REPORT DOT-HS-4-00865

DATA FROM FABRICATION OF A

STANDARD BENCH VEHICLE SEAT

(APPENDIX C)

Prepared For:

U.S. Department of Transportation
National Highway Traffic Safety Administration
Washington, D.C. 20591

Final Report for Period

March 5, 1974 - September 14, 1974

September 14, 1974

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This report has the data that was used in the design of the DOT Standard Seat. Full details of the test conditions and the use of this data is given in "Fabrication of a Standard Bench Vehicle Seat," Final Report (UM-HSRI-BI-74-5-1).
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- Test Data Summary
- Test Set-Up Photograph
- Graph-Check Camera Sequence
- Summary Data Head Accelerations
- Summary Data Chest Accelerations

<table>
<thead>
<tr>
<th>TEST NO.</th>
<th>RESTRAINT DESCRIPTION OR TEST DESCRIPTION</th>
<th>DUMMY</th>
<th>SLED ACC. AVG. g's</th>
<th>IMPACT DIRECTION</th>
<th>DUMMY ATTITUDE</th>
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</thead>
<tbody>
<tr>
<td>A-721</td>
<td>Tot Guard</td>
<td>Sierra 3 yr.</td>
<td>20.5</td>
<td>F</td>
<td>PS</td>
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<tr>
<td>A-733</td>
<td>30 lb wt. into seat bottom</td>
<td>-</td>
<td>16.0</td>
<td>-</td>
<td>-</td>
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<tr>
<td>A-734</td>
<td>&quot;</td>
<td>-</td>
<td>16.0</td>
<td>-</td>
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<tr>
<td>A-735</td>
<td>Check out of GM Impala seat</td>
<td>-</td>
<td>18.4</td>
<td>F</td>
<td>-</td>
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<tr>
<td>A-736</td>
<td>Rearward with 30# wt. on seat back</td>
<td>-</td>
<td>16.0</td>
<td>-</td>
<td>-</td>
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<td>A-743</td>
<td>Check out of DOT standard seat</td>
<td>Sierra 3 yr.</td>
<td>21.2</td>
<td>F</td>
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<td>A-744</td>
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<td>20.8</td>
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<td>A-745</td>
<td>Century Motor-Toter</td>
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<td>A-746</td>
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<td>20.0</td>
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<tr>
<td>A-747</td>
<td>GM Love Seat</td>
<td>&quot;</td>
<td>16.6</td>
<td>S</td>
<td>PS</td>
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<td>A-748</td>
<td>&quot;</td>
<td>&quot;</td>
<td>17.0</td>
<td>S</td>
<td>PS</td>
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<tr>
<td>A-749</td>
<td>Chrysler Mopar</td>
<td>&quot;</td>
<td>17.2</td>
<td>R</td>
<td>CS</td>
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<td>A-750</td>
<td>&quot;</td>
<td>&quot;</td>
<td>16.8</td>
<td>R</td>
<td>CS</td>
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<tr>
<td>A-751</td>
<td>Check out of GM Impala seat</td>
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<td>16.2</td>
<td>R</td>
<td>-</td>
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<td>A-752</td>
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<td>20.4</td>
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<td>A-753</td>
<td>Strollee (Model 594)</td>
<td>&quot;</td>
<td>20.4</td>
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<td>PS</td>
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<td>A-754</td>
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<td>17.2</td>
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<td>A-755</td>
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<td>A-756</td>
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<td>F</td>
<td>PS</td>
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<td>A-758</td>
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<td>-</td>
<td>21.6</td>
<td>F</td>
<td>-</td>
</tr>
</tbody>
</table>

F - Forward, S - Side, R - Rearward
PS - Passenger Seat, CS.- Center Seat, DS - Driver Seat
<table>
<thead>
<tr>
<th>TEST NO.</th>
<th>RESTRAINT DESCRIPTION OR TEST DESCRIPTION</th>
<th>DUMMY</th>
<th>SLED ACC. AVG. q's</th>
<th>IMPACT DIRECTION</th>
<th>DUMMY ATTITUDE</th>
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<tbody>
<tr>
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<td>Sierra 3 yr.</td>
<td>21.0</td>
<td>F</td>
<td>PS</td>
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<td>A-760</td>
<td>Chrysler Mopar</td>
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<td>22.0</td>
<td>F</td>
<td>PS</td>
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<td>A-761</td>
<td>GM Love Seat</td>
<td>&quot;</td>
<td>20.8</td>
<td>F</td>
<td>PS</td>
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<td>A-762</td>
<td>GM Love Seat</td>
<td>&quot;</td>
<td>21.2</td>
<td>F</td>
<td>PS</td>
</tr>
<tr>
<td>A-763</td>
<td>Strollee (Model 594)</td>
<td>&quot;</td>
<td>21.2</td>
<td>F</td>
<td>PS</td>
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<td>A-764</td>
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<td>16.0</td>
<td>S</td>
<td>PS</td>
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<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
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<tr>
<td>A-766</td>
<td>Chrysler Mopar</td>
<td>&quot;</td>
<td>&quot;</td>
<td>R</td>
<td>DS</td>
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<td>A-769</td>
<td>Calib. of DOT seat back deflection</td>
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<td>16.0</td>
<td>R</td>
<td>-</td>
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<tr>
<td>A-770</td>
<td>30# weight on DOT seat back</td>
<td>-</td>
<td>16.0</td>
<td>R</td>
<td>-</td>
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<tr>
<td>A-771</td>
<td>30# weight on DOT seat bottom</td>
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<td>16.0</td>
<td>-</td>
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<tr>
<td>A-772</td>
<td>Calib. of DOT seat back deflection</td>
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<td>20.8</td>
<td>F</td>
<td>-</td>
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</tbody>
</table>
HSRI CHILD SEAT DATA SUMMARY

Test Number: 721
Test Date: 10/April/74
Restraint Description: Tot-Guard
Harness Configurations: Type 1

Dummy Sierra 3 yr.

Sled Velocity (avg., ft/sec) 44.02
Sled Acceleration (avg. g's) 20.5

Belt Loads (avg. pounds):
Lap Inboard
Lap Outboard
Shoulder*  

Impact Direction: Forward
Dummy Attitude Passenger Seat

Test Observations: GM Impala seat performance with a Tot-Guard child seat. (Run 1).

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
TEST NO. A- 721

Figure C-2  Graph-Cneck Camera Sequence
Test Number: 721
Dummy: SIERRA 3 YR. OLD
Sled Velocity: 44.0 ft/sec

Summary Data - Head Accelerations

- Sled Pulse
  - 10 g's/Division
  - Filtered
  - Class 60

- Anterior-Posterior
  - Head Accelerations
  - 25 g's/Division
  - Filtered
  - Class 1000

- Superior-Inferior
  - Head Accelerations
  - 25 g's/Division
  - Filtered
  - Class 1000

- Left-Right
  - Head Accelerations
  - 25 g's/Division
  - Filtered
  - Class 1000

- Resultant Head Accelerations
  - 10 g's/Division
  - Filtered
  - Class 1000

Test Type: FORWARD
Test Guard: ON PASSENGER SIDE
Impala Seat

1-12.5 M
SUMMARY DATA CHEST ACCELERATIONS

Test Type: FORWARD
Test Number: A-721
Dummy: SIERRA 3 YEAR
Sled Velocity: 44.2 ft/sec

Sled Pulse
1 g's/Division
Filtered
Class: 60

Anterior-Posterior
Chest Accelerations
12.5 g's/Division
Filtered
Class: 180

Superior-Inferior
Chest Accelerations
12.5 g's/Division
Filtered
Class: 180

Left-Right
Chest Accelerations
12.5 g's/Division
Filtered
Class: 180

Resultant Chest Accelerations
1.0 g's/Division
Filtered
Class: 180

1-12.5 MSEC
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-733
Test Date: 13/June/74
Restraint Description: -
Harness Configurations:

Sled Velocity (avg., ft/sec) 26.48
Sled Acceleration (avg. g's) 16.0
Belt Loads (avg. pounds): Lap Inboard -
Lap Outboard -
Shoulder* -
Impact Direction: 30# wt. into seat bottom
Dummy Attitude -

Test Observations: Dynamic Load Deflection Test of G.M. Impala seat bottom and cushion.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
TEST NO. A-733

Figure C-4 Graph-Check Camera Sequence
<table>
<thead>
<tr>
<th>Test Number</th>
<th>7.23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dummy</td>
<td>ANNE</td>
</tr>
<tr>
<td>Sled Velocity</td>
<td>26.48 ft/sec</td>
</tr>
</tbody>
</table>

**Summary Data: Head Accelerations**

- **Test Type**: Dynamic Test of Impala Seat
- **Test Type**: Cushion Foam

### Sled Pulse
- 10 g's/Division
- Filtered
- Class 60

### Anterior-Posterior Head Accelerations
- g's/Division
- Filtered
- Class 1000

### Superior-Inferior Head Accelerations
- g's/Division
- Filtered
- Class 1000

### Left-Right Head Accelerations
- g's/Division
- Filtered
- Class 1000

### Resultant Head Accelerations
- g's/Division
- Filtered
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-734

Test Date: 13/June/74

Restraint Description: -

Harness Configurations: -

Dummy: -

Sled Velocity (avg., ft/sec) 27.81

Sled Acceleration (avg. g's) 16.0

Belt Loads (avg. pounds):

Lap Inboard -

Lap Outboard -

Shoulder* -

Impact Direction: 30# wt. into seat bottom

Dummy Attitude -

Test Observations: Dynamic load deflection test of G.M. Impala Seat Cushion and bottom. Same setup photo as A-733.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-5 Graph-Check Camera Sequence
<table>
<thead>
<tr>
<th>Test Number</th>
<th>A-734</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dummy</td>
<td>None</td>
</tr>
<tr>
<td>Sled Velocity</td>
<td>27.81 ft/sec</td>
</tr>
</tbody>
</table>

**Test Type:** Dynamic Test of Impala Seat

**Test Type:** Cushion Foam

**Sled Pulse**

- /og's/Division
- Filtered
- Class 60

**Anterior-Posterior**

- Head Accelerations
  - g's/Division
  - Filtered
  - Class 1000

**Superior-Inferior**

- Head Accelerations
  - g's/Division
  - Filtered
  - Class 1000

**Left-Right**

- Head Accelerations
  - g's/Division
  - Filtered
  - Class 1000

**Resultant Head Accelerations**

- g's/Division
  - Filtered
  - Class 1000
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-735
Test Date: 14/June/74

Restraint Description: 
Harness Configurations: 

Dummy 

Sled Velocity (avg., ft/sec) 43.4
Sled Acceleration (avg. g's) 18.4

Belt Loads (avg. pounds):
  Lap Inboard 
  Lap Outboard 
  Shoulder*

Impact Direction: Forward
Dummy Attitude 

Test Observations: Check-out of GM Impala Seat. Seat back angle was measured. Side camera was lost.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-6 Test Setup for A-735
TEST NO. A-735

Figure C-7 Graph-Check Camera Sequence
<table>
<thead>
<tr>
<th>Test Number</th>
<th>A-735</th>
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</thead>
<tbody>
<tr>
<td>Dummy</td>
<td>NONE</td>
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<tr>
<td>Sled Velocity</td>
<td>43.4 ft/sec</td>
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</table>

**SUMMARY DATA HEAD ACCELERATIONS**

- **Test Type**: IMPALA
- **Seatback Deflection Test (Forward)**

<table>
<thead>
<tr>
<th>Sled Pulse</th>
<th>10 g's/Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filtered</td>
<td>Class 60</td>
</tr>
</tbody>
</table>

- **Anterior-Posterior Head Accelerations**
  - g's/Division
  - Filtered
  - Class 1000

- **Superior-Inferior Head Accelerations**
  - g's/Division
  - Filtered
  - Class 1000

- **Left-Right Head Accelerations**
  - g's/Division
  - Filtered
  - Class 1000

- **Resultant Head Accelerations**
  - g's/Division
  - Filtered
  - Class 1000
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-736
Test Date: 14/June/74
Restraint Description: 
Harness Configurations: 

Dummy 

Sled Velocity (avg., ft/sec) 29.60
Sled Acceleration (avg. g's) 16.0

Belt Loads (avg. pounds): Lap Inboard 
Lap Outboard 
Shoulder* 

Impact Direction: Rearward with 30# weight on seat back

Dummy Attitude 

Test Observations: Dynamic load deflection test of GM Impala seatback and foam 

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
TEST NO. A-736

Figure C-9  Graph-Check Camera Sequence
<table>
<thead>
<tr>
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<th>Test Number</th>
<th>Dummy</th>
<th>Sled Velocity</th>
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</thead>
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<td>DYNA</td>
<td>A-736</td>
<td>NONE</td>
<td>29.60 ft/sec</td>
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<table>
<thead>
<tr>
<th>Sled Pulse</th>
<th>10 g's/Division</th>
<th>Filtered</th>
<th>Class 60</th>
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<table>
<thead>
<tr>
<th>Anterior-Posterior</th>
<th>Head Accelerations</th>
<th>g's/Division</th>
<th>Filtered</th>
<th>Class 1000</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Superior-Inferior</th>
<th>Head Accelerations</th>
<th>g's/Division</th>
<th>Filtered</th>
<th>Class 1000</th>
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</table>

<table>
<thead>
<tr>
<th>Left-Right</th>
<th>Head Accelerations</th>
<th>g's/Division</th>
<th>Filtered</th>
<th>Class 1000</th>
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</table>

<table>
<thead>
<tr>
<th>Resultant Head</th>
<th>Accelerations</th>
<th>g's/Division</th>
<th>Filtered</th>
<th>Class 1000</th>
</tr>
</thead>
</table>
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-743
Test Date: 19/June/74
Restraint Description: 
Harness Configurations: 

Harness Configurations:

Dummy: 
Sled Velocity (avg., ft/sec) 48.91
Sled Acceleration (avg. g's) 21.2

Belt Loads (avg. pounds):

Lap Inboard
Lap Outboard
Shoulder*

Impact Direction: Forward

Dummy Attitude

Test Observations: Early check-out of the DOT Standard Seat. Seat back angle was measured. No set-up photo taken.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
<table>
<thead>
<tr>
<th>Description</th>
<th>Numbers</th>
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</thead>
<tbody>
<tr>
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<td>A-743</td>
</tr>
<tr>
<td>Dummy</td>
<td>N. E. N.</td>
</tr>
<tr>
<td>Sled Velocity</td>
<td>45.9 ft/sec</td>
</tr>
<tr>
<td>Test Type</td>
<td>STANDARD</td>
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<tr>
<td>Sled Pulse</td>
<td>Class 60</td>
</tr>
<tr>
<td>Anterior-Posterior Head Accelerations</td>
<td>g's/Division</td>
</tr>
<tr>
<td>Superior-Inferior Head Accelerations</td>
<td>g's/Division</td>
</tr>
<tr>
<td>Left-Right</td>
<td>g's/Division</td>
</tr>
<tr>
<td>Resultant Head Accelerations</td>
<td>g's/Division</td>
</tr>
</tbody>
</table>

**SLED VELOCITY**

45.9 ft/sec

**SLED PULSE**

10 g's/Division

**ANTERIOR-POSTERIOR HEAD ACCELERATIONS**

g's/Division

**SUPERIOR-INFERIOR HEAD ACCELERATIONS**

g's/Division

**LEFT-RIGHT HEAD ACCELERATIONS**

g's/Division

**RESULTANT HEAD ACCELERATIONS**

g's/Division
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-744
Test Date: 19/June/74
Restraint Description: Tot-Guard
Harness Configurations: Type 1

Dummy Sierra 3 yr
Sled Velocity (avg., ft/sec) 46.19
Sled Acceleration (avg. g's) 20.8
Belt Loads (avg. pounds):
   Lap Inboard
   Lap Outboard
   Shoulder*

Impact Direction: Forward
Dummy Attitude Passenger Seat

Test Observations: Early check-out of Tot-Guard child seat on DOT standard seat. Dummy not instrumented. No setup photo taken.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
TEST NO. A-744

Figure C-11 Graph-Cneck Camera Sequence
SUMMARY DATA HEAD ACCELERATIONS

Test Number A - 744
Dummy SIERRA 3 YEAR
Sled Velocity 46.19 ft/sec

Test Type FORWARD
Test Guard on Passenger Side
Standard Seat

Sled Pulse
10g's/Division
Filtered
Class 60

Anterior-Posterior
Head Accelerations
g's/Division
Filtered
Class 1000

Superior-Inferior
Head Accelerations
g's/Division
Filtered
Class 1000

Left-Right
Head Accelerations
g's/Division
Filtered
Class 1000

Resultant Head Accelerations
g's/Division
Filtered
Class 1000
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-745
Test Date: 19/June/74
Restraint Description: Century Motor-Toter
Harness Configurations: Type 1

Dummy Sierra 3 yr

Sled Velocity (avg., ft/sec) 46.19

Sled Acceleration (avg. g's) 21.6

Belt Loads (avg. pounds):
- Lap Inboard
- Lap Outboard
- Shoulder*

Impact Direction: Forward

Dummy Attitude Passenger seat

Test Observations: Check-out run of the DOT standard seat with a used Motor-Toter (Century). Back strap pulled through because it was weakened by previous runs. Dummy not instrumented. No set-up photo taken.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-12 Graph-Check Camera Sequence
SUMMARY DATA HEAD ACCELERATIONS

Test Number: A-745
Dummy: Sierra 3 Year
Sled Velocity: 46.19 ft/sec

Test Type: Forward
Motor-Torque (Passenger Side)
Standard Seat

Sled Pulse
10g's/Division
Filtered
Class 60

Anterior-Posterior
Head Accelerations
  g's/Division
Filtered
Class 1000

Superior-Inferior
Head Accelerations
  g's/Division
Filtered
Class 1000

Left-Right
Head Accelerations
  g's/Division
Filtered
Class 1000

Resultant Head
Accelerations
  g's/Division
Filtered
Class 1000
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-746
Test Date: 23/July/74
Restraint Description: Tot-Guard
Harness Configurations: Type 1

Dummy: Sierra 3 yr
Sled Velocity (avg, ft/sec) 46.07
Sled Acceleration (avg. g's) 20.0

Belt Loads (avg. pounds):
  Lap Inboard
  Lap Outboard
  Shoulder*

Impact Direction: Forward
Dummy Attitude Passenger seat

Test Observations: Check-out run with the DOT standard seat with a Tot-Guard. Dummy not instrumented. Graph-check data was lost.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-13 Test Setup for A-746
<table>
<thead>
<tr>
<th>Test Number</th>
<th>746</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dummy</td>
<td>Sierra 3 Year</td>
</tr>
<tr>
<td>Sled Velocity</td>
<td>46.07 ft/sec</td>
</tr>
</tbody>
</table>

**Test Type**

- Forward
- TDT Guard (Passenger Side)
- Standard Seat

**Sled Pulse**

- 10g's/Division
- Filtered
- Class 60

**Anterior-Posterior Head Accelerations**

- 10g's/Division
- Filtered
- Class 1000

**Superior-Inferior Head Accelerations**

- 10g's/Division
- Filtered
- Class 1000

**Left-Right Head Accelerations**

- 10g's/Division
- Filtered
- Class 1000

**Resultant Head Accelerations**

- 10g's/Division
- Filtered
- Class 1000
Test Number: A-747
Test Date: 31/July/74
Restraint Description: GM Love Seat
Harness Configurations: Type 1

Dummy: Sierra 3 yr.
Sled Velocity (avg., ft/sec): 29.43
Sled Acceleration (avg. g's): 16.6
Belt Loads (avg. pounds):
- Lap Inboard
- Lap Outboard
- Shoulder*
Impact Direction: Side
Dummy Attitude: Passenger Seat

Test Observations: GM Impala Seat performance with a GM Love Seat (Run 1)

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-14  Test Setup for A-747
TEST NO. A-747

Figure C-15 Graph-Check Camera Sequence
<table>
<thead>
<tr>
<th>Test Number</th>
<th>Dummy</th>
<th>Sled Velocity</th>
<th>Test Type</th>
<th>Sled Pulse</th>
<th>Anterior-Posterior</th>
<th>Superior-Inferior</th>
<th>Left-Right</th>
<th>Resultant Head</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 747</td>
<td>SIERRA 3 YEAR</td>
<td>27.43 ft/sec</td>
<td>SIDE Live Seat (Passenger Side)</td>
<td>/10 g's/Division</td>
<td>/25 g's/Division</td>
<td>/25 g's/Division</td>
<td>/25 g's/Division</td>
<td>/25 g's/Division</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Filtered</td>
<td>Filtered</td>
<td>Filtered</td>
<td>Filtered</td>
<td>Filtered</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Class 60</td>
<td>Class 1000</td>
<td>Class 1000</td>
<td>Class 1000</td>
<td>Class 1000</td>
</tr>
</tbody>
</table>

Sled Pulse:

- /10 g's/Division
- Filtered
- Class 60

Anterior-Posterior:

- Head Accelerations
- /25 g's/Division
- Filtered
- Class 1000

Superior-Inferior:

- Head Accelerations
- /25 g's/Division
- Filtered
- Class 1000

Left-Right:

- Head Accelerations
- /25 g's/Division
- Filtered
- Class 1000

Resultant Head:

- Accelerations
- /25 g's/Division
- Filtered
- Class 1000
SUMMARY DATA CHEST ACCELERATIONS

Test Number A-747
Dummy SIERRA 3 YEAR
Sled Velocity 29.43 ft/sec

Test Type SIDE
LOVE SEAT (PASSENGER SIDE)

Sled Pulse
10 g's/Division
Filtered
Class 60

Anterior-Posterior
Chest Accelerations
2.5 g's/Division
Filtered
Class 180

Superior-Inferior
Chest Accelerations
2.5 g's/Division
Filtered
Class 180

Left-Right
Chest Accelerations
2.5 g's/Division
Filtered
Class 180

Resultant Chest
Accelerations
10 g's/Division
Filtered
Class 180

1-12.5 MSEC
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-748

Test Date: 31/July/74

Restraint Description: GM Love Seat

Harness Configurations: Type 1

---

Dummy: Sierra 3 year

Sled Velocity (avg., ft/sec): 29.87

Sled Acceleration (avg. g's): 17.0

Belt Loads (avg. pounds):
- Lap Inboard
- Lap Outboard
- Shoulder*

Impact Direction: Side

Dummy Attitude: Passenger seat

---

Test Observations: GM Impala seat performance with a GM Love Seat (Run 2).

---

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-16  Test Setup for A-748
Test Number: A 749
Dummy: SIERRA 3 YEAR
Sled Velocity: 29.87 ft/sec

**Summary Data Head Accelerations**

<table>
<thead>
<tr>
<th>Test Type</th>
<th>SLED</th>
<th>LOVE SEAT (PASSENGER SIDE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Type</td>
<td>SIDE</td>
<td>IMPALA SEAT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sled Pulse</th>
<th>10 g/s/Division</th>
<th>Filtered</th>
<th>Class 60</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Anterior-Posterior Head Accelerations</th>
<th>25 g/s/Division</th>
<th>Filtered</th>
<th>Class 1000</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Superior-Inferior Head Accelerations</th>
<th>25 g/s/Division</th>
<th>Filtered</th>
<th>Class 1000</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Left-Right Head Accelerations</th>
<th>25 g/s/Division</th>
<th>Filtered</th>
<th>Class 1000</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Resultant Head Accelerations</th>
<th>10 g/s/Division</th>
<th>Filtered</th>
<th>Class 1000</th>
</tr>
</thead>
</table>
SUMMARY DATA CHEST ACCELERATIONS

Test Number A-748

Dummy SIERRA 3 YEAR

Sled Velocity 29.97 ft/sec

Test Type SIDE

LOVE SEAT (PASSENGER SEAT)

IMPALA SEAT

Sled Pulse

μg's/Division

Filtered

Class 60

Anterior-Posterior Chest Accelerations

12.5 g's/Division

Filtered

Class 180

Superior-Inferior Chest Accelerations

12.5 g's/Division

Filtered

Class 180

Gould Inc., Instrument Systems Division

Cleveland, Ohio Printed in USA

Left-Right Chest Accelerations

12.5 g's/Division

Filtered

Class 180

Resultant Chest Accelerations

1.0 g's/Division

Filtered

Class 180

1-12.5 msec
Test Number: A-749
Test Date: 31/July/74
Restraint Description: Chrysler Mopar
Harness Configurations: Type 1

Dummy: Sierra 3 yr.
Sled Velocity (avg., ft/sec) 30.01
Sled Acceleration (avg. g's) 17.2
Belt Loads (avg. pounds):
   Lap Inboard -
   Lap Outboard -
   Shoulder* -

Impact Direction: Rearward
Dummy Attitude Center Seat

Test Observations: GM Impala seat performance with a Mopar child seat (Run 1).

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-18 Test Setup for A-749
Figure C-19 Graph-Check Camera Sequence
Test Number: A 749
Dummy: SICKA 3 YEAR
Sled Velocity: 36.01 ft/sec

SUMMARY DATA HEAD ACCELERATIONS
Test Type: REARWARD

MOPAR IN CENTER POSITION
IMPALA SEAT

Sled Pulse
1/g's/Division
Filtered
Class 60

Anterior-Posterior
Head Accelerations
12.5 g's/Division
Filtered
Class 1000

Superior-Inferior
Head Accelerations
12.5 g's/Division
Filtered
Class 1000

Left-Right
Head Accelerations
12.5 g's/Division
Filtered
Class 1000

Resultant Head
Accelerations
10 g's/Division
Filtered
Class 1000
SUMMARY DATA CHEST ACCELERATIONS

Test Number: A-149
Dummy: SIERRA 3 YEAR
Sled Velocity: 30.0 ft/sec

Test Type: REARWARD
MOPAR (CENTER POSITION)
IMPALA SEAT

Sled Pulse
1 g's/Division
Filtered
Class 60

Anterior-Posterior Chest Accelerations
2.5 g's/Division
Filtered
Class 180

Superior-Inferior Chest Accelerations
2.5 g's/Division
Filtered
Class 180

Left-Right Chest Accelerations
2.5 g's/Division
Filtered
Class 180

Resultant Chest Accelerations
1.5 g's/Division
Filtered
Class 180

1-12.5 MSEC
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-750

Test Date: 31/July/74

Restraint Description: Chrysler Mopar

Harness Configurations: Type 1

Dummy Sierra 3 yr.

Sled Velocity (avg., ft/sec) 30.33

Sled Acceleration (avg. g's) 16.8

Belt Loads (avg. pounds):
- Lap Inboard
- Lap Outboard
- Shoulder*

Impact Direction: Rearward

Dummy Attitude Center seat

Test Observations: GM Impala seat performance with a Mopar Child seat (Run 2).

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-20 Test Setup for A-750
Test Number: A 750
Dummy: SIERRA 3 YEAR
Sled Velocity: 30.33 ft/sec

Sled Pulse
/0g's/Division
Filtered
Class 60

Anterior-Posterior
Head Accelerations
12.5g's/Division
Filtered
Class 1000

Superior-Inferior
Head Accelerations
12.5g's/Division
Filtered
Class 1000

Left-Right
Head Accelerations
12.5g's/Division
Filtered
Class 1000

Resultant Head
Accelerations
10 g's/Division
Filtered
Class 1000

Gould Inc., Instrument Systems Div
Cleveland, Ohio
Printed in U.S.A.
SUMMARY DATA CHEST ACCELERATIONS

Test Number A-750

Dummy SIERRA 3 YEAR

Test Type REARWARD

MOPAR (CENTER POSITION)

Sled Velocity 32.23 ft/sec

IMPALA SEAT

Test Number A-750

Sled Pulse

10 g's/Division

Filtered

Class 60

Anterior-Posterior Chest accelerations

12.5 g's/Division

Filtered

Class 180

Superior-Inferior Chest accelerations

12.5 g's/Division

Filtered

Class 180

Left-Right Chest accelerations

12.5 g's/Division

Filtered

Class 180

Resultant Chest Accelerations

10 g's/Division

Filtered

Class 180

1-12.5 MSEC
Test Number: A-751
Test Date: 31/July/74
Restraint Description: -
Harness Configurations: -

Dummy -
Sled Velocity (avg., ft/sec) 30.22
Sled Acceleration (avg. g's) 16.2

Belt Loads (avg. pounds):
   Lap Inboard -
   Lap Outboard -
   Shoulder* -

Impact Direction: Rearward
Dummy Attitude -

Test Observations: Check out of GM Impala seat. Seat back angle was measured.
Set-up photo was not taken. Graph-Check camera did not work.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
SUMMARY DATA HEAD ACCELERATIONS

Test Number: A-751
Test Type: IMPALA
Seatback Deflection
Test: (Rearward)

Dummy: None
Sled Velocity: 30.22 ft/sec

Sled Pulse
/0g's/Division
Filtered
Class 60

Anterior-Posterior
Head Accelerations
/0g's/Division
Filtered
Class 1000

Superior-Inferior
Head Accelerations
/0g's/Division
Filtered
Class 1000

Left-Right
Head Accelerations
/0g's/Division
Filtered
Class 1000

Resultant Head
Accelerations
/0g's/Division
Filtered
Class 1000
Test Number: A-752
Test Date: 1/August/74
Restraint Description: Tot Guard
Harness Configurations: Type 1

Dummy: Sierra 3 yr.
Sled Velocity (avg., ft/sec): 42.87
Sled Acceleration (avg. g's): 20.4

Belt Loads (avg. pounds):
- Lap Inboard
- Lap Outboard
- Shoulder*

Impact Direction: Forward
Dummy Attitude: Passenger seat

Test Observations: GM Impala seat performance with a Tot-Guard child seat (Run 2). High rebound spike on head acceleration data.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-22  Test Setup for A-752
TEST NO. A-752

Figure C-23  Graph-Check Camera Sequence
<table>
<thead>
<tr>
<th>Test Number</th>
<th>752</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dummy</td>
<td>SIERA 3 YEAR</td>
</tr>
<tr>
<td>Sled Velocity</td>
<td>42.87 ft/sec</td>
</tr>
</tbody>
</table>

**SUNMARY DATA HEAD ACCELERATIONS**

<table>
<thead>
<tr>
<th>Test Type</th>
<th>FORWARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1ST GUARD (PASSENGER SIDE)</td>
<td>IMPALA SEAT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sled Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 g's/Division</td>
</tr>
<tr>
<td>Filtered</td>
</tr>
<tr>
<td>Class 60</td>
</tr>
</tbody>
</table>

Anterior-Posterior Head Accelerations

| 25 g's/Division |
| Filtered |
| Class 1000 |

Superior-Inferior Head Accelerations

| 25 g's/Division |
| Filtered |
| Class 1000 |

Left-Right Head Accelerations

| 25 g's/Division |
| Filtered |
| Class 1000 |

Resultant Head Accelerations

| 0 g's/Division |
| Filtered |
| Class 1000 |
Test Number: A-752
Dummy: SIERRA 3 YEAR
Sled Velocity: 42.87 ft/sec

SUMMARY DATA CHEST ACCELERATIONS
Test Type: FORWARD
TDT Guard (Passenger Side)

IMPALA SEAT

Sled Pulse
1/2g's/Division
Filtered
Class 60

Anterior-Posterior Chest Accelerations
1/2g's/Division
Filtered
Class 180

Superior-Inferior Chest Accelerations
1/2g's/Division
Filtered
Class 180

Left-Right Chest Accelerations
1/2g's/Division
Filtered
Class 180

Resultant Chest Accelerations
1/2g's/Division
Filtered
Class 180
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-753

Test Date: 1/August/74

Restraint Description: Strollee (Model 594)

Harness Configurations: Type 1

Dummy Sierra 3 yr.

Sled Velocity (avg., ft/sec) 44.02

Sled Acceleration (avg. g's) 20.4

Belt Loads (avg. pounds):
- Lap Inboard
- Lap Outboard
- Shoulder*

Impact Direction: Forward

Dummy Attitude Passenger seat

Test Observations: GM Impala seat performance with a Strollee child seat (one only).

*(asterisk on belt load value indicates load was other than for standard shoulder belt)*
Figure C-25  Graph Check Camera Sequence
Test Number A753
Dummy SIERRA 3 YEAR
Sled Velocity 44.02 ft/sec

SUMMARY DATA HEAD ACCELERATIONS
Test Type FORWARD
STREEXE (PASSENGEX SIDE)
IMPALA SEAT

Sled Pulse
10 g's/Division
Filtered
Class 60

Anterior-Posterior
Head Accelerations
25 g's/Division
Filtered
Class 1000

Superior-Inferior
Head Accelerations
25 g's/Division
Filtered
Class 1000

Left-Right
Head Accelerations
25 g's/Division
Filtered
Class 1000

Resultant Head
Accelerations
10 g's/Division
Filtered
Class 1000
SUMMARY DATA CHEST ACCELERATIONS

Test Number A-753
Dummy SIERRA 3 YEAR
Sled Velocity 44.02 ft/sec

Test Type FORWARD
STROLEE (PASSENGER SIDE)
IMPALA SEAT

Sled Pulse
10 g's/Division
Filtered
Class 60

Anterior-Posterior Chest Accelerations
12.5 g's/Division
Filtered
Class 180

Superior-Inferior Chest Accelerations
12.5 g's/Division
Filtered
Class 180

Left-Right Chest Accelerations
12.5 g's/Division
Filtered
Class 180

Resultant Chest Accelerations
0.5 g's/Division
Filtered
Class 180

I-12.5 MSEC
HSRI CHILD SEAT DATA SUMMARY

<table>
<thead>
<tr>
<th>Test Number:</th>
<th>A-754</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Date:</td>
<td>1/August/74</td>
</tr>
<tr>
<td>Restraint Description:</td>
<td>Chrysler Mopar</td>
</tr>
<tr>
<td>Harness Configurations:</td>
<td>Type 1</td>
</tr>
<tr>
<td>Dummy:</td>
<td>Sierra 3 yr.</td>
</tr>
<tr>
<td>Sled Velocity (avg., ft/sec):</td>
<td>44.31</td>
</tr>
<tr>
<td>Sled Acceleration (avg. g's):</td>
<td>17.2</td>
</tr>
<tr>
<td>Belt Loads (avg. pounds):</td>
<td>Lap Inboard -</td>
</tr>
<tr>
<td></td>
<td>Lap Outboard -</td>
</tr>
<tr>
<td></td>
<td>Shoulder* -</td>
</tr>
<tr>
<td>Impact Direction:</td>
<td>Forward</td>
</tr>
<tr>
<td>Dummy Attitude:</td>
<td>Passenger seat</td>
</tr>
<tr>
<td>Test Observations:</td>
<td>GM Impala seat performance with a Mopar child seat (one only). Auto seat was weakened from previous testing. High rebound spike on head acceleration data.</td>
</tr>
</tbody>
</table>

*(asterisk on belt load value indicates load was other than for standard shoulder belt)*
Figure C-26  Test Setup for A-754
TEST NO. A-754

Figure C-27  Graph-Check Camera Sequence
Test Number: A 774
Dummy: SICRENA 2 YEAR
Sled Velocity: 44.2 ft/sec

Sled Pulse
10 g/s/Division
Filtered
Class 60

Anterior-Posterior
Head Accelerations
25 g/s/Division
Filtered
Class 1000

Superior-Inferior
Head Accelerations
25 g/s/Division
Filtered
Class 1000

Left-Right
Head Accelerations
25 g/s/Division
Filtered
Class 1000

Resultant Head
Accelerations
20 g/s/Division
Filtered
Class 1000

SUMMARY DATA HEAD ACCELERATIONS
Test Type: FORWARD
Mopar (Passenger Side)
IMPELLA TEST

1-12.5 ms
<table>
<thead>
<tr>
<th>Test Number</th>
<th>A-750</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dummy</td>
<td>SIERRA 3 YEAR</td>
</tr>
<tr>
<td>Sled Velocity</td>
<td>44.31 ft/sec</td>
</tr>
</tbody>
</table>

**SUMMARY DATA CHEST ACCELERATIONS**

**Test Type:** FORWARD

**MOPAR (PASSENGER SIDE)**

**IMPALA SEAT**

<table>
<thead>
<tr>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sled Pulse</td>
<td>/\ g's/Division</td>
</tr>
<tr>
<td>Filtered</td>
<td>Class 60</td>
</tr>
</tbody>
</table>

**Anterior-Posterior Chest Accelerations**

<table>
<thead>
<tr>
<th>Description</th>
<th>/\ g's/Division</th>
</tr>
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<tbody>
<tr>
<td>Filtered</td>
<td>Class 180</td>
</tr>
</tbody>
</table>

**Superior-Inferior Chest Accelerations**

<table>
<thead>
<tr>
<th>Description</th>
<th>/\ g's/Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filtered</td>
<td>Class 180</td>
</tr>
</tbody>
</table>

**Left-Right Chest Accelerations**

<table>
<thead>
<tr>
<th>Description</th>
<th>/\ g's/Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filtered</td>
<td>Class 180</td>
</tr>
</tbody>
</table>

**Resultant Chest Accelerations**

<table>
<thead>
<tr>
<th>Description</th>
<th>/\ g's/Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filtered</td>
<td>Class 180</td>
</tr>
</tbody>
</table>

1 1-12.5 MSEC
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-755

Test Date: 1/ August/74

Restraint Description: 

Harness Configurations: 

__________________________

Sled Velocity (avg., ft/sec) 45.91

Sled Acceleration (avg. g's) 21.0

Belt Loads (avg. pounds): 
Lap Inboard 
Lap Outboard 
Shoulder* 

Impact Direction: Forward

Dummy Attitude 

Test Observations: Check-out of GM Impala seat. Seat back angle was measured.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-28   Test Setup for A-755
Figure C-29  Graph-Check Camera Sequence
SUMMARY DATA HEAD ACCELERATIONS

Test Number: A-755
Test Type: IMPACT

Dummy: NONE
Sled Velocity: 45.91 ft/sec

Sled Pulse
10g's/Division
Filtered
Class: 60

Anterior-Posterior
Head Accelerations
  g's/Division
Filtered
Class: 1000

Superior-Inferior
Head Accelerations
  g's/Division
Filtered
Class: 1000

Left-Right
Head Accelerations
  g's/Division
Filtered
Class: 1000

Resultant Head
Accelerations
  g's/Division
Filtered
Class: 1000
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-756
Test Date: 2/August/74
Restraint Description: GM Love Seat
Harness Configurations: Type 1

Dummy: Sierra 3 yr.
Sled Velocity (avg., ft/sec) 43.53
Sled Acceleration (avg. g's) 21.6
Belt Loads (avg. pounds):
- Lap Inboard
- Lap Outboard
- Shoulder*
Impact Direction: Forward
Dummy Attitude: Passenger seat

Test Observations: GM Love seat tested on GM Impala seat (one only). Auto seat back angle is low because of over back strap. High rebound spike on head acceleration data.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-30  Test Setup for A-756
Figure C-31  Graph-Cneck Camera Sequence
<table>
<thead>
<tr>
<th>Test Number</th>
<th>756</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dummy</td>
<td>Sierra 3 Year</td>
</tr>
<tr>
<td>Sled Velocity</td>
<td>43.53 ft/sec</td>
</tr>
</tbody>
</table>

### Summary Data Head Accelerations

<table>
<thead>
<tr>
<th>Category</th>
<th>Graph 1</th>
<th>Graph 2</th>
<th>Graph 3</th>
<th>Graph 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sled Pulse</td>
<td>0 g/s/Division</td>
<td>Filtered</td>
<td>Class 60</td>
<td></td>
</tr>
<tr>
<td>Anterior-Posterior Head Accelerations</td>
<td>25 g/s/Division</td>
<td>Filtered</td>
<td>Class 1000</td>
<td></td>
</tr>
<tr>
<td>Superior-Inferior Head Accelerations</td>
<td>25 g/s/Division</td>
<td>Filtered</td>
<td>Class 1000</td>
<td></td>
</tr>
<tr>
<td>Left-Right Head Accelerations</td>
<td>25 g/s/Division</td>
<td>Filtered</td>
<td>Class 1000</td>
<td></td>
</tr>
<tr>
<td>Resultant Head Accelerations</td>
<td>20 g/s/Division</td>
<td>Filtered</td>
<td>Class 1000</td>
<td></td>
</tr>
</tbody>
</table>
Test Number **A-76**

Dummy **SIERRA 3 YEAR**

Sled Velocity **43.53 ft/sec**

**SUMMARY DATA CHEST ACCELERATIONS**

**Test Type** **FORWARD**

**LOVE SEAT (PASSENGER SIDE)**

**IMPALA SEAT**

<table>
<thead>
<tr>
<th>Sled Pulse</th>
<th>10g's/Division</th>
<th>Filtered</th>
<th>Class 60</th>
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</table>

<table>
<thead>
<tr>
<th>Anterior-Posterior</th>
<th>Chest Accelerations</th>
<th>1/2g's/Division</th>
<th>Filtered</th>
<th>Class 180</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Superior-Inferior</th>
<th>Chest Accelerations</th>
<th>1/2g's/Division</th>
<th>Filtered</th>
<th>Class 180</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Left-Right</th>
<th>Chest Accelerations</th>
<th>1/2g's/Division</th>
<th>Filtered</th>
<th>Class 180</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Resultant Chest Accelerations</th>
<th>.5g's/Division</th>
<th>Filtered</th>
<th>Class 180</th>
</tr>
</thead>
</table>

**12.5 MSEC**
**HSRI CHILD SEAT DATA SUMMARY**

<table>
<thead>
<tr>
<th>Test Number:</th>
<th>A-758</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Date:</td>
<td>21/August/74</td>
</tr>
<tr>
<td>Restraint Description:</td>
<td>-</td>
</tr>
<tr>
<td>Harness Configurations:</td>
<td>-</td>
</tr>
<tr>
<td>Dummy</td>
<td>-</td>
</tr>
<tr>
<td>Sled Velocity (avg., ft/sec)</td>
<td>46.70</td>
</tr>
<tr>
<td>Sled Acceleration (avg. g's)</td>
<td>21.6</td>
</tr>
<tr>
<td>Belt Loads (avg. pounds):</td>
<td>Lap Inboard -</td>
</tr>
<tr>
<td></td>
<td>Lap Outboard -</td>
</tr>
<tr>
<td></td>
<td>Shoulder* -</td>
</tr>
<tr>
<td>Impact Direction:</td>
<td>Forward</td>
</tr>
<tr>
<td>Dummy Attitude</td>
<td>-</td>
</tr>
<tr>
<td>Test Observations:</td>
<td>Early check-out of the DOT Standard seat. Seat back angle was measured and strap was used to prevent seat bottom from moving forward on impact. Seatback had earlier design 2-piece plywood backing and no straps.</td>
</tr>
</tbody>
</table>

*(asterisk on belt load value indicates load was other than for standard shoulder belt)*
TEST NO. A-758

Figure C-33  Graph-Check Camera Sequence
SUMMARY DATA HEAD ACCELERATIONS

Test Number A-758

Dummy NONE

Sled Velocity 46.76 ft/sec

Sled Pulse
10g's/Division
Filtered
Class 60

Anterior-Posterior
Head Accelerations
g's/Division
Filtered
Class 1000

Superior-Inferior
Head Accelerations
g's/Division
Filtered
Class 1000

Left-Right
Head Accelerations
g's/Division
Filtered
Class 1000

Resultant Head Accelerations
g's/Division
Filtered
Class 1000
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-759
Test Date: 22/August/74
Restraint Description: Tot-Guard
Harness Configurations: Type 1

Dummy: Sierra 3 yr.
Sled Velocity (avg., ft/sec): 44.31
Sled Acceleration (avg. g's): 21.0

Belt Loads (avg. pounds):
- Lap Inboard
- Lap Outboard
- Shoulder* Forward

Impact Direction: Passenger seat

Test Observations: DOT standard seat performance with a Tot-Guard child seat. High rebound spike on head acceleration data.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-34  Test Setup for A-759
TEST NO. A-759

Figure C-35  Graph-Cneck Camera Sequence
Test Number: 759
Dummy: SIERRA 3 YEAR
Sled Velocity: 44.31 ft/sec

**SLED PULSE**
- 1/g's/Division
- Filtered
- Class 60

**ANTERIOR-POSTERIOR HEAD ACCELERATIONS**
- 25 g's/Division
- Filtered
- Class 1000

**SUPERIOR-INFERIOR HEAD ACCELERATIONS**
- 25 g's/Division
- Filtered
- Class 1000

**LEFT-RIGHT HEAD ACCELERATIONS**
- 25 g's/Division
- Filtered
- Class 1000

**RESULTANT HEAD ACCELERATIONS**
- 20 g's/Division
- Filtered
- Class 1000
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-760
Test Date: 22/August/74
Restraint Description: Chrysler Mopar
Harness Configurations: Type 1

Dummy Sierra 3 yr.

Sled Velocity (avg., ft/sec) 43.71
Sled Acceleration (avg. g's) 22.0

Belt Loads (avg. pounds):
- Lap Inboard
- Lap Outboard
- Shoulder*

Impact Direction: Forward
Dummy Attitude Passenger seat

Test Observations: DOT standard seat performance with a Mopar child seat (one run only).

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-36  Test Setup for A-760
TEST NO. A-760

Figure A-37 Graph-Check Camera Sequence
| Test Number | A 760 |
| Dummy | SIERRA 3 YEAR |
| Sled Velocity | 3.7 ft/sec |

**Test Type: FORWARD**

**Seat Type: STANDARD SEAT**

### SUMMARY DATA HEAD ACCELERATIONS

<table>
<thead>
<tr>
<th>Category</th>
<th>Acceleration</th>
<th>Division</th>
<th>Filtered Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sled Pulse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 g's/Division</td>
<td>Filtered</td>
<td>60</td>
</tr>
<tr>
<td>Anterior-Posterior Head Accelerations</td>
<td>25 g's/Division</td>
<td>Filtered</td>
<td>1000</td>
</tr>
<tr>
<td>Superior-Inferior Head Accelerations</td>
<td>25 g's/Division</td>
<td>Filtered</td>
<td>1000</td>
</tr>
<tr>
<td>Left-Right Head Accelerations</td>
<td>25 g's/Division</td>
<td>Filtered</td>
<td>1000</td>
</tr>
<tr>
<td>Resultant Head Accelerations</td>
<td>20 g's/Division</td>
<td>Filtered</td>
<td>1000</td>
</tr>
</tbody>
</table>

*Instrument Systems Division*

*U.S.A.*
Test Number: A-760
Dummy: SIERRA 3 YEAR
Sled Velocity: 43.7 ft/sec

Test Type: FORWARD
Mother (Passenger Side)

SUMMARY DATA CHEST ACCELERATIONS

Sled Pulse
10 g's/Division
Filtered
Class: 60

Anterior-Posterior Chest Accelerations
1.5 g's/Division
Filtered
Class: 180

Superior-Inferior Chest Accelerations
1.5 g's/Division
Filtered
Class: 180

Left-Right Chest Accelerations
1.5 g's/Division
Filtered
Class: 180

Resultant Chest Accelerations
10 g's/Division
Filtered
Class: 180

BRUSH ACCI

1-12.5 MSEC
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-761
Test Date: 22/August/74
Restraint Description: GM Love Seat
Harness Configurations: Type 1

Dummy Sierra 3 yr.
Sled Velocity (avg., ft/sec) 42.81
Sled Acceleration (avg. g's) 20.8

Belt Loads (avg. pounds):
   Lap Inboard -
   Lap Outboard -
   Shoulder* -

Impact Direction: Forward
Dummy Attitude Passenger seat

Test Observations: DOT standard seat performance with a GM Love Seat (Run 1). Lost side camera data. Very high rebound spike on head acceleration data.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-38 Test Setup for A-761
Figure C-39  Graph-Check Camera Sequence
SUMMARY DATA HEAD ACCELERATIONS

Test Number: 76
Dummy: SIERRA 3 YEAR
Sled Velocity: 42.3 ft/sec

Test Type: FORWARD
LOVE SEAT (FIXED position, SIDE)
STANDARD SEAT

Sled Pulse
20 g's/Division
Filtered
Class 60

Anterior-Posterior
Head Accelerations
25 g's/Division
Filtered
Class 1000

Superior-Inferior
Head Accelerations
25 g's/Division
Filtered
Class 1000

Left-Right
Head Accelerations
25 g's/Division
Filtered
Class 1000

Resultant Head
Accelerations
20 g's/Division
Filtered
Class 1000
SUMMARY DATA CHEST ACCELERATIONS

Test Number A-761

Dummy SIERRA 3 YEAR

Sled Velocity 42.81 ft/sec

Test Type FORWARD

LOVE SEAT ( PASSENGER SIDE)

STANDARD SEAT

Sled Pulse

1 g's/Division

Filtered

Class 60

Anterior-Posterior

Chest Accelerations

1.25 g's/Division

Filtered

Class 180

Superior-Inferior

Chest Accelerations

1.25 g's/Division

Filtered

Class 180

Left-Right

Chest Accelerations

12.5 g's/Division

Filtered

Class 180

Resultant Chest Accelerations

0 g's/Division

Filtered

Class 180
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-762
Test Date: 22/August/74
Restraint Description: GM Love Seat
Harness Configurations: Type 1

Dummy: Sierra 3 yr.

Sled Velocity (avg., ft/sec) 42.42
Sled Acceleration (avg. g's) 21.2

Belt Loads (avg. pounds):
  Lap Inboard
  Lap Outboard
  Shoulder*

Impact Direction: Forward
Dummy Attitude: Passenger seat

Test Observations: DOT standard seat performance with a GM Love seat (Run 2). Auto seat back angle is low because of over-the-back-strap. Very high rebound spike on head acceleration data.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-40 Test Setup for A-762
Figure C-41  Graph-Check Camera Sequence
**Test Number**: A 762  
**Dummy**: SIERRA 3 YEAR  
**Sled Velocity**: 42.42 ft/sec

**Test Type**: FORWARD  
**Test Type**: LOVE SEAT (PASSENGER SIDE)  
**Test Type**: STANDARD SEAT

**Sled Pulse**  
10 g's/Division  
Filtered  
Class 60

**Anterior-Posterior**  
Head Accelerations  
25 g's/Division  
Filtered  
Class 1000

**Superior-Inferior**  
Head Accelerations  
25 g's/Division  
Filtered  
Class 1000

**Left-Right**  
Head Accelerations  
25 g's/Division  
Filtered  
Class 1000

**Resultant Head Accelerations**  
20 g's/Division  
Filtered  
Class 1000
SUMMARY DATA CHEST ACCELERATIONS

Test Number A-762
Dummy SIERRA 3 YEAR
Sled Velocity 42.42 ft/sec

Test Type FORWARD
LOVE SEAT (PASSENGER SIDE)

STANDARD SEAT

Sled Pulse
10 g's/Division
Filtered
Class 60

Anterior-Posterior
Chest Accelerations
12 g's/Division
Filtered
Class 180

Superior-Inferior
Chest Accelerations
12 g's/Division
Filtered
Class 180

Left-Right
Chest Accelerations
12 g's/Division
Filtered
Class 180

Resultant Chest Accelerations
10 g's/Division
Filtered
Class 180

1-12.5 MSEC
Test Number: A-763
Test Date: 22/August/74
Restraint Description: Strollee (Model 594)
Harness Configurations: Type 1

Dummy: Sierra 3 yr.

Sled Velocity (avg., ft/sec): 43.81
Sled Acceleration (avg. g's): 21.2

Belt Loads (avg. pounds):
- Lap Inboard
- Lap Outboard
- Shoulder*

Impact Direction: Forward
Dummy Attitude: Passenger seat

Test Observations: DOT standard seat performance with a Strollee child seat (one run only).

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-42 Test Setup for A-763
TEST NO. A-763

Figure C-43  Graph-Check Camera Sequence
Summary Data: Head Accelerations

Test Number: A 763
Test Type: Forward

Dummy: Sierra 3 Year
Sled Velocity: 43.31 ft/sec

Test Description:

- Head Accelerations
- Sled Pulse
- Anterior-Posterior
- Superior-Inferior
- Left-Right
- Resultant

Classifications:

- 60 Class
- 1000 Class
- 1060 Class

Graphs and Measurements:

- Sled Pulse
- Anterior-Posterior
- Superior-Inferior
- Left-Right
- Resultant

Note: Graphs and measurements are shown for various axes and divisions.
<table>
<thead>
<tr>
<th>Test Number</th>
<th>4-75-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dummy</td>
<td>SIERRA 3 YEAR</td>
</tr>
<tr>
<td>Sled Velocity</td>
<td>43.51 ft/sec</td>
</tr>
</tbody>
</table>

### SUMMARY DATA CHEST ACCELERATIONS

**Test Type: FORWARD**

**STROLEE (PASSENGER SIDE)**

**STANDARD SEAT**

<table>
<thead>
<tr>
<th>Acceleration Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sled Pulse</td>
<td>5.5 g's/Division</td>
</tr>
<tr>
<td>Anterior-Posterior Chest Accelerations</td>
<td>12 g's/Division</td>
</tr>
<tr>
<td>Superior-Inferior Chest Accelerations</td>
<td>12 g's/Division</td>
</tr>
<tr>
<td>Left-Right Chest Accelerations</td>
<td>12 g's/Division</td>
</tr>
<tr>
<td>Resultant Chest Accelerations</td>
<td>12 g's/Division</td>
</tr>
</tbody>
</table>

- All filtered data is Class 60.
Test Number: A-764
Test Date: 22/August/74
Restraint Description: GM Love Seat
Harness Configurations: Type 1

Dummy: Sierra 3 yr.

Sled Velocity (avg., ft/sec): 29.43
Sled Acceleration (avg. g's): 16.0

Belt Loads (avg. pounds):
<table>
<thead>
<tr>
<th></th>
<th>Lap Inboard</th>
<th>Lap Outboard</th>
<th>Shoulder*</th>
</tr>
</thead>
</table>

Impact Direction: Side
Dummy Attitude: Passenger seat

Test Observations: DOT standard seat performance with a GM Love seat (Run 1). Chest A-P channel was lost.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)*
Figure C-44   Test Setup for A-764
TEST NO. A-764

Figure C-45  Graph-Check Camera Sequence
Test Number: 764
Dummy: Sierra 3 Year
Sled Velocity: 29.43 ft/sec

Sled Pulse:
- 10 g/s/Division
- Filtered
- Class 60

Anterior-Posterior
Head Accelerations:
- 12.5 g/s/Division
- Filtered
- Class 1000

Superior-Inferior
Head Accelerations:
- 2.5 g/s/Division
- Filtered
- Class 1000

Left-Right
Head Accelerations:
- 2.5 g/s/Division
- Filtered
- Class 1000

Resultant Head Accelerations:
- 10 g/s/Division
- Filtered
- Class 1000
SUMMARY DATA CHEST ACCELERATIONS

Test Number A-7-

Dummy SIERRA 3 YEAR

Sled Velocity 29.43 ft/sec

Test Type SIDE

LOVE SEAT (PASSSENGER SIDE)

STANDARD SEAT

Sled Pulse
1.0 g's/Division
Filtered
Class 60

Anterior-Posterior
Chest Accelerations
1.5 g's/Division
Filtered
Class 180

Superior-Inferior
Chest Accelerations
1.5 g's/Division
Filtered
Class 180

Left-Right
Chest Accelerations
1.5 g's/Division
Filtered
Class 180

Resultant Chest
Accelerations
1.0 g's/Division
Filtered
Class 180

1-12.5 MSEC
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-765

Test Date: 22/August/74

Restraint Description: GM Love seat

Harness Configurations: Type 1

Dummy: Sierra 3 yr.

Sled Velocity (avg., ft/sec) 29.18

Sled Acceleration (avg. g's) 16.0

Belt Loads (avg. pounds):

- Lap Inboard
- Lap Outboard
- Shoulder*

Impact Direction: Side

Dummy Attitude: Passenger seat

Test Observations: DOT standard seat performance with a GM Love seat

(Run 2). No set-up photo was taken.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)*
Figure C-46  Graph-Check Camera Sequence
Test Number: 765
 dummy SIEKRA 3 YEAR
 Sled Velocity: 29.19 ft/sec

Sled Pulse
1/2 g's/Division
Filtered
Class 60

Anterior-Posterior
Head Accelerations
1/2 g's/Division
Filtered
Class 1000

Superior-Inferior
Head Accelerations
1/2 g's/Division
Filtered
Class 1000

Left-Right
Head Accelerations
1/2 g's/Division
Filtered
Class 1000

Resultant Head
Accelerations
1/2 g's/Division
Filtered
Class 1000

SUMMARY DATA HEAD ACCELERATIONS
Test Type: SIDE
LOVE SEAT (PASSENGER SIDE)
STANDARD SEAT
SUMMARY DATA CHEST ACCELERATIONS

Test Number: A-765
Dummy: SIERRA 3
Sled Velocity: 29.18 ft/sec

Sled Pulse
10 g's/Division
Filtered
Class: 60

Anterior-Posterior
Chest Accelerations
1.5 g's/Division
Filtered
Class: 180

Superior-Inferior
Chest Accelerations
1.5 g's/Division
Filtered
Class: 180

Left-Right
Chest Accelerations
1.5 g's/Division
Filtered
Class: 180

Resultant Chest Accelerations
10 g's/Division
Filtered
Class: 180

1-12.5 msec
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-766
Test Date: 22/August/74
Restraint Description: Chrysler Mopar
Harness Configurations: Type 1

Dummy: Sierra 3 yr.
Sled Velocity (avg., ft/sec): 29.04
Sled Acceleration (avg. g's): 16.0
Belt Loads (avg. pounds):
- Lap Inboard
- Lap Outboard
- Shoulder*
Impact Direction: Rearward
Dummy Attitude: Driver's seat

Test Observations: DOT standard seat performance with a Mopar child seat.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-47  Test Setup for A-766
Test Number: A 1764
Dummy: SERRA 3 YEAR
Sled Velocity: 29.04 ft/sec

SUMMARY DATA HEAD ACCELERATIONS
Test Type: REAR
MOPAR (DRIVER SIDE)
STANDARD SEAT

Sled Pulse
1/0 g's/Division
Filtered
Class 60

Anterior-Posterior
Head Accelerations
1/25 g's/Division
Filtered
Class 1000

Superior-Inferior
Head Accelerations
1/25 g's/Division
Filtered
Class 1000

Left-Right
Head Accelerations
1/25 g's/Division
Filtered
Class 1000

Resultant Head
Accelerations
1/0 g's/Division
Filtered
Class 1000
SUMMARY DATA CHEST ACCELERATIONS

Test Number A-766
Dummy SIERRA 3 YEAR
Sled Velocity 29.04 ft/sec

Test Type READ
MOPAR (DRIVER SIDE)
STANDARD SEAT

Sled Pulse
10g's/Division
Filtered
Class 60

Anterior-Posterior
Chest Accelerations
1.2g's/Division
Filtered
Class 180

Superior-Inferior
Chest Accelerations
12.5g's/Division
Filtered
Class 180

Left-Right
Chest Accelerations
5g's/Division
Filtered
Class 180

Resultant Chest
Accelerations
10 g's/Division
Filtered
Class 180

1-12.5 MSEC
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-767

Test Date: 23/August/74

Restraint Description: Chrysler Mopar

Harness Configurations: Type 1

Dummy: Sierra 3 yr.

Sled Velocity (avg., ft/sec) 29.6

Sled Acceleration (avg. g's) 16.0

Belt Loads (avg. pounds):

Lap Inboard

Lap Outboard

Shoulder*

Impact Direction: Rearward

Dummy Attitude Center Seating Position

Test Observations: DOT standard seat performance with a Mopar child seat (Run 1). No setup photo was taken.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
Figure C-49  Graph-Check Camera Sequence
**Summary Data**

**Head Accelerations**

**Test Number:** J 247  
**Dummy:** Sierra 3 Year  
**Sled Velocity:** 29.6 ft/sec

**Sled Pulse**  
10 g's/Division  
Filtered  
Class 60

**Anterior-Posterior**  
Head Accelerations  
1.5 g's/Division  
Filtered  
Class 1000

**Superior-Inferior**  
Head Accelerations  
1.5 g's/Division  
Filtered  
Class 1000

**Left-Right**  
Head Accelerations  
1.5 g's/Division  
Filtered  
Class 1000

**Resultant Head Accelerations**  
0 g's/Division  
Filtered  
Class 1000

**Test Type:** Rear Mopar (Center Position)  
**Standard Seat**

**Gould Inc., Instrument Systems Division**

Cleveland Ohio  
Printed in U.S.A.

— 1-12.5 ms —
Test Number A-707
Dummy: SICRRA 2 YEAR
Sled Velocity 29.6 ft/sec

Sled Pulse
10 g's/Division
Filtered
Class 60

Anterior-Posterior
Chest Accelerations
1.2 g's/Division
Filtered
Class 180

Superior-Inferior
Chest Accelerations
1.25 g's/Division
Filtered
Class 180

Left-Right
Chest Accelerations
1.25 g's/Division
Filtered
Class 180

Resultant Chest
Accelerations
10 g's/Division
Filtered
Class 180

1-12.5 MSEC
Test Number: A-768

Test Date: 23/August/74

Restraint Description: Chrysler Mopar

Harness Configurations: Type 1

 Dummy: Sierra 3 yr.

Sled Velocity (avg., ft/sec) 29.69

Sled Acceleration (avg. g's) 16.0

Belt Loads (avg. pounds):
- Lap Inboard
- Lap Outboard
- Shoulder*

Impact Direction: Rearward

Dummy Attitude: Center seating position

Test Observations: DOT standard seat performance with a Mopar child seat (Run 2). No setup photo was taken.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
TEST NO. A-768

Figure C-50  Graph-Check Camera Sequence
Test Number: A 769
Dummy: SIERRA 3 YEAR
Sled Velocity: 29.69 ft/sec

SUMMARY DATA HEAD ACCELERATIONS
Test Type: REAR
MOBAK (CENTER POSITION)
STANDARD SEAT

Sled Pulse
-6 g's/Division
Filtered
Class: 60

Anterior-Posterior
Head Accelerations
-2.5 g's/Division
Filtered
Class: 1000

Superior-Inferior
Head Accelerations
-2.5 g's/Division
Filtered
Class: 1000

Left-Right
Head Accelerations
-2.5 g's/Division
Filtered
Class: 1000

Resultant Head Accelerations
10 g's/Division
Filtered
Class: 1000

I-12.5 MS
SUMMARY DATA CHEST ACCELERATIONS

Test Number: A-763
Dummy: SIERRA 3 YCPR
Sled Velocity: 29.69 ft/sec

Test Type: RECAR
MOFAR (CENTER POSITION)
STANDARD SEAT

Sled Pulse
10g's/Division
Filtered
Class 60

Anterior-Posterior
Chest Accelerations
15.5g's/Division
Filtered
Class 180

Superior-Inferior
Chest Accelerations
12.5g's/Division
Filtered
Class 180

Left-Right
Chest Accelerations
12.5g's/Division
Filtered
Class 180

Resultant Chest
Accelerations
10 g's/Division
Filtered
Class 180

BRUSH ACCUCHART

1-12.5 MSEC
Test Number: A-769
Test Date: 23/August/74
Restraint Description: 
Harness Configurations: 

Dummy 

Sled Velocity (avg., ft/sec) 29.60
Sled Acceleration (avg. g's) 16.0

Belt Loads (avg. pounds):
  Lap Inboard
  Lap Outboard
  Shoulder*

Impact Direction: Rearward

Dummy Attitude 

Test Observations: Calibration tests of DOT standard seat back deflection.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
TEST NO. A-769

Figure C-52  Graph-Check Camera Sequence
SUMMARY DATA

HEAD ACCELERATIONS

Test Number A-769
Dummy NONE
Sled Velocity 27.60 ft/sec

Test Type STANDARD
SEATBACK DEFLECTION
TEST (REARWARD)

Sled Pulse
\[ \frac{\text{g's}}{\text{Division}} \]
Filtered
Class 60

Anterior-Posterior
Head Accelerations
\[ \frac{\text{g's}}{\text{Division}} \]
Filtered
Class 1000

Superior-Inferior
Head Accelerations
\[ \frac{\text{g's}}{\text{Division}} \]
Filtered
Class 1000

Left-Right
Head Accelerations
\[ \frac{\text{g's}}{\text{Division}} \]
Filtered
Class 1000

Resultant Head
Accelerations
\[ \frac{\text{g's}}{\text{Division}} \]
Filtered
Class 1000
<table>
<thead>
<tr>
<th>Test Number:</th>
<th>A-770</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Date:</td>
<td>23/August/74</td>
</tr>
<tr>
<td>Restraint Description:</td>
<td></td>
</tr>
<tr>
<td>Harness Configurations:</td>
<td></td>
</tr>
<tr>
<td>Dummy</td>
<td></td>
</tr>
<tr>
<td>Sled Velocity (avg., ft/sec)</td>
<td>30.20</td>
</tr>
<tr>
<td>Sled Acceleration (avg. g's)</td>
<td>16.0</td>
</tr>
<tr>
<td>Belt Loads (avg. pounds):</td>
<td></td>
</tr>
<tr>
<td>Lap Inboard</td>
<td></td>
</tr>
<tr>
<td>Lap Outboard</td>
<td></td>
</tr>
<tr>
<td>Shoulder*</td>
<td></td>
</tr>
<tr>
<td>Impact Direction:</td>
<td>Rearward with 30# weight on seat back</td>
</tr>
<tr>
<td>Dummy Attitude</td>
<td></td>
</tr>
<tr>
<td>Test Observations:</td>
<td>Dynamic load deflection test of DOT standard seatback and foam.</td>
</tr>
</tbody>
</table>

*(asterisk on belt load value indicates load was other than for standard shoulder belt)*
TEST NO. A-770

Figure C-54  Graph-Check Camera Sequence
<table>
<thead>
<tr>
<th>Test Number</th>
<th>A-770</th>
<th>Test Type</th>
<th>STANDARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dummy</td>
<td>R. A.</td>
<td>SENTREX DYNAMIC</td>
<td>normalized</td>
</tr>
<tr>
<td>Sled Velocity</td>
<td>36.20 ft/sec</td>
<td>PEAK TEST</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sled Pulse</th>
<th>10 g's/Division</th>
<th>Filtered</th>
<th>Class 60</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Anterior-Posterior Head Accelerations</th>
<th>g's/Division</th>
<th>Filtered</th>
<th>Class 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superior-Inferior Head Accelerations</td>
<td>g's/Division</td>
<td>Filtered</td>
<td>Class 1000</td>
</tr>
<tr>
<td>Left-Right Head Accelerations</td>
<td>g's/Division</td>
<td>Filtered</td>
<td>Class 1000</td>
</tr>
<tr>
<td>Resultant Head Accelerations</td>
<td>g's/Division</td>
<td>Filtered</td>
<td>Class 1000</td>
</tr>
</tbody>
</table>
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-771
Test Date: 23/August/74
Restraint Description: 
Harness Configurations: 

Dummy: 

Sled Velocity (avg., ft/sec) 30.29
Sled Acceleration (avg. g's) 16.0

Belt Loads (avg. pounds): 
  Lap Inboard 
  Lap Outboard 
  Shoulder* 

Impact Direction: 30# wt. into seat bottom
Dummy Attitude 

Test Observations: Dynamic load deflection test of DOT standard seat cushion and bottom frame. Side high-speed camera was lost.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
TEST NO. A-771

Figure C-56  Graph-Check Camera Sequence
SUMMARY DATA HEAD ACCELERATIONS

Test Number A 777
Dummy NONE

Test Type STANDARD SEAT CUSHION DYNAMIC FOAM TEST

Sled Velocity 36.2 ft/sec

Sled Pulse
1/5 g's/Division
Filtered
Class 60

Anterior-Posterior
Head Accelerations
g's/Division
Filtered
Class 1000

Superior-Inferior
Head Accelerations
g's/Division
Filtered
Class 1000

Left-Right
Head Accelerations
g's/Division
Filtered
Class 1000

Resultant Head Accelerations
g's/Division
Filtered
Class 1000
HSRI CHILD SEAT DATA SUMMARY

Test Number: A-772
Test Date: 27/August/74
Restraint Description: 
Harness Configurations: 

Dummy 
Sled Velocity (avg., ft/sec) 44.37 
Sled Acceleration (avg. g's) 20.8 
Belt Loads (avg. pounds): 
  Lap Inboard 
  Lap Outboard 
  Shoulder* 
Impact Direction: Forward 
Dummy Attitude 

Test Observations: Calibration test of DTO standard seat back deflection. 12# dynamic tuning weight on seat back. No setup photo taken.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
TEST NO. A-772

Figure C-57   Graph-Check Camera Sequence
Test Number A-772
Dummy NONE
Sled Velocity 44.37 ft/sec

SUMMARY DATA
HEAD ACCELERATIONS

Test Type DYNAMIC
RING UP STANDARD
SEATBACK DEFLECTION

Sled Pulse
1g's/Division
Filtered
Class 60

Anterior-Posterior
Head Accelerations
- g's/Division
Filtered
Class 1000

Superior-Inf erior
Head Accelerations
- g's/Division
Filtered
Class 1000

Left-Right
Head Accelerations
- g's/Division
Filtered
Class 1000

Resultant Head
Accelerations
- g's/Division
Filtered
Class 1000
Test Number: A-773
Test Date: 27/August/74

Restraint Description: 

Harness Configurations: 

 Dummy 

Sled Velocity (avg., ft/sec) 41.71

Sled Acceleration (avg. g's) 21.6

Belt Loads (avg. pounds):

Lap Inboard

Lap Outboard

Shoulder*

Impact Direction: Forward

Dummy Attitude 

Test Observations: Calibration test of DOT standard seat back deflection. 6# dynamic tuning weight on seat back. No setup photo taken.

*(asterisk on belt load value indicates load was other than for standard shoulder belt)
SUMMARY DATA HEAD ACCELERATIONS

Test Number: A - 773
Test Type: DYNAMIC

Dummy: NONE

Sled Velocity: 41.7 ft/sec

Sled Pulse

/ g's/Division
Filtered
Class 60

Anterior-Posterior Head Accelerations

* g's/Division
Filtered
Class 1000

Superior-Inferior Head Accelerations

* g's/Division
Filtered
Class 1000

Left-Right Head Accelerations

* g's/Division
Filtered
Class 1000

Resultant Head Accelerations

* g's/Division
Filtered
Class 1000