the top of the latch plate.

4. Continue to slide the latch plate up until it clears the folded webbing.
Seat Belt Pretensioners
The seat belts for both front seating positions are equipped with pretensioning devices that are designed to remove slack from the seat belt in the event of a collision. These devices improve the performance of the seat belt by ensuring that the belt is tight about the occupant early in a collision. Pretensioners are designed to work for all size occupants.

NOTE: These devices are not a substitute for proper seat belt placement by the occupant. The seat belt still must be worn snugly and positioned properly.

The pretensioners are triggered by the front airbag control module (see Airbag Section). Like the front airbags, the pretensioners are single use items. After a collision that is severe enough to deploy the airbags and pretensioners, both must be replaced.

Enhanced Driver Seat Belt Reminder System (BeltAlert™)
If the driver’s seat belt has not been buckled within 60 seconds of starting the vehicle and if the vehicle speed is greater than 5 mph (8 km/h), the Enhanced Warning System (BeltAlert™) will alert the driver to buckle their seat belt. The driver should also instruct all other occupants to buckle their seat belts. Once the warning is triggered, the Enhanced Warning System (BeltAlert™) will continue to chime and flash the Seat Belt Warning Light for 96 seconds or until the driver’s seat belt is buckled.

The Enhanced Warning System (BeltAlert™) will be reactivated if the driver’s seat belt is unbuckled for more than 10 seconds and the vehicle speed is greater than 5 mph (8 km/h).

The Enhanced Warning System (BeltAlert™) can be enabled or disabled by your authorized dealer or by following these steps:

NOTE: The following steps must occur within the first 60 seconds of the ignition switch being turned to the ON or START position. DaimlerChrysler does not recommend deactivating the Enhanced Warning System (BeltAlert).

1. Turn the ignition switch to the OFF position and buckle the driver’s seat belt.
2. Start the engine and wait for the Seat Belt Warning Light to turn off.
3. Within 60 seconds of starting the vehicle, unbuckle and then re-buckle the driver’s seat belt at least three times within 10 seconds, ending with the seat belt buckled.

4. Turn off the engine. A single chime will sound to signify that you have successfully completed the programming.

The Enhanced Warning System (BeltAlert™) can be reactivated by repeating this procedure.

NOTE: Although the Enhanced Warning System (BeltAlert™) has been deactivated, the Seat Belt Warning Light will continue to illuminate while the driver’s seat belt remains unbuckled.

Seat Belts and Pregnant Women
We recommend that pregnant women use the seat belts throughout their pregnancies. Keeping the mother safe is the best way to keep the baby safe.

Pregnant women should wear the lap part of the belt across the thighs and as snug across the hips as possible.
Keep the belt low so that it does not come across the abdomen. That way the strong bones of the hips will take the force if there is a collision.

**Seat Belt Extender**
If a seat belt is too short, even when fully extended and when the adjustable upper shoulder belt anchorage (if equipped) is in its lowest position, your dealer can provide you with a seat belt extender. This extender should be used only if the existing belt is not long enough. When it is not required, remove the extender and stow it.

---

**Driver and Front Passenger Supplemental Restraint System - Airbag**
This vehicle has airbags for both the driver and front passenger as a supplement to the seat belt restraint systems. The driver’s front airbag is mounted in the center of the steering wheel. The passenger’s front airbag is mounted in the instrument panel, above the glove compartment. The words SRS AIRBAG are embossed on the airbag covers.

**NOTE:** The front airbags are certified to the Federal regulations that allow less forceful deployment in low speed collisions.

The front airbags have a multi stage inflator design. This allows the airbag to have different rates of inflation that are based on collision severity.
This vehicle is also equipped with a driver inflatable knee blocker located on the instrument panel below the steering column.

This vehicle may also be equipped with left and right side curtain airbags to protect the driver and passengers sitting next to a window. If the vehicle is equipped with side curtain airbags, they are located above the side windows. Their covers are also labeled SRS AIRBAG.

**NOTE:** Airbag covers may not be obvious in the interior trim; but they will open to allow airbag deployment.

---

**WARNING**

- Do not put anything on or around the airbag covers or attempt to manually open them. You may damage the airbags and you could be injured because the airbags are not there to protect you. These protective covers for the airbag cushions are designed to open only when the airbags are inflating.

- If your vehicle is equipped with left and right side curtain airbags, do not stack luggage or other cargo up high enough to block the location of the side curtain airbag. The area where the side curtain airbag is located should remain free from any obstructions.

- If your vehicle is equipped with left and right side curtain airbags, do not have any accessory items installed which will alter the roof, including adding a sunroof to your vehicle. Do not add roof racks that require permanent attachments (bolts or screws) for installation on the vehicle roof. Do not drill into the roof of the vehicle for any reason.

---

Airbags inflate in moderate to high speed impacts. Along with seat belts, and pretensioners, front airbags work with the instrument panel knee blockers to provide improved protection for the driver and front passenger. Left and right side curtain airbags also work with seat belts to improve occupant protection.

The seat belts are designed to protect you in many types of collisions. The front airbags deploy only in moderate to severe frontal collisions. If your vehicle is equipped, the side curtain airbag on the crash side of the vehicle is triggered in moderate to severe side collisions. In certain types of collisions where the airbags deploy, you need the seat belts to keep you in the right position for the airbags to protect you properly.

Here are some simple steps you can take to minimize the risk of harm from a deploying airbag.
1. Children 12 years old and under should always ride buckled up in a rear seat.

Infants in rear facing child restraints should NEVER ride in the front seat of a vehicle with a passenger front airbag. An airbag deployment can cause severe injury or death to infants in that position.

Children that are not big enough to properly wear the vehicle seat belt (refer to section on Child Restraint) should be secured in the rear seat, in a child restraint or belt-positioning booster seat appropriate for the size and age of the child. Older children who do not use a child restraint or belt-positioning booster seat should ride properly buckled up in the rear seat. Never allow children to slide the shoulder belt behind them or under their arm.

If a child from 1 to 12 years old must ride in the front passenger seat because the vehicle is crowded, move the seat as far back as possible, and use the proper child restraint. Refer to the section on Child Restraint.

You should read the instructions provided with your child restraint to make sure that you are using it properly.

2. All occupants should wear their lap and shoulder belts properly.

3. The driver and front passenger seats should be moved back as far as practical to allow the front airbag room to inflate.

4. If your vehicle has left and right side curtain airbags, do not lean against the door, airbags will inflate forcefully into the space between you and the door.

---

**THINGS TO KNOW BEFORE STARTING YOUR VEHICLE**

"The Front Airbag System" consists of the following:

- Airbag Control Module (with integrated impact sensor)
- AIRBAG Readiness Light
- Driver Airbag
- Front Passenger Airbag
- Seat Belt Pretensioners
- Steering Wheel and Column
- Instrument Panel
- Seat Belt Readiness Light
- Interconnecting Wiring
- Passenger Knee Impact Blocker
- Driver Inflatable Knee Blocker

---

- Relying on the airbags alone could lead to more severe injuries in a collision. The airbags work with your seat belt to restrain you properly. In some collisions the airbags won’t deploy at all. Always wear your seat belts even though you have airbags.

- Being too close to the steering wheel or instrument panel during front airbag deployment could cause serious injury. Airbags need room to inflate. Sit back, comfortably extending your arms to reach the steering wheel or instrument panel.

- If the vehicle has left and right side curtain airbags, they also need room to inflate. Do not lean against the door or window. Sit upright in the center of the seat.
How The Airbag Systems Work

- The airbag control module determines if an impact is severe enough to require the airbags to inflate. Based on the level of collision severity, the control module determines the proper rate of inflation. The front airbag inflators are designed to provide different rates of airbag inflation. The airbag control module will not detect roll over collisions.

The airbag control module also monitors the readiness of the electronic parts of the system whenever the ignition switch is in the START or ON positions. These include all of the items listed under "The Front Airbag System", except the passenger knee blocker, instrument panel and the steering wheel and column. If the key is in the OFF position, in the ACC position, or not in the ignition switch, the front airbags are not on and will not inflate.

- When the airbag control module detects a collision requiring the Front Airbags, it signals the inflator units. A large quantity of nontoxic gas is generated to inflate the front airbags. Different front airbag inflation rates are possible, these rates are determined by the airbag control module based on collision severity. The front airbag covers separate and fold out of the way as the front airbags inflate to their full size. The front airbags fully inflate in about 50 milliseconds. This is only about half of the time it takes you to blink your eyes. The front airbags then quickly deflate while helping to restrain the driver and front passenger. The driver’s and passenger’s front airbag gas is vented through the airbag material and small vent openings towards the instrument panel. In this way the front airbags do not interfere with your control of the vehicle.

- The Supplemental Side Curtain Airbags are designed to activate only in certain side collisions. When the

The airbag control module sends a message to the instrument cluster to turn on the AIRBAG light in the instrument panel for 6 to 8 seconds when the ignition switch is first turned ON, then turns the light off. If the airbag control module detects a malfunction in any part of the system, the airbag light will turn on either momentarily or continuously.

**WARNING**

Ignoring the AIRBAG light in your instrument panel could mean you won’t have the airbags to protect you in a collision. If the light does not come on, stays on after you start the vehicle, or if it comes on as you drive, have the airbag system checked right away.

- When the airbag control module detects a collision requiring the side curtain airbags to inflate, it signals the inflators on the crash side of the vehicle. A quantity of nontoxic gas is generated to inflate the side curtain airbag. The inflating side curtain airbag pushes the outside edge of the headliner out of the way and inflates (in about the same time it takes to blink your eyes). A properly belted and seated occupant is less likely to be injured by the force of the airbag or crash event. Items that are positioned in the area where the side curtain airbag inflates can reduce the effectiveness of the airbag and also increase the likelihood of injuries to the occupants, this especially applies to children. The side curtain airbag is about 4 inches (10 cm) thick when it is inflated.

- When the airbag control module detects a collision requiring the Driver Inflatable Knee Blocker, it signals the inflator unit. A quantity of nontoxic gas is generated to inflate the Driver Inflatable Knee Blocker.
The Driver Inflatable Knee Blocker inflates rearward towards the driver’s knees to help protect the knees and position you for the best interaction with the front airbag. The Driver Inflatable Knee Blocker fully inflates in about 50 milliseconds, this is only about half of the time it takes you to blink your eyes. It then quickly deflates while helping to protect the driver’s knees.

- The Knee Impact Blockers help protect the knees and position you for the best interaction with the front airbags.

Side Airbags Supplemental Restraint System (SRS) — If Equipped

“Supplemental Side Curtain Airbag System”, on vehicles equipped, consists of the following:

- AIRBAG Readiness Light (shared with the front airbag system)
- Left and Right Side Curtain Airbags Above Side Windows
- Airbag Control Module
- Interconnecting Wiring

If An Airbag Deployment Occurs

The airbag systems are designed to deploy when the airbag control modules detect a moderate-to-severe collision, to help restrain the driver and front passenger, and then immediately deflate.

NOTE: A collision that is not severe enough to need airbag protection will not activate the system. This does not mean something is wrong with the airbag system.

If you do have a collision which deploys the airbag, any or all of the following may occur:

- The airbag material may sometimes cause abrasions and/or skin reddening to the driver and front passenger as the airbags deploy and unfold. The abrasions are similar to friction rope burns or those you might get sliding along a carpet or gymnasium floor. They are not caused by contact with chemicals. They are not permanent and normally heal quickly. However, if you haven’t healed significantly within a few days, or if you have any blistering, see your doctor immediately.

- As the airbags deflate you may see some smoke-like particles. The particles are a normal by-product of the process that generates the nontoxic gas used for airbag inflation. These airborne particles may irritate the skin, eyes, nose, or throat. If you have skin or eye irritation, rinse the area with cool water. For nose or throat irritation, move to fresh air. If the irritation continues, see your doctor. If these particles settle on your clothing, follow the garment manufacturer’s instructions for cleaning.

- It is not advisable to drive your vehicle after the airbags have deployed. If you are involved in another collision, the airbags and seat belt pretensioners will not be in place to protect you.

Deployed airbags and seat belt pretensioners cannot protect you in another collision. Have the airbags and seat belt pretensioners replaced by an authorized dealer as soon as possible.

Enhanced Accident Response

If the airbags and seat belt pretensioners deploy after an impact and the electrical system remains functional, vehicles equipped with power door locks will unlock automatically. In addition, approximately 5 seconds after the vehicle has stopped moving, the interior lights will illuminate until the ignition switch is turned off.
Maintaining Your Airbag System

**WARNING**

- Modifications to any part of the airbag system could cause it to fail when you need it. You could be injured because the airbags are not there to protect you. Do not modify the components or wiring, including adding any kind of badges or stickers to the steering wheel hub trim cover or the upper right side of the instrument panel. Do not modify the front bumper, vehicle body structure, or frame.
- You need proper knee impact protection in a collision. Do not mount or locate any aftermarket equipment on or behind the knee blockers.
- It is dangerous to try to repair any part of the airbag system yourself. Be sure to tell anyone who works on your vehicle that it has airbags.

Airbag Light
You will want to have the airbags ready to inflate for your protection in a collision. While the airbag system is designed to be maintenance free, if any of the following occurs, have an authorized dealer service the system immediately.

- The AIRBAG light does not come on or flickers during the 6 to 8 seconds when the ignition switch is first turned on.
- The light remains on or flickers after the 6 to 8 second interval.
- The light flickers or comes on and remains on while driving.

Child Restraint
Everyone in your vehicle needs to be buckled up at all times — babies and children, too. Every state in the United States and all Canadian provinces require that small children ride in proper restraint systems. This is the law, and you can be prosecuted for ignoring it.

Children 12 years and under should ride properly buckled up in a seat appropriate for their age and size. According to crash statistics, children are safer when properly restrained in the rear seats, rather than in the front.

In a collision, an unrestrained child, even a tiny baby, can become a missile inside the vehicle. The force required to hold even an infant on your lap could become so great that you could not hold the child, no matter how strong you are. The child and others could be badly injured. Any child riding in your vehicle should be in a proper restraint for the child’s size.

Lower Anchors and Tether for Childen (LATCH)
Each vehicle is equipped with two child restraint anchorage systems called LATCH, which stands for Lower Anchors and Tether for Children. The LATCH child restraint anchorage systems are installed on all second-row seats.
The lower anchor bars of the LATCH System are located where the seat back meets the seat cushion.

The tether anchors are located on the rear surface of the seat.

Child restraint systems designed to be compatible with the vehicles LATCH System are now available. LATCH child restraints make installation into the vehicle simple and convenient.

When using the LATCH System, always follow the child restraint manufactures installation instructions.

NOTE: If your child restraint seat is not LATCH compatible, install the restraint using the vehicle seat belts.

Tether Anchors
There are tether strap anchorages behind all second row seating positions and the driver's side third row seating position. The tether anchors are located in the rear surface of the seat. When using the tether anchorages in the second row seating position, ensure that the strap is routed over the top of the seatback and under the head restraint between the head restraint posts.
When the tether anchorage is used in the third row seating position, the strap should be positioned straight over the top of the seatback.

**Infants and Children**

There are different sizes and types of restraints for children from newborn size to the child almost large enough for an adult safety belt. Always check the child seat owner’s manual to ensure you have the right seat for your child. Use the restraint that is correct for your child:

- Safety experts recommend that children ride rearward-facing in the vehicle until they are at least one year old and weigh at least 9 kg (20 lbs). Two types of child restraints can be used rearward-facing: infant carriers and “convertible” child seats. Both types of child restraints are held in the vehicle by the lap/shoulder belt or the LATCH child restraint anchorage system. Refer to “Lower Anchors and Tether for Children (LATCH)” in this section.

- The infant carrier is only used rearward-facing in the vehicle. It is recommended for children who weigh up to about 9 kg (20 lbs). “Convertible” child seats can be used either rearward-facing or forward-facing in the vehicle. Convertible child seats often have a higher weight limit in the rearward-facing direction than infant carriers do, so they can be used rearward-facing by children who weigh more than 9 kg (20 lbs) but are less than one year old.

- Rearward-facing child seats must NEVER be used in the front seat of a vehicle with a front passenger airbag. An airbag deployment could cause severe injury or death to infants in this position.

- Children who weigh more than 9 kg (20 lbs) and who are older than one year can ride forward-facing in the vehicle. Forward-facing child seats and convertible child seats used in the forward-facing direction are for children who weigh 9 to 18 kg (20 to 40 lbs) and who are older than one year.

- The belt-positioning booster seat is for children weighing more than 18 kg (40 lbs), but who are still too small to fit the vehicle’s seat belts properly. If the child can not sit with knees bent over the vehicles seat cushion while the child’s back is against the seat back, they should use a belt-positioning booster seat. The child and booster seat are held in the vehicle by the lap/shoulder belt. (Some booster seats are equipped with a front shield and are held in the vehicle by the lap portion.)

**NOTE:** For additional information refer to www.seatcheck.org.
Improper installation can lead to failure of an infant or child restraint. It could come loose in a collision. The child could be badly injured or killed. Follow the manufacturer’s directions exactly when installing an infant or child restraint.

A rearward facing child restraint should only be used in a rear seat. A rearward facing child restraint in the front seat may be struck by a deploying passenger airbag which may cause severe or fatal injury to the infant.

Here are some tips on getting the most out of your child restraint:

- Before buying any restraint system, make sure that it has a label certifying that it meets all applicable Safety Standards. We also recommend that you make sure that you can install the child restraint in the vehicle where you will use it, before you buy it.
- The restraint must be appropriate for your child’s weight and height. Check the label on the restraint for weight and height limits.
- Carefully follow the instructions that come with the restraint. If you install the restraint improperly, it may not work when you need it.

The passenger seat belts are equipped with cinching latch plates, which are designed to keep the lap portion tight around the child restraint so that it is not necessary to use a locking clip. Pulling up on the shoulder portion of the lap/shoulder belt will tighten the belt. The cinching latch plate will keep the belt tight, however, any seat belt system will loosen with time, so check the belt occasionally and pull it tight if necessary.

- Buckle the child into the seat according to the child restraint manufacturer’s directions.
- When your child restraint is not in use, secure it in the vehicle with the seat belt or remove it from the vehicle. Don’t leave it loose in the vehicle. In a sudden stop or collision, it could strike the occupants or seatbacks and cause serious personal injury.

Installing A Child Restraint

We urge that you carefully follow the directions of the manufacturer when installing your child restraint. Many, but not all, restraint systems will be equipped with separate straps on each side, with each having a hook or connector and a means for adjusting the tension in the strap. Forward-facing toddler restraints and some rearward-facing infant restraints will also be equipped with a tether strap, a hook and means for adjusting the tension in the strap.

In general, you will first loosen the adjusters on the lower straps and tether straps so that you can more easily attach the hook or connector to the lower anchorages and tether anchorages. Then tighten all three straps as you push the child restraint rearward and downward into the seat.

Child restraint systems having attachments designed to connect to the lower anchorages are now available. Child restraints having tether straps and hooks for connection to the seatback tether anchorage have been available for some time. In fact, many child restraint manufacturers will provide add-on tether strap kits for some of their older products.

Because the lower anchorages are to be introduced to passenger carrying vehicles over a period of years, child restraint systems having attachments for those anchorages will continue to have features for installation in vehicles using the lap or lap/shoulder belt. They will also
have tether straps, and you are urged to take advantage of all of the available attachments provided with your child restraint in any vehicle.

Not all child restraint systems will be installed as we have described here. Again, carefully follow the instructions that come with the child restraint system.

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improper installation of a child restraint to the LATCH anchorages can lead to failure of an infant or child restraint. The child could be badly injured or killed. Follow the manufacturer's directions exactly when installing an infant or child restraint.</td>
</tr>
</tbody>
</table>

Children Too Large For Booster Seats
Children who are large enough to wear the shoulder belt comfortably, and whose legs are long enough to bend over the front of the seat when their back is against the seatback, should use the lap/shoulder belt in a rear seat.

- Make sure that the child is upright in the seat.
- The lap portion should be low on the hips and as snug as possible.
- Check belt fit periodically. A child’s squirming or slouching can move the belt out of position.
- If the shoulder belt contacts the face or neck, move the child closer to the center of the vehicle. Never allow a child to put the shoulder belt under an arm or behind their back.
## Price Information

**Manufacturer's Suggested Retail Price of this Model Including Dealer Preparation**

<table>
<thead>
<tr>
<th>CHRYSLER PACIFICA FWD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base Price:</strong> $28,845</td>
</tr>
</tbody>
</table>

**Exterior Color:** Bright Silver Metallic Paint  
**Interior Color:** Dark Slate Gray

**Exterior Features**
- Bright Silver Metallic Paint
- Dark Slate Gray Interior
- Premium Cloth Low-Back Bucket Seats
- Four-Speed Automatic Transmission

**Standard Equipment**
- Next Generation Driver & Front-Passenger Air Bags**
- Driver Side Inflatable Knee-Bolster Air Bag
- LATCH-Ready Child Seat Anchor System
- Rear Door Child-Protection Locks
- Anti-lock Brakes
- Four-Wheel Disc Brakes
- AutoStick(R) Driver Interactive Transaxle Shifter
- Load Leveling and Height Control
- Performance Suspension
- Brake-Park Interlock

**Interior Features**
- Dual Zone Temperature Control Air Conditioning
- Cabin Air Filtering System
- Power Locks
- Speed Control
- Tilt Steering Wheel
- Steering Wheel-Mounted Audio Controls
- Front Seatback Grocery Bag Hooks
- AM/FM Stereo Radio with CD Player
- Infinity(R) Speaker System
- Power Windows with One-Touch-Down Feature
- Leather-Wrapped Shift Knob
- Sun Visors with Illuminated Vanity Mirrors
- Front and Rear Floor Center Consoles
- Power Driver's and Front Passenger's Seats
- Remote Keyless Entry
- Security Alarm
- Sentry Key(R) Engine Immobilizer Theft-Deterrent
- Folding Flat Rear Seating - Load Floor
- Front and Rear 12-Volt DC Power Outlets

**Price Information (cont'd)**

- Sunscreen Glass
- Power Heated Foldaway Mirrors
- 17-Inch Aluminum Wheels
- P235/65R17 BSW AS Performance Tires

**Optional Equipment**
- Customer Preferred Package 26P

**Destination Charge**
- $680

**Total Price:** $29,525

**Warranty Coverage**
- 7-year or 70,000-mile Powertrain Limited Warranty*
- Towing assistance during Warranty period++
- 3-year or 36,000-mile Basic Limited Warranty

---

**Assembly Plant/Port of Entry:** WINDSOR, ONTARIO, CANADA

**VIN:** 2C4GM6464R-624863
For more information visit: www.chrysler.com
or call 1-800-CHRYSLER

DaimlerChrysler
Motors Company LLC

THIS VEHICLE IS MANUFACTURED TO MEET SPECIFIC UNITED STATES REQUIREMENTS. THIS VEHICLE IS NOT MANUFACTURED FOR SALE OR REGISTRATION OUTSIDE OF THE UNITED STATES.

PARTS CONTENT INFORMATION
FOR VEHICLES IN THIS CARLINE:
U.S./CANADIAN PARTS CONTENT: 83 %
NOTE: PARTS CONTENT DOES NOT INCLUDE FINAL ASSEMBLY,
DISTRIBUTION, OR OTHER NON-PARTS COSTS.

FOR THIS VEHICLE:
FINAL ASSEMBLY POINT:
WINDSOR, ONTARIO, CANADA
COUNTRY OF ORIGIN:
ENGINE: UNITED STATES
TRANSMISSION: UNITED STATES

Smog Index:
The Smog Index of this vehicle is 1.51.

<table>
<thead>
<tr>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
<th>Cleaner</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>0.1</td>
<td>0.2</td>
<td>0.3</td>
<td>0.4</td>
<td>0.5</td>
<td>0.6</td>
<td>0.7</td>
<td>0.8</td>
<td>0.9</td>
<td>1.0</td>
<td>1.1</td>
<td>1.2</td>
<td>1.3</td>
<td>1.4</td>
<td>1.5</td>
<td>1.6</td>
<td>1.7</td>
<td>1.8</td>
<td>1.9</td>
<td>2.0</td>
<td>2.1</td>
<td>2.2</td>
<td>2.3</td>
<td>2.4</td>
</tr>
</tbody>
</table>

CLEANER MORE POLLUTING
The Smog Index of the average new vehicle is 1.02
The Smog Index (SI) indicates the relative level of smog-forming pollutants
emitted by the vehicle. The lower the SI, the lower the vehicle's emissions.

Compare this vehicle to others in the FREE FUEL ECONOMY GUIDE available at the dealer.

CITY MPG
17

Highway MPG
23

Actual Mileage will vary with options, driving conditions,
driving habits and vehicle’s condition. Results reported to
EPA indicate that the majority of vehicles with these estimates
will achieve between
14 and 20 mpg in the city,
and between
19 and 27 mpg on the
highway.

2004 PACIFICA 2WD
6 CYL, 3.5 L (215 CID),
multi-point fuel injection,
4-speed automatic trans. w/
user-selectable "autostick"
w/ lock-up torque converter

Estimated Annual Fuel Cost:
$1105

For Comparison Shopping,
all vehicles classified as
SPECIAL PURPOSE
have been issued mileage ratings
ranging from 10 to 14 mpg city
and 14 to 30 mpg highway.

See www.fueleconomy.gov
Appendix D

Miscellaneous Test Information
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3000</td>
<td>EVENT</td>
<td>EVENT</td>
<td>EVENT</td>
<td></td>
<td>10.24 V</td>
<td>+ 11/08/2003</td>
<td>OK</td>
<td>SLED</td>
<td>TRC</td>
</tr>
<tr>
<td>3001</td>
<td>C15531</td>
<td>SLDXG</td>
<td>SLED G LONG.</td>
<td>Rear</td>
<td>199.58523 g</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>SLED</td>
<td>Endevco 7231C</td>
</tr>
<tr>
<td>3002</td>
<td>C15519</td>
<td>SLDXGR</td>
<td>SLED G LONG</td>
<td>Rear</td>
<td>200.05001 g</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>SLED</td>
<td>Endevco 7231C</td>
</tr>
<tr>
<td>3003</td>
<td>SLDXV</td>
<td>SLDXV</td>
<td>SLED VELOCITY</td>
<td>164.82632 km/h</td>
<td>- 07/31/2003</td>
<td>OK</td>
<td>SLED</td>
<td>TRC</td>
<td>SLDXV</td>
</tr>
<tr>
<td>3004</td>
<td>A61G</td>
<td>SLDXGT</td>
<td>SLED TRIGGER/SLDXGT</td>
<td>Rear</td>
<td>200.15167 g</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>SLED</td>
<td>Endevco 7231C</td>
</tr>
<tr>
<td>3005</td>
<td>P34003</td>
<td>LBXG</td>
<td>RR SEAT X-MEMBER LT</td>
<td>Fwd</td>
<td>200.25187 g</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>-1</td>
<td>Endevco 7264C-2K-2-180</td>
</tr>
<tr>
<td>3006</td>
<td>P33562</td>
<td>RBXG</td>
<td>RR SEAT X-MEMBER RT</td>
<td>Fwd</td>
<td>200.12977 g</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>-1</td>
<td>Endevco 7264C-2K-2-180</td>
</tr>
<tr>
<td>3007</td>
<td>P33833</td>
<td>TEGX</td>
<td>TOP OF ENGINE BLOCK</td>
<td>Fwd</td>
<td>199.75966 g</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>-1</td>
<td>Endevco 7264C-2K-2-180</td>
</tr>
<tr>
<td>3008</td>
<td>P33526</td>
<td>RAXG</td>
<td>RR AXLE</td>
<td>Rwd</td>
<td>199.56462 g</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>Endevco 7231C</td>
</tr>
<tr>
<td>3009</td>
<td>GB86</td>
<td>HEDXG1</td>
<td>Head Accel X</td>
<td>Rwd</td>
<td>399.01959 g</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>Endevco 7231C</td>
</tr>
<tr>
<td>3012</td>
<td>GB77</td>
<td>HEDYG1</td>
<td>Head Accel Y</td>
<td>Lft</td>
<td>399.04914 g</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>Endevco 7231C</td>
</tr>
<tr>
<td>3013</td>
<td>A54F</td>
<td>HEDZG1</td>
<td>Head Accel Z</td>
<td>Up</td>
<td>399.03359 g</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>Endevco 7231C</td>
</tr>
<tr>
<td>3014</td>
<td>1716A-1222-FX</td>
<td>NEKXF1</td>
<td>Neck Force X</td>
<td>Hdr</td>
<td>8901.839 g</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>Denton 1716A</td>
</tr>
<tr>
<td>3015</td>
<td>1716A-1222-FY</td>
<td>NEKYF1</td>
<td>Neck Force Y</td>
<td>Hdr</td>
<td>8900.2923 g</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>Denton 1716A</td>
</tr>
<tr>
<td>3016</td>
<td>1716A-1222-FZ</td>
<td>NEKZF1</td>
<td>Neck Force Z</td>
<td>Hdr</td>
<td>13342.680 g</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>Denton 1716A</td>
</tr>
<tr>
<td>3017</td>
<td>1716A-1222-MX</td>
<td>NEKXM1</td>
<td>Neck Moment X</td>
<td>Rt Ear</td>
<td>282.39058 N-m</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>Denton 1716A</td>
</tr>
<tr>
<td>3018</td>
<td>1716A-1222-MY</td>
<td>NEKYM1</td>
<td>Neck Moment Y</td>
<td>Chin</td>
<td>282.58263 g</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>Denton 1716A</td>
</tr>
<tr>
<td>3019</td>
<td>1716A-1222-MZ</td>
<td>NEKZM1</td>
<td>Neck Moment Z</td>
<td>Chin</td>
<td>282.70168 g</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>Denton 1716A</td>
</tr>
<tr>
<td>3020</td>
<td>C14135</td>
<td>CSTXG1</td>
<td>Neck Accel X</td>
<td>Fwd</td>
<td>401.55917 g</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>Endevco 7231C</td>
</tr>
<tr>
<td>3021</td>
<td>A35D</td>
<td>CSTYG1</td>
<td>Neck Accel Y</td>
<td>Lft</td>
<td>399.67526 g</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>Endevco 7231C</td>
</tr>
<tr>
<td>3022</td>
<td>AH5G8</td>
<td>CSTZG1</td>
<td>Neck Accel Z</td>
<td>Down</td>
<td>399.66902 g</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>Endevco 7231C</td>
</tr>
<tr>
<td>3023</td>
<td>14CB1-2847-229</td>
<td>CSTXD1</td>
<td>Neck Deflection X</td>
<td>Strn</td>
<td>99.901464 mm</td>
<td>+ 03/16/2004</td>
<td>OK</td>
<td>229n</td>
<td>Servo 14CB1-2847</td>
</tr>
<tr>
<td>3024</td>
<td>2430-901</td>
<td>LFMZF1</td>
<td>Neck Deflection Z</td>
<td>Knee</td>
<td>13342.506 N</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>GSE 2430</td>
</tr>
<tr>
<td>3025</td>
<td>2430-902</td>
<td>RFMZF1</td>
<td>Neck Deflection Z</td>
<td>Knee</td>
<td>13355.941 N</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>229n</td>
<td>GSE 2430</td>
</tr>
<tr>
<td>3026</td>
<td>AD4H9</td>
<td>HEDXG2</td>
<td>Neck Accel X</td>
<td>Rear</td>
<td>400.70593 g</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>230n</td>
<td>Endevco 7231C</td>
</tr>
<tr>
<td>3027</td>
<td>AD4J7</td>
<td>HEDYG2</td>
<td>Neck Accel Y</td>
<td>Left</td>
<td>398.61264 g</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>230n</td>
<td>Endevco 7231C</td>
</tr>
<tr>
<td>3028</td>
<td>AD4J8</td>
<td>HEDZG2</td>
<td>Neck Accel Z</td>
<td>Up</td>
<td>398.92477 g</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>230n</td>
<td>Endevco 7231C</td>
</tr>
<tr>
<td>3029</td>
<td>1716-0235-FX</td>
<td>NEKXF2</td>
<td>Neck Force X</td>
<td>Hd</td>
<td>8893.5209 g</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>230n</td>
<td>Denton 1716</td>
</tr>
<tr>
<td>3030</td>
<td>1716-0235-FY</td>
<td>NEKYF2</td>
<td>Neck Force Y</td>
<td>Hd</td>
<td>8890.2239 g</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>230n</td>
<td>Denton 1716</td>
</tr>
<tr>
<td>3031</td>
<td>1716-0235-FZ</td>
<td>NEKZF2</td>
<td>Neck Force Z</td>
<td>Hd</td>
<td>13341.671 g</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>230n</td>
<td>Denton 1716</td>
</tr>
<tr>
<td>3032</td>
<td>1716-0235-MX</td>
<td>NEKXM2</td>
<td>Neck Moment X</td>
<td>Rt Ear</td>
<td>282.42568 N-m</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>230n</td>
<td>Denton 1716</td>
</tr>
<tr>
<td>3033</td>
<td>1716-0235-MY</td>
<td>NEKYM2</td>
<td>Neck Moment Y</td>
<td>Chin</td>
<td>282.54938 g</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>230n</td>
<td>Denton 1716</td>
</tr>
</tbody>
</table>
## Channel Report

<table>
<thead>
<tr>
<th>Channel ID</th>
<th>Description</th>
<th>Unit</th>
<th>Value</th>
<th>Date</th>
<th>Status</th>
<th>Code</th>
<th>Location</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>3034</td>
<td>1716-0235-MZ NEKZM2 Neck Moment Z</td>
<td>N·m</td>
<td>282.19155</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>230n</td>
<td>Denton</td>
<td>1716</td>
</tr>
<tr>
<td>3035</td>
<td>ACTR4 Chest Accel X CSTXG2</td>
<td>g</td>
<td>400.04688</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>230n</td>
<td>Endevco</td>
<td>7231C</td>
</tr>
<tr>
<td>3036</td>
<td>ACTT4 Chest Accel Y CSTYG2</td>
<td>g</td>
<td>399.13157</td>
<td>- 03/15/2004</td>
<td>OK</td>
<td>230n</td>
<td>Endevco</td>
<td>7231C</td>
</tr>
<tr>
<td>3037</td>
<td>ACTW0 Chest Accel Z CSTZG2</td>
<td>g</td>
<td>399.23583</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>230n</td>
<td>Endevco</td>
<td>7231C</td>
</tr>
<tr>
<td>3038</td>
<td>85427-1 Chest Deflection X CSTXD2</td>
<td>mm</td>
<td>99.778810</td>
<td>+ 03/16/2004</td>
<td>OK</td>
<td>230n</td>
<td>Servo</td>
<td>14CB1-2847</td>
</tr>
<tr>
<td>3039</td>
<td>2430-984 Left Femur Force Z 60 LFMZF2</td>
<td>N</td>
<td>13354.199</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>230n</td>
<td>GSE</td>
<td>2430</td>
</tr>
<tr>
<td>3040</td>
<td>2430-985 Right Femur Force Z S1511 RFMZP2</td>
<td>N</td>
<td>13345.845</td>
<td>+ 03/15/2004</td>
<td>OK</td>
<td>230n</td>
<td>GSE</td>
<td>2430</td>
</tr>
</tbody>
</table>
## Digital and System Channel Report

<table>
<thead>
<tr>
<th>Name of Test</th>
<th>040419-1</th>
<th>System</th>
<th>K3600</th>
<th>Name of DAU</th>
<th>DAU3</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>enable</td>
<td>Yes</td>
<td>Channel</td>
<td>3500</td>
<td>Type</td>
<td>dig0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bit Position</th>
<th>Bit</th>
<th>Short</th>
<th>Long</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSB = bit 15</td>
<td>0</td>
<td>0</td>
<td>Switch</td>
<td>Backup Switch</td>
</tr>
<tr>
<td>bit 14</td>
<td>1</td>
<td>1</td>
<td>ABEVT1</td>
<td>DR AIRBAG EVENT PRI</td>
</tr>
<tr>
<td>bit 13</td>
<td>1</td>
<td>2</td>
<td>ABEVT2</td>
<td>DR AIRBAG EVENT SEC</td>
</tr>
<tr>
<td>bit 12</td>
<td>1</td>
<td>3</td>
<td>ABEVT3</td>
<td>PASS AIRBAG EVENT PRI</td>
</tr>
<tr>
<td>bit 11</td>
<td>1</td>
<td></td>
<td>ABEVT4</td>
<td>PASS AIRBAG EVENT SEC</td>
</tr>
<tr>
<td>bit 10</td>
<td>1</td>
<td></td>
<td>ABEVT5</td>
<td>DR KNEE BOLSTER AIRBAG EVENT</td>
</tr>
<tr>
<td>bit 09</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bit 08</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bit 07</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bit 06</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bit 05</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bit 04</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bit 03</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bit 02</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bit 01</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSB = bit 00</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chsnam</td>
<td>Location</td>
<td>Model</td>
<td>Name</td>
<td>Manufacturer</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------</td>
<td>---------</td>
<td>----------</td>
<td>--------------</td>
</tr>
<tr>
<td>HEDXG</td>
<td>Head Accel X</td>
<td>7231C</td>
<td>GB86</td>
<td>Endevco</td>
</tr>
<tr>
<td>HEDYG</td>
<td>Head Accel Y</td>
<td>7231C</td>
<td>GB77</td>
<td>Endevco</td>
</tr>
<tr>
<td>HEDZG</td>
<td>Head Accel Z</td>
<td>7231C</td>
<td>A54F</td>
<td>Endevco</td>
</tr>
<tr>
<td>NEKXF</td>
<td>Neck Force X</td>
<td>1716A</td>
<td>1716A-1222-FX</td>
<td>Denton</td>
</tr>
<tr>
<td>NEKYF</td>
<td>Neck Force Y</td>
<td>1716A</td>
<td>1716A-1222-FY</td>
<td>Denton</td>
</tr>
<tr>
<td>NEKZF</td>
<td>Neck Force Z</td>
<td>1716A</td>
<td>1716A-1222-FZ</td>
<td>Denton</td>
</tr>
<tr>
<td>NEKXM</td>
<td>Neck Moment X</td>
<td>1716A</td>
<td>1716A-1222-MX</td>
<td>Denton</td>
</tr>
<tr>
<td>NEKYM</td>
<td>Neck Moment Y</td>
<td>1716A</td>
<td>1716A-1222-MY</td>
<td>Denton</td>
</tr>
<tr>
<td>NEKZM</td>
<td>Neck Moment Z</td>
<td>1716A</td>
<td>1716A-1222-MZ</td>
<td>Denton</td>
</tr>
<tr>
<td>CSTXG</td>
<td>Chest Accel X</td>
<td>7231C</td>
<td>C14135</td>
<td>Endevco</td>
</tr>
<tr>
<td>CSTYG</td>
<td>Chest Accel Y</td>
<td>7231C</td>
<td>A35D</td>
<td>Endevco</td>
</tr>
<tr>
<td>CSTZG</td>
<td>Chest Accel Z</td>
<td>7231C</td>
<td>A54F</td>
<td>Endevco</td>
</tr>
<tr>
<td>CSTXD</td>
<td>Chest Deflection X</td>
<td>14CB1-2847</td>
<td>14CB1-2847-229</td>
<td>Servo</td>
</tr>
<tr>
<td>LFMZF</td>
<td>Left Femur Force Z. 603</td>
<td>2430</td>
<td>2430-901</td>
<td>GSE</td>
</tr>
<tr>
<td>RFMZF</td>
<td>Right Femur Force Z. 744</td>
<td>2430</td>
<td>2430-902</td>
<td>GSE</td>
</tr>
</tbody>
</table>