

**REPORT NUMBER: 208-MGA-2014-011**

**VEHICLE SAFETY COMPLIANCE TESTING  
FOR  
FMVSS 208, OCCUPANT CRASH PROTECTION  
FMVSS 212, WINDSHIELD MOUNTING  
FMVSS 219, WINDSHIELD INTRUSION (PARTIAL)  
FMVSS 301, FUEL SYSTEM INTEGRITY**

**GENERAL MOTORS DE MEXICO  
2014 CHEVROLET SILVERADO 1500 TRUCK  
NHTSA NO.: C20140103**

**PREPARED BY:  
MGA RESEARCH CORPORATION  
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BURLINGTON, WI 53105**



**TEST DATES: MAY 22, 2014 – JULY 28, 2014**

**FINAL REPORT DATE: SEPTEMBER 23, 2014**

**FINAL REPORT**

**PREPARED FOR:  
U.S. DEPARTMENT OF TRANSPORTATION  
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION  
OFFICE OF ENFORCEMENT  
OFFICE OF VEHICLE SAFETY COMPLIANCE  
1200 NEW JERSEY AVENUE, S.E., NVS-220  
WASHINGTON, D.C. 20590**

This final test report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, in response to Contract Number DTNH22-13-D-00313.

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Accepted By:



Acceptance Date: September 23, 2014



### Technical Report Documentation Page

|                                                                                                                                                                                                                                                                                                                                         |                                                                   |                                                                                                                                                                                                                                                                                                                   |                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <b>1. Report No.</b><br>208-MGA-2014-011                                                                                                                                                                                                                                                                                                | <b>2. Government Accession No.</b>                                | <b>3. Recipient's Catalog No.</b>                                                                                                                                                                                                                                                                                 |                  |
| <b>4. Title and Subtitle</b><br>Final Report of FMVSS 208 Compliance Testing of a 2014 Chevrolet Silverado 1500<br>NHTSA No.: C20140103                                                                                                                                                                                                 |                                                                   | <b>5. Report Date</b><br>September 23, 2014                                                                                                                                                                                                                                                                       |                  |
|                                                                                                                                                                                                                                                                                                                                         |                                                                   | <b>6. Performing Organization Code</b><br>MGA                                                                                                                                                                                                                                                                     |                  |
| <b>7. Author(s)</b><br>Jeff Lewandowski, Project Engineer                                                                                                                                                                                                                                                                               |                                                                   | <b>8. Performing Organization Report No.</b><br>208-MGA-2014-011                                                                                                                                                                                                                                                  |                  |
| <b>9. Performing Organization Name and Address</b><br>MGA Research Corporation<br>5000 Warren Road<br>Burlington, WI 53105                                                                                                                                                                                                              |                                                                   | <b>10. Work Unit No.</b>                                                                                                                                                                                                                                                                                          |                  |
|                                                                                                                                                                                                                                                                                                                                         |                                                                   | <b>11. Contract or Grant No.</b><br>DTNH22-13-D-00313                                                                                                                                                                                                                                                             |                  |
| <b>12. Sponsoring Agency Name and Address</b><br>U.S. Department of Transportation<br>National Highway Traffic Safety Administration<br>Office of Enforcement<br>Office of Vehicle Safety Compliance<br>1200 New Jersey Avenue, S.E., NVS-220<br>Washington, D.C. 20590                                                                 |                                                                   | <b>13. Type of Report and Period Covered</b><br>5/22/14 - 7/28/14                                                                                                                                                                                                                                                 |                  |
|                                                                                                                                                                                                                                                                                                                                         |                                                                   | <b>14. Sponsoring Agency Code</b><br>NVS-220                                                                                                                                                                                                                                                                      |                  |
| <b>15. Supplementary Notes</b>                                                                                                                                                                                                                                                                                                          |                                                                   |                                                                                                                                                                                                                                                                                                                   |                  |
| <b>16. Abstract</b><br>Compliance tests were conducted on the subject 2014 Chevrolet Silverado 1500 in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP208-14 for the determination of FMVSS 208 compliance. Test failures identified were as follows:<br><br>TEST FAILURES:<br>None |                                                                   |                                                                                                                                                                                                                                                                                                                   |                  |
| <b>17. Key Words</b><br><br>Frontal Impact<br>40 kmph Vehicle Safety Compliance Testing<br>FMVSS 208, "Occupant Crash Protection"<br>FMVSS 212, "Windshield Mounting"<br>FMVSS 219, (partial), "Windshield Zone Intrusion"<br>FMVSS 301, "Fuel System Integrity"                                                                        |                                                                   | <b>18. Distribution Statement</b><br>Copies of this report are available from the following:<br>U.S. Department of Transportation<br>National Highway Traffic Safety Administration<br>Technical Information Services (TIS),<br>NPO-411<br>1200 New Jersey Avenue, S.E.<br>(Room E12-100)<br>Washington, DC 20590 |                  |
| <b>19. Security Classification (of this report)</b><br>Unclassified                                                                                                                                                                                                                                                                     | <b>20. Security Classification (of this page)</b><br>Unclassified | <b>21. No. of Pages</b><br>366                                                                                                                                                                                                                                                                                    | <b>22. Price</b> |

Form DOT F1700.7 (8-72)

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**SECTION 1**  
**PURPOSE OF COMPLIANCE TESTS**

This Federal Motor Vehicle Safety Standard 208 compliance test is part of a program conducted for the National Highway Traffic Safety Administration (NHTSA) by MGA Research Corporation (MGA) under Contract No.: DTNH22-13-D-00313. The purpose of this test was to determine whether the subject vehicle, a 2014 Chevrolet Silverado 1500, NHTSA No.: C20140103, meets certain performance requirements of FMVSS 208, "Occupant Crash Protection"; FMVSS 212, "Windshield Mounting"; FMVSS 219, "Windshield Zone Intrusion"; and FMVSS 301, "Fuel System Integrity". The compliance test was conducted in accordance with OVSC Laboratory Test Procedure No.: TP208-14 dated April 16, 2008.

## SECTION 2

### TESTS PERFORMED

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance

NHTSA No.: C20140103  
 Test Dates: 5/22/14 - 7/28/14

The following checked items indicate the tests that were performed:

- |                                     |     |                                                                                                               |
|-------------------------------------|-----|---------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | 1.  | Rear seating position seat belts                                                                              |
| <input checked="" type="checkbox"/> | 2.  | Air bag labels (S4.5.1)                                                                                       |
| <input checked="" type="checkbox"/> | 3.  | Readiness indicator (S4.5.2)                                                                                  |
| <input checked="" type="checkbox"/> | 4.  | Passenger air bag manual cut-off device (S4.5.4)                                                              |
| <input checked="" type="checkbox"/> | 5.  | Lap belt lockability (S7.1.1.5)                                                                               |
| <input checked="" type="checkbox"/> | 6.  | Seat belt warning system (S7.3)                                                                               |
| <input checked="" type="checkbox"/> | 7.  | Seat belt contact force (S7.4.3)                                                                              |
| <input checked="" type="checkbox"/> | 8.  | Seat belt latch plate access (S7.4.4)                                                                         |
| <input checked="" type="checkbox"/> | 9.  | Seat belt retraction (S7.4.5)                                                                                 |
| <input checked="" type="checkbox"/> | 10. | Seat belt guides and hardware (S7.4.6)                                                                        |
| <input checked="" type="checkbox"/> | 11. | Air bag suppression telltale (S19.2.2)                                                                        |
| <input checked="" type="checkbox"/> | 12. | Suppression tests with 12-month-old CRABI dummy (Part 572, Subpart R)                                         |
| <input checked="" type="checkbox"/> | 13. | Suppression tests with Newborn infant (Part 572, Subpart K)                                                   |
| <input type="checkbox"/>            | 14. | Suppression tests with 3-year-old dummy                                                                       |
| <input type="checkbox"/>            | 15. | Suppression tests with 6-year-old dummy                                                                       |
| <input checked="" type="checkbox"/> | 16. | Test of Reactivation of the passenger air bag system with an unbelted 5 <sup>th</sup> percentile female dummy |
| <input type="checkbox"/>            | 17. | Low risk deployment test with 12-month-old dummy (Part 572, Subpart R)                                        |
| <input checked="" type="checkbox"/> | 18. | Low risk deployment test with 3-year-old dummy (Part 572, Subpart P)                                          |
| <input checked="" type="checkbox"/> | 19. | Low risk deployment test with 6-year-old dummy (Part 572, Subpart N)                                          |
| <input checked="" type="checkbox"/> | 20. | Low risk deployment test with 5 <sup>th</sup> female dummy (Part 572, Subpart O)                              |
| <input checked="" type="checkbox"/> | 21. | Impact Tests                                                                                                  |
| <input type="checkbox"/>            |     | Frontal Oblique                                                                                               |
| <input type="checkbox"/>            |     | Belted 50 <sup>th</sup> male dummy driver and passenger (0 to 48 kmph) (S5.1.1(a))                            |
| <input type="checkbox"/>            |     | Unbelted 50 <sup>th</sup> male dummy driver and passenger (0 to 48 kmph) (S5.1.2(a)(1))                       |
| <input type="checkbox"/>            |     | Unbelted 50 <sup>th</sup> male dummy driver and passenger (32 to 40 kmph) (S5.1.2(a)(1) or S5.1.2(b))         |
| <input checked="" type="checkbox"/> |     | Frontal 0°                                                                                                    |
| <input type="checkbox"/>            |     | Belted 50 <sup>th</sup> male dummy driver (0 to 48 kmph) (S5.1.1.(b)(1) or S5.1.1(a))                         |
| <input type="checkbox"/>            |     | Belted 50 <sup>th</sup> male dummy passenger (0 to 48 kmph) (S5.1.1.(b)(1) or S5.1.1(a))                      |
| <input type="checkbox"/>            |     | Belted 5 <sup>th</sup> female dummy driver (0 to 48 kmph) (S16.1(a))                                          |
| <input type="checkbox"/>            |     | Belted 5 <sup>th</sup> female dummy passenger (0 to 48 kmph) (S16.1(a))                                       |
| <input type="checkbox"/>            |     | Belted 50 <sup>th</sup> male dummy driver and passenger (0 to 56 kmph) (S5.1.1.(b)(2))                        |
| <input type="checkbox"/>            |     | Unbelted 50 <sup>th</sup> male dummy driver and passenger (0 to 48 kmph) (S5.1.2(a)(1))                       |
| <input type="checkbox"/>            |     | Unbelted 50 <sup>th</sup> male dummy driver (32 to 40 kmph) (S5.1.2.(a)(2) or S5.1.2(b))                      |
| <input type="checkbox"/>            |     | Unbelted 50 <sup>th</sup> male dummy passenger (32 to 40 kmph) (S5.1.2.(a)(2) or S5.1.2(b))                   |
| <input checked="" type="checkbox"/> |     | Unbelted 5 <sup>th</sup> female dummy driver (32 to 40 kmph) (S16.1(b))                                       |
| <input checked="" type="checkbox"/> |     | Unbelted 5 <sup>th</sup> female dummy passenger (32 to 40 kmph) (S16.1(b))                                    |
| <input type="checkbox"/>            |     | 40% Offset 0° Belted 5 <sup>th</sup> female dummy driver and passenger (0 to 40 kmph) (S18.1)                 |
| <input type="checkbox"/>            | 22. | FMVSS 204 Indicant Test                                                                                       |
| <input checked="" type="checkbox"/> | 23. | FMVSS 212 Test                                                                                                |
| <input checked="" type="checkbox"/> | 24. | FMVSS 219 Indicant Test                                                                                       |
| <input checked="" type="checkbox"/> | 25. | FMVSS 301 Frontal Test                                                                                        |

For the crash tests, the vehicle was instrumented with 8 accelerometers. The data from the vehicle and dummies were sampled at 10,000 samples per second and processed as specified in SAE J211/1 MAR95 and FMVSS 208, S4.13.

The dynamic tests were recorded using high-speed digital video.

The vehicle appears to meet all of the performance requirements to which it was tested.

### SECTION 3

#### INJURY RESULT SUMMARY FOR FMVSS 208 TESTS

Test Vehicle: 2014 Chevrolet Silverado 1500

NHTSA No.: C20140103

Test Program: FMVSS 208 Compliance

Test Dates: 6/16/14 – 6/17/14

#### 3 Year-Old Low Risk Deployments

##### 3 Year-Old SN 031 Position 1 (Chest On Instrument Panel) 6/17/14

| Injury Criteria    | Max. Allowable Injury Assessment Values | Measured Value |
|--------------------|-----------------------------------------|----------------|
| HIC15              | 570                                     | 70             |
| Peak Nij (Nte)     | 1.0                                     | 0.4            |
| Time (ms)          | NA                                      | 29.1           |
| Peak Nij (Ntf)     | 1.0                                     | 0.4            |
| Time (ms)          | NA                                      | 20.6           |
| Peak Nij (Nce)     | 1.0                                     | 0.0            |
| Time (ms)          | NA                                      | 10.1           |
| Peak Nij (Ncf)     | 1.0                                     | 0.2            |
| Time (ms)          | NA                                      | 14.8           |
| Neck Tension       | 1130 N                                  | 550            |
| Neck Compression   | 1380 N                                  | 65             |
| Chest g            | 55 g                                    | 25             |
| Chest Displacement | 34 mm                                   | 9              |

Second stage fire time of 120 ms; Injuries calculated on 0 ms to 100 ms

##### 3 Year-Old SN 031 Position 2 (Head On Instrument Panel) 6/16/14

| Injury Criteria    | Max. Allowable Injury Assessment Values | Measured Value |
|--------------------|-----------------------------------------|----------------|
| HIC15              | 570                                     | 6              |
| Peak Nij (Nte)     | 1.0                                     | 0.1            |
| Time (ms)          | NA                                      | 21.8           |
| Peak Nij (Ntf)     | 1.0                                     | 0.0            |
| Time (ms)          | NA                                      | 12.3           |
| Peak Nij (Nce)     | 1.0                                     | 0.5            |
| Time (ms)          | NA                                      | 38.0           |
| Peak Nij (Ncf)     | 1.0                                     | 0.2            |
| Time (ms)          | NA                                      | 17.9           |
| Neck Tension       | 1130 N                                  | 79             |
| Neck Compression   | 1380 N                                  | 611            |
| Chest g            | 55 g                                    | 4              |
| Chest Displacement | 34 mm                                   | 0              |

Second stage fire time of 120 ms; Injuries calculated on 0 ms to 100 ms

### SECTION 3

#### INJURY RESULT SUMMARY FOR FMVSS 208 TESTS

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance

NHTSA No.: C20140103  
Test Dates: 6/17/14

#### 6 Year-Old Low Risk Deployments

##### 6 Year-Old SN 155 Position 1 (Chest On Instrument Panel) 6/17/14

| Injury Criteria    | Max. Allowable Injury Assessment Values | Measured Value |
|--------------------|-----------------------------------------|----------------|
| HIC15              | 700                                     | 60             |
| Peak Nij (Nte)     | 1.0                                     | 0.3            |
| Time (ms)          | NA                                      | 27.9           |
| Peak Nij (Ntf)     | 1.0                                     | 0.4            |
| Time (ms)          | NA                                      | 18.1           |
| Peak Nij (Nce)     | 1.0                                     | 0.2            |
| Time (ms)          | NA                                      | 47.1           |
| Peak Nij (Ncf)     | 1.0                                     | 0.3            |
| Time (ms)          | NA                                      | 15.3           |
| Neck Tension       | 1490 N                                  | 668            |
| Neck Compression   | 1820 N                                  | 200            |
| Chest g            | 60 g                                    | 20             |
| Chest Displacement | 40 mm                                   | 13             |

Second stage fire time of 120 ms; Injuries calculated on 0 ms to 100 ms

##### 6 Year-Old SN 155 Position 2 (Head On Instrument Panel) 6/17/14

| Injury Criteria    | Max. Allowable Injury Assessment Values | Measured Value |
|--------------------|-----------------------------------------|----------------|
| HIC15              | 700                                     | 2              |
| Peak Nij (Nte)     | 1.0                                     | 0.1            |
| Time (ms)          | NA                                      | 22.0           |
| Peak Nij (Ntf)     | 1.0                                     | 0.0            |
| Time (ms)          | NA                                      | 12.8           |
| Peak Nij (Nce)     | 1.0                                     | 0.3            |
| Time (ms)          | NA                                      | 40.7           |
| Peak Nij (Ncf)     | 1.0                                     | 0.0            |
| Time (ms)          | NA                                      | 16.1           |
| Neck Tension       | 1490 N                                  | 69             |
| Neck Compression   | 1820 N                                  | 486            |
| Chest g            | 60 g                                    | 5              |
| Chest Displacement | 40 mm                                   | 0              |

Second stage fire time of 120 ms; Injuries calculated on 0 ms to 100 ms



### SECTION 3

#### INJURY RESULT SUMMARY FOR FMVSS 208 TESTS

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance

NHTSA No.: C20140103  
 Test Date: 6/16/14

#### 5<sup>th</sup> Percentile Female Low Risk Deployments

##### 5<sup>th</sup> Percentile Female SN 510 Position 1 (Chin On Module) 6/16/14

| Injury Criteria    | Max. Allowable Injury Assessment Values | Measured Value |
|--------------------|-----------------------------------------|----------------|
| HIC15              | 700                                     | 45             |
| Peak Nij (Nte)     | 1.0                                     | 0.3            |
| Time (ms)          | NA                                      | 57.7           |
| Peak Nij (Ntf)     | 1.0                                     | 0.3            |
| Time (ms)          | NA                                      | 9.0            |
| Peak Nij (Nce)     | 1.0                                     | 0.5            |
| Time (ms)          | NA                                      | 159.4          |
| Peak Nij (Ncf)     | 1.0                                     | 0.1            |
| Time (ms)          | NA                                      | 146.0          |
| Neck Tension       | 2070 N                                  | 943            |
| Neck Compression   | 2520 N                                  | 561            |
| Chest g            | 60 g                                    | 16             |
| Chest Displacement | 52 mm                                   | 8              |
| Left Femur         | 6805 N                                  | 165            |
| Right Femur        | 6805 N                                  | 66             |

Second stage fire time of 120 ms; Injuries calculated on 0 ms to 245 ms

##### 5<sup>th</sup> Percentile Female SN 510 Position 2 (Chin On Rim) 6/16/14

| Injury Criteria    | Max. Allowable Injury Assessment Values | Measured Value |
|--------------------|-----------------------------------------|----------------|
| HIC15              | 700                                     | 12             |
| Peak Nij (Nte)     | 1.0                                     | 0.6            |
| Time (ms)          | NA                                      | 18.1           |
| Peak Nij (Ntf)     | 1.0                                     | 0.0            |
| Time (ms)          | NA                                      | 80.1           |
| Peak Nij (Nce)     | 1.0                                     | 0.1            |
| Time (ms)          | NA                                      | 71.3           |
| Peak Nij (Ncf)     | 1.0                                     | 0.0            |
| Time (ms)          | NA                                      | 84.7           |
| Neck Tension       | 2070 N                                  | 985            |
| Neck Compression   | 2520 N                                  | 58             |
| Chest g            | 60 g                                    | 28             |
| Chest Displacement | 52 mm                                   | 24             |
| Left Femur         | 6805 N                                  | 31             |
| Right Femur        | 6805 N                                  | 23             |

Second stage fire time of 120 ms; Injuries calculated on 0 ms to 245 ms

### SECTION 3

#### INJURY RESULT SUMMARY FOR FMVSS 208 TESTS

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance

NHTSA No.: C20140103  
 Test Date: 7/28/14

#### 40 kmph Frontal Crash

|                 |    |     |   |    |
|-----------------|----|-----|---|----|
| Impact Angle:   | 0° |     |   |    |
| Belted Dummies: |    | Yes | X | No |

|              |  |              |   |               |
|--------------|--|--------------|---|---------------|
| Speed Range: |  | 0 to 40 kmph | X | 32 to 40 kmph |
|              |  | 0 to 48 kmph |   | 0 to 56 kmph  |

|                    |      |                   |        |
|--------------------|------|-------------------|--------|
| Test Speed (kmph): | 39.8 | Test Weight (kg): | 2524.7 |
|--------------------|------|-------------------|--------|

|                  |   |                        |  |                       |
|------------------|---|------------------------|--|-----------------------|
| Driver Dummy:    | X | 5 <sup>th</sup> female |  | 50 <sup>th</sup> male |
| Passenger Dummy: | X | 5 <sup>th</sup> female |  | 50 <sup>th</sup> male |

#### 5<sup>th</sup> Percentile Female Frontal Crash Test Vehicles certified to S16.1 (a) (1), S16.1 (a) (2), S16.1 (b), or S18.1

| Injury Criteria    | Max. Allowable Injury Assessment Values | Driver | Passenger |
|--------------------|-----------------------------------------|--------|-----------|
| HIC15              | 700                                     | 59     | 83        |
| N <sub>te</sub>    | 1.0                                     | 0.3    | 0.1       |
| N <sub>tf</sub>    | 1.0                                     | 0.2    | 0.1       |
| N <sub>ce</sub>    | 1.0                                     | 0.2    | 0.1       |
| N <sub>cf</sub>    | 1.0                                     | 0.2    | 0.4       |
| Neck Tension       | 2620 N                                  | 921    | 432       |
| Neck Compression   | 2520 N                                  | 175    | 439       |
| Chest g            | 60 g                                    | 32     | 26        |
| Chest Displacement | 52 mm                                   | 15     | 3         |
| Left Femur         | 6,805 N                                 | 4400   | 4286      |
| Right Femur        | 6,805 N                                 | 4558   | 5228      |

**SECTION 4**  
**DISCUSSION OF TESTS**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance

NHTSA No.: C20140103  
Test Dates: 5/22/14 - 7/28/14

A blanket and visor were not used in the suppression testing because they did not affect the sensing system used on the vehicle.

There was no valid data after 180 msec on the Passenger Neck FY load cell during the frontal impact crash test.

**SECTION 5**  
**TEST DATA SHEETS**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance

NHTSA No.: C20140103  
Test Dates: 5/22/14 - 7/28/14

**DATA SHEET 1**  
**COTR VEHICLE WORK ORDER**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance

NHTSA No.: C20140103  
Test Dates: 5/22/14 - 7/28/14

COTR Signature: Lawrence Valvo

Test to be performed for this vehicle are checked below:

|   |     |                                                                                                                                                  |   |               |   |              |
|---|-----|--------------------------------------------------------------------------------------------------------------------------------------------------|---|---------------|---|--------------|
| X | 1.  | Rear Seating Position Seat Belts                                                                                                                 |   |               |   |              |
| X | 2.  | Air Bag Labels (S4.5.1)                                                                                                                          |   |               |   |              |
| X | 3.  | Readiness Indicator (S4.5.2)                                                                                                                     |   |               |   |              |
| X | 4.  | Passenger Air Bag Manual Cut-off Device (S4.5.4)                                                                                                 |   |               |   |              |
| X | 5.  | Lap Belt Lockability (S7.1.1.5)                                                                                                                  |   |               |   |              |
| X | 6.  | Seat Belt Warning System (S7.3)                                                                                                                  |   |               |   |              |
| X | 7.  | Seat Belt Contact Force (S7.4.3)                                                                                                                 |   |               |   |              |
| X | 8.  | Seat Belt Latch Plate Access (S7.4.4)                                                                                                            |   |               |   |              |
| X | 9.  | Seat Belt Retraction (S7.4.5)                                                                                                                    |   |               |   |              |
| X | 10. | Seat Belt Guides and Hardware (S7.4.6)                                                                                                           |   |               |   |              |
| X | 11. | Air bag suppression telltale (S19.2.2)                                                                                                           |   |               |   |              |
| X | 12. | Suppression tests with 12-month-old CRABI dummy (Part 572, Subpart R) using the following indicated child restraints (mid-height seat position): |   |               |   |              |
|   |     | Section B – Rear Facing (unbelted and belted rear facing, unbelted forward facing)                                                               |   |               |   |              |
|   |     | Century Smart Fit 4543                                                                                                                           |   | Full Rearward |   | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
| X |     | Cosco Arriva 22-013                                                                                                                              | X | Full Rearward | X | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
|   |     | Evenflo Discovery Adjust Right 212                                                                                                               |   | Full Rearward |   | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
|   |     | Graco Infant 8457                                                                                                                                |   | Full Rearward |   | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
| X |     | Graco Snugride                                                                                                                                   | X | Full Rearward | X | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
| X |     | Peg Perego Viaggio                                                                                                                               | X | Full Rearward | X | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
|   |     | Section C – Convertible (unbelted and belted rear facing, unbelted and belted forward facing)                                                    |   |               |   |              |
| X |     | Britax Roundabout E9L02                                                                                                                          | X | Full Rearward | X | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
| X |     | Cosco High Back Booster 22-209                                                                                                                   | X | Full Rearward | X | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
|   |     | Cosco Summit Deluxe 22-262                                                                                                                       |   | Full Rearward |   | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
|   |     | Cosco Touriva 02519                                                                                                                              |   | Full Rearward |   | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
| X |     | Evenflo Generations 352                                                                                                                          | X | Full Rearward | X | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
|   |     | Evenflo Medallion 254                                                                                                                            |   | Full Rearward |   | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
|   |     | Evenflo Tribute V 379                                                                                                                            |   | Full Rearward |   | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
| X |     | Graco ComfortSport                                                                                                                               | X | Full Rearward | X | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
|   |     | Graco Platinum Cargo                                                                                                                             |   | Full Rearward |   | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
|   |     | Graco Safeseat Step 2                                                                                                                            |   | Full Rearward |   | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |
| X | 13. | Suppression tests with newborn infant (Part 572, Subpart K) using the following indicated child restraints (mid-height seat position):           |   |               |   |              |
|   |     | Section A – Car Bed (Belted)                                                                                                                     |   |               |   |              |
| X |     | Angel Guard Angel Ride                                                                                                                           | X | Full Rearward | X | Mid Position |
|   |     |                                                                                                                                                  |   |               |   | Full Forward |

|                          |     |                                                                                                                                                                                                       |                                        |                                       |                                       |
|--------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> | 14. | Suppression tests with 3-year-old dummy (Part 572, Subpart P) using the following indicated child restraints where a child restraint is required (mid-height seat position):                          |                                        |                                       |                                       |
|                          |     | Section C – Convertible (Belted forward-facing)                                                                                                                                                       |                                        |                                       |                                       |
| <input type="checkbox"/> |     | Britax Roundabout E9L02                                                                                                                                                                               | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Cosco High Back Booster 22-209                                                                                                                                                                        | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Cosco Summit Deluxe 22-262                                                                                                                                                                            | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Cosco Touriva 02519                                                                                                                                                                                   | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Evenflo Generations 352                                                                                                                                                                               | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Evenflo Medallion 254                                                                                                                                                                                 | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Evenflo Tribute V 379                                                                                                                                                                                 | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Graco ComfortSport                                                                                                                                                                                    | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Graco Platinum Cargo                                                                                                                                                                                  | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Graco Safeseat Step 2                                                                                                                                                                                 | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
|                          |     | Section D – Toddler/Belt Positioning Booster (Belted)                                                                                                                                                 |                                        |                                       |                                       |
| <input type="checkbox"/> |     | Britax Roadster 9004                                                                                                                                                                                  | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Cosco High Back Booster 22-209                                                                                                                                                                        | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Cosco Summit Deluxe 22-262                                                                                                                                                                            | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Evenflo Right Fit 245                                                                                                                                                                                 | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Evenflo Generations 352                                                                                                                                                                               | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Graco Platinum Cargo                                                                                                                                                                                  | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> | 15. | Suppression tests with representative 3-year-old child using the following indicated child restraints where a child restraint is required (mid-height position). (Appendix H, Data Sheet 19H and 20H) |                                        |                                       |                                       |
|                          |     | Section C – Convertible (Belted forward-facing)                                                                                                                                                       |                                        |                                       |                                       |
| <input type="checkbox"/> |     | Britax Roundabout E9L02                                                                                                                                                                               | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Cosco High Back Booster 22-209                                                                                                                                                                        | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Cosco Summit Deluxe 22-262                                                                                                                                                                            | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Cosco Touriva 02519                                                                                                                                                                                   | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Evenflo Generations 352                                                                                                                                                                               | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Evenflo Medallion 254                                                                                                                                                                                 | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Evenflo Tribute V 379                                                                                                                                                                                 | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Graco ComfortSport                                                                                                                                                                                    | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Graco Platinum Cargo                                                                                                                                                                                  | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Graco Safeseat Step 2                                                                                                                                                                                 | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
|                          |     | Section D – Toddler/Belt Positioning Booster (Belted)                                                                                                                                                 |                                        |                                       |                                       |
| <input type="checkbox"/> |     | Britax Roadster 9004                                                                                                                                                                                  | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Cosco High Back Booster 22-209                                                                                                                                                                        | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Cosco Summit Deluxe 22-262                                                                                                                                                                            | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Evenflo Generations 352                                                                                                                                                                               | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Evenflo Right Fit 245                                                                                                                                                                                 | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Graco Platinum Cargo                                                                                                                                                                                  | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |

|                          |     |                                                                                                                                                                              |                                        |                                       |                                       |
|--------------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> | 16. | Suppression tests with 3-year-old dummy (Part 572, Subpart P) in the following positions (mid-height seat position):                                                         |                                        |                                       |                                       |
| <input type="checkbox"/> |     | Sitting on seat with back against seat back (S22.2.2.1)                                                                                                                      |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> |     | Sitting on seat with back against reclined seat back (S22.2.2.2)                                                                                                             |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> |     | Sitting on seat with back not against seat back (S22.2.2.3)                                                                                                                  |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> |     | Sitting on seat edge, spine vertical, hands by the child's side (S22.2.2.4)                                                                                                  |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> |     | Standing on seat, facing forward (S22.2.2.5)                                                                                                                                 |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> |     | Kneeling on seat facing forward (S22.2.2.6)                                                                                                                                  |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> |     | Kneeling on seat facing rearward (S22.2.2.7)                                                                                                                                 |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> |     | Lying on seat (S22.2.2.8)                                                                                                                                                    |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> | 17. | Suppression tests with representative 3-year-old child in the following positions (mid-height seat position):                                                                |                                        |                                       |                                       |
| <input type="checkbox"/> |     | Sitting on seat with back against seat back (S22.2.2.1)                                                                                                                      |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> |     | Sitting on seat with back against reclined seat back (S22.2.2.2)                                                                                                             |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> |     | Sitting on seat with back not against seat back (S22.2.2.3)                                                                                                                  |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> |     | Sitting on seat edge, spine vertical, hands by the child's side (S22.2.2.4)                                                                                                  |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> |     | Standing on seat, facing forward (S22.2.2.5)                                                                                                                                 |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> |     | Kneeling on seat facing forward (S22.2.2.6)                                                                                                                                  |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> |     | Kneeling on seat facing rearward (S22.2.2.7)                                                                                                                                 |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> |     | Lying on seat (S22.2.2.8)                                                                                                                                                    |                                        |                                       |                                       |
| <input type="checkbox"/> |     | <input type="checkbox"/> Full Rearward                                                                                                                                       | <input type="checkbox"/> Mid Position  | <input type="checkbox"/> Full Forward |                                       |
| <input type="checkbox"/> | 18. | Suppression tests with 6-year-old dummy (Part 572, Subpart N) using the following indicated child restraints where a child restraint is required (mid-height seat position): |                                        |                                       |                                       |
|                          |     | Section D                                                                                                                                                                    |                                        |                                       |                                       |
| <input type="checkbox"/> |     | Britax Roadster 9004                                                                                                                                                         | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Cosco High Back Booster 22-209                                                                                                                                               | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Cosco Summit Deluxe 22-262                                                                                                                                                   | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Evenflo Generations 352                                                                                                                                                      | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Evenflo Right Fit 245                                                                                                                                                        | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> |     | Graco Platinum Cargo                                                                                                                                                         | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |

- ☐ 19. Suppression tests with representative 6-year-old child using the following indicated child restraints where a child restraint is required (mid-height seat position):
- Section D
- |                                                         |                                        |                                       |                                       |
|---------------------------------------------------------|----------------------------------------|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> Britax Roadster 9004           | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> Cosco High Back Booster 22-209 | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> Cosco Summit Deluxe 22-262     | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> Evenflo Generations 352        | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> Evenflo Right Fit 245          | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> Graco Platinum Cargo           | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
- ☐ 20. Suppression tests with 6-year-old dummy (Part 572, Subpart N) in the following positions (mid-height seat position):
- |                                                                                                           |                                        |                                       |                                       |
|-----------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> Sitting on seat with back against seat back (S22.2.2.1)                          | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> Sitting on seat with back against reclined seat back (S22.2.2.2)                 | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> Sitting on seat edge, spine vertical, hands by the child's side (S22.2.2.4)      | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> Sitting back in the seat and leaning on the right front passenger door (S24.2.3) | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
- ☐ 21. Suppression tests with representative 6-year-old child in the following positions (mid-height seat position):
- |                                                                                                           |                                        |                                       |                                       |
|-----------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> Sitting on seat with back against seat back (S22.2.2.1)                          | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> Sitting on seat with back against reclined seat back (S22.2.2.2)                 | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> Sitting on seat edge, spine vertical, hands by the child's side (S22.2.2.4)      | <input type="checkbox"/> Full Rearward | <input type="checkbox"/> Mid Position | <input type="checkbox"/> Full Forward |
| <input type="checkbox"/> Sitting back in the seat and leaning on the right front passenger door (S24.2.3) |                                        |                                       |                                       |
- ☒ 22. Test of Reactivation of the Passenger Air Bag System with an Unbelted 5<sup>th</sup> percentile female dummy (S20.3, 22.3, S24.3) (mid-height seat position). Perform this test after the following suppression tests: After each restraint.
- ☐ 23. Test of Reactivation of the Passenger Air Bag System with a representative 5<sup>th</sup> percentile female (S20.3, 22.3, S24.3) (mid-height seat position). Perform this test after the following suppression tests:
- ☐ 24. Low risk deployment test with 12-month-old dummy (Part 572, Subpart R) using the following indicated child restraints (full forward, mid-height seat position)(S20.4):
- Section B
- |                                                             |
|-------------------------------------------------------------|
| <input type="checkbox"/> Century Smart Fit 4543             |
| <input type="checkbox"/> Cosco Arriva 22-013                |
| <input type="checkbox"/> Evenflo Discovery Adjust Right 212 |
| <input type="checkbox"/> Graco Infant 8457                  |
| <input type="checkbox"/> Graco Snugride 8645                |
| <input type="checkbox"/> Peg Perego                         |
- Section C
- |                                                  |
|--------------------------------------------------|
| <input type="checkbox"/> Britax Roundabout E9L02 |
| <input type="checkbox"/> Cosco Touriva 02519     |
| <input type="checkbox"/> Evenflo Medallion 254   |
| <input type="checkbox"/> Evenflo Tribute V 379   |
| <input type="checkbox"/> Graco ComfortSport      |



|   |     |                                                                                                              |
|---|-----|--------------------------------------------------------------------------------------------------------------|
| X | 25. | Low risk deployment test with 3-year-old dummy (Part 572, Subpart P) in the following positions:             |
|   | X   | Position 1 (rearmost, lowest seat position)                                                                  |
|   | X   | Position 2 (mid-height seat position)                                                                        |
| X | 26. | Low risk deployment test with 6-year-old dummy (Part 572, Subpart N) in the following positions:             |
|   | X   | Position 1(rearmost, lowest seat position)                                                                   |
|   | X   | Position 2 (mid-height seat position)                                                                        |
| X | 27. | Low risk deployment test with 5 <sup>th</sup> female dummy (Part 572, Subpart O) in the following positions: |
|   | X   | Position 1 (mid-height seat position)                                                                        |
|   | X   | Position 2 (mid-height seat position)                                                                        |
| X | 28. | Impact Tests                                                                                                 |
|   |     | Frontal Oblique                      Impact Angle:                      Test Speed:                          |
|   |     | Belted 50 <sup>th</sup> male dummy driver and passenger (0 to 48 kmph) (S5.1.1(a))                           |
|   |     | Unbelted 50 <sup>th</sup> male dummy driver and passenger (0 to 48 kmph) (S5.1.2(a)(1))                      |
|   |     | Unbelted 50 <sup>th</sup> male dummy driver and passenger (32 to 40 kmph) (S5.1.2(a)(2) or S5.1.2(b))        |
|   | X   | Frontal 0° - Test Speed: 39.8                                                                                |
|   |     | Belted 50 <sup>th</sup> male dummy driver (0 to 48 kmph) (S5.1.1.(b)(1) or S5.1.1(a))                        |
|   |     | Belted 50 <sup>th</sup> male dummy passenger (0 to 48 kmph) (S5.1.1.(b)(1) or S5.1.1(a))                     |
|   |     | Belted 5 <sup>th</sup> female dummy driver (0 to 48 kmph) (S16.1(a)(1))                                      |
|   |     | Belted 5 <sup>th</sup> female dummy passenger (0 to 48 kmph) (S16.1(a)(1))                                   |
|   |     | Belted 5 <sup>th</sup> female dummy driver and passenger (0 to 56 kmph) (S16.1(a)(2))                        |
|   |     | Belted 50 <sup>th</sup> male dummy driver and passenger (0 to 56 kmph) (S5.1.1.(b)(2))                       |
|   |     | Unbelted 50 <sup>th</sup> male dummy driver and passenger (0 to 48 kmph) (S5.1.2(a) (1))                     |
|   |     | Unbelted 50 <sup>th</sup> male dummy driver (32 to 40 kmph) (S5.1.2.(a)(2) or S5.1.2(b))                     |
|   |     | Unbelted 50 <sup>th</sup> male dummy passenger (32 to 40 kmph) (S5.1.2.(a)(2) or S5.1.2(b))                  |
|   |     | X   Unbelted 5 <sup>th</sup> female dummy driver (32 to 40 kmph) (S16.1(b))                                  |
|   |     | X   Unbelted 5 <sup>th</sup> female dummy passenger (32 to 40 kmph) (S16.1(b))                               |
|   |     | 40% Offset 0° Belted 5 <sup>th</sup> female dummy driver and passenger (0 to 40 kmph) (S18.1) Test Speed:    |
|   | 29. | FMVSS 204 Indicant Test                                                                                      |
| X | 30. | FMVSS 212 Test                                                                                               |
| X | 31. | FMVSS 219 Indicant Test                                                                                      |
| X | 32. | FMVSS 301 Frontal Test                                                                                       |

**DATA SHEET 2**  
**REPORT OF VEHICLE CONDITION**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance

NHTSA No.: C20140103  
Test Dates: 5/22/14 - 7/28/14

CONTRACT NO.: DTNH22-13-D-00313

Date: 8/4/2014

FROM (Lab and rep name): MGA Research Corporation

TO: NHTSA, OVSC, NVS-220

PURPOSE: (X) Initial Receipt ( ) Received via Transfer (X) Present vehicle condition

MODEL YEAR/MAKE/MODEL/BODY STYLE: 2014 Chevrolet Silverado 1500 Truck

MANUFACTURE DATE: 01/14

NHTSA NO. C20140103 GVWR: 3130 kg (6900 lbs)

BODY COLOR: Silver Ice Metallic GAWR (Fr): 1656 kg (3650 lbs)

VIN: 3GCPCPEH5EG366679 GAWR (Rr): 1792 kg (3950 lbs)

ODOMETER READINGS: ARRIVAL (miles): 177 DATE: 5/19/14

COMPLETION (miles): 180 DATE: 7/28/14

PURCHASE PRICE: (\$) 32,260

DEALER'S NAME: Roberts Chevrolet

421 W Lincoln Hwy, Exton, PA 19341

- A. All options listed on window sticker are present on the test vehicle:  
X Yes      No
- B. Tires and wheel rims are new and the same as listed: X Yes      No
- C. There are no dents or other interior or exterior flaws: X Yes      No
- D. The vehicle has been properly prepared and is in running condition:  
X Yes      No
- E. Keyless remote is available and working: X Yes      No
- F. The glove box contains an owner's manual, warranty document, consumer information, and extra set of keys: X Yes      No
- G. Proper fuel filler cap is supplied on the test vehicle: X Yes      No
- H. Using permanent marker, identify vehicle with NHTSA number and FMVSS test type(s) on roof line above driver door or for school buses, place a placard with NHTSA number inside the windshield and to the exterior front and rear side of bus:  
X Yes      No
- I. Place vehicle in storage area: X Yes      No
- J. Inspect the vehicle's interior and exterior, including all windows, seats, doors, etc. to confirm that each system is complete and functional per the manufacturer's specifications. Any damage, misadjustment, or other unusual condition that could influence the test program or test results shall be recorded. Report any abnormal condition to the NHTSA COTR before beginning any test:  
X Vehicle OK      Conditions reported below in comment section

Identify the letter above to which any of the following comments apply.

Comments: \_\_\_\_\_

## REPORT OF VEHICLE CONDITION AT THE COMPLETION OF TESTING

LIST OF FMVSS TESTS PERFORMED BY THIS LAB: FMVSS 208, 212, 219, 301  
VEHICLE: 2014 Chevrolet Silverado 1500 NHTSA NO.: C20140103  
REMARKS:

Equipment that is no longer on the test vehicle as noted on previous page:

None

Explanation for equipment removal:

None

Test Vehicle Condition:

25 mph frontal impact damage- front suspension & structure damaged, hood & front quarter panels damaged, radiator damaged, air bags deployed, Stoddard in fuel system

RECORDED BY: Jeff Lewandowski DATE: 8/4/2014  
APPROVED BY: David Winkelbauer DATE: 8/4/2014

#####

### RELEASE OF TEST VEHICLE

The vehicle described above is released from MGA to be delivered to:

Date: Time: Odometer:

Lab Rep's Signature:

Title:

Carrier/Customer Rep:

Date:

### DATA SHEET 3

#### CERTIFICATION LABEL AND TIRE PLACARD INFORMATION

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Alex Vanderheyden

NHTSA No.: C20140103  
 Test Date: 7/28/14

| Certification Label (Part 567)                  |                          |
|-------------------------------------------------|--------------------------|
| Manufacturer:                                   | GENERAL MOTORS DE MEXICO |
| Date of Manufacture:                            | 01/14                    |
| VIN:                                            | 3GCPCPEH5EG366679        |
| Vehicle Certified As (Pass. Car/MPV/Truck/Bus): | TRUCK                    |
| Front Axle GVWR:                                | 1656 kg (3650 lbs)       |
| Rear Axle GVWR:                                 | 1792 kg (3950 lbs)       |
| Total GVWR:                                     | 3130 kg (6900 lbs)       |

| Tire Placard for Motor Vehicles with GVWR of 10,000 lb or Less and Passenger Cars (571.110) |                   |
|---------------------------------------------------------------------------------------------|-------------------|
| Vehicle Capacity Weight:                                                                    | 812 kg (1791 lbs) |
| Designated Seating Capacity Front:                                                          | 3                 |
| Designated Seating Capacity Rear:                                                           | 3                 |
| Total Designated Seating Capacity:                                                          | 6                 |
| Recommended Cold Tire Inflation Pressure Front:                                             | 240 kpa (35 psi)  |
| Recommended Cold Tire Inflation Pressure Rear:                                              | 240 kpa (35 psi)  |
| Recommended Tire Size:                                                                      | P225/70 R17       |
| Tire Size on Vehicle:                                                                       | P225/70 R17       |

Signature: 

Date: 7/28/14

**DATA SHEET 4**  
**REAR SEATING POSITION SEAT BELTS**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance  
Test Technician: Nicholas Abels

NHTSA No.: C20140103  
Test Date: 5/22/14

|                                                       | Yes | No |
|-------------------------------------------------------|-----|----|
| Do all rear seating positions have Type 2 seat belts? | X   |    |

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:

Signature: Nicholas Abels

Date: 5/22/14

**DATA SHEET 5**  
**AIR BAG LABELS (S4.5.1)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance  
Test Technician: Nicholas Abels

NHTSA No.: C20140103  
Test Date: 5/22/14

- ☒ 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)  
☒ 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 vehicle part? (3/19/01 legal interpretation to Todd Mitchell)
- ☐ Yes – Pass  
☐ No – Fail
- ☐ 1.5 Is the label lettered in English?
- ☐ Yes – Pass  
☐ No – Fail
- ☐ 1.6 Is the label in block capitals and numerals?
- ☐ Yes – Pass  
☐ No – Fail
- ☐ 1.7 Are the letters and numerals at least 3/32 inches high?
- ☐ Yes – Pass  
☐ No – Fail
- ☐ 1.8 Does the owner's manual set forth the recommended schedule for maintenance or replacement?
- ☒ 2. Does the owner's manual: (S4.5.1(f))
- ☒ 2.1 Include a description of the vehicle's air bag system in an easily understandable format?
- ☒ Yes – 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 position?
- ☒ Yes – Pass  
☐ No – Fail
- ☒ 2.3 Include a statement that the air bag is a supplemental restraint at the front outboard seating position?
- ☒ 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?  
☒ 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?  
☒ 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?  
☒ 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 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 23.2 (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)): Vehicles certified to meet the requirements of S19, S21 and S23. (S4.5.1(b)(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 outboard seating position such that it cannot be removed without destroying or defacing the label or the sun visor? (S4.5.1(b)(3)) (3/19/01 legal interpretation to Todd Mitchell)
- ☒ Driver Side, Yes – Pass
- ☐ Driver Side, No – Fail
- ☒ Passenger Side, Yes – Pass
- ☐ Passenger Side, No – Fail



X

- 3.2 Does the label conform in content to the label shown in Figure 11 at each front outboard seating position? (S4.5.1(b)(2)) **(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)))**



Figure 11. Sun Visor Label Visible when Visor is in Down Position.



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

- X Driver Side, Yes – Pass
- Driver Side, No – Fail
- X Passenger Side, Yes – Pass
- Passenger Side, No – Fail

X

- 3.3 Is the label heading area yellow with the word “WARNING” and the alert symbol in black? (S4.5.1(b)(3)(i))

- X Driver Side, Yes – Pass
- Driver Side, No – Fail
- X Passenger Side, Yes – Pass
- Passenger Side, No – Fail

X

- 3.4 Is the message area white with black text? (S4.5.1(b)(3)(ii))

- X Driver Side, Yes – Pass
- Driver Side, No – Fail
- X Passenger Side, Yes – Pass
- Passenger Side, No – Fail

- ☒ 3.5 Is the message area at least 30 cm<sup>2</sup>? (S4.5.1(b)(3)(ii))  
**The message area consists of the total label area minus the yellow heading area and the pictogram. The pictogram is enclosed on the left side and bottom by the edge of the label. The top edge of the pictogram area is defined by a horizontal line midway between the uppermost edge of the pictogram and the lowermost edge of the text. The right side of the pictogram is defined by a vertical line midway between the rightmost edge of the pictogram and the left most edge of the text, including any bullets. (See 5/6/03 interpretation to Gerald Plante on behalf of Subaru)**  
 Driver Side: Length 90 mm, Width 39 mm  
 Passenger Side: Length 90 mm, Width 39 mm  
 Driver actual message area 35.1 cm<sup>2</sup>  
 Passenger actual message area 35.1 cm<sup>2</sup>  
☒ Driver Side, Yes – Pass  
☐ Driver Side, No – Fail  
☒ Passenger Side, Yes – Pass  
☐ Passenger Side, No – Fail
- ☒ 3.6 Is the pictogram black on a white background? (S4.5.1(b)(3)(iii))  
☒ Driver Side, Yes – Pass  
☐ Driver Side, No – Fail  
☒ Passenger Side, Yes – Pass  
☐ Passenger Side, No – Fail
- ☒ 3.7 Is the pictogram at least 30 mm in length? (S4.5.1(b)(3)(iii))  
 Driver side: Length: 32 mm  
 Passenger side: Length: 32 mm  
☒ Driver Side, Yes – Pass  
☐ Driver Side, No – Fail  
☒ Passenger Side, Yes – Pass  
☐ Passenger Side, No – Fail
- ☒ 3.8 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  
☐ Driver Side, No – Fail  
☒ Passenger Side, Yes – Pass  
☐ Passenger Side, No – Fail
- ☒ 3.9 Is the sun visor free of other information about air bags or the need to wear seat belts with the exception of the air bag alert label and/or the rollover-warning label? (S4.5.1(b)(5)(ii))  
☒ Driver Side, Yes – Pass  
☐ Driver Side, No – Fail  
☒ Passenger Side, Yes – Pass  
☐ Passenger Side, No – Fail
- ☒ 3.10 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 3.10.1)  
☒ No (go to 4., skipping 3.10.1 through 3.10.3)
- ☐ 3.10.1 Are both the rollover-warning label and the air bag warning label surrounded by a continuous solid-lined border?  
 \_\_\_ Yes (go to 3.10.2 and skip 3.10.3)  
 \_\_\_ No (go to 3.10.3 and skip 3.10.2)

- ☐ 3.10.2 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**
- ☐ 3.10.3 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?  
☒ **If yes for driver and passenger, go to 5.**  
☒ Driver Side, Yes  
☐ Driver Side, No  
☒ Passenger Side, Yes  
☐ Passenger Side, No
- ☐ 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)) (3/19/01 legal interpretation to Todd Mitchell)  
☐ Driver Side, Yes – Pass  
☐ Driver Side, No – Fail  
☐ Passenger Side, Yes – Pass  
☐ Passenger Side, 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  
☐ Driver Side, No – Fail  
☐ Passenger Side, Yes – Pass  
☐ Passenger Side, No – Fail
- ☐ 4.4 Does the label conform in content to the label shown in Figure 6C? (S4.5.1(c))

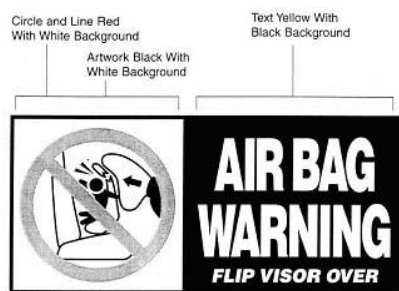


Figure 6C. Sun Visor Label Visible When Visor is in Up Position.

- ☐ Driver Side, Yes – Pass  
☐ Driver Side, No – Fail  
☐ Passenger Side, Yes – Pass  
☐ Passenger Side, No – Fail
- ☐ 4.5 Is the message area black with yellow text? (S4.5.1(c)(1))  
☐ Driver Side, Yes – Pass  
☐ Driver Side, No – Fail  
☐ Passenger Side, Yes – Pass  
☐ Passenger Side, No – Fail

- ☐ 4.6 Is the message area at least 20 cm<sup>2</sup>? (S4.5.1(c)(1)) **The message area consists of the black part of the label.**  
 Driver Side: Length\_\_\_\_\_, Width\_\_\_\_\_  
 Passenger Side: Length\_\_\_\_\_, Width\_\_\_\_\_  
 Actual message area \_\_\_\_\_ cm<sup>2</sup>  
☐ Driver Side, Yes – Pass  
☐ Driver Side, No – Fail  
☐ Passenger Side, Yes – Pass  
☐ Passenger Side, 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  
☐ Driver Side, No – Fail  
☐ Passenger Side, Yes – Pass  
☐ Passenger Side, No – Fail
- ☐ 4.8 Is the pictogram at least 20 mm in diameter? (S4.5.1(c)(2))  
 Driver Side: Diameter \_\_\_\_\_mm  
 Passenger Side: Diameter \_\_\_\_\_mm  
☐ Driver Side, Yes – Pass  
☐ Driver Side, No – Fail  
☐ Passenger Side, Yes – Pass  
☐ Passenger Side, No – Fail
- ☒ 5. Label on the Dashboard: Vehicles certified to meet the requirements of S19, S21 and S23?
- ☒ 5.1 Does the vehicle have a label on the dash or steering wheel hub? (S4.5.1(e)(3))  
☒ Yes – Pass  
☐ No – Fail
- ☒ 5.2 Is the label clearly visible from all front seating positions? (S4.5.1(e)(3))  
☒ Yes – Pass  
☐ No - Fail
- ☒ 5.3 Does the label conform in content to the label shown in Figure 12? (S4.5.1(e)(3))  
**Vehicles without back seats may omit the statement: “The back seat is the safest place for children.” Vehicles without back seats or too small to accommodate a rear-facing child restraint consistent with S4.5.4.1 as determined in DATA SHEET 7 may omit the statement “Never put a rear-facing child seat in the front.” (S4.5.1(e)(3)(iii))**  
☒ Yes – Pass  
☐ No - Fail

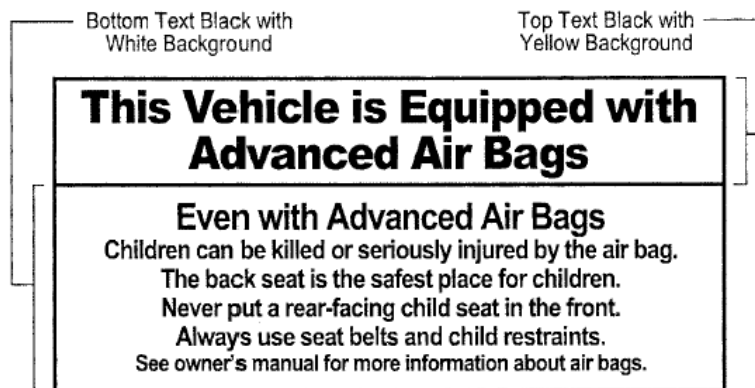


Figure 12. Removable Label on Dash.

- ☒ 5.4 Is the heading area yellow with black text? (S4.5.1(e)(3)(i))  
☒ Yes – Pass  
☐ No - Fail
- ☒ 5.5 Is the message white with black text? (S4.5.1(e)(3)(ii))  
☒ Yes – Pass  
☐ No - Fail
- ☒ 5.6 Is the message area at least 30 cm<sup>2</sup>? (S4.5.1(e)(3)(ii)) **The message area consists of the total label area minus the yellow heading area. (See 5/6/03 interpretation to Gerald Plante on behalf of Subaru)**  
Length 105 mm, Width 50 mm  
Actual message area 52.5 cm<sup>2</sup>  
☒ Yes – Pass  
☐ No - Fail

I certify that I have read and performed each instruction.

Signature: Nicholas Heuts

Date: 5/22/14

**DATA SHEET 6**  
**FMVSS 208 READINESS INDICATOR (S4.5.2)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance  
Test Technician: Nicholas Abels

NHTSA No.: C20140103  
Test Date: 5/22/14

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. Hennegerger on behalf of Breed)

- ☒ 1. Is the system totally mechanical? **(If Yes, this Data Sheet is complete).**  
☐ Yes  
☒ No
- ☒ 2. Describe the location of the readiness indicator: *Center Of Left Cluster*
- ☒ 3. Is the readiness indicator clearly visible to the driver?  
☒ Yes – Pass  
☐ No - Fail
- ☒ 4. Is a list of the elements in the occupant restraint system, being monitored by the readiness indicator, provided on a label or in the owner's manual?  
☒ Yes – Pass  
☐ No - Fail
- ☒ 5. Does the vehicle have an on-off switch for the passenger air bag?  
☐ If Yes (go to 6)  
☒ If No (this form is complete)
- ☐ 6. Is the air bag readiness indicator off when the passenger air bag switch is in the off position?  
☐ Yes – Pass  
☐ No - Fail

REMARKS:

I certify that I have read and performed each instruction.

Signature: Nicholas Abels

Date: 5/22/14

## DATA SHEET 7

### PASSENGER AIR BAG MANUAL CUT-OFF DEVICE (S4.5.4)

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

- ☒ 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? (S4.5.4.1(a))  
☐ Yes, go to 3  
☐ No, go to 4
- ☐ 3. Verification there is room for a child restraint in the rear seat behind the driver's seat. (S4.5.4.1(b))
- ☐ 3.1 Using all the controls that affect the fore-aft movement of the seat, move the seat to the rearmost position. Mark this position.  
☐ N/A – the seat does not have fore-aft adjustment
- ☐ 3.2 Using all the controls that affect the fore-aft movement of the seat, move the seat to the foremost position. Mark this position.  
☐ N/A – the seat does not have fore-aft adjustment
- ☐ 3.3 Move the seat to the middle of the foremost and rearmost positions. (S8.1.2)  
☐ N/A – the seat does not have a fore-aft adjustment
- ☐ 3.4 If the driver's seat height is adjustable, use all the controls that affect height to put it in the lowest position while maintaining the middle fore-aft position. (S8.1.2)  
☐ N/A – No seat height adjustment
- ☐ 3.5 Position the driver's seat 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
- ☐ 3.6 The driver's 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 driver's seat back angle \_\_\_\_\_  
☐ Tested driver's seat back angle \_\_\_\_\_
- ☐ 3.7 Is the driver seat a bucket seat?  
 \_\_\_ Yes, go to 3.7.1 and skip 3.7.2.  
 \_\_\_ No, go to 3.7.2 and skip 3.7.1.
- ☐ 3.7.1 Bucket seats:
- ☐ 3.7.1.1 Locate and mark a vertical Plane B through the longitudinal centerline of the driver's seat cushion. The longitudinal centerline of a bucket seat cushion is determined at SgRP. (S16.3.1.10) (S4.5.4.1(b)(1))
- ☐ 3.7.1.2 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
- ☐ 3.7.2 Bench seats (including split bench seats):
- ☐ 3.7.2.1 Locate and mark a vertical Plane B through the center of the steering wheel parallel to the vehicle longitudinal centerline. (S4.5.4.1(b)(2))

- ☐ 3.7.2.2 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" or "PASS 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?
- Measurement from the edge of the telltale light (mm):
- ☐ Yes – Pass
- ☐ No – Fail
- ☐ 7.3 Does the telltale remain illuminated while the air bag is turned off? (S4.5.4.3(c)) (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? (S4.5.4.3(d))
- ☐ Yes – Fail
- ☐ No – Pass
- ☐ 7.5 Is the telltale combined with the air bag readiness indicator? (S4.5.4.3(e))
- ☐ Yes – Fail
- ☐ 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

REMARKS:

I certify that I have read and performed each instruction.

Signature: Nicholas Huet Date: 5/22/14

## 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)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance  
Test Technician: Nicholas Abels

NHTSA No.: C20140103  
Test Date: 5/22/14

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))

|                              |                        |
|------------------------------|------------------------|
| DESIGNATED SEATING POSITION: | Center Front Passenger |
|------------------------------|------------------------|

- |                                     |     |                                                                                                                                                                                                                                                                                                           |
|-------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> |     | N/A – No retractor is at this position                                                                                                                                                                                                                                                                    |
| <input type="checkbox"/>            |     | N/A – The retractor is an automatic locking retractor ONLY                                                                                                                                                                                                                                                |
| <input type="checkbox"/>            | 1.  | Record test fore-aft seat position:<br>(S7.1.1.5(c)(1)) (Any position is acceptable)                                                                                                                                                                                                                      |
| <input type="checkbox"/>            | 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 <b>NOT</b> have to be attached by the vehicle user to the seat belt webbing, retractor, or any other part of the vehicle.<br>(S7.1.1.5(a))     |
|                                     |     | <input type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                                       |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input type="checkbox"/>            | 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 <b>NOT</b> require inverting, twisting or deforming of the belt webbing. (S7.1.1.5(a))                                                         |
|                                     |     | <input type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                                       |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input type="checkbox"/>            | 4.  | Place any adjustable seat belt anchorage in the lowest adjustment position.                                                                                                                                                                                                                               |
|                                     |     | <input type="checkbox"/> N/A The anchorage is not adjustable.                                                                                                                                                                                                                                             |
| <input type="checkbox"/>            | 5.  | Buckle the seat belt. (S7.1.1.5(c)(1))                                                                                                                                                                                                                                                                    |
| <input type="checkbox"/>            | 6.  | Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))                                                                                                                                                                                                                                      |
| <input type="checkbox"/>            | 7.  | 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))                                                                                                                              |
| <input type="checkbox"/>            | 8.  | 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?                                                                                                        |
|                                     |     | <input type="checkbox"/> Yes (go to 8.1)                                                                                                                                                                                                                                                                  |
|                                     |     | <input type="checkbox"/> No (go to 9)                                                                                                                                                                                                                                                                     |
| <input type="checkbox"/>            | 8.1 | 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))    |
|                                     |     | <input type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                                       |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input type="checkbox"/>            | 9.  | Adjust the lap belt or lap belt portion of the seat belt assembly according to any procedures recommended in the vehicle owner's manual to activate any locking feature so that the webbing between points A and B is at the maximum length allowed by the belt system. (S7.1.1.5(c)(2) & S7.1.1.5(c)(1)) |
| <input type="checkbox"/>            | 10. | Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly.<br>(S7.1.1.5(c)(2))                                                                                                               |
| <input type="checkbox"/>            |     | Measured distance between A and B (inches):                                                                                                                                                                                                                                                               |

- ☐ 11. Readjust the belt system so that the webbing between points A and B is at  $\frac{1}{2}$  the maximum length of the webbing. (S7.1.1.5(c)(3))
- ☐ 12. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))  
Measured force application angle: \_\_\_\_ (spec. 5 - 15 degrees)
- ☐ 13. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4))  
Measured distance between A and B: \_\_\_\_ inches
- ☐ 14. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))  
Record onset rate: \_\_\_\_ lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))  
Measured distance between A and B: \_\_\_\_ inches (S7.1.1.5(c)(6))
- ☐ 15. Let the seat belt webbing retract to its minimum length with the seat belt still buckled.
- ☐ 16. 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: \_\_\_\_ (spec. 5 - 15 degrees)
- ☐ 17. 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: \_\_\_\_ inches
- ☐ 18. 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: \_\_\_\_ lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))  
Measured distance between A and B: \_\_\_\_ inches (S7.1.1.5(c)(6))
- ☐ 19. Subtract the measurement in 13 from the measurement in 14 and the measurement in 17 from the measurement in 18. Is the difference 2 inches or less for both? (S7.1.1.5(c)(7))  
14 – 13 = \_\_\_\_ inch;  
18 – 17 = \_\_\_\_ inch;  
☐ Yes – Pass  
☐ No – Fail

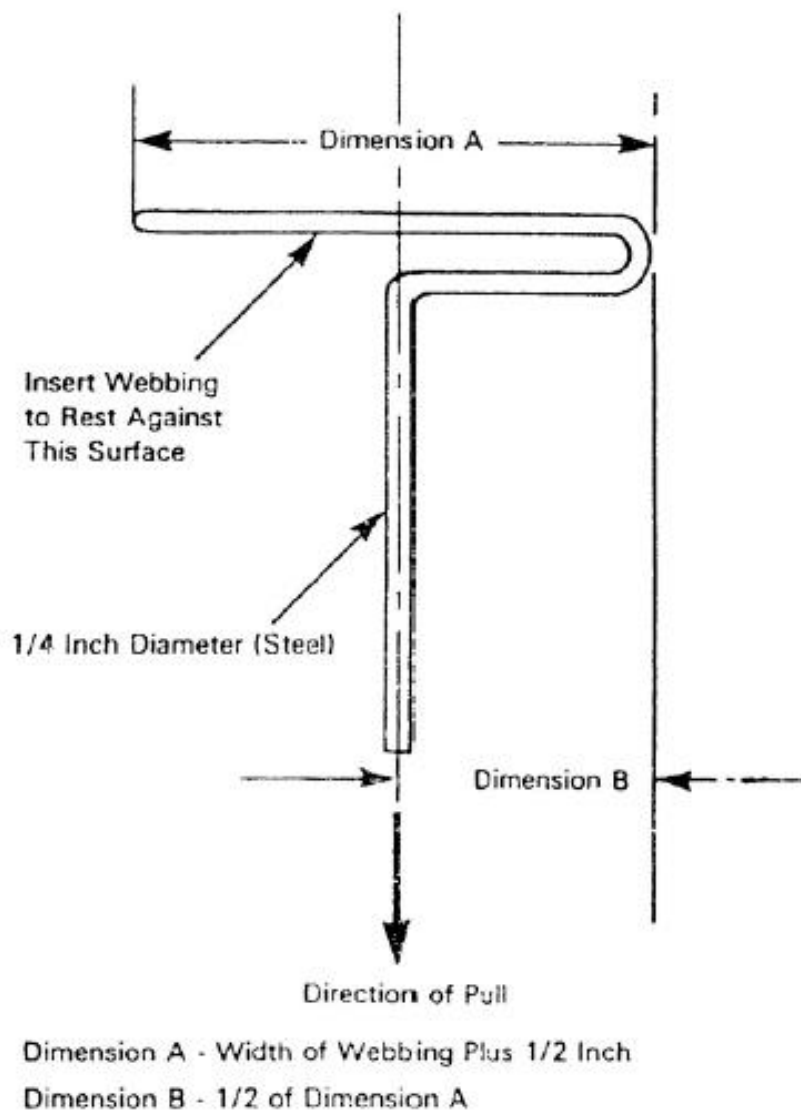
- ☐ 20. Subtract the measurement in 14 from the measurement in 10 and the measurement in 18 from the measurement in 10. Is the difference 3 inches or more for both?  
(S7.1.1.5(c)(8))  
10-14 = \_\_\_\_\_ inches;  
10-18 = \_\_\_\_\_ inches'  
☐ Yes – Pass  
☐ No – Fail

REMARKS:

Signature: Nicholas Huth

Date: 5/22/14

I certify that I have read and performed each instruction.



**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)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance  
Test Technician: Nicholas Abels

NHTSA No.: C20140103  
Test Date: 5/22/14

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))

|                              |                 |
|------------------------------|-----------------|
| DESIGNATED SEATING POSITION: | Front Passenger |
|------------------------------|-----------------|

- |                                     |     |                                                                                                                                                                                                                                                                                                           |
|-------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/>            |     | N/A – No retractor is at this position                                                                                                                                                                                                                                                                    |
| <input type="checkbox"/>            |     | N/A – The retractor is an automatic locking retractor ONLY                                                                                                                                                                                                                                                |
| <input checked="" type="checkbox"/> | 1.  | Record test fore-aft seat position: <b>REAR</b><br>(S7.1.1.5(c)(1)) (Any position is acceptable)                                                                                                                                                                                                          |
| <input checked="" type="checkbox"/> | 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 <b>NOT</b> have to be attached by the vehicle user to the seat belt webbing, retractor, or any other part of the vehicle.<br>(S7.1.1.5(a))     |
|                                     |     | <input checked="" type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                            |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | 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 <b>NOT</b> require inverting, twisting or deforming of the belt webbing. (S7.1.1.5(a))                                                         |
|                                     |     | <input checked="" type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                            |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | 4.  | Place any adjustable seat belt anchorage in the lowest adjustment position.                                                                                                                                                                                                                               |
|                                     |     | <input type="checkbox"/> N/A The anchorage is not adjustable.                                                                                                                                                                                                                                             |
| <input checked="" type="checkbox"/> | 5.  | Buckle the seat belt. (S7.1.1.5(c)(1))                                                                                                                                                                                                                                                                    |
| <input checked="" type="checkbox"/> | 6.  | Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))                                                                                                                                                                                                                                      |
| <input checked="" type="checkbox"/> | 7.  | 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))                                                                                                                              |
| <input checked="" type="checkbox"/> | 8.  | 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?                                                                                                        |
|                                     |     | <input checked="" type="checkbox"/> Yes (go to 8.1)                                                                                                                                                                                                                                                       |
|                                     |     | <input type="checkbox"/> No (go to 9)                                                                                                                                                                                                                                                                     |
| <input checked="" type="checkbox"/> | 8.1 | 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))    |
|                                     |     | <input checked="" type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                            |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | 9.  | Adjust the lap belt or lap belt portion of the seat belt assembly according to any procedures recommended in the vehicle owner's manual to activate any locking feature so that the webbing between points A and B is at the maximum length allowed by the belt system. (S7.1.1.5(c)(2) & S7.1.1.5(c)(1)) |
| <input checked="" type="checkbox"/> | 10. | Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))                                                                                                                  |
| <input checked="" type="checkbox"/> |     | Measured distance between A and B (inches): <u>67</u>                                                                                                                                                                                                                                                     |

- ☒ 11. Readjust the belt system so that the webbing between points A and B is at  $\frac{1}{2}$  the maximum length of the webbing. (S7.1.1.5(c)(3))
- ☒ 12. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))  
Measured force application angle: 10 (spec. 5 - 15 degrees)
- ☒ 13. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4))  
Measured distance between A and B: 35 inches
- ☒ 14. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))  
Record onset rate: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))  
Measured distance between A and B: 35  $\frac{1}{2}$  inches (S7.1.1.5(c)(6))
- ☒ 15. Let the seat belt webbing retract to its minimum length with the seat belt still buckled.
- ☒ 16. 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 (spec. 5 - 15 degrees)
- ☒ 17. 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: 16 inches
- ☒ 18. 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: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))  
Measured distance between A and B: 16 inches (S7.1.1.5(c)(6))
- ☒ 19. Subtract the measurement in 13 from the measurement in 14 and the measurement in 17 from the measurement in 18. Is the difference 2 inches or less for both? (S7.1.1.5(c)(7))  
 $14 - 13 = 35 \frac{1}{2} - 35 = \frac{1}{2}$  inch;  
 $18 - 17 = 16 - 16 = 0$  inches;
- ☒ Yes – Pass  
☐ No – Fail

- ☒ 20. Subtract the measurement in 14 from the measurement in 10 and the measurement in 18 from the measurement in 10. Is the difference 3 inches or more for both?  
(S7.1.1.5(c)(8))
- ☒ 10-14 =  $67 - 35 \frac{1}{2} = 31 \frac{1}{2}$  inches;
- ☒ 10-18 =  $67 - 16 = 51$  inches;
- ☒ Yes – Pass
- ☐ No – Fail

REMARKS:

Signature: Nicholas Huth Date: 5/22/14

I certify that I have read and performed each instruction.

## 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)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance  
Test Technician: Nicholas Abels

NHTSA No.: C20140103  
Test Date: 5/22/14

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))

|                              |                     |
|------------------------------|---------------------|
| DESIGNATED SEATING POSITION: | Left Rear Passenger |
|------------------------------|---------------------|

- |                                     |     |                                                                                                                                                                                                                                                                                                           |
|-------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/>            |     | N/A – No retractor is at this position                                                                                                                                                                                                                                                                    |
| <input type="checkbox"/>            |     | N/A – The retractor is an automatic locking retractor ONLY                                                                                                                                                                                                                                                |
| <input checked="" type="checkbox"/> | 1.  | Record test fore-aft seat position: <b>FIXED</b><br>(S7.1.1.5(c)(1)) (Any position is acceptable)                                                                                                                                                                                                         |
| <input checked="" type="checkbox"/> | 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 <b>NOT</b> 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))        |
|                                     |     | <input checked="" type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                            |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | 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 <b>NOT</b> require inverting, twisting or deforming of the belt webbing. (S7.1.1.5(a))                                                         |
|                                     |     | <input checked="" type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                            |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | 4.  | Place any adjustable seat belt anchorage in the lowest adjustment position.                                                                                                                                                                                                                               |
|                                     |     | <input checked="" type="checkbox"/> N/A The anchorage is not adjustable.                                                                                                                                                                                                                                  |
| <input checked="" type="checkbox"/> | 5.  | Buckle the seat belt. (S7.1.1.5(c)(1))                                                                                                                                                                                                                                                                    |
| <input checked="" type="checkbox"/> | 6.  | Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))                                                                                                                                                                                                                                      |
| <input checked="" type="checkbox"/> | 7.  | 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))                                                                                                                              |
| <input checked="" type="checkbox"/> | 8.  | 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?                                                                                                        |
|                                     |     | <input checked="" type="checkbox"/> Yes (go to 8.1)                                                                                                                                                                                                                                                       |
|                                     |     | <input type="checkbox"/> No (go to 9)                                                                                                                                                                                                                                                                     |
| <input checked="" type="checkbox"/> | 8.1 | 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))    |
|                                     |     | <input checked="" type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                            |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | 9.  | Adjust the lap belt or lap belt portion of the seat belt assembly according to any procedures recommended in the vehicle owner's manual to activate any locking feature so that the webbing between points A and B is at the maximum length allowed by the belt system. (S7.1.1.5(c)(2) & S7.1.1.5(c)(1)) |
| <input checked="" type="checkbox"/> | 10. | Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))                                                                                                                  |
| <input checked="" type="checkbox"/> |     | Measured distance between A and B (inches): <u>77</u>                                                                                                                                                                                                                                                     |



- ☒ 11. Readjust the belt system so that the webbing between points A and B is at  $\frac{1}{2}$  the maximum length of the webbing. (S7.1.1.5(c)(3))
- ☒ 12. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))  
Measured force application angle: 10 (spec. 5 - 15 degrees)
- ☒ 13. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4))  
Measured distance between A and B: 48  $\frac{3}{4}$  inches
- ☒ 14. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))  
Record onset rate: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))  
Measured distance between A and B: 50 inches (S7.1.1.5(c)(6))
- ☒ 15. Let the seat belt webbing retract to its minimum length with the seat belt still buckled.
- ☒ 16. 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 (spec. 5 - 15 degrees)
- ☒ 17. 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: 30  $\frac{3}{4}$  inches
- ☒ 18. 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: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))  
Measured distance between A and B: 32 inches (S7.1.1.5(c)(6))
- ☒ 19. Subtract the measurement in 13 from the measurement in 14 and the measurement in 17 from the measurement in 18. Is the difference 2 inches or less for both? (S7.1.1.5(c)(7))  
 $14 - 13 = \underline{50 - 48 \frac{3}{4} = 1 \frac{1}{4}}$  inches;  
 $18 - 17 = \underline{32 - 30 \frac{3}{4} = 1 \frac{1}{4}}$  inches;
- ☒ Yes – Pass  
☐ No – Fail

- ☒ 20. Subtract the measurement in 14 from the measurement in 10 and the measurement in 18 from the measurement in 10. Is the difference 3 inches or more for both?  
(S7.1.1.5(c)(8))
- ☒  $10 - 14 = 77 - 50 = 27$  inches;
- ☒  $10 - 18 = 77 - 32 = 45$  inches;
- ☒ Yes – Pass
- ☐ No – Fail

REMARKS:

Signature: Nicholas Huet Date: 5/22/14

I certify that I have read and performed each instruction.

## 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)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance  
Test Technician: Nicholas Abels

NHTSA No.: C20140103  
Test Date: 5/22/14

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))

|                              |                       |
|------------------------------|-----------------------|
| DESIGNATED SEATING POSITION: | Center Rear Passenger |
|------------------------------|-----------------------|

- |                                     |     |                                                                                                                                                                                                                                                                                                           |
|-------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/>            |     | N/A – No retractor is at this position                                                                                                                                                                                                                                                                    |
| <input type="checkbox"/>            |     | N/A – The retractor is an automatic locking retractor ONLY                                                                                                                                                                                                                                                |
| <input checked="" type="checkbox"/> | 1.  | Record test fore-aft seat position: <b>FIXED</b><br>(S7.1.1.5(c)(1)) (Any position is acceptable)                                                                                                                                                                                                         |
| <input checked="" type="checkbox"/> | 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 <b>NOT</b> 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))        |
|                                     |     | <input checked="" type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                            |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | 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 <b>NOT</b> require inverting, twisting or deforming of the belt webbing. (S7.1.1.5(a))                                                         |
|                                     |     | <input checked="" type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                            |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | 4.  | Place any adjustable seat belt anchorage in the lowest adjustment position.                                                                                                                                                                                                                               |
|                                     |     | <input checked="" type="checkbox"/> N/A The anchorage is not adjustable.                                                                                                                                                                                                                                  |
| <input checked="" type="checkbox"/> | 5.  | Buckle the seat belt. (S7.1.1.5(c)(1))                                                                                                                                                                                                                                                                    |
| <input checked="" type="checkbox"/> | 6.  | Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))                                                                                                                                                                                                                                      |
| <input checked="" type="checkbox"/> | 7.  | 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))                                                                                                                              |
| <input checked="" type="checkbox"/> | 8.  | 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?                                                                                                        |
|                                     |     | <input checked="" type="checkbox"/> Yes (go to 8.1)                                                                                                                                                                                                                                                       |
|                                     |     | <input type="checkbox"/> No (go to 9)                                                                                                                                                                                                                                                                     |
| <input checked="" type="checkbox"/> | 8.1 | 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))    |
|                                     |     | <input checked="" type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                            |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | 9.  | Adjust the lap belt or lap belt portion of the seat belt assembly according to any procedures recommended in the vehicle owner's manual to activate any locking feature so that the webbing between points A and B is at the maximum length allowed by the belt system. (S7.1.1.5(c)(2) & S7.1.1.5(c)(1)) |
| <input checked="" type="checkbox"/> | 10. | Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))                                                                                                                  |
| <input checked="" type="checkbox"/> |     | Measured distance between A and B (inches): <u>66 ¾</u>                                                                                                                                                                                                                                                   |

- ☒ 11. Readjust the belt system so that the webbing between points A and B is at  $\frac{1}{2}$  the maximum length of the webbing. (S7.1.1.5(c)(3))
- ☒ 12. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))  
Measured force application angle: 10 (spec. 5 - 15 degrees)
- ☒ 13. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4))  
Measured distance between A and B: 38 inches
- ☒ 14. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))  
Record onset rate: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))  
Measured distance between A and B: 38  $\frac{3}{4}$  inches (S7.1.1.5(c)(6))
- ☒ 15. Let the seat belt webbing retract to its minimum length with the seat belt still buckled.
- ☒ 16. 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 (spec. 5 - 15 degrees)
- ☒ 17. 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: 16 inches
- ☒ 18. 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: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))  
Measured distance between A and B: 17 inches (S7.1.1.5(c)(6))
- ☒ 19. Subtract the measurement in 13 from the measurement in 14 and the measurement in 17 from the measurement in 18. Is the difference 2 inches or less for both? (S7.1.1.5(c)(7))  
14 - 13 = 38  $\frac{3}{4}$  - 38 =  $\frac{3}{4}$  inch;  
18 - 17 = 17 - 16 = 1 inch;  
☒ Yes – Pass  
☐ No – Fail

- ☒ 20. Subtract the measurement in 14 from the measurement in 10 and the measurement in 18 from the measurement in 10. Is the difference 3 inches or more for both?  
(S7.1.1.5(c)(8))
- ☒ 10-14 =  $66\frac{3}{4} - 38\frac{3}{4} = 28$  inches;  
☒ 10-18 =  $66\frac{3}{4} - 17 = 49\frac{3}{4}$  inches
- ☒ Yes – Pass  
☐ No – Fail

REMARKS:

Signature: Nicholas Huth

Date: 5/22/14

I certify that I have read and performed each instruction.

## 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)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance  
Test Technician: Nicholas Abels

NHTSA No.: C20140103  
Test Date: 5/22/14

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))

|                              |                             |
|------------------------------|-----------------------------|
| DESIGNATED SEATING POSITION: | <b>Right Rear Passenger</b> |
|------------------------------|-----------------------------|

- |                                     |     |                                                                                                                                                                                                                                                                                                           |
|-------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/>            |     | N/A – No retractor is at this position                                                                                                                                                                                                                                                                    |
| <input type="checkbox"/>            |     | N/A – The retractor is an automatic locking retractor ONLY                                                                                                                                                                                                                                                |
| <input checked="" type="checkbox"/> | 1.  | Record test fore-aft seat position: <b>FIXED</b><br>(S7.1.1.5(c)(1)) (Any position is acceptable)                                                                                                                                                                                                         |
| <input checked="" type="checkbox"/> | 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 <b>NOT</b> 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))        |
|                                     |     | <input checked="" type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                            |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | 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 <b>NOT</b> require inverting, twisting or deforming of the belt webbing. (S7.1.1.5(a))                                                         |
|                                     |     | <input checked="" type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                            |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | 4.  | Place any adjustable seat belt anchorage in the lowest adjustment position.                                                                                                                                                                                                                               |
|                                     |     | <input checked="" type="checkbox"/> N/A The anchorage is not adjustable.                                                                                                                                                                                                                                  |
| <input checked="" type="checkbox"/> | 5.  | Buckle the seat belt. (S7.1.1.5(c)(1))                                                                                                                                                                                                                                                                    |
| <input checked="" type="checkbox"/> | 6.  | Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))                                                                                                                                                                                                                                      |
| <input checked="" type="checkbox"/> | 7.  | 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))                                                                                                                              |
| <input checked="" type="checkbox"/> | 8.  | 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?                                                                                                        |
|                                     |     | <input checked="" type="checkbox"/> Yes (go to 8.1)                                                                                                                                                                                                                                                       |
|                                     |     | <input type="checkbox"/> No (go to 9)                                                                                                                                                                                                                                                                     |
| <input checked="" type="checkbox"/> | 8.1 | 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))    |
|                                     |     | <input checked="" type="checkbox"/> Yes – Pass                                                                                                                                                                                                                                                            |
|                                     |     | <input type="checkbox"/> No – Fail                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | 9.  | Adjust the lap belt or lap belt portion of the seat belt assembly according to any procedures recommended in the vehicle owner's manual to activate any locking feature so that the webbing between points A and B is at the maximum length allowed by the belt system. (S7.1.1.5(c)(2) & S7.1.1.5(c)(1)) |
| <input checked="" type="checkbox"/> | 10. | Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))                                                                                                                  |
| <input checked="" type="checkbox"/> |     | Measured distance between A and B (inches): <u>75</u>                                                                                                                                                                                                                                                     |

- ☒ 11. Readjust the belt system so that the webbing between points A and B is at  $\frac{1}{2}$  the maximum length of the webbing. (S7.1.1.5(c)(3))
- ☒ 12. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))  
Measured force application angle: 10 (spec. 5 - 15 degrees)
- ☒ 13. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4))  
Measured distance between A and B: 49 inches
- ☒ 14. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))  
Record onset rate: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))  
Measured distance between A and B: 50 inches (S7.1.1.5(c)(6))
- ☒ 15. Let the seat belt webbing retract to its minimum length with the seat belt still buckled.
- ☒ 16. 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 (spec. 5 - 15 degrees)
- ☒ 17. 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: 30 inches
- ☒ 18. 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: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))  
Measured distance between A and B: 31 inches (S7.1.1.5(c)(6))
- ☒ 19. Subtract the measurement in 13 from the measurement in 14 and the measurement in 17 from the measurement in 18. Is the difference 2 inches or less for both? (S7.1.1.5(c)(7))  
14 - 13 = 50 - 49 = 1 inch;  
18 - 17 = 31 - 30 = 1 inch;
- ☒ Yes – Pass  
☐ No – Fail

- ☒ 20. Subtract the measurement in 14 from the measurement in 10 and the measurement in 18 from the measurement in 10. Is the difference 3 inches or more for both?  
(S7.1.1.5(c)(8))
- ☒  $10 - 14 = 75 - 50 = 25$  inches;  
☒  $10 - 18 = 75 - 31 = 44$  inches;
- ☒ Yes – Pass  
☐ No – Fail

REMARKS:

Signature: Nicholas Huet

Date: 5/22/14

I certify that I have read and performed each instruction.



## DATA SHEET 9

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

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

- |                                     |     |                                                                                                 |
|-------------------------------------|-----|-------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | 1.  | The occupant is in the driver's seat.                                                           |
| <input checked="" type="checkbox"/> | 2.  | The seat belt is in the stowed position.                                                        |
| <input checked="" type="checkbox"/> | 3.  | The key is in the "on" or "start" position.                                                     |
| <input checked="" type="checkbox"/> | 4.  | The time duration of the audible signal beginning with key "on" or "start" is <u>5</u> seconds. |
| <input checked="" type="checkbox"/> | 5.  | The occupant is in the driver's seat.                                                           |
| <input checked="" type="checkbox"/> | 6.  | The seat belt is in the stowed position.                                                        |
| <input checked="" type="checkbox"/> | 7.  | The key is in the "on" or "start" position.                                                     |
| <input checked="" type="checkbox"/> | 8.  | The time duration of the warning light beginning with key "on" or "start" is <u>Stays On</u>    |
| <input checked="" type="checkbox"/> | 9.  | The occupant is in the driver's seat.                                                           |
| <input checked="" type="checkbox"/> | 10. | The seat belt is in the latched position and with at least 4 inches of belt webbing extended.   |
| <input checked="" type="checkbox"/> | 11. | The key is in the "on" or "start" position.                                                     |
| <input checked="" type="checkbox"/> | 12. | The time duration of the warning light beginning with key "on" or "start" is <u>0</u> seconds.  |
| <input checked="" type="checkbox"/> | 13. | Complete the following table with the data from 4, 8, and 12 to determine which option is used. |

|             |                                | Warning light             | Warning light specification | Audible signal           | Audible signal specification* |
|-------------|--------------------------------|---------------------------|-----------------------------|--------------------------|-------------------------------|
| S7.3 (a)(1) | Belt stowed & key on or start  | Item 8: <u>Stays On</u>   | 60 seconds minimum          | Item 4: <u>5 Seconds</u> | 4 to 8 seconds                |
| S7.3 (a)(2) | Belt latched & key on or start | Item 12: <u>0 Seconds</u> | 4 to 8 seconds              |                          |                               |
|             | Belt stowed & key on or start  | Item 8: <u>Stays On</u>   | 4 to 8 seconds              | Item 4: <u>5 Seconds</u> | 4 to 8 seconds                |

\* 49 USCS @ 30124 does NOT allow an audible signal to operate for more than 8 seconds.

A voluntary audible signal after the 4 to 8 second required signal may be provided. It must be differentiated from the required signal (5/25/2001 legal interpretation to Longacre and Associates).

- |                                     |     |                                                                                                       |
|-------------------------------------|-----|-------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | 14. | The seat belt warning system meets the requirements of (manufacturers may comply with either section) |
| <input checked="" type="checkbox"/> |     | S7.3 (a)(1)                                                                                           |
| <input checked="" type="checkbox"/> |     | S7.3 (a)(2)                                                                                           |
| <input type="checkbox"/>            |     | FAIL – Does NOT meet the requirements of either option                                                |
| <input checked="" type="checkbox"/> | 15. | Note wording of visual warning: (S7.3(a)(1) and S7.3(a)(2))                                           |
| <input type="checkbox"/>            |     | Fasten Seat Belts                                                                                     |
| <input type="checkbox"/>            |     | Fasten Belts                                                                                          |
| <input checked="" type="checkbox"/> |     | Symbol 101 -       |
| <input type="checkbox"/>            |     | FAIL – Does not use any of the above wording or symbol                                                |

I certify that I have read and performed each instruction.

Signature: Nicholas Abels

Date: 5/22/14

**DATA SHEET 10**  
**BELT CONTACT FORCE (S7.4.3)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

|                              |                   |
|------------------------------|-------------------|
| DESIGNATED SEATING POSITION: | Left Front Driver |
|------------------------------|-------------------|

- |                                                                                                                    |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 1.  | Does the vehicle incorporate a webbing tension-relieving device?<br><div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>Yes (this form is complete)</div> </div> <div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>X No (continue with this check sheet)</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 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)<br><div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>N/A – No lumbar adjustment</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 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)<br><div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>X N/A – No additional support adjustment</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 4.  | Is the fore-aft position of the seat adjustable?<br><div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>No – go to 5</div> </div> <div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>X Yes – go to 4.1</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 4.1 | Use all the seat controls that have any effect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. <b>Mark</b> this position. (8/31/95 legal interpretation to Hogan and Hartson)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 4.2 | Use all the seat controls that have any effects on the fore-aft movement of the seat to move the seat cushion to the foremost position. <b>Mark</b> this position. (8/31/95 legal interpretation to Hogan and Hartson)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 4.3 | <b>Mark</b> each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, <b>mark</b> each detent. For power seats, mark only the rearmost, middle and foremost positions. Label three of the positions with the following: F for foremost, 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 rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 4.1 and 4.2. (8/31/95 legal interpretation to Hogan and Hartson)                                                                                                                                                                                                                                                                                                    |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 4.4 | Move the seat to the mid position.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 4.5 | While maintaining the mid position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 5.  | Is the seat back angle adjustable?<br><div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>No- go to 6</div> </div> <div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>X Yes- go to 5.1</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 5.1 | Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a 50 <sup>th</sup> percentile adult male in the manner specified by the manufacturer.<br><div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>N/A – No seat back angle adjustment</div> </div> <div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>X Manufacturer's design seat back angle: <u>2.7° on Headrest Post</u></div> </div> <div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>X Tested seat back angle: <u>2.4° on Headrest Post</u></div> </div> |

- ☒ 6. Is the seat a bucket seat?
- ☒ Yes, go to 6.1 and skip 6.2
- ☐ No, go to 6.2 and skip 6.1
- ☒ 6.1 Bucket seats:  
Locate and mark the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- ☐ 6.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
- ☐ 6.2.1 Driver Seat  
Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)
- ☐ 6.2.2 Front Outboard Passenger Seat  
Locate and **mark** the longitudinal centerline of the passenger seat cushion. The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)
- ☐ Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. \_\_\_\_\_
- ☐ Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. \_\_\_\_\_
- ☐ 6.2.3 Rear designated seating positions  
Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline.
- ☒ 7. Position the test dummies according to dummy position placement instructions in Appendix F. **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**
- ☒ 8. Fasten the seat belt latch.
- ☒ 9. 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.
- ☒ 10. 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 (lb): **0.5**
- ☒ 0.0 to 0.7 pounds – Pass
- ☐ Greater than 0.7 pounds - FAIL

REMARKS:

Signature: Nicholas Huet

Date: 5/22/14

I certify that I have read and performed each instruction.

**DATA SHEET 10**  
**BELT CONTACT FORCE (S7.4.3)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

|                              |                                                       |
|------------------------------|-------------------------------------------------------|
| DESIGNATED SEATING POSITION: | Center Front Passenger – Not Applicable – Type 1 Belt |
|------------------------------|-------------------------------------------------------|

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

Yes (this form is complete)

No (continue with this check sheet)
- 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)

N/A – No lumbar adjustment
- 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)

N/A – No additional support adjustment
- 4. Is the fore-aft position of the seat adjustable?

No – go to 5

Yes – go to 4.1
- 4.1 Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- 4.2 Use all the seat controls that have any affects on the fore-aft movement of the seat to move the seat cushion to the foremost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- 4.3 **Mark** each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, **mark** each detent. For power seats, mark only the rearmost, middle and foremost positions. Label three of the positions with the following: F for foremost, 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 rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 4.1 and 4.2. (8/31/95 legal interpretation to Hogan and Hartson)
- 4.4 Move the seat to the mid position.
- 4.5 While maintaining the mid position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.
- 5. Is the seat back angle adjustable?

No- go to 6

Yes- go to 5.1
- 5.1 Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a 50<sup>th</sup> percentile adult male in the manner specified by the manufacturer.

N/A – No seat back angle adjustment

Manufacturer's design seat back angle:

Tested seat back angle:

- ☐ 6. Is the seat a bucket seat?  
☐ Yes, go to 6.1 and skip 6.2  
☐ No, go to 6.2 and skip 6.1
- ☐ 6.1 Bucket seats:  
Locate and mark the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- ☐ 6.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
- ☐ 6.2.1 Driver Seat  
Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)
- ☐ 6.2.2 Front Outboard Passenger Seat  
Locate and **mark** the longitudinal centerline of the passenger seat cushion. The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)  
☐ Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. \_\_\_\_\_  
☐ Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. \_\_\_\_\_
- ☐ 6.2.3 Rear designated seating positions  
Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline.
- ☐ 7. Position the test dummies according to dummy position placement instructions in Appendix F. **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**
- ☐ 8. Fasten the seat belt latch.
- ☐ 9. 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.
- ☐ 10. 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 (lb):  
☐ 0.0 to 0.7 pounds – Pass  
☐ **Greater than 0.7 pounds - FAIL**

REMARKS:

Signature: Nicholas Hertz Date: 5/22/14

I certify that I have read and performed each instruction.

**DATA SHEET 10**  
**BELT CONTACT FORCE (S7.4.3)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

|                              |                       |
|------------------------------|-----------------------|
| DESIGNATED SEATING POSITION: | Right Front Passenger |
|------------------------------|-----------------------|

- |                                                                                                                    |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 1.  | Does the vehicle incorporate a webbing tension-relieving device?<br><div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>Yes (this form is complete)</div> </div> <div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>X No (continue with this check sheet)</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 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)<br><div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>X N/A – No lumbar adjustment</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 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)<br><div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>X N/A – No additional support adjustment</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 4.  | Is the fore-aft position of the seat adjustable?<br><div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>No – go to 5</div> </div> <div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>X Yes – go to 4.1</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 4.1 | Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. <b>Mark</b> this position. (8/31/95 legal interpretation to Hogan and Hartson)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 4.2 | Use all the seat controls that have any affects on the fore-aft movement of the seat to move the seat cushion to the foremost position. <b>Mark</b> this position. (8/31/95 legal interpretation to Hogan and Hartson)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 4.3 | <b>Mark</b> each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, <b>mark</b> each detent. For power seats, mark only the rearmost, middle and foremost positions. Label three of the positions with the following: F for foremost, 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 rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 4.1 and 4.2. (8/31/95 legal interpretation to Hogan and Hartson)                                                                                                                                                                                                                                                                                                    |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 4.4 | Move the seat to the mid position.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 4.5 | While maintaining the mid position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 5.  | Is the seat back angle adjustable?<br><div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>No- go to 6</div> </div> <div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>X Yes- go to 5.1</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <div style="background-color: yellow; border: 1px solid black; padding: 2px; width: 20px; margin: 0 auto;">X</div> | 5.1 | Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a 50 <sup>th</sup> percentile adult male in the manner specified by the manufacturer.<br><div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>N/A – No seat back angle adjustment</div> </div> <div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>X Manufacturer's design seat back angle: <u>2.7° on Headrest Post</u></div> </div> <div style="display: flex; margin-top: 5px;"> <div style="width: 20px; height: 15px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></div> <div>X Tested seat back angle: <u>2.6° on Headrest Post</u></div> </div> |

- ☒ 6. Is the seat a bucket seat?  
☒ Yes, go to 6.1 and skip 6.2  
☐ No, go to 6.2 and skip 6.1
- ☒ 6.1 Bucket seats:  
 Locate and mark the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- ☐ 6.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
- ☐ 6.2.1 Driver Seat  
 Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)
- ☐ 6.2.2 Front Outboard Passenger Seat  
 Locate and **mark** the longitudinal centerline of the passenger seat cushion. The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)  
☐ Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. \_\_\_\_\_  
☐ Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. \_\_\_\_\_
- ☐ 6.2.3 Rear designated seating positions  
 Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline.
- ☒ 7. Position the test dummies according to dummy position placement instructions in Appendix F. **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**
- ☒ 8. Fasten the seat belt latch.
- ☒ 9. 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.
- ☒ 10. 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 (lb): **0.5**  
☒ 0.0 to 0.7 pounds – Pass  
☐ Greater than 0.7 pounds - FAIL

REMARKS:

Signature: Nicholas Huetts Date: 5/22/14

I certify that I have read and performed each instruction.



**DATA SHEET 10**  
**BELT CONTACT FORCE (S7.4.3)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

|                              |                     |
|------------------------------|---------------------|
| DESIGNATED SEATING POSITION: | Left Rear Passenger |
|------------------------------|---------------------|

- ☒ 1. Does the vehicle incorporate a webbing tension-relieving device?  
☐ Yes (this form is complete)  
☒ No (continue with this check sheet)
- ☒ 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)  
☒ N/A – No lumbar adjustment
- ☒ 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)  
☒ N/A – No additional support adjustment
- ☒ 4. Is the fore-aft position of the seat adjustable?  
☒ No – go to 5  
☐ Yes – go to 4.1
- ☐ 4.1 Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- ☐ 4.2 Use all the seat controls that have any affects on the fore-aft movement of the seat to move the seat cushion to the foremost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- ☐ 4.3 **Mark** each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, **mark** each detent. For power seats, mark only the rearmost, middle and foremost positions. Label three of the positions with the following: F for foremost, 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 rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 4.1 and 4.2. (8/31/95 legal interpretation to Hogan and Hartson)
- ☐ 4.4 Move the seat to the mid position.
- ☐ 4.5 While maintaining the mid position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.
- ☒ 5. Is the seat back angle adjustable?  
☒ No- go to 6  
☐ Yes- go to 5.1
- ☐ 5.1 Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a 50<sup>th</sup> percentile adult male in the manner specified by the manufacturer.  
☐ N/A – No seat back angle adjustment  
☐ Manufacturer's design seat back angle: \_\_\_\_\_  
☐ Tested seat back angle: \_\_\_\_\_



- ☒ 6. Is the seat a bucket seat?  
☐ Yes, go to 6.1 and skip 6.2  
☒ No, go to 6.2 and skip 6.1
- ☐ 6.1 Bucket seats:  
 Locate and mark the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- ☒ 6.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
- ☐ 6.2.1 Driver Seat  
 Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)
- ☐ 6.2.2 Front Outboard Passenger Seat  
 Locate and **mark** the longitudinal centerline of the passenger seat cushion. The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)  
☐ Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. \_\_\_\_\_  
☐ Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. \_\_\_\_\_
- ☒ 6.2.3 Rear designated seating positions  
 Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline.
- ☒ 7. Position the test dummies according to dummy position placement instructions in Appendix F. **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**
- ☒ 8. Fasten the seat belt latch.
- ☒ 9. 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.
- ☒ 10. 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 (lb): **0.5**  
☒ 0.0 to 0.7 pounds – Pass  
☐ Greater than 0.7 pounds - FAIL

REMARKS:

I certify that I have read and performed each instruction.

Signature: Nicholas Hertz

Date: 5/22/14

**DATA SHEET 10**  
**BELT CONTACT FORCE (S7.4.3)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

|                              |                       |
|------------------------------|-----------------------|
| DESIGNATED SEATING POSITION: | Center Rear Passenger |
|------------------------------|-----------------------|

- |                                                                                                                                                                                                                                                                                                     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"><div style="background-color: black; width: 10px; height: 10px; display: flex; align-items: center; justify-content: center;">X</div></div> | 1.  | Does the vehicle incorporate a webbing tension-relieving device?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                     |     | <div style="display: flex; align-items: center;"><div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"></div> Yes (this form is complete)</div>                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                                     |     | <div style="display: flex; align-items: center;"><div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">X</div> No (continue with this check sheet)</div>                                                                                                                                                                                                                                                                                                                                                                  |
| <div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"><div style="background-color: black; width: 10px; height: 10px; display: flex; align-items: center; justify-content: center;">X</div></div> | 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                                                                                                                                                                                                                                                                                     |     | <div style="display: flex; align-items: center;"><div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">X</div> N/A – No lumbar adjustment</div>                                                                                                                                                                                                                                                                                                                                                                           |
| <div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"><div style="background-color: black; width: 10px; height: 10px; display: flex; align-items: center; justify-content: center;">X</div></div> | 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                                                                                                                                                                                                                                                                     |     | <div style="display: flex; align-items: center;"><div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">X</div> N/A – No additional support adjustment</div>                                                                                                                                                                                                                                                                                                                                                               |
| <div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"><div style="background-color: black; width: 10px; height: 10px; display: flex; align-items: center; justify-content: center;">X</div></div> | 4.  | Is the fore-aft position of the seat adjustable?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                                                                     |     | <div style="display: flex; align-items: center;"><div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">X</div> No – go to 5</div>                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                     |     | <div style="display: flex; align-items: center;"><div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"></div> Yes – go to 4.1</div>                                                                                                                                                                                                                                                                                                                                                                                       |
| <div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"></div>                                                                                                                                      | 4.1 | Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. <b>Mark</b> this position. (8/31/95 legal interpretation to Hogan and Hartson)                                                                                                                                                                                                                                                                                                                                                                                                       |
| <div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"></div>                                                                                                                                      | 4.2 | Use all the seat controls that have any affects on the fore-aft movement of the seat to move the seat cushion to the foremost position. <b>Mark</b> this position. (8/31/95 legal interpretation to Hogan and Hartson)                                                                                                                                                                                                                                                                                                                                                                                                      |
| <div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"></div>                                                                                                                                      | 4.3 | <b>Mark</b> each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, <b>mark</b> each detent. For power seats, mark only the rearmost, middle and foremost positions. Label three of the positions with the following: F for foremost, 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 rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 4.1 and 4.2. (8/31/95 legal interpretation to Hogan and Hartson) |
| <div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"></div>                                                                                                                                      | 4.4 | Move the seat to the mid position.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"></div>                                                                                                                                      | 4.5 | While maintaining the mid position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.                                                                                                                                                                                                                                                                                                                                                                                                        |
| <div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"><div style="background-color: black; width: 10px; height: 10px; display: flex; align-items: center; justify-content: center;">X</div></div> | 5.  | Is the seat back angle adjustable?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                                                                                                                                                                                                                                                     |     | <div style="display: flex; align-items: center;"><div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">X</div> No- go to 6</div>                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                                                                                                                                                                                                                                                     |     | <div style="display: flex; align-items: center;"><div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"></div> Yes- go to 5.1</div>                                                                                                                                                                                                                                                                                                                                                                                        |
| <div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"></div>                                                                                                                                      | 5.1 | Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a 50 <sup>th</sup> percentile adult male in the manner specified by the manufacturer.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                                                                                                                                                                                                                     |     | <div style="display: flex; align-items: center;"><div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"></div> N/A – No seat back angle adjustment</div>                                                                                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                     |     | <div style="display: flex; align-items: center;"><div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"></div> Manufacturer's design seat back angle: _____</div>                                                                                                                                                                                                                                                                                                                                                          |
|                                                                                                                                                                                                                                                                                                     |     | <div style="display: flex; align-items: center;"><div style="background-color: yellow; border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"></div> Tested seat back angle: _____</div>                                                                                                                                                                                                                                                                                                                                                                         |

- ☒ 6. Is the seat a bucket seat?
- ☐ Yes, go to 6.1 and skip 6.2
- ☒ No, go to 6.2 and skip 6.1
- ☐ 6.1 Bucket seats:  
Locate and mark the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- ☒ 6.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
- ☐ 6.2.1 Driver Seat  
Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)
- ☐ 6.2.2 Front Outboard Passenger Seat  
Locate and **mark** the longitudinal centerline of the passenger seat cushion. The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)
- ☐ Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. \_\_\_\_\_
- ☐ Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. \_\_\_\_\_
- ☒ 6.2.3 Rear designated seating positions  
Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline.
- ☒ 7. Position the test dummies according to dummy position placement instructions in Appendix F. **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**
- ☒ 8. Fasten the seat belt latch.
- ☒ 9. 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.
- ☒ 10. 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 (lb): **0.6**
- ☒ 0.0 to 0.7 pounds – Pass
- ☐ Greater than 0.7 pounds - FAIL

REMARKS:

I certify that I have read and performed each instruction.

Signature: Nicholas Hertz

Date: 5/22/14

**DATA SHEET 10**  
**BELT CONTACT FORCE (S7.4.3)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

|                              |                      |
|------------------------------|----------------------|
| DESIGNATED SEATING POSITION: | Right Rear Passenger |
|------------------------------|----------------------|

- |                                     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | 1.  | Does the vehicle incorporate a webbing tension-relieving device?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                     |     | <input type="checkbox"/> Yes (this form is complete)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                     |     | <input checked="" type="checkbox"/> No (continue with this check sheet)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <input checked="" type="checkbox"/> | 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                     |     | <input checked="" type="checkbox"/> N/A – No lumbar adjustment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <input checked="" type="checkbox"/> | 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                     |     | <input checked="" type="checkbox"/> N/A – No additional support adjustment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <input checked="" type="checkbox"/> | 4.  | Is the fore-aft position of the seat adjustable?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                     |     | <input checked="" type="checkbox"/> No – go to 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                     |     | <input type="checkbox"/> Yes – go to 4.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <input type="checkbox"/>            | 4.1 | Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. <b>Mark</b> this position. (8/31/95 legal interpretation to Hogan and Hartson)                                                                                                                                                                                                                                                                                                                                                                                                       |
| <input type="checkbox"/>            | 4.2 | Use all the seat controls that have any affects on the fore-aft movement of the seat to move the seat cushion to the foremost position. <b>Mark</b> this position. (8/31/95 legal interpretation to Hogan and Hartson)                                                                                                                                                                                                                                                                                                                                                                                                      |
| <input type="checkbox"/>            | 4.3 | <b>Mark</b> each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, <b>mark</b> each detent. For power seats, mark only the rearmost, middle and foremost positions. Label three of the positions with the following: F for foremost, 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 rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 4.1 and 4.2. (8/31/95 legal interpretation to Hogan and Hartson) |
| <input type="checkbox"/>            | 4.4 | Move the seat to the mid position.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <input type="checkbox"/>            | 4.5 | While maintaining the mid position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.                                                                                                                                                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | 5.  | Is the seat back angle adjustable?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                     |     | <input checked="" type="checkbox"/> No- go to 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                                     |     | <input type="checkbox"/> Yes- go to 5.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <input type="checkbox"/>            | 5.1 | Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a 50 <sup>th</sup> percentile adult male in the manner specified by the manufacturer.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                     |     | <input type="checkbox"/> N/A – No seat back angle adjustment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                     |     | <input type="checkbox"/> Manufacturer's design seat back angle: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                     |     | <input type="checkbox"/> Tested seat back angle: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

- ☒ 6. Is the seat a bucket seat?
- ☐ Yes, go to 6.1 and skip 6.2
- ☒ No, go to 6.2 and skip 6.1
- ☐ 6.1 Bucket seats:  
Locate and mark the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- ☒ 6.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
- ☐ 6.2.1 Driver Seat  
Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)
- ☐ 6.2.2 Front Outboard Passenger Seat  
Locate and **mark** the longitudinal centerline of the passenger seat cushion. The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)
- ☐ Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. \_\_\_\_\_
- ☐ Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. \_\_\_\_\_
- ☒ 6.2.3 Rear designated seating positions  
Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline.
- ☒ 7. Position the test dummies according to dummy position placement instructions in Appendix F. **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**
- ☒ 8. Fasten the seat belt latch.
- ☒ 9. 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.
- ☒ 10. 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 (lb): **0.5**
- ☒ 0.0 to 0.7 pounds – Pass
- ☐ Greater than 0.7 pounds - FAIL

REMARKS:

I certify that I have read and performed each instruction.

Signature: Nicholas Huth

Date: 5/22/14

**DATA SHEET 11**  
**LATCH PLATE ACCESS (S7.4.4)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

|                              |                   |
|------------------------------|-------------------|
| DESIGNATED SEATING POSITION: | Left Front Driver |
|------------------------------|-------------------|

- ☒

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
- ☒

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. Is the fore-aft position of the seat adjustable?

☐ No – go to 4  
☒ Yes – go to 3.1
- ☒

3.1 Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- ☒

3.2 While maintaining the forward most position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.
- ☒

4. Is the seat back angle adjustable?

☐ No- go to 5  
☒ Yes- go to 4.1
- ☒

4.1 Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a **50<sup>th</sup> percentile adult male** in the manner specified by the manufacturer.

☐ N/A – No seat back angle adjustment  
☒ Manufacturer's design seat back angle: 2.7° on Headrest Post  
☒ Tested seat back angle: 2.4° on Headrest Post
- ☒

5. Is the seat a bucket seat?

☒ Yes, go to 5.1 and skip 5.2  
☐ No, go to 5.2 and skip 5.1
- ☒

5.1 Bucket seats:  
 Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- ☐

5.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
- ☐

5.2.1 Driver Seat  
 Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)

☐ 5.2.2 Front Outboard Passenger Seat

Locate and **mark** the longitudinal centerline of the passenger seat cushion. The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)

☐ Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. \_\_\_\_\_

☐ Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. \_\_\_\_\_

☒ 6. Position the test dummy using the procedures in Appendix F. (Some modifications to the positioning procedure may need to be made because the seat is in the forward most position. Note on the Appendix F positioning check sheet any deviations necessary to position the Part 572, Subpart E dummy). **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**

☒ 7. Position the adjustable seat belt anchorage in the manufacturer's nominal design position for a 50<sup>th</sup> percentile adult male occupant.

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

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

☒ 10. Place the latch plate in the stowed position.

☒ 11. Extend the inboard reach string in front of the dummy and then backward and outboard to the latch plate to generate arcs of the reach envelope of the test dummy's arms. Is the latch plate within the reach envelope?

☒ Yes – Pass

☐ No

☒ 12. Extend the outboard reach string in front of the dummy and then backward and outboard to the latch plate to generate arcs of the reach envelope of the test dummy's arms. Is the latch plate within the reach envelope?

☒ Yes – Pass

☐ No

☒ 13. Is the latch plate within the inboard (item 11) or outboard (item 12) reach envelope?

☒ Yes – Pass

☐ No – Fail

☒ 14. 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?

☒ Yes – Pass

☐ No – Fail

REMARKS:

Signature: Nicholas Aerts

Date: 5/22/14

I certify that I have read and performed each instruction.



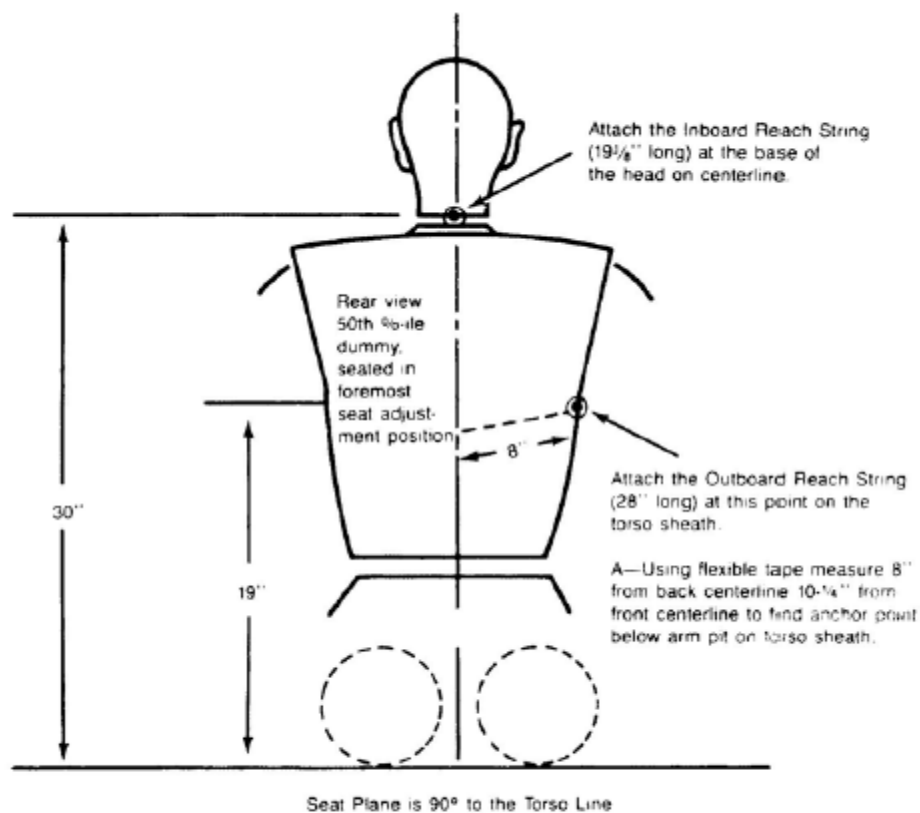


Figure 3. Location of Anchoring Points for Latchplate Reach Limiting Chains or Strings to Test for Latchplate Accessibility Using Subpart E Test Device

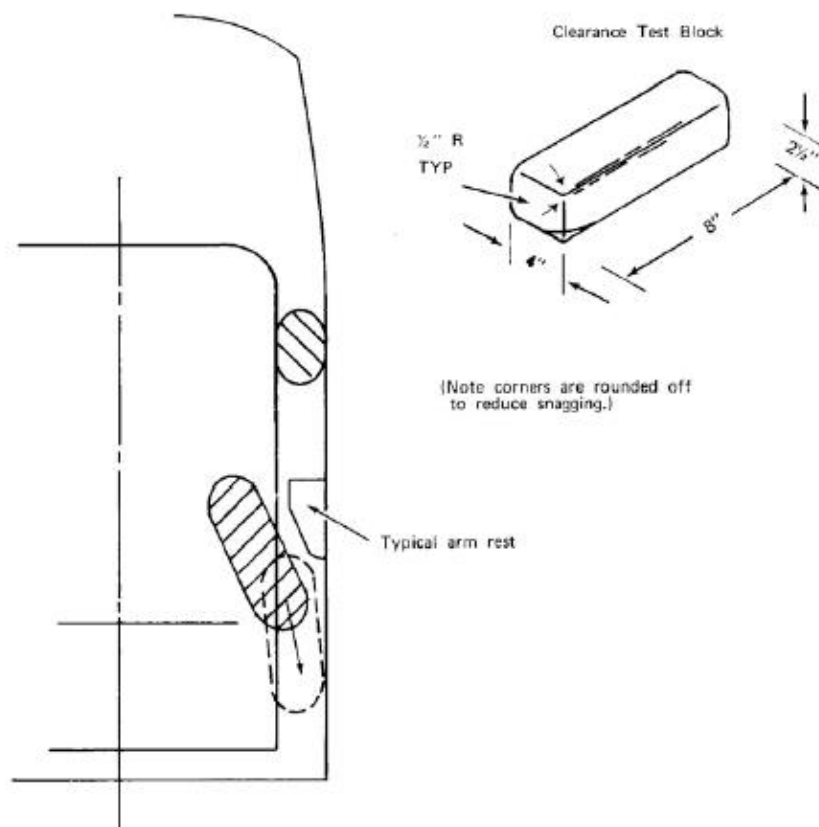


Figure 4—USE OF CLEARANCE TEST BLOCK TO DETERMINE HAND/ARM ACCESS



**DATA SHEET 11**  
**LATCH PLATE ACCESS (S7.4.4)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

|                              |                       |
|------------------------------|-----------------------|
| DESIGNATED SEATING POSITION: | Right Front Passenger |
|------------------------------|-----------------------|

- ☒ 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
- ☒ 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. Is the fore-aft position of the seat adjustable?
  - ☐ No – go to 4
  - ☒ Yes – go to 3.1
- ☒ 3.1 Use all the seat controls that have any effect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- ☒ 3.2 While maintaining the forward most position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.
- ☒ 4. Is the seat back angle adjustable?
  - ☐ No- go to 5
  - ☒ Yes- go to 4.1
- ☒ 4.1 Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a **50<sup>th</sup> percentile adult male** in the manner specified by the manufacturer.
  - ☐ N/A – No seat back angle adjustment
  - ☒ Manufacturer's design seat back angle: 2.7° on Headrest Post
  - ☒ Tested seat back angle: 2.6° on Headrest Post
- ☒ 5. Is the seat a bucket seat?
  - ☒ Yes, go to 5.1 and skip 5.2
  - ☐ No, go to 5.2 and skip 5.1
- ☒ 5.1 Bucket seats:
  - Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- ☐ 5.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
  - ☐ 5.2.1 Driver Seat
    - Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)

☐ 5.2.2 Front Outboard Passenger Seat

Locate and **mark** the longitudinal centerline of the passenger seat cushion.  
The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)

☐ Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. \_\_\_\_\_

☐ Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. \_\_\_\_\_

☒ 6. Position the test dummy using the procedures in Appendix F. (Some modifications to the positioning procedure may need to be made because the seat is in the forward most position. Note on the Appendix F positioning check sheet any deviations necessary to position the Part 572, Subpart E dummy). **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**

☒ 7. Position the adjustable seat belt anchorage in the manufacturer's nominal design position for a 50<sup>th</sup> percentile adult male occupant.

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

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

☒ 10. Place the latch plate in the stowed position.

☒ 11. Extend the inboard reach string in front of the dummy and then backward and outboard to the latch plate to generate arcs of the reach envelope of the test dummy's arms. Is the latch plate within the reach envelope?

☒ Yes – Pass

☐ No

☒ 12. Extend the outboard reach string in front of the dummy and then backward and outboard to the latch plate to generate arcs of the reach envelope of the test dummy's arms. Is the latch plate within the reach envelope?

☒ Yes – Pass

☐ No

☒ 13. Is the latch plate within the inboard (item 11) or outboard (item 12) reach envelope?

☒ Yes – Pass

☐ No – Fail

☒ 14. 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?

☒ Yes – Pass

☐ No – Fail

REMARKS:

Signature: Nicholas Hertz

Date: 5/22/14

I certify that I have read and performed each instruction.

**DATA SHEET 12**  
**SEAT BELT RETRACTION (S7.4.5)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

|                              |                   |
|------------------------------|-------------------|
| DESIGNATED SEATING POSITION: | Left Front Driver |
|------------------------------|-------------------|

- ☒ 1. Is the vehicle a passenger car or walk-in van-type vehicle?  
☐ Yes, this form is complete  
☒ No
- ☒ 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)  
☐ N/A – No lumbar adjustment
- ☒ 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)  
☒ N/A – No additional support adjustment
- ☒ 4. Is the fore-aft position of the seat adjustable?  
☐ No – go to 5  
☒ Yes – go to 4.1
- ☒ 4.1 Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- ☒ 4.2 Use all the seat controls that have any affects on the fore-aft movement of the seat to move the seat cushion to the foremost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- ☒ 4.3 **Mark** each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, **mark** each detent. For power seats, mark only the rearmost, middle and foremost positions. Label three of the positions with the following: F for foremost, 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 rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 4.1 and 4.2. (8/31/95 legal interpretation to Hogan and Hartson)
- ☒ 4.4 Move the seat to the mid position.
- ☒ 4.5 While maintaining the mid position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.
- ☒ 5. Is the seat back angle adjustable?  
☐ No- go to 6  
☒ Yes- go to 5.1
- ☒ 5.1 Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a **50<sup>th</sup> percentile adult male** in the manner specified by the manufacturer.  
☐ N/A – No seat back angle adjustment  
☒ Manufacturer's design seat back angle: 2.7° on Headrest Post  
☒ Tested seat back angle: 2.4° on Headrest Post

- ☒ 6. Is the seat a bucket seat?  
☒ Yes, go to 6.1 and skip 6.2  
☐ No, go to 6.2 and skip 6.1
- ☒ 6.1 Bucket Seats:  
 Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- ☐ 6.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
- ☐ 6.2. Driver Seat  
 1 Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)
- ☐ 6.2. Front Outboard Passenger Seat  
 2 Locate and **mark** the longitudinal centerline of the passenger seat cushion. The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)  
☐ Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. \_\_\_\_\_  
☐ Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. \_\_\_\_\_
- ☒ 7. Position the Part 572 Subpart E test dummy according to dummy position placement instructions in Appendix F. **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**
- ☒ 8. Fasten the seat belt around the dummy.
- ☒ 9. Remove all slack from the lap belt portion. (S10.9)  
☐ N/A, the seat does not have a fore-aft adjustment
- ☒ 10. Pull the upper torso webbing out of the retractor and allow it to retract; repeat this four times. (S10.9)
- ☒ 11. Apply a 2 to 4 pound tension load to the lap belt. (S10.9)  
**Pound load applied: 3 lbs**
- ☒ 12. Is the belt system equipped with a tension relieving device?  
☐ Yes, continue  
☒ No, go to 14
- ☐ 13. 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).
- ☒ 14. Check the statement that applies to this test vehicle:
- ☐ 14.1 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 go to 15  
☐ No – go to 14.2
- ☒ 14.2 The torso and lap belt webbing of the seat belt system automatically retracts when the seat belt latch plate is released.  
☒ Yes – Pass go to 15  
☐ No – go to 14.3
- ☐ 14.3 Neither 14.1 nor 14.2 apply – Fail
- ☒ 15. 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

- ☒ 16. If this test vehicle has an open body (without doors) and has a belt system with a tension relieving device, does the belt system fully retract when the tension-relieving device is deactivated?
- ☒ N/A – Not an open body vehicle  
☐ Yes – Pass  
☐ No – Fail

REMARKS:

Signature: Nicholas Harts Date: 5/22/14

I certify that I have read and performed each instruction.

**DATA SHEET 12**  
**SEAT BELT RETRACTION (S7.4.5)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

|                              |                       |
|------------------------------|-----------------------|
| DESIGNATED SEATING POSITION: | Right Front Passenger |
|------------------------------|-----------------------|

- ☒ 1. Is the vehicle a passenger car or walk-in van-type vehicle?
  - ☐ Yes, this form is complete
  - ☒ No
- ☒ 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)
  - ☒ N/A – No lumbar adjustment
- ☒ 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)
  - ☒ N/A – No additional support adjustment
- ☒ 4. Is the fore-aft position of the seat adjustable?
  - ☐ No – go to 5
  - ☒ Yes – go to 4.1
- ☒ 4.1 Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- ☒ 4.2 Use all the seat controls that have any affects on the fore-aft movement of the seat to move the seat cushion to the foremost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- ☒ 4.3 **Mark** each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, **mark** each detent. For power seats, mark only the rearmost, middle and foremost positions. Label three of the positions with the following: F for foremost, 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 rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 4.1 and 4.2. (8/31/95 legal interpretation to Hogan and Hartson)
- ☒ 4.4 Move the seat to the mid position.
- ☒ 4.5 While maintaining the mid position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.
- ☒ 5. Is the seat back angle adjustable?
  - ☐ No- go to 6
  - ☒ Yes- go to 5.1
- ☒ 5.1 Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a **50<sup>th</sup> percentile adult male** in the manner specified by the manufacturer.
  - ☐ N/A – No seat back angle adjustment
  - ☒ Manufacturer's design seat back angle: 2.7° on Headrest Post
  - ☒ Tested seat back angle: 2.6° on Headrest Post

- ☒ 6. Is the seat a bucket seat?
- ☒ Yes, go to 6.1 and skip 6.2
- ☐ No, go to 6.2 and skip 6.1
- ☒ 6.1 Bucket Seats:
- Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- ☐ 6.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
- ☐ 6.2. Driver Seat
- 1 Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)
- ☐ 6.2. Front Outboard Passenger Seat
- 2 Locate and **mark** the longitudinal centerline of the passenger seat cushion. The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)
- ☐ Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. \_\_\_\_\_
- ☐ Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. \_\_\_\_\_
- ☒ 7. Position the Part 572 Subpart E test dummy according to dummy position placement instructions in Appendix F. **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**
- ☒ 8. Fasten the seat belt around the dummy.
- ☒ 9. Remove all slack from the lap belt portion. (S10.9)
- ☐ N/A, the seat does not have a fore-aft adjustment
- ☒ 10. Pull the upper torso webbing out of the retractor and allow it to retract; repeat this four times. (S10.9)
- ☒ 11. Apply a 2 to 4 pound tension load to the lap belt. (S10.9)
- ☒ **Pound load applied: 3 lbs**
- ☒ 12. Is the belt system equipped with a tension relieving device?
- ☐ Yes, continue
- ☒ No, go to 14
- ☐ 13. 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).
- ☒ 14. Check the statement that applies to this test vehicle:
- ☒ 14.1 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 go to 15
- ☐ No – go to 14.2
- ☒ 14.2 The torso and lap belt webbing of the seat belt system automatically retracts when the seat belt latch plate is released.
- ☒ Yes – Pass go to 15
- ☐ No – go to 14.3
- ☐ 14.3 Neither 14.1 nor 14.2 apply – Fail
- ☒ 15. 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

- ☒ 16. 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?
- |                                     |                                |
|-------------------------------------|--------------------------------|
| <input checked="" type="checkbox"/> | N/A – Not an open body vehicle |
| <input type="checkbox"/>            | Yes – Pass                     |
| <input type="checkbox"/>            | No – Fail                      |

REMARKS:

Signature: Nicholas Harts Date: 5/22/14

I certify that I have read and performed each instruction.



# DATA SHEET 13

## SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

DESIGNATED SEATING POSITION: Left Front Driver

- ☒ 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, go to 2
- ☒ 2. Is the seat removable? (S7.4.6.1(b))  
☐ Yes, this form is complete ☒ No, go 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, 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 ☐ N/A – Rear seat

REMARKS:

Signature: Nicholas Abels

Date: 5/22/14

I certify that I have read and performed each instruction.

# DATA SHEET 13

## SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

DESIGNATED SEATING POSITION: Center Front Passenger

- ☒ 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, go to 2
- ☒ 2. Is the seat removable? (S7.4.6.1(b))  
☐ Yes, this form is complete ☒ No, go 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, 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 ☐ N/A – Rear seat

REMARKS:

Signature: Nicholas Abels

Date: 5/22/14

I certify that I have read and performed each instruction.

# DATA SHEET 13

## SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

DESIGNATED SEATING POSITION: Right Front Passenger

- ☒ 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, go to 2
- ☒ 2. Is the seat removable? (S7.4.6.1(b))  
☐ Yes, this form is complete ☒ No, go 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, 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 ☐ N/A – Rear seat

REMARKS:

Signature: Nicholas Abels

Date: 5/22/14

I certify that I have read and performed each instruction.

# DATA SHEET 13

## SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

DESIGNATED SEATING POSITION: Left Rear Passenger

- ☒ 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, go to 2
- ☒ 2. Is the seat removable? (S7.4.6.1(b))  
☐ Yes, this form is complete ☒ No, go 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, 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 ☐ N/A – Rear seat

REMARKS:

Signature: Nicholas Abels

Date: 5/22/14

I certify that I have read and performed each instruction.

# DATA SHEET 13

## SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

DESIGNATED SEATING POSITION: Center Rear Passenger

- ☒ 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, go to 2
- ☒ 2. Is the seat removable? (S7.4.6.1(b))  
☐ Yes, this form is complete ☒ No, go 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, 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 ☐ N/A – Rear seat

REMARKS:

Signature: Nicholas Abels

Date: 5/22/14

I certify that I have read and performed each instruction.

# DATA SHEET 13

## SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Nicholas Abels

NHTSA No.: C20140103  
 Test Date: 5/22/14

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.

DESIGNATED SEATING POSITION: Right Rear Passenger

- |                                     |     |                                                                                                                                                                                                                                                                                                        |                                                                |                                                                             |
|-------------------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | 1.  | Is the seat cushion movable so that the seat back serves a function other than seating? (S7.4.6.1(b))                                                                                                                                                                                                  | <input type="checkbox"/> Yes, this form is complete            | <input checked="" type="checkbox"/> No, go to 2                             |
| <input checked="" type="checkbox"/> | 2.  | Is the seat removable? (S7.4.6.1(b))                                                                                                                                                                                                                                                                   | <input type="checkbox"/> Yes, this form is complete            | <input checked="" type="checkbox"/> No, go to 3                             |
| <input checked="" type="checkbox"/> | 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))                                                                                                                                                                                | <input checked="" type="checkbox"/> Yes, this form is complete | <input type="checkbox"/> No, go to 4                                        |
| <input type="checkbox"/>            | 4.  | Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back? (S7.4.6.1(a))                                                                                                                                                                                      | <input type="checkbox"/> Yes, go to 5                          | <input type="checkbox"/> No, this form is complete                          |
| <input type="checkbox"/>            | 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)) | <input type="checkbox"/> Yes – Pass                            | <input type="checkbox"/> No – Fail                                          |
|                                     |     | Identify the part(s) on top or above the seat.                                                                                                                                                                                                                                                         | <input type="checkbox"/> Seat belt latch plate                 | <input type="checkbox"/> Buckle <input type="checkbox"/> Seat belt webbing  |
| <input type="checkbox"/>            | 6.  | Are the remaining two seat belt parts accessible under normal conditions?                                                                                                                                                                                                                              | <input type="checkbox"/> Yes – Pass                            | <input type="checkbox"/> No – Fail                                          |
| <input type="checkbox"/>            | 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)                                                                                     | <input type="checkbox"/> Yes – Pass                            | <input type="checkbox"/> No – Fail                                          |
| <input type="checkbox"/>            | 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)                                                                                                      | <input type="checkbox"/> Yes – Pass                            | <input type="checkbox"/> No – Fail                                          |
| <input type="checkbox"/>            | 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)                                                                        | <input type="checkbox"/> Yes – Pass                            | <input type="checkbox"/> No – Fail                                          |
| <input type="checkbox"/>            | 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)                                                          | <input type="checkbox"/> Yes – Pass                            | <input type="checkbox"/> No – Fail <input type="checkbox"/> N/A – Rear seat |

REMARKS:

Signature: Nicholas Abels

Date: 5/22/14

I certify that I have read and performed each instruction.

DATA SHEET 16

AIR BAG SUPPRESSION TELLTALE (S19.2.2)

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance  
Test Technician: Nicholas Abels

NHTSA No.: C20140103  
Test Date: 6/4/14

- ☒ 1. Is the vehicle certified to any suppression performance standards of FMVSS 208?  
☒ Yes - go to 2  
☐ No - this form is complete
- ☒ 2. Does telltale emit yellow light when the air bag is suppressed? (S19.2.2 (a))  
☒ Yes - Pass **NO - FAIL**
- ☒ 3. Are the words "PASSENGER AIR BAG OFF" or "PASS AIR BAG OFF" (S19.2.2 (b))  
☒ 3.1 on the telltale? (S19.2.2 (b))  
☒ Yes - Pass, go to 4  
☐ No - go to 3.2
- ☐ 3.2 Within 25 mm of the telltale? (S19.2.2 (b)) 3 mm from the edge of the telltale light  
☐ Yes - Pass **NO - FAIL**
- ☒ 4. Is the telltale separate from the air bag readiness indicator? (S19.2.2(c))  
☒ Yes - Pass **NO - FAIL**
- ☒ 5. Is the telltale within the interior of the vehicle? (S19.2.2 (d))  
☒ Yes - Pass **NO - FAIL**
- ☒ 6. Is the telltale forward of and above the design H-point of both the driver's and the front outboard passenger's seat when the seats are in their forwardmost seating positions? (S19.2.2 (d))  
☒ Yes - Pass **NO - FAIL**
- ☒ 7. Is the telltale away from surfaces that can be used for temporary or permanent storage of objects that could obscure the telltale from either the driver's or front outboard passenger's view? (S19.2.2 (d))  
☒ Yes - Pass **NO - FAIL**
- ☒ 8. Is the telltale located so that it is not obscured from the driver or front outboard passenger by a rear-facing child restraint in Appendix A installed in the front outboard passenger seat? (S19.2.2 (d))  
☒ Yes - Pass **NO - FAIL**
- ☒ 9. Is the telltale visible or recognizable during the night? (S19.2.2 (e))  
☒ Yes - Pass **NO - FAIL**
- ☒ 10. Is the telltale visible or recognizable during the day? (S19.2.2 (e))  
☒ Yes - Pass **NO - FAIL**
- ☒ 11. If there is a visibility adjustment, do all the adjustment levels make the telltale visible and recognizable? (S19.2.2 (g))  
☐ N/A-No visibility adjustment  
☒ Yes - Pass **NO - FAIL**
- ☒ 12. Does the telltale remain illuminated while the air bag is suppressed? (S19.2.2 (h)) (Leave the air bag suppressed for 5 minutes.)  
☒ Yes - Pass **NO - FAIL**
- ☒ 13. Is the telltale off while the air bag is activated? (S19.2.2 (h)) (Leave the air bag activated for 5 minutes.)  
☒ Yes - Pass **NO - FAIL**

Signature: Nicholas Abels

Date: 6/4/14

I certify that I have read and performed each instruction.



## DATA SHEET 17 SUMMARY

### Suppression Test Using 12-Month-Old CRABI Dummy (Part 572, Subpart R) Section B Rear Facing CRS

|             |              |                   |        |
|-------------|--------------|-------------------|--------|
| NHTSA NO.:  | C20140103    | TEST DATE:        | 6/4/14 |
| LABORATORY: | MGA          | TECHNICIAN(S):    | NA     |
| DUMMY TYPE: | 12 Month Old | DUMMY SERIAL NO.: | 062    |

|                        |                                      |
|------------------------|--------------------------------------|
| CHILD RESTRAINT NAME:  | Cosco                                |
| CHILD RESTRAINT MODEL: | Arriva 22-049 (same as model 22-013) |
| DATE OF MANUFACTURE:   | 8-20-2008                            |

Base: ☒ On ☐ Off ☐ N/A-Restraint does not have a removable base

Manufacturer's design seat back angle: 2.7° on Headrest Post  
Tested seat back angle: 2.6° on Headrest Post  
Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0  
Tested anchorage position: 0 of 4; Upper-most defined as 0

A blanket and visor were not used in the suppression testing because they did not affect the weight sensing system used on the vehicle.

#### Test Summary

| Seat Belt                     | Seat Slide  | Cinch Load (N) | Result     |
|-------------------------------|-------------|----------------|------------|
| Belted<br>Rear<br>Facing      | Forward 5*  | 130            | Suppressed |
|                               | Middle      | 127            | Suppressed |
|                               | Rearward    | 128            | Suppressed |
| Unbelted<br>Rear<br>Facing    | Forward 11* | N/A            | Suppressed |
|                               | Middle      | N/A            | Suppressed |
|                               | Rearward    | N/A            | Suppressed |
| Unbelted<br>Forward<br>Facing | Forward 4*  | N/A            | Suppressed |
|                               | Middle      | N/A            | Suppressed |
|                               | Rearward    | N/A            | Suppressed |

\* The CRS would not fit in this forward seat slide position. If there is a number in the seat slide column, it indicates the fore-aft position with respect to the foremost position. (1 = Full Forward; 43 = Full Rearward; 43 total Seat Slide detents)



## DATA SHEET 17 SUMMARY

### Suppression Test Using 12-Month-Old CRABI Dummy (Part 572, Subpart R) Section B Rear Facing CRS

|             |              |                   |        |
|-------------|--------------|-------------------|--------|
| NHTSA NO.:  | C20140103    | TEST DATE:        | 6/4/14 |
| LABORATORY: | MGA          | TECHNICIAN(S):    | NA     |
| DUMMY TYPE: | 12 Month Old | DUMMY SERIAL NO.: | 062    |

|                        |                                      |
|------------------------|--------------------------------------|
| CHILD RESTRAINT NAME:  | Cosco                                |
| CHILD RESTRAINT MODEL: | Arriva 22-049 (same as model 22-013) |
| DATE OF MANUFACTURE:   | 8-20-2008                            |

Base: \_\_On X Off \_\_N/A-Constraint does not have a removable base

Manufacturer's design seat back angle: 2.7° on Headrest Post  
 Tested seat back angle: 2.6° on Headrest Post  
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0  
 Tested anchorage position: 0 of 4; Upper-most defined as 0

A blanket and visor were not used in the suppression testing because they did not affect the weight sensing system used on the vehicle.

#### Test Summary

| Seat Belt                     | Seat Slide  | Cinch Load (N) | Result     |
|-------------------------------|-------------|----------------|------------|
| Belted<br>Rear<br>Facing      | Forward 12* | 127            | Suppressed |
|                               | Middle      | 128            | Suppressed |
|                               | Rearward    | 127            | Suppressed |
| Unbelted<br>Rear<br>Facing    | Forward 14* | N/A            | Suppressed |
|                               | Middle      | N/A            | Suppressed |
|                               | Rearward    | N/A            | Suppressed |
| Unbelted<br>Forward<br>Facing | Forward 3*  | N/A            | Suppressed |
|                               | Middle      | N/A            | Suppressed |
|                               | Rearward    | N/A            | Suppressed |

\* The CRS would not fit in this forward seat slide position. If there is a number in the seat slide column, it indicates the fore-aft position with respect to the foremost position. (1 = Full Forward; 43 = Full Rearward; 43 total Seat Slide detents)

Successful Unbelted 5th percentile Female Dummy Reactivation was performed with the seat in the Middle position. (SN506)

## DATA SHEET 17 SUMMARY

### Suppression Test Using 12-Month-Old CRABI Dummy (Part 572, Subpart R) Section B Rear Facing CRS

|             |              |                   |        |
|-------------|--------------|-------------------|--------|
| NHTSA NO.:  | C20140103    | TEST DATE:        | 6/4/14 |
| LABORATORY: | MGA          | TECHNICIAN(S):    | NA     |
| DUMMY TYPE: | 12 Month Old | DUMMY SERIAL NO.: | 062    |

|                        |           |
|------------------------|-----------|
| CHILD RESTRAINT NAME:  | Graco     |
| CHILD RESTRAINT MODEL: | Snugride  |
| DATE OF MANUFACTURE:   | 5-24-2007 |

Base: ☒ On ☐ Off ☐ N/A-Restraint does not have a removable base

Manufacturer's design seat back angle: 2.7° on Headrest Post  
 Tested seat back angle: 2.6° on Headrest Post  
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0  
 Tested anchorage position: 0 of 4; Upper-most defined as 0

A blanket and visor were not used in the suppression testing because they did not affect the weight sensing system used on the vehicle.

#### Test Summary

| Seat Belt                     | Seat Slide | Cinch Load (N) | Result     |
|-------------------------------|------------|----------------|------------|
| Belted<br>Rear<br>Facing      | Forward    | 127            | Suppressed |
|                               | Middle     | 128            | Suppressed |
|                               | Rearward   | 128            | Suppressed |
| Unbelted<br>Rear<br>Facing    | Forward 5* | N/A            | Suppressed |
|                               | Middle     | N/A            | Suppressed |
|                               | Rearward   | N/A            | Suppressed |
| Unbelted<br>Forward<br>Facing | Forward    | N/A            | Suppressed |
|                               | Middle     | N/A            | Suppressed |
|                               | Rearward   | N/A            | Suppressed |

\* The CRS would not fit in this forward seat slide position. If there is a number in the seat slide column, it indicates the fore-aft position with respect to the foremost position. (1 = Full Forward; 43 = Full Rearward; 43 total Seat Slide detents)

## DATA SHEET 17 SUMMARY

### Suppression Test Using 12-Month-Old CRABI Dummy (Part 572, Subpart R) Section B Rear Facing CRS

|             |              |                   |        |
|-------------|--------------|-------------------|--------|
| NHTSA NO.:  | C20140103    | TEST DATE:        | 6/4/14 |
| LABORATORY: | MGA          | TECHNICIAN(S):    | NA     |
| DUMMY TYPE: | 12 Month Old | DUMMY SERIAL NO.: | 062    |

|                        |           |
|------------------------|-----------|
| CHILD RESTRAINT NAME:  | Graco     |
| CHILD RESTRAINT MODEL: | Snugride  |
| DATE OF MANUFACTURE:   | 5-24-2007 |

Base: \_\_ On   X   Off \_\_ N/A-Constraint does not have a removable base

Manufacturer's design seat back angle: 2.7° on Headrest Post  
 Tested seat back angle: 2.6° on Headrest Post  
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0  
 Tested anchorage position: 0 of 4; Upper-most defined as 0

A blanket and visor were not used in the suppression testing because they did not affect the weight sensing system used on the vehicle.

#### Test Summary

| Seat Belt                     | Seat Slide  | Cinch Load (N) | Result     |
|-------------------------------|-------------|----------------|------------|
| Belted<br>Rear<br>Facing      | Forward 7*  | 130            | Suppressed |
|                               | Middle      | 131            | Suppressed |
|                               | Rearward    | 133            | Suppressed |
| Unbelted<br>Rear<br>Facing    | Forward 10* | N/A            | Suppressed |
|                               | Middle      | N/A            | Suppressed |
|                               | Rearward    | N/A            | Suppressed |
| Unbelted<br>Forward<br>Facing | Forward     | N/A            | Suppressed |
|                               | Middle      | N/A            | Suppressed |
|                               | Rearward    | N/A            | Suppressed |

\* The CRS would not fit in this forward seat slide position. If there is a number in the seat slide column, it indicates the fore-aft position with respect to the foremost position. (1 = Full Forward; 43 = Full Rearward; 43 total Seat Slide detents)

Successful Unbelted 5th percentile Female Dummy Reactivation was performed with the seat in the Rearward position. (SN506)

## DATA SHEET 17 SUMMARY

### Suppression Test Using 12-Month-Old CRABI Dummy (Part 572, Subpart R) Section B Rear Facing CRS

|             |              |                   |        |
|-------------|--------------|-------------------|--------|
| NHTSA NO.:  | C20140103    | TEST DATE:        | 6/4/14 |
| LABORATORY: | MGA          | TECHNICIAN(S):    | NA     |
| DUMMY TYPE: | 12 Month Old | DUMMY SERIAL NO.: | 062    |

|                        |            |
|------------------------|------------|
| CHILD RESTRAINT NAME:  | Peg Perego |
| CHILD RESTRAINT MODEL: | Viaggio    |
| DATE OF MANUFACTURE:   | 8-27-2007  |

Base: ☒ On ☐ Off ☐ N/A-Constraint does not have a removable base

Manufacturer's design seat back angle: 2.7° on Headrest Post  
Tested seat back angle: 2.6° on Headrest Post  
Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0  
Tested anchorage position: 0 of 4; Upper-most defined as 0

A blanket and visor were not used in the suppression testing because they did not affect the weight sensing system used on the vehicle.

#### Test Summary

| Seat Belt                     | Seat Slide | Cinch Load (N) | Result     |
|-------------------------------|------------|----------------|------------|
| Belted<br>Rear<br>Facing      | Forward    | 132            | Suppressed |
|                               | Middle     | 127            | Suppressed |
|                               | Rearward   | 127            | Suppressed |
| Unbelted<br>Rear<br>Facing    | Forward    | N/A            | Suppressed |
|                               | Middle     | N/A            | Suppressed |
|                               | Rearward   | N/A            | Suppressed |
| Unbelted<br>Forward<br>Facing | Forward    | N/A            | Suppressed |
|                               | Middle     | N/A            | Suppressed |
|                               | Rearward   | N/A            | Suppressed |

## DATA SHEET 17 SUMMARY

### Suppression Test Using 12-Month-Old CRABI Dummy (Part 572, Subpart R) Section B Rear Facing CRS

|             |              |                   |        |
|-------------|--------------|-------------------|--------|
| NHTSA NO.:  | C20140103    | TEST DATE:        | 6/4/14 |
| LABORATORY: | MGA          | TECHNICIAN(S):    | NA     |
| DUMMY TYPE: | 12 Month Old | DUMMY SERIAL NO.: | 062    |

|                        |            |
|------------------------|------------|
| CHILD RESTRAINT NAME:  | Peg Perego |
| CHILD RESTRAINT MODEL: | Viaggio    |
| DATE OF MANUFACTURE:   | 8-27-2007  |

Base: \_\_On X Off \_\_N/A-Constraint does not have a removable base

Manufacturer's design seat back angle: 2.7° on Headrest Post  
Tested seat back angle: 2.6° on Headrest Post  
Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0  
Tested anchorage position: 0 of 4; Upper-most defined as 0

A blanket and visor were not used in the suppression testing because they did not affect the weight sensing system used on the vehicle.

#### Test Summary

| Seat Belt                     | Seat Slide | Cinch Load (N) | Result     |
|-------------------------------|------------|----------------|------------|
| Belted<br>Rear<br>Facing      | Forward    | 133            | Suppressed |
|                               | Middle     | 131            | Suppressed |
|                               | Rearward   | 129            | Suppressed |
| Unbelted<br>Rear<br>Facing    | Forward    | N/A            | Suppressed |
|                               | Middle     | N/A            | Suppressed |
|                               | Rearward   | N/A            | Suppressed |
| Unbelted<br>Forward<br>Facing | Forward    | N/A            | Suppressed |
|                               | Middle     | N/A            | Suppressed |
|                               | Rearward   | N/A            | Suppressed |

Successful Unbelted 5th percentile Female Dummy Reactivation was performed with the seat in the Forward position. (SN506)

## DATA SHEET 17 SUMMARY

### Suppression Test Using 12-Month-Old CRABI Dummy (Part 572, Subpart R) Section C Forward Facing Convertible CRS

|             |              |                   |        |
|-------------|--------------|-------------------|--------|
| NHTSA NO.:  | C20140103    | TEST DATE:        | 6/4/14 |
| LABORATORY: | MGA          | TECHNICIAN(S):    | NA     |
| DUMMY TYPE: | 12 Month Old | DUMMY SERIAL NO.: | 062    |

|                        |                  |
|------------------------|------------------|
| CHILD RESTRAINT NAME:  | Britax           |
| CHILD RESTRAINT MODEL: | Roundabout E9L02 |
| DATE OF MANUFACTURE:   | 7-2-2008         |

Base: \_\_On \_\_Off X N/A-Constraint does not have a removable base

Manufacturer's design seat back angle: 2.7° on Headrest Post  
 Tested seat back angle: 2.6° on Headrest Post  
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0  
 Tested anchorage position: 0 of 4; Upper-most defined as 0

A blanket was not used in the suppression testing because it did not affect the weight sensing system used on the vehicle.

### Test Summary

| Seat Belt                     | Seat Slide | Cinch Load (N) | Result     |
|-------------------------------|------------|----------------|------------|
| Belted<br>Forward<br>Facing   | Forward    | 129            | Suppressed |
|                               | Middle     | 132            | Suppressed |
|                               | Rearward   | 133            | Suppressed |
| Unbelted<br>Forward<br>Facing | Forward    | N/A            | Suppressed |
|                               | Middle     | N/A            | Suppressed |
|                               | Rearward   | N/A            | Suppressed |
| Belted<br>Rear<br>Facing      | Forward    | 133            | Suppressed |
|                               | Middle     | 130            | Suppressed |
|                               | Rearward   | 127            | Suppressed |
| Unbelted<br>Rear<br>Facing    | Forward    | N/A            | Suppressed |
|                               | Middle     | N/A            | Suppressed |
|                               | Rearward   | N/A            | Suppressed |

Successful Unbelted 5th percentile Female Dummy Reactivation was performed with the seat in the Middle position. (SN506)

## DATA SHEET 17 SUMMARY

### Suppression Test Using 12-Month-Old CRABI Dummy (Part 572, Subpart R) Section C Forward Facing Convertible CRS

|             |              |                   |        |
|-------------|--------------|-------------------|--------|
| NHTSA NO.:  | C20140103    | TEST DATE:        | 6/4/14 |
| LABORATORY: | MGA          | TECHNICIAN(S):    | NA     |
| DUMMY TYPE: | 12 Month Old | DUMMY SERIAL NO.: | 062    |

|                        |                          |
|------------------------|--------------------------|
| CHILD RESTRAINT NAME:  | Cosco                    |
| CHILD RESTRAINT MODEL: | High Back Booster 22-209 |
| DATE OF MANUFACTURE:   | 10-7-2008                |

Base: \_\_On \_\_Off X N/A-Constraint does not have a removable base

Manufacturer's design seat back angle: 2.7° on Headrest Post  
Tested seat back angle: 2.6° on Headrest Post  
Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0  
Tested anchorage position: 0 of 4; Upper-most defined as 0

A blanket was not used in the suppression testing because it did not affect the weight sensing system used on the vehicle.

#### Test Summary

| Seat Belt                     | Seat Slide | Cinch Load (N) | Result     |
|-------------------------------|------------|----------------|------------|
| Belted<br>Forward<br>Facing   | Forward    | 127            | Suppressed |
|                               | Middle     | 130            | Suppressed |
|                               | Rearward   | 127            | Suppressed |
| Unbelted<br>Forward<br>Facing | Forward    | N/A            | Suppressed |
|                               | Middle     | N/A            | Suppressed |
|                               | Rearward   | N/A            | Suppressed |
| Unbelted<br>Rear<br>Facing    | Forward    | N/A            | Suppressed |
|                               | Middle     | N/A            | Suppressed |
|                               | Rearward   | N/A            | Suppressed |

Successful Unbelted 5th percentile Female Dummy Reactivation was performed with the seat in the Rearward position. (SN506)

The Cosco High Back Booster 22-209 does not have a rear facing belt path.

## DATA SHEET 17 SUMMARY

### Suppression Test Using 12-Month-Old CRABI Dummy (Part 572, Subpart R) Section C Forward Facing Convertible CRS

|             |              |                   |        |
|-------------|--------------|-------------------|--------|
| NHTSA NO.:  | C20140103    | TEST DATE:        | 6/4/14 |
| LABORATORY: | MGA          | TECHNICIAN(S):    | NA     |
| DUMMY TYPE: | 12 Month Old | DUMMY SERIAL NO.: | 062    |

|                        |                 |
|------------------------|-----------------|
| CHILD RESTRAINT NAME:  | Evenflo         |
| CHILD RESTRAINT MODEL: | Generations 352 |
| DATE OF MANUFACTURE:   | 10-5-2006       |

Base: \_\_On \_\_Off X N/A-Constraint does not have a removable base

Manufacturer's design seat back angle: 2.7° on Headrest Post  
Tested seat back angle: 2.6° on Headrest Post  
Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0  
Tested anchorage position: 0 of 4; Upper-most defined as 0

A blanket was not used in the suppression testing because it did not affect the weight sensing system used on the vehicle.

#### Test Summary

| Seat Belt                     | Seat Slide | Cinch Load (N) | Result     |
|-------------------------------|------------|----------------|------------|
| Belted<br>Forward<br>Facing   | Forward    | 129            | Suppressed |
|                               | Middle     | 127            | Suppressed |
|                               | Rearward   | 127            | Suppressed |
| Unbelted<br>Forward<br>Facing | Forward    | N/A            | Suppressed |
|                               | Middle     | N/A            | Suppressed |
|                               | Rearward   | N/A            | Suppressed |
| Unbelted<br>Rear<br>Facing    | Forward    | N/A            | Suppressed |
|                               | Middle     | N/A            | Suppressed |
|                               | Rearward   | N/A            | Suppressed |

Successful Unbelted 5th percentile Female Dummy Reactivation was performed with the seat in the Forward position. (SN506)

The Evenflo Generations 352 does not have a rear facing belt path.



## DATA SHEET 17 SUMMARY

### Suppression Test Using 12-Month-Old CRABI Dummy (Part 572, Subpart R) Section C Forward Facing Convertible CRS

|             |              |                   |        |
|-------------|--------------|-------------------|--------|
| NHTSA NO.:  | C20140103    | TEST DATE:        | 6/4/14 |
| LABORATORY: | MGA          | TECHNICIAN(S):    | NA     |
| DUMMY TYPE: | 12 Month Old | DUMMY SERIAL NO.: | 062    |

|                        |              |
|------------------------|--------------|
| CHILD RESTRAINT NAME:  | Graco        |
| CHILD RESTRAINT MODEL: | ComfortSport |
| DATE OF MANUFACTURE:   | 6-15-2009    |

Base: \_\_On \_\_Off X N/A-Constraint does not have a removable base

Manufacturer's design seat back angle: 2.7° on Headrest Post  
Tested seat back angle: 2.6° on Headrest Post  
Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0  
Tested anchorage position: 0 of 4; Upper-most defined as 0

A blanket was not used in the suppression testing because it did not affect the weight sensing system used on the vehicle.

#### Test Summary

| Seat Belt                     | Seat Slide | Cinch Load (N) | Result     |
|-------------------------------|------------|----------------|------------|
| Belted<br>Forward<br>Facing   | Forward    | 133            | Suppressed |
|                               | Middle     | 130            | Suppressed |
|                               | Rearward   | 129            | Suppressed |
| Unbelted<br>Forward<br>Facing | Forward    | N/A            | Suppressed |
|                               | Middle     | N/A            | Suppressed |
|                               | Rearward   | N/A            | Suppressed |
| Belted<br>Rear<br>Facing      | Forward    | 132            | Suppressed |
|                               | Middle     | 133            | Suppressed |
|                               | Rearward   | 128            | Suppressed |
| Unbelted<br>Rear<br>Facing    | Forward    | N/A            | Suppressed |
|                               | Middle     | N/A            | Suppressed |
|                               | Rearward   | N/A            | Suppressed |

Successful Unbelted 5th percentile Female Dummy Reactivation was performed with the seat in the Middle position. (SN506)

## DATA SHEET 18 SUMMARY

### Suppression Test Using Newborn Infant Dummy (Part 572, Subpart K) Section A Car Bed

|             |                |                   |        |
|-------------|----------------|-------------------|--------|
| NHTSA NO.:  | C20140103      | TEST DATE:        | 6/4/14 |
| LABORATORY: | MGA            | TECHNICIAN(S):    | NA     |
| DUMMY TYPE: | Newborn Infant | DUMMY SERIAL NO.: | 003    |

|                      |             |
|----------------------|-------------|
| CAR BED NAME:        | Angel Guard |
| CAR BED MODEL:       | Angel Ride  |
| DATE OF MANUFACTURE: | 4-15-2008   |

Base: ☐ On ☐ Off ☒ N/A-Constraint does not have a removable base  
(A car bed with a removable base shall be treated as two separate models, i.e. this form and test procedure will be completed with the base on and then repeated on a new form with the base off.

Manufacturer's design seat back angle: 2.7° on Headrest Post  
Tested seat back angle: 2.6° on Headrest Post  
Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0  
Tested anchorage position: 0 of 4; Upper-most defined as 0

A blanket and visor were not used in the suppression testing because they did not affect the weight sensing system used on the vehicle.

#### Test Summary

| Seat Belt | Seat Slide | Result     |
|-----------|------------|------------|
| Belted    | Forward    | Suppressed |
|           | Middle     | Suppressed |
|           | Rearward   | Suppressed |

Successful Unbelted 5th percentile Female Dummy Reactivation was performed with the seat in the Forward position. (SN506)

## DATA SHEET 25 SUMMARY

Low Risk Deployment Tests Using an Unbelted 3 Year Old Dummy  
(Part 572, Subpart P) (S22) Position 1 - Chest On Instrument Panel (S22.4.2)

|             |            |                   |         |
|-------------|------------|-------------------|---------|
| NHTSA NO.:  | C20140103  | TEST DATE:        | 6/17/14 |
| LABORATORY: | MGA        | TECHNICIAN(S):    | NA      |
| DUMMY TYPE: | 3 Year Old | DUMMY SERIAL NO.: | 031     |

Manufacturer's design seat back angle: 2.7° on Headrest Post

Tested seat back angle: 2.6° on Headrest Post

Tested seat position: Full Aft

Thorax cavity angle: 0.0°

Thigh angle: 61.2°

Point 1 height: 0 mm - At Plane C Air Bag Height

### Air Bag Deployment Timing

| Stage No. | Firing time (ms) | Recorded firing time (ms) |
|-----------|------------------|---------------------------|
| 1         | 0.0              | 0.0                       |
| 2         | 120.0            | 120.0                     |

### 3-Year-Old SN 031 Position 1 (Chest on Instrument Panel) 6/17/14

| Injury Criteria    | Max. Allowable Injury Assessment Values | Measured Value |
|--------------------|-----------------------------------------|----------------|
| HIC15              | 570                                     | 70             |
| Peak Nij (Nte)     | 1.0                                     | 0.4            |
| Time (ms)          | NA                                      | 29.1           |
| Peak Nij (Ntf)     | 1.0                                     | 0.4            |
| Time (ms)          | NA                                      | 20.6           |
| Peak Nij (Nce)     | 1.0                                     | 0.0            |
| Time (ms)          | NA                                      | 10.1           |
| Peak Nij (Ncf)     | 1.0                                     | 0.2            |
| Time (ms)          | NA                                      | 14.8           |
| Neck Tension       | 1130 N                                  | 550            |
| Neck Compression   | 1380 N                                  | 65             |
| Chest g            | 55 g                                    | 25             |
| Chest Displacement | 34 mm                                   | 9              |

Calculated on data recorded for 100 ms after the initial deployment of the air bag. (S4.11(b))

**A new air bag and instrument panel were used for this deployment.**

## DATA SHEET 26 SUMMARY

Low Risk Deployment Tests Using an Unbelted 3 Year Old Dummy  
(Part 572, Subpart P) (S22) Position 2 - Head On Instrument Panel (S22.4.3)

|             |            |                   |         |
|-------------|------------|-------------------|---------|
| NHTSA NO.:  | C20140103  | TEST DATE:        | 6/16/14 |
| LABORATORY: | MGA        | TECHNICIAN(S):    | NA      |
| DUMMY TYPE: | 3 Year Old | DUMMY SERIAL NO.: | 031     |

Manufacturer's design seat back angle: 2.7° on Headrest Post  
Tested seat back angle: 2.6° on Headrest Post  
Tested seat position: Full Forward

Thorax cavity angle: 0.0°  
Thigh angle: 4.8°

### Air Bag Deployment Timing

| Stage No. | Firing time (ms) | Recorded firing time (ms) |
|-----------|------------------|---------------------------|
| 1         | 0.0              | 0.0                       |
| 2         | 120.0            | 120.0                     |

### 3-Year-Old SN 031 Position 2 (Head on Instrument Panel) 6/16/14

| Injury Criteria    | Max. Allowable Injury Assessment Values | Measured Value |
|--------------------|-----------------------------------------|----------------|
| HIC15              | 570                                     | 6              |
| Peak Nij (Nte)     | 1.0                                     | 0.1            |
| Time (ms)          | NA                                      | 21.8           |
| Peak Nij (Ntf)     | 1.0                                     | 0.0            |
| Time (ms)          | NA                                      | 12.3           |
| Peak Nij (Nce)     | 1.0                                     | 0.5            |
| Time (ms)          | NA                                      | 38.0           |
| Peak Nij (Ncf)     | 1.0                                     | 0.2            |
| Time (ms)          | NA                                      | 17.9           |
| Neck Tension       | 1130 N                                  | 79             |
| Neck Compression   | 1380 N                                  | 611            |
| Chest g            | 55 g                                    | 4              |
| Chest Displacement | 34 mm                                   | 0              |

Calculated on data recorded for 100 ms after the initial deployment of the air bag. (S4.11(b))

**The original equipment parts were used for this deployment.**

## DATA SHEET 27 SUMMARY

Low Risk Deployment Tests Using an Unbelted 6-Year-Old Dummy (Part 572, Subpart N) (S24)  
Position 1 – Chest on Instrument Panel (S24.4.2)

|             |            |                   |         |
|-------------|------------|-------------------|---------|
| NHTSA NO.:  | C20140103  | TEST DATE:        | 6/17/14 |
| LABORATORY: | MGA        | TECHNICIAN(S):    | NA      |
| DUMMY TYPE: | 6 Year Old | DUMMY SERIAL NO.: | 155     |

Manufacturer's design seat back angle: 2.7° on Headrest Post  
Tested seat back angle: 2.6° on Headrest Post  
Tested seat position: Full Aft

Thorax cavity angle: 6.0°  
Point 1 height: 31 mm Below Plane C Air Bag Height

### Air Bag Deployment Timing

| Stage No. | Firing time (ms) | Recorded firing time (ms) |
|-----------|------------------|---------------------------|
| 1         | 0.0              | 0.0                       |
| 2         | 120.0            | 120.0                     |

### 6-Year-Old SN 155 Position 1 (Chest on Instrument Panel) 6/17/14

| Injury Criteria    | Max. Allowable Injury Assessment Values | Measured Value |
|--------------------|-----------------------------------------|----------------|
| HIC15              | 700                                     | 60             |
| Peak Nij (Nte)     | 1.0                                     | 0.3            |
| Time (ms)          | NA                                      | 27.9           |
| Peak Nij (Ntf)     | 1.0                                     | 0.4            |
| Time (ms)          | NA                                      | 18.1           |
| Peak Nij (Nce)     | 1.0                                     | 0.2            |
| Time (ms)          | NA                                      | 47.1           |
| Peak Nij (Ncf)     | 1.0                                     | 0.3            |
| Time (ms)          | NA                                      | 15.3           |
| Neck Tension       | 1490 N                                  | 668            |
| Neck Compression   | 1820 N                                  | 200            |
| Chest g            | 60 g                                    | 20             |
| Chest Displacement | 40 mm                                   | 13             |

Calculated on data recorded for 100 ms after the initial deployment of the air bag. (S4.11(b))

**A new air bag and instrument panel were used for this deployment.**

## DATA SHEET 28 SUMMARY

Low Risk Deployment Tests Using an Unbelted 6 Year Old Dummy  
(Part 572, Subpart N) (S24) Position 2 - Head On Instrument Panel (S24.4.3)

|             |            |                   |         |
|-------------|------------|-------------------|---------|
| NHTSA NO.:  | C20140103  | TEST DATE:        | 6/17/14 |
| LABORATORY: | MGA        | TECHNICIAN(S):    | NA      |
| DUMMY TYPE: | 6 Year Old | DUMMY SERIAL NO.: | 155     |

Manufacturer's design seat back angle: 2.7° on Headrest Post  
Tested seat back angle: 2.6° on Headrest Post  
Tested seat position: Full Forward

Thorax cavity angle: 20.0°  
Thigh angle: 2.0°

### Air Bag Deployment Timing

| Stage No. | Firing time (ms) | Recorded firing time (ms) |
|-----------|------------------|---------------------------|
| 1         | 0.0              | 0.0                       |
| 2         | 120.0            | 120.0                     |

### 6-Year-Old SN 155 Position 2 (Head on Instrument Panel) 6/17/14

| Injury Criteria    | Max. Allowable Injury Assessment Values | Measured Value |
|--------------------|-----------------------------------------|----------------|
| HIC15              | 700                                     | 2              |
| Peak Nij (Nte)     | 1.0                                     | 0.1            |
| Time (ms)          | NA                                      | 22.0           |
| Peak Nij (Ntf)     | 1.0                                     | 0.0            |
| Time (ms)          | NA                                      | 12.8           |
| Peak Nij (Nce)     | 1.0                                     | 0.3            |
| Time (ms)          | NA                                      | 40.7           |
| Peak Nij (Ncf)     | 1.0                                     | 0.0            |
| Time (ms)          | NA                                      | 16.1           |
| Neck Tension       | 1490 N                                  | 69             |
| Neck Compression   | 1820 N                                  | 486            |
| Chest g            | 60 g                                    | 5              |
| Chest Displacement | 40 mm                                   | 0              |

Calculated on data recorded for 100 ms after the initial deployment of the air bag. (S4.11(b))

**A new air bag and instrument panel were used for this deployment.**

## DATA SHEET 29 SUMMARY

Low Risk Deployment Tests Using an Unbelted 5<sup>th</sup> Percentile Female  
Dummy (Part 572, Subpart O) (S26) Position 1 - Chin On Module (S26.2)

|             |                                   |                   |         |
|-------------|-----------------------------------|-------------------|---------|
| NHTSA NO.:  | C20140103                         | TEST DATE:        | 6/16/14 |
| LABORATORY: | MGA                               | TECHNICIAN(S):    | NA      |
| DUMMY TYPE: | 5 <sup>th</sup> Percentile Female | DUMMY SERIAL NO.: | 510     |

Manufacturer's design seat back angle: 2.7° on Headrest Post  
Tested seat back angle: 2.4° on Headrest Post  
Tested seat position: Full Aft  
  
Tested steering wheel angle: 21.0°  
Thorax cavity angle: 26.7°  
Bottom of chin height: 8 mm Above Plane F Module Height

### Air Bag Deployment Timing

| Stage No. | Firing time (ms) | Recorded firing time (ms) |
|-----------|------------------|---------------------------|
| 1         | 0.0              | 0.0                       |
| 2         | 120.0            | 120.0                     |

### 5th Percentile Female SN 510 Position 1 (Chin On Module) 6/16/14

| Injury Criteria    | Max. Allowable Injury Assessment Values | Measured Value |
|--------------------|-----------------------------------------|----------------|
| HIC15              | 700                                     | 45             |
| Peak Nij (Nte)     | 1.0                                     | 0.3            |
| Time (ms)          | NA                                      | 57.7           |
| Peak Nij (Ntf)     | 1.0                                     | 0.3            |
| Time (ms)          | NA                                      | 9.0            |
| Peak Nij (Nce)     | 1.0                                     | 0.5            |
| Time (ms)          | NA                                      | 159.4          |
| Peak Nij (Ncf)     | 1.0                                     | 0.1            |
| Time (ms)          | NA                                      | 146.0          |
| Neck Tension       | 2070 N                                  | 943            |
| Neck Compression   | 2520 N                                  | 561            |
| Chest g            | 60 g                                    | 16             |
| Chest Displacement | 52 mm                                   | 8              |
| Left Femur         | 6805 N                                  | 165            |
| Right Femur        | 6805 N                                  | 66             |

Calculated on data recorded for 125 ms after the initiation of the final stage of air bag deployment designed to deploy in any full frontal rigid barrier crash up to 26 km/h. (S4.11(d))  
Second stage fire time of 120 ms; Injuries calculated on 0 ms to 245 ms.

**The original equipment steering wheel and steering column and a new air bag were used for this deployment.**

### DATA SHEET 30 SUMMARY

Low Risk Deployment Tests Using an Unbelted 5<sup>th</sup> Percentile Female Dummy (Part 572, Subpart O) (S26) Position 2 - Chin On Rim (S26.3)

|             |                                   |                   |         |
|-------------|-----------------------------------|-------------------|---------|
| NHTSA NO.:  | C20140103                         | TEST DATE:        | 6/16/14 |
| LABORATORY: | MGA                               | TECHNICIAN(S):    | NA      |
| DUMMY TYPE: | 5 <sup>th</sup> Percentile Female | DUMMY SERIAL NO.: | 510     |

Manufacturer's design seat back angle: 2.7° on Headrest Post

Tested seat back angle: 2.4° on Headrest Post

Tested seat position: Full Aft

Tested steering wheel angle: 21.0°

Thorax cavity angle: 27.0°

Chin Point height: 0 mm – At Steering Wheel Target

Note: The chin on rim steering wheel target is 10 mm below the highest point on the steering wheel.

#### Air Bag Deployment Timing

| Stage No. | Firing time (ms) | Recorded firing time (ms) |
|-----------|------------------|---------------------------|
| 1         | 0.0              | 0.0                       |
| 2         | 120.0            | 120.0                     |

#### 5<sup>th</sup> Percentile Female SN 510 Position 2 (Chin On Rim) 6/16/14

| Injury Criteria    | Max. Allowable Injury Assessment Values | Measured Value |
|--------------------|-----------------------------------------|----------------|
| HIC15              | 700                                     | 12             |
| Peak Nij (Nte)     | 1.0                                     | 0.6            |
| Time (ms)          | NA                                      | 18.1           |
| Peak Nij (Ntf)     | 1.0                                     | 0.0            |
| Time (ms)          | NA                                      | 80.1           |
| Peak Nij (Nce)     | 1.0                                     | 0.1            |
| Time (ms)          | NA                                      | 71.3           |
| Peak Nij (Ncf)     | 1.0                                     | 0.0            |
| Time (ms)          | NA                                      | 84.7           |
| Neck Tension       | 2070 N                                  | 985            |
| Neck Compression   | 2520 N                                  | 58             |
| Chest g            | 60 g                                    | 28             |
| Chest Displacement | 52 mm                                   | 24             |
| Left Femur         | 6805 N                                  | 31             |
| Right Femur        | 6805 N                                  | 23             |

Calculated on data recorded for 125 ms after the initiation of the final stage of air bag deployment designed to deploy in any full frontal rigid barrier crash up to 26 km/h. (S4.11(d))

Second stage fire time of 120 ms; Injuries calculated on 0 ms to 245 ms.

**A new air bag; and original equipment steering column and steering wheel were used for this deployment.**



## DATA SHEET 32

### VEHICLE WEIGHT, FUEL TANK, AND ATTITUDE DATA

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Alex Vanderheyden

NHTSA No.: C20140103  
 Test Date: 7/28/14

|                          |    |                        |  |                       |
|--------------------------|----|------------------------|--|-----------------------|
| IMPACT ANGLE:            | 0° |                        |  |                       |
| BELTED DUMMIES (YES/NO): | No |                        |  |                       |
| TEST SPEED:              | X  | 32 to 40 kmph          |  | 0 to 56 kmph          |
| DRIVER DUMMY:            | X  | 5 <sup>th</sup> female |  | 50 <sup>th</sup> male |
| PASSENGER DUMMY:         | X  | 5 <sup>th</sup> female |  | 50 <sup>th</sup> male |

- |   |     |                                                                                                                                                                                                                                                       |
|---|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X | 1.  | Fill the transmission with transmission fluid to the satisfactory range.                                                                                                                                                                              |
| X | 2.  | Drain fuel from vehicle.                                                                                                                                                                                                                              |
| X | 3.  | Run the engine until fuel remaining in the fuel delivery system is used and the engine stops.                                                                                                                                                         |
| X | 4.  | Record the useable fuel tank capacity supplied by the COTR.                                                                                                                                                                                           |
| X |     | Useable Fuel Tank Capacity supplied by COTR: 97.6 liters (25.75 gallons).                                                                                                                                                                             |
| X | 5.  | Record the fuel tank capacity supplied in the owner's manual.                                                                                                                                                                                         |
| X |     | Useable Fuel Tank Capacity in owner's manual: 97.6 liters (25.75 gallons).                                                                                                                                                                            |
| X | 6.  | Using purple dyed Stoddard solvent having the physical and chemical properties of Type 1 solvent or cleaning fluid, Table 1, ASTM Standard D484-71, "Standard Specifications for Hydrocarbon Dry-cleaning Solvents," or gasoline, fill the fuel tank. |
| X |     | Amount Added: 97.6 liters (25.75 gallons)                                                                                                                                                                                                             |
| X | 7.  | Fill the coolant system to capacity.                                                                                                                                                                                                                  |
| X | 8.  | Fill the engine with motor oil to the Max. mark on the dip stick.                                                                                                                                                                                     |
| X | 9.  | Fill the brake reservoir with brake fluid to its normal level.                                                                                                                                                                                        |
| X | 10. | Fill the windshield washer reservoir to capacity.                                                                                                                                                                                                     |
| X | 11. | Inflate the tires to the tire pressure on the tire placard. If no tire placard is available, inflate the tires to the recommended pressure in the owner's manual.                                                                                     |

|                           |     |        |     |        |     |        |     |        |
|---------------------------|-----|--------|-----|--------|-----|--------|-----|--------|
| Tire placard pressure:    | RF: | 35 psi | LF: | 35 psi | RR: | 35 psi | LR: | 35 psi |
| Owner's manual pressure:  | RF: | 35 psi | LF: | 35 psi | RR: | 35 psi | LR: | 35 psi |
| Actual inflated pressure: | RF: | 35 psi | LF: | 35 psi | RR: | 35 psi | LR: | 35 psi |

- |   |     |                                                                                                                      |
|---|-----|----------------------------------------------------------------------------------------------------------------------|
| X | 12. | Record the vehicle weight at each wheel to determine the unloaded vehicle weight (UVW), i.e. "as delivered" weight). |
|---|-----|----------------------------------------------------------------------------------------------------------------------|

|                                         |        |                  |       |
|-----------------------------------------|--------|------------------|-------|
| Right Front (kg):                       | 664.5  | Right Rear (kg): | 478.5 |
| Left Front (kg):                        | 654.1  | Left Rear (kg):  | 500.3 |
| Total Front (kg):                       | 1318.6 | Total Rear (kg): | 978.8 |
| % Total Weight:                         | 57.4   | % Total Weight:  | 42.6  |
| UVW = TOTAL FRONT PLUS TOTAL REAR (KG): |        | 2297.4           |       |

- |   |      |                                                                                                            |
|---|------|------------------------------------------------------------------------------------------------------------|
| X | 13.  | UVW Test Vehicle Attitude: (All dimensions in millimeters)                                                 |
| X | 13.1 | Mark a point on the vehicle above the center of each wheel.                                                |
| X | 13.2 | Place the vehicle on a level surface.                                                                      |
| X | 13.3 | Measure perpendicular to the level surface to the 4 points marked on the body and record the measurements. |

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| RF: | 924 | LF: | 922 | RR: | 991 | LR: | 983 |
|-----|-----|-----|-----|-----|-----|-----|-----|

☒ 14. Calculate the Rated Cargo and Luggage Weight (RCLW): 404 kg  
☒ 14.1 Does the vehicle have the vehicle capacity weight (VCW) on the certification label or tire placard?  
☒ ☒ Yes, go to 14.3  
☐ ☐ No, go to 14.2  
☐ 14.2 VCW = Gross Vehicle Weight - UVW  
VCW = \_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_  
☒ 14.3 VCW = 812 kg (1791 lbs)  
☒ 14.4 Does the certification or tire placard contain the Designated Seating Capacity (DSC)?  
☒ Yes, go to 14.6  
☐ No, go to 14.5 and skip 14.6  
☐ 14.5 DSC = Total number of seat belt assemblies = \_\_\_\_\_  
☒ 14.6 DSC = 6  
☒ 14.7 RCLW = VCW - (68 kg x DSC) = 812 kg - (68 kg x 6) = 404 kg  
☒ 14.8 Is the vehicle certified as a truck, MPV or bus (see the certification label on the door jamb)?  
☒ Yes, if the calculated RCLW is greater than 136 kg, use 136 kg as the RCLW. (S8.1.1)  
☐ No, use the RCLW calculated in 14.7  
☒ 15. Fully Loaded Weight (100% fuel fill): 2531.5 kg  
☒ 15.1 Place the appropriate test dummy in both front outboard seating positions.  
Driver: X 5<sup>th</sup> female    50<sup>th</sup> male  
Passenger: X 5<sup>th</sup> female    50<sup>th</sup> male  
☒ 15.2 Load the vehicle with the RCLW from 14.7 or 14.8 whichever is applicable.  
☒ 15.3 Place the RCLW in the cargo area. Center the load over the longitudinal centerline of the vehicle. (S8.1.1 (d))  
☒ 15.4 Record the vehicle weight at each wheel to determine the Fully Loaded Weight.  

|                                                         |        |                  |        |
|---------------------------------------------------------|--------|------------------|--------|
| Right Front (kg):                                       | 682.7  | Right Rear (kg): | 578.3  |
| Left Front (kg):                                        | 673.1  | Left Rear (kg):  | 597.4  |
| Total Front (kg):                                       | 1355.8 | Total Rear (kg): | 1175.7 |
| % Total Weight:                                         | 53.6   | % Total Weight:  | 46.4   |
| % GVW                                                   | 52.9   | % GVW            | 57.2   |
| (% GVW = Axle GVW divided by Vehicle GVW)               |        |                  |        |
| Fully Loaded Weight = Total Front Plus Total Rear (kg): |        |                  | 2531.5 |

☒ 16. Fully Loaded Test Vehicle Attitude: (All dimensions in millimeters)  
☒ 16.1 Place the vehicle on a level surface.  
☒ 16.2 Measure perpendicular to the level surface to the 4 points marked on the body (see 13.1 above) and record the measurements  

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| RF: | 918 | LF: | 917 | RR: | 958 | LR: | 950 |
|-----|-----|-----|-----|-----|-----|-----|-----|

☒ 17. Drain the fuel system

- ☒ 18. Using purple dyed Stoddard solvent having the physical and chemical properties of Type 1 solvent or cleaning fluid, Table 1, ASTM Standard D484-71, "Standard Specifications for Hydrocarbon Dry-cleaning Solvents," fill the fuel tank to 92 - 94 percent of useable capacity.
- ☒ Fuel tank capacity x .94 = 97.6 liters (25.75 gallons) x .94 = 91.6 liters (24.2 gallons)
- ☒ Amount added: 90.7 liters (23.95 gallons) 93.0%
- ☒ 19. Crank the engine to fill the fuel delivery system with Stoddard solvent.
- ☒ 20. Calculate the test weight range.
- ☒ 20.1 Calculated Weight = UVW (see 12 above) + RCLW (see 14 above) + 2x(dummy weight)
- 2531.4 kg = 2297.4 kg + 136.0 kg + 98.0 kg
- ☒ 20.2 Test Weight Range = Calculated Weight (- 4.5 kg, - 9 kg.)  
 Max. Test Weight = Calculated Test Weight - 4.5 kg = 2526.9 kg  
 Min. Test Weight = Calculated Test Weight - 9 kg = 2522.4 kg
- ☒ 21. Remove the RCLW from the cargo area.
- ☒ 22. Drain transmission fluid, engine coolant, motor oil, and windshield washer fluid from the test vehicle so that Stoddard solvent leakage from the fuel system will be evident.
- ☒ 23. Vehicle Components Removed For Weight Reduction:  
None
- ☒ 24. Secure the equipment and ballast in the load carrying area and distribute it, as nearly as possible, to obtain the proportion of axle weight indicated by the gross axle weight ratings and center it over the longitudinal centerline of the vehicle.
- ☒ 25. If necessary, add ballast to achieve the actual test weight.
- ☐ N/A
- ☒ Weight of Ballast: 76.7 kg
- ☒ 26. Ballast, including test equipment, must be contained so that it will not shift during the impact event or interfere with data collection or interfere with high-speed film recordings or affect the structural integrity of the vehicle or do anything else to affect test results. Care must be taken to assure that any attachment hardware added to the vehicle is not in the vicinity of the fuel tank or lines.
- ☒ 27. Record the vehicle weight at each wheel to determine the actual test weight.
- |                                           |        |                  |        |
|-------------------------------------------|--------|------------------|--------|
| Right Front (kg):                         | 695.4  | Right Rear (kg): | 565.6  |
| Left Front (kg):                          | 681.3  | Left Rear (kg):  | 582.4  |
| Total Front (kg):                         | 1376.7 | Total Rear (kg): | 1148.0 |
| % Total Weight:                           | 54.5   | % Total Weight:  | 45.5   |
| % GVW                                     | 52.9   | % GVW            | 57.2   |
| (% GVW = Axle GVW divided by Vehicle GVW) |        |                  |        |
| TOTAL FRONT PLUS TOTAL REAR (kg):         |        |                  | 2524.7 |
- ☒ 28. Is the test weight between the Max. Weight and the Min. Weight (See 20.2)?
- ☒ Yes
- ☐ No, explain why not.
- ☒ 29. Test Weight Vehicle Attitude: (all dimensions in millimeters)
- ☒ 29.1 Place the vehicle on a level surface.
- ☒ 29.2 Measure perpendicular to the level surface to the 4 points marked on the body (see 13 above) and record the measurements.

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| RF: | 918 | LF: | 917 | RR: | 962 | LR: | 955 |
|-----|-----|-----|-----|-----|-----|-----|-----|

- ☒ 30. Summary of test attitude.  
☒ 30.1 AS DELIVERED:

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| RF: | 924 | LF: | 922 | RR: | 991 | LR: | 983 |
|-----|-----|-----|-----|-----|-----|-----|-----|

AS TESTED:

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| RF: | 918 | LF: | 917 | RR: | 962 | LR: | 955 |
|-----|-----|-----|-----|-----|-----|-----|-----|

FULLY LOADED:

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| RF: | 918 | LF: | 917 | RR: | 958 | LR: | 950 |
|-----|-----|-----|-----|-----|-----|-----|-----|

- ☒ 30.2 Is the "as tested" test attitude equal to or between the "fully loaded" and "as delivered" attitude?

- ☒ Yes  
☐ No, explain why not.

REMARKS:

Signature:  Date: 7/28/14

I certify that I have read and performed each instruction.

# DATA SHEET 33

## VEHICLE ACCELEROMETER LOCATION AND MEASUREMENT

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Alex Vanderheyden

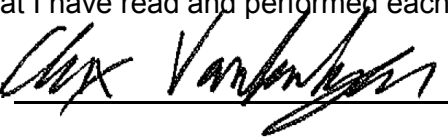
NHTSA No.: C20140103  
 Test Date: 7/28/14

|                          |    |               |                        |              |                       |
|--------------------------|----|---------------|------------------------|--------------|-----------------------|
| IMPACT ANGLE:            | 0° |               |                        |              |                       |
| BELTED DUMMIES (YES/NO): | No |               |                        |              |                       |
| TEST SPEED:              | X  | 32 to 40 kmph |                        | 0 to 48 kmph | 0 to 56 kmph          |
| DRIVER DUMMY:            | X  |               | 5 <sup>th</sup> female |              | 50 <sup>th</sup> male |
| PASSENGER DUMMY:         | X  |               | 5 <sup>th</sup> female |              | 50 <sup>th</sup> male |

- ☒ 1. Find the location where the vertical plane parallel to the longitudinal centerline of the vehicle and through the center of the left front outboard seating position intersects the left rear seat cross member. Install an accelerometer at this intersection on the rear seat cross member to record x-direction accelerations. Record the location on the following chart.
- ☒ 2. Find the location where the vertical plane parallel to the longitudinal centerline of the vehicle and through the center of the right front outboard seating position intersects the right rear seat cross member. Install an accelerometer at this intersection on the rear seat cross member to record x-direction accelerations. Record the location on the following chart.
- ☒ 3. Find the location where a vertical plane through the longitudinal centerline of the vehicle and a vertical transverse plane through the center of the two wheels on opposite sides of the engine intersect at the top of the engine. Install an accelerometer at this intersection to record x-direction accelerations. Record the location on the following chart.
- ☒ 4. Find the location where a vertical plane through the longitudinal centerline of the vehicle and a vertical transverse plane through the center of the two wheels on opposite sides of the engine intersect the bottom of the engine. Install an accelerometer at this intersection to record x-direction accelerations. Record the location on the following chart.
- ☒ 5. Install an accelerometer on the right front brake caliper to record x-direction accelerations. Record the location on the following chart.
- ☒ 6. Find the location where a vertical plane through the longitudinal centerline of the vehicle intersects the top of the instrument panel. Install an accelerometer at this intersection to record x-direction accelerations. Record the location on the following chart.
- ☒ 7. Install an accelerometer on the left front brake caliper to record x-direction accelerations. Record the location on the following chart.
- ☒ 8. Find the location where a vertical plane through the longitudinal centerline of the vehicle intersects the floor of the trunk. Install an accelerometer on the trunk floor at this intersection to record z-direction accelerations. Record the location on the following chart.

REMARKS:

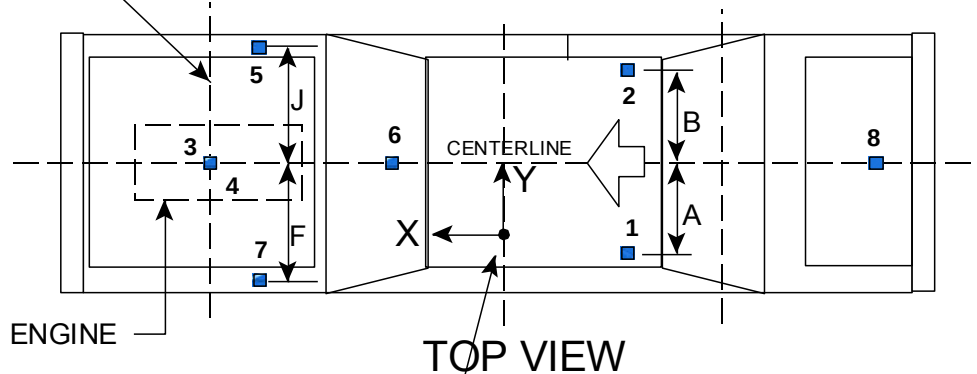
I certify that I have read and performed each instruction.

Signature: 

Date: 7/28/14

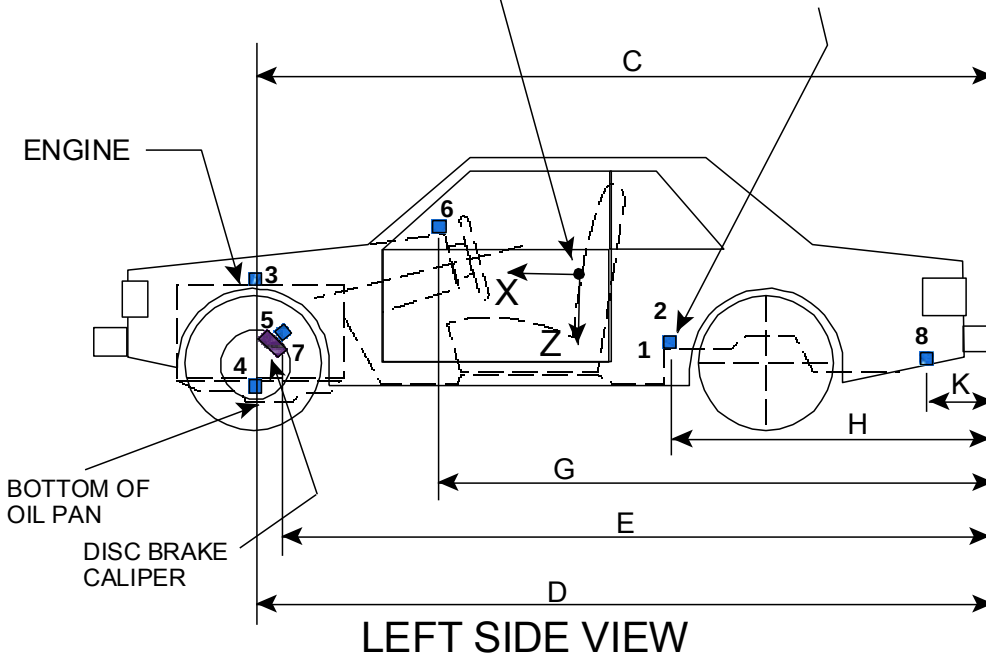
# VEHICLE ACCELEROMETER LOCATION AND DATA SUMMARY

CENTERLINE OF  
FRONT WHEELS



ACCELEROMETER  
COORDINATE SYSTEM  
(POSITIVE DIRECTION SHOWN)

REAR SEAT CUSHION  
ASSY. FRONT ATTACHMENT  
BRACKET SUPPORT



Dimensions Corresponding To The Letters "A" Through "K" (Excluding "I") Are Recorded In The Table On The Following Page.

Accelerometers Corresponding To The Numbers 1 Through 8 Are Specified On The Preceding Page.

# VEHICLE ACCELEROMETER LOCATION AND MEASUREMENTS

| <u>DIMENSION</u>             | <u>LENGTH (mm)</u> |                 |
|------------------------------|--------------------|-----------------|
| <u>PRETEST VALUES</u>        |                    |                 |
| <u>A</u> (LH Rear Seat Xmbr) | 500                |                 |
| <u>B</u> (RH Rear Seat Xmbr) | 425                |                 |
| <u>C</u> (Engine Top)        | 4845               |                 |
| <u>D</u> (Engine Bottom)     | 4833               |                 |
| <u>E</u> (Caliper)           | Right Side: 4715   | Left Side: 4730 |
| <u>F</u> (Left Caliper)      | 780                |                 |
| <u>G</u> (IP)                | 4049               |                 |
| <u>H</u> (Seat)              | 2770               |                 |
| <u>J</u> (Right Caliper)     | 780                |                 |
| <u>K</u> (Trunk)             | 1178               |                 |
| <u>POST TEST VALUES</u>      |                    |                 |
| <u>A</u> (LH Rear Seat Xmbr) | 500                |                 |
| <u>B</u> (RH Rear Seat Xmbr) | 425                |                 |
| <u>C</u> (Engine Top)        | 4843               |                 |
| <u>D</u> (Engine Bottom)     | 4830               |                 |
| <u>E</u> (Caliper)           | Right Side: 4715   | Left Side: 4729 |
| <u>F</u> (Left Caliper)      | 767                |                 |
| <u>G</u> (IP)                | 4045               |                 |
| <u>H</u> (Seat)              | 2770               |                 |
| <u>J</u> (Right Caliper)     | 768                |                 |
| <u>K</u> (Trunk)             | 1178               |                 |

**DATA SHEET 34**  
**PHOTOGRAPHIC TARGETS**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance  
Test Technician: Alex Vanderheyden

NHTSA No.: C20140103  
Test Date: 7/28/14

|                          |    |               |                        |              |                       |
|--------------------------|----|---------------|------------------------|--------------|-----------------------|
| IMPACT ANGLE:            | 0° |               |                        |              |                       |
| BELTED DUMMIES (YES/NO): | No |               |                        |              |                       |
| TEST SPEED:              | X  | 32 to 40 kmph |                        | 0 to 48 kmph | 0 to 56 kmph          |
| DRIVER DUMMY:            | X  |               | 5 <sup>th</sup> female |              | 50 <sup>th</sup> male |
| PASSENGER DUMMY:         | X  |               | 5 <sup>th</sup> female |              | 50 <sup>th</sup> male |

- |                                     |      |                                                                                                                                                                                                                                                                                                 |
|-------------------------------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | 1.   | <b>FMVSS 208 vehicle targeting requirements</b> (See Figures 28A and 28B)                                                                                                                                                                                                                       |
| <input checked="" type="checkbox"/> | 1.1  | Targets A1 and A2 are on flat rectangular panels.                                                                                                                                                                                                                                               |
| <input checked="" type="checkbox"/> | 1.2  | Three circular targets at least 90 mm in diameter and with black and yellow quadrants are mounted at the front on the outboard sides of A1 and A2. The center of each circular target is 100 mm from the one next to it.                                                                        |
| <input checked="" type="checkbox"/> |      | Distance between targets (mm): <u>100 mm</u>                                                                                                                                                                                                                                                    |
| <input checked="" type="checkbox"/> | 1.3  | Three circular targets at least 90 mm in diameter and with black and yellow quadrants are mounted at the back on the outboard sides of on A1 and A2. The center of each circular target is 100 mm from the one next to it.                                                                      |
| <input checked="" type="checkbox"/> |      | Distance between targets (mm): <u>100 mm</u>                                                                                                                                                                                                                                                    |
| <input checked="" type="checkbox"/> | 1.4  | The distance between the first circular target at the front of A1 and A2 and the last circular target at the back of A1 and A2 is at least 915 mm.                                                                                                                                              |
| <input checked="" type="checkbox"/> |      | Distance between the first and last circular targets (mm): <u>915 mm</u>                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> | 1.5  | Firmly fix target A1 on the vehicle roof in the vertical longitudinal plane that is coincident with the midsagittal plane of the driver dummy.                                                                                                                                                  |
| <input checked="" type="checkbox"/> | 1.6  | Firmly fix target A2 on the vehicle roof in the vertical longitudinal plane that is coincident with the midsagittal plane of the passenger dummy.                                                                                                                                               |
| <input checked="" type="checkbox"/> | 1.7  | Two circular targets (C1 and C2) at least 90 mm in diameter and with black and yellow quadrants are mounted on the outside of the driver door. The centers of each circular target are at least 610 mm apart.                                                                                   |
| <input checked="" type="checkbox"/> |      | Distance between targets (mm): <u>610 mm</u>                                                                                                                                                                                                                                                    |
| <input checked="" type="checkbox"/> | 1.8  | Two circular targets (C1 and C2) at least 90 mm in diameter and with black and yellow quadrants are mounted on the outside of the passenger door. The centers of each circular target are at least 610 mm apart.                                                                                |
| <input checked="" type="checkbox"/> |      | Distance between targets (mm): <u>610 mm</u>                                                                                                                                                                                                                                                    |
| <input checked="" type="checkbox"/> | 1.9  | Place tape with squares having alternating colors on the top portion of the steering wheel.                                                                                                                                                                                                     |
| <input checked="" type="checkbox"/> | 1.10 | Chalk the bottom portion of the steering wheel.                                                                                                                                                                                                                                                 |
| <input checked="" type="checkbox"/> | 1.11 | Is this an offset test?                                                                                                                                                                                                                                                                         |
| <input type="checkbox"/>            |      | <b>Yes, continue with this section</b>                                                                                                                                                                                                                                                          |
| <input checked="" type="checkbox"/> |      | <b>No, go to 2.</b>                                                                                                                                                                                                                                                                             |
| <input type="checkbox"/>            | 1.12 | Measure the width of the vehicle.                                                                                                                                                                                                                                                               |
| <input type="checkbox"/>            |      | Vehicle width (mm):                                                                                                                                                                                                                                                                             |
| <input type="checkbox"/>            | 1.13 | Find the centerline of the vehicle. ( $\frac{1}{2}$ of the vehicle width)                                                                                                                                                                                                                       |
| <input type="checkbox"/>            | 1.14 | Find the line parallel to the centerline of the vehicle and 0.1 x vehicle width from the centerline of the vehicle.                                                                                                                                                                             |
| <input type="checkbox"/>            | 1.15 | Apply 25 mm wide tape with alternating black and yellow squares parallel to and on each side of the line found in 1.14. The edge of each tape shall be 50 mm from the line found in 1.14. The tape shall extend from the bottom of the bumper to the front edge of the windshield. (Figure 28D) |



- ☒ 2. **Barrier Targeting**
- ☒ 2.1 Fix two stationary targets D1 and D2 to the barrier as shown in the Figure 28A. One target is in the vertical longitudinal plane that is coincident with the midsagittal plane of the driver dummy. The other is in the vertical longitudinal plane that is coincident with the midsagittal plane of the passenger dummy.
- ☒ 2.2 Targets D1 and D2 are on a rectangular panel.
- ☒ 2.3 Three circular targets at least 90 mm in diameter and with black and yellow quadrants are mounted on the sides of the rectangular panel away from the longitudinal centerline of the vehicle. The center of each circular target is 100 mm from the one next to it.
- ☒ Distance between circular targets on D1 (mm): 100 mm
- ☒ Distance between circular targets on D2 (mm): 100 mm
- ☒ 3. **FMVSS 208 Dummy Targeting Requirements**
- ☒ 3.1 Place a circular target with black and yellow quadrants on both sides of the driver dummy head as close as possible to the center of gravity of the head in the x and z direction (relative to the measuring directions of the accelerometers).
- ☒ 3.2 Place a circular target with black and yellow quadrants on both sides of the passenger dummy head as close as possible to the center of gravity of the head in the x and z direction (relative to the measuring directions of the accelerometers).
- ☒ 3.3 Place a circular target with black and yellow quadrants on the outboard shoulder of the driver dummy. Place the target as high up on the arm as possible at the intersection of the arm and shoulder. The sleeve of the shirt on the dummy may be cut to make the target visible, but do not remove any material.
- ☒ 3.4 Place a circular target with black and yellow quadrants on the outboard shoulder of the passenger dummy. Place the target as high up on the arm as possible at the intersection of the arm and shoulder. The sleeve of the shirt on the dummy may be cut to make the target visible, but do not remove any material.
- ☒ 4. **FMVSS 204 Targeting Requirements**
- ☒ 4.1 Is an FMVSS 204 indicant test ordered on the "COTR Vehicle Work Order?"
- ☐ Yes, continue with this form.
- ☒ No, this form is complete.
- ☐ 4.2 Resection panel (Figure 28C)
- ☐ 4.2.1 The panel deviates no more than 6 mm from perfect flatness when suspended vertically.
- ☐ 4.2.2 The 8 targets on the panel are circular targets at least 90 mm in diameter and with black and yellow quadrants.
- ☐ 4.2.3 The center of each of the 4 outer targets are placed within 1 mm of the corners of a square measuring 914 mm on each side.
- ☐ 4.2.4 Locate another square with 228 mm sides and with the center of this square coincident with the center of the 914 mm square.
- ☐ 4.2.5 The center of the 4 inner targets are placed at the midpoints of each of the 228 mm sides.
- ☐ 4.3 Place a circular target at least 90 mm in diameter and with black and yellow quadrants on a material (cardboard, metal, etc.) that can be taped to the top of the steering column.
- ☐ 4.4 Tape the target from 4.3 to the top of the steering column in a manner that does not interfere with the movement of the steering column in a crash.

REMARKS:

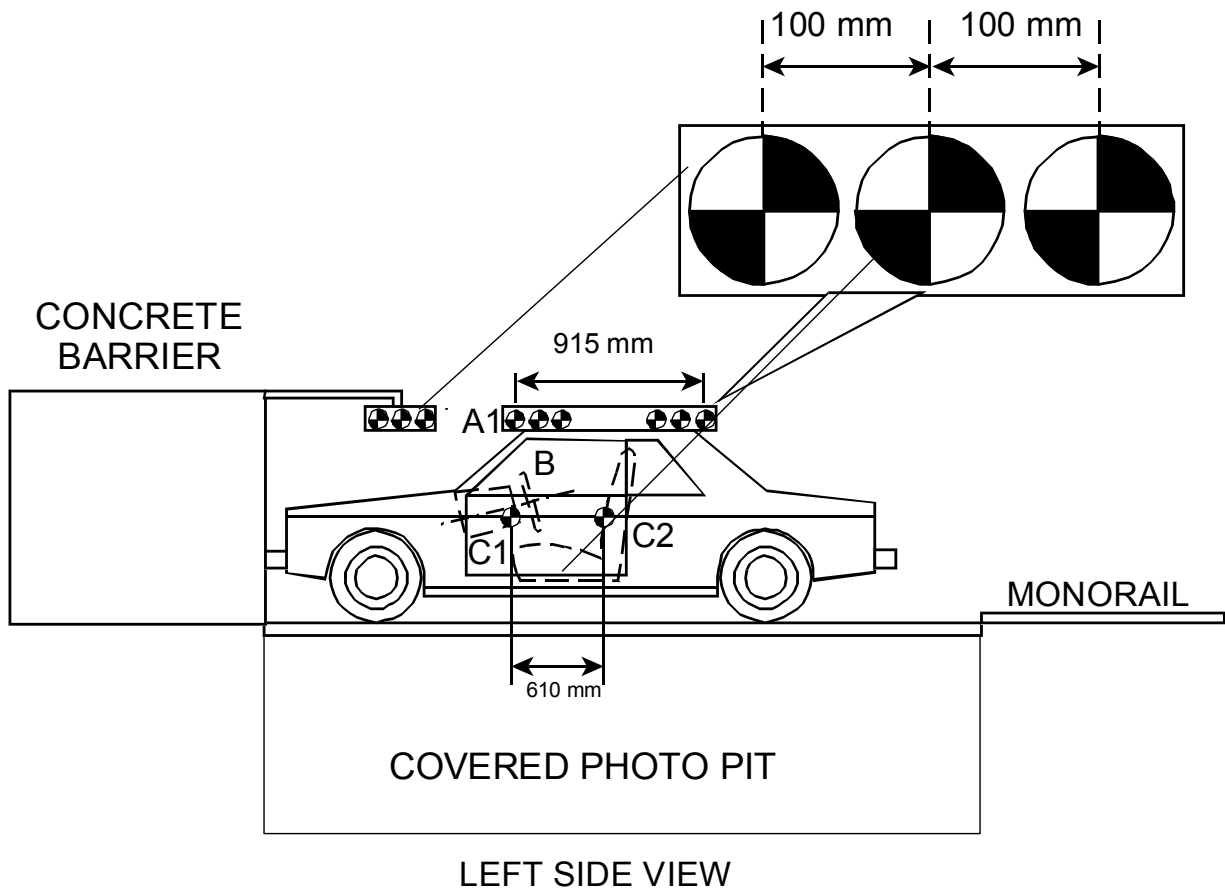
Signature: \_\_\_\_\_

*Chex Vandenbosch*

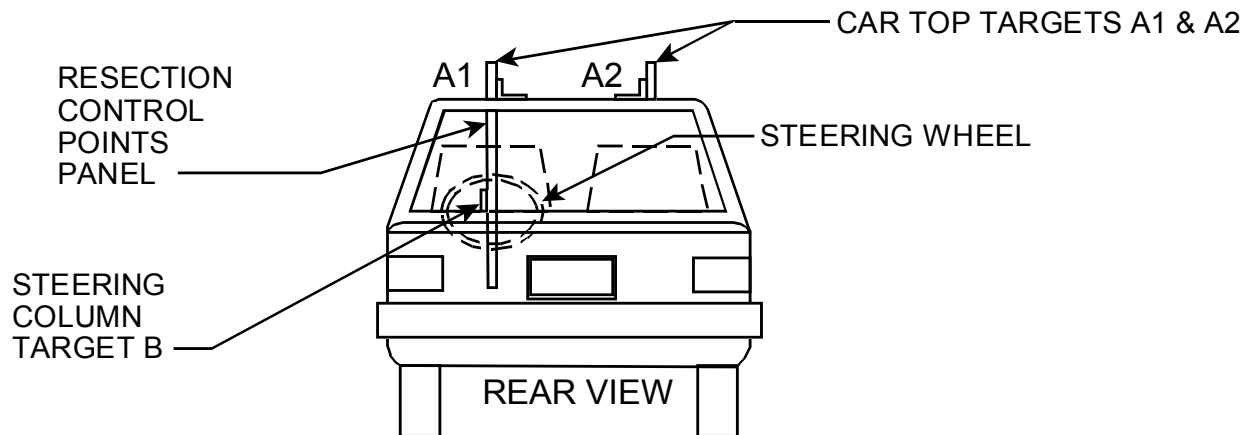
Date: 7/28/14

I certify that I have read and performed each instruction.

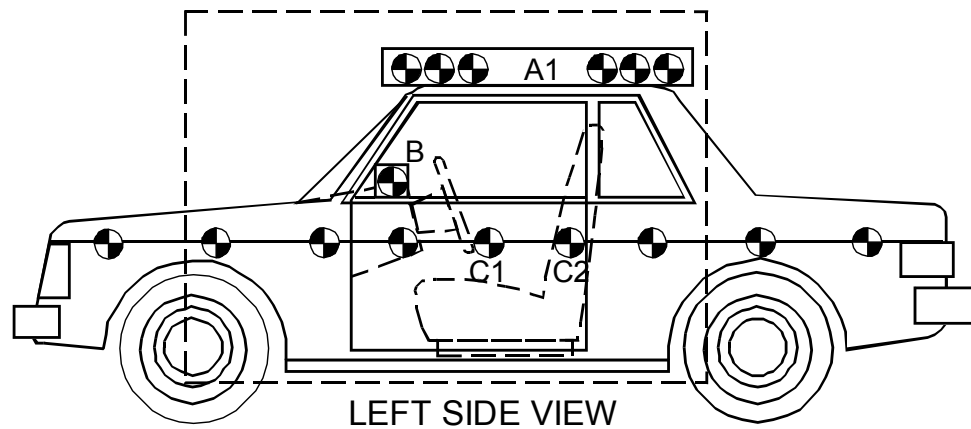
## REFERENCE PHOTO TARGETS



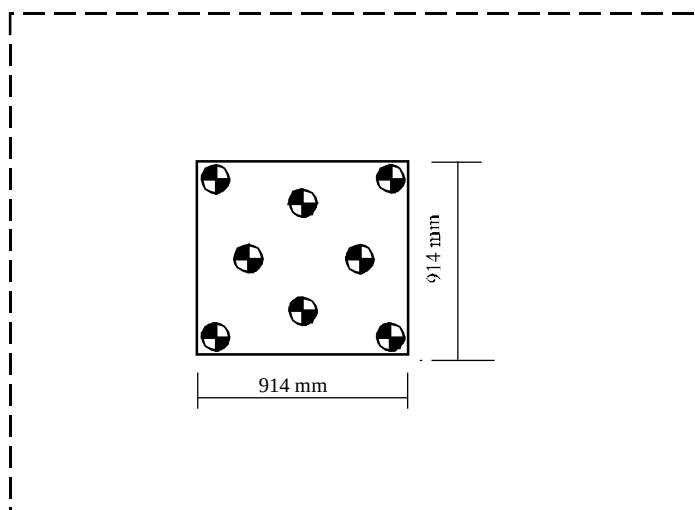
## RESECTION PANEL TARGETING ALIGNMENT



## TEST RUN STEERING COLUMN CAMERA VIEW OF TYPICAL TIME ZERO VEHICLE POSITION



## PRE-RUN STEERING COLUMN HIGH SPEED CAMERA VIEW



LEFT SIDE VIEW

**DATA SHEET 35**  
**CAMERA LOCATIONS**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance

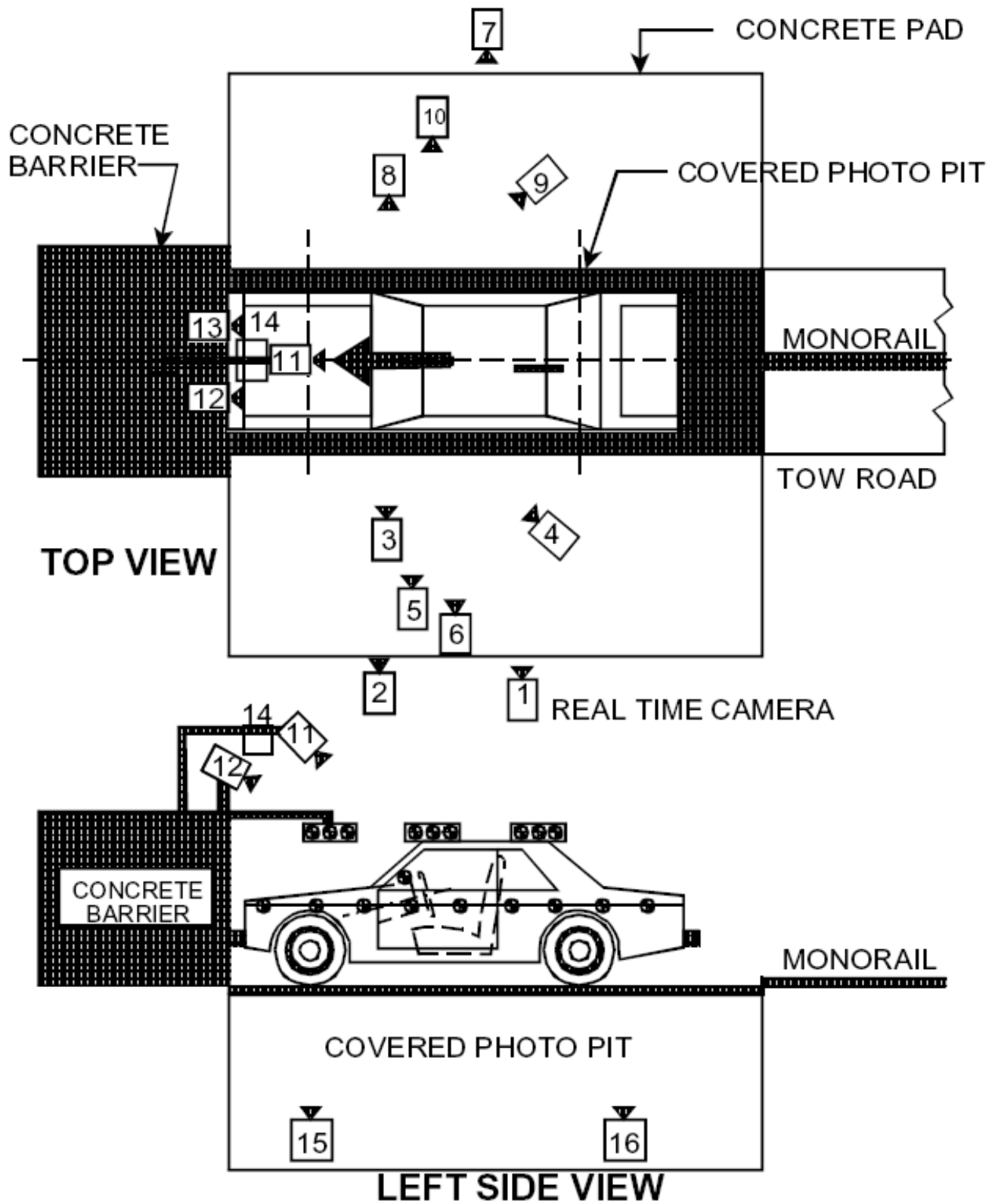
NHTSA No.: C20140103  
Test Date: 7/28/14  
Time: 11:11 am

| CAMERA NO. | VIEW                                                          | CAMERA POSITIONS (mm) * |       |       | LENS (mm) | SPEED (fps) |
|------------|---------------------------------------------------------------|-------------------------|-------|-------|-----------|-------------|
|            |                                                               | X                       | Y     | Z     |           |             |
| 1          | Real Time Left Side View                                      |                         |       |       | 13        | 24          |
| 2          | Left Side View (Barrier face to front seat backs)             | 1320                    | -5390 | 1420  | 24        | 1000        |
| 3          | Left Side View (Driver)                                       | 1660                    | -6740 | 1880  | 35        | 1000        |
| 4          | Left Side View (B-post aimed toward center of steering wheel) | 5980                    | -5590 | 1920  | 50        | 1000        |
| 5          | Left Side View (Steering Column)                              | 750                     | -5440 | 1190  | 24        | 1000        |
| 6          | Left Side View (Steering Column)                              | 730                     | -5410 | 790   | 24        | 1000        |
| 7          | Right Side View (Overall)                                     | 2770                    | 6450  | 1430  | 20        | 1000        |
| 8          | Right Side View (Passenger)                                   | 1860                    | 7430  | 1860  | 35        | 1000        |
| 9          | Right Side View (Angle)                                       | 6030                    | 5080  | 1920  | 50        | 1000        |
| 10         | Right Side View (Front door)                                  | 1490                    | 5600  | 1490  | 24        | 1000        |
| 11         | Front View Windshield                                         | -210                    | 0     | 2810  | 20        | 1000        |
| 12         | Front View Driver                                             | 190                     | -450  | 2030  | 8.5       | 1000        |
| 13         | Front View Passenger                                          | 180                     | 450   | 2030  | 8.5       | 1000        |
| 14         | Overhead Barrier Impact View                                  | 2030                    | 0     | 4910  | 14        | 1000        |
| 15         | Pit Camera Engine View                                        | 1290                    | 0     | -3150 | 24        | 1000        |
| 16         | Pit Camera Fuel Tank View                                     | 3380                    | 0     | -3150 | 24        | 1000        |

**\*COORDINATES:**

- +X - forward of impact plane
- +Y - right of monorail centerline
- +Z - above ground level

# CAMERA POSITIONS FOR FMVSS 208



## DATA SHEET 36 - APPENDIX G

### DUMMY POSITIONING PROCEDURES

#### FOR 5<sup>th</sup> PERCENTILE FEMALE DRIVER TEST DUMMY CONFORMING TO SUBPART O OF PART 572

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance  
Test Technician: Jon Miller

NHTSA No.: C20140103  
Test Date: 7/28/14

|                          |    |               |                        |              |                       |
|--------------------------|----|---------------|------------------------|--------------|-----------------------|
| IMPACT ANGLE:            | 0° |               |                        |              |                       |
| BELTED DUMMIES (YES/NO): | No |               |                        |              |                       |
| TEST SPEED:              | X  | 32 to 40 kmph |                        | 0 to 48 kmph | 0 to 56 kmph          |
| DRIVER DUMMY:            | X  |               | 5 <sup>th</sup> female |              | 50 <sup>th</sup> male |
| PASSENGER DUMMY:         | X  |               | 5 <sup>th</sup> female |              | 50 <sup>th</sup> male |

Seating Procedure 5<sup>th</sup> Percentile Female Driver Dummy (Part 572, Subpart O) (S16.2-S16.3)

#### 1. Seat Position

- X 1.1 Position the seat's adjustable lumbar supports so that the lumbar supports are in the lowest, retracted or deflated adjustment positions. (S16.2.10.1, S20.1.9.1, S20.4.1, S22.1.7.1)  
\_\_\_ N/A – No lumbar adjustment
- X 1.2 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, S20.1.9.2, S20.4.1, S22.1.7.1, S22.4.2.1, S22.4.3.1, S24.4.2.1, S26.2.3, S26.3.1)  
X N/A – No additional support adjustment
- X 1.3 Position an adjustable leg support system in its rearmost position. (8/27/04 interpretation to Toyota)  
X N/A – No adjustable leg support system
- X 1.4 **Mark** a point (seat cushion reference point) on the side of the seat cushion that is between 150 mm and 250 mm from the front edge of the seat cushion. (S16.3.1.12)
- X 1.5 Draw a line (seat cushion reference line) through the seat cushion reference point. (S16.3.1.13)
- X 1.6 Use only the controls that primarily move the seat in the fore-aft direction to move the seat cushion reference point to the rearmost position. (S16.2.10.3.1, S22.1.7.3)
- X 1.7 If the seat cushion adjusts fore-aft, independent of the seat back, use only the controls that primarily move the seat cushion in the fore-aft direction to move the seat cushion reference point to the rearmost position. (S16.2.10.3.1, S20.1.9.3)  
X N/A – No independent fore-aft seat cushion adjustment
- X 1.8 Use any part of any control, other than the parts just used for fore-aft positioning, to determine the range of angles of the seat cushion reference line and to set the seat cushion reference line at the mid-angle. (S16.2.10.3.1)  
Maximum angle: FIXED  
Minimum angle: FIXED  
Mid-angle: FIXED

- ☒ 1.9 If the seat and/or seat cushion height is adjustable, use any part of any control other than the parts which primarily move the seat or seat cushion fore-aft, to put the seat cushion reference point in its lowest position with the seat cushion reference line angle at the mid-angle found in 1.8. (S16.2.10.3.1)  
☒ N/A – No seat height adjustment
- ☒ 1.10 Use only the controls that primarily move the seat in the fore-aft direction to verify the seat is in the rearmost position.
- ☒ 1.11 Use only the controls that primarily move the seat in the fore-aft direction to **mark** the fore-aft seat positions. **Mark** each position so that there is a visual indication when the seat is at a particular position. For manual seats, move the seat forward one detent at a time and **mark** each detent. For power seats, **mark** only the rearmost, middle, and foremost positions. Label three of the positions with the following: F for foremost, 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 rearmost.
- ☒ 1.12 Use only the controls that primarily move the seat in the fore-aft direction to place the seat in the rearmost position.
- ☒ 1.13 Use any part of any control, other than the parts which primarily move the seat or seat cushion fore-aft, to find and visually **mark** the maximum, minimum, and middle height of the seat cushion reference point with the seat cushion reference line at the mid-angle determined in 1.8. (S20.1.9.4, S22.1.2, S22.1.7.4, S22.3.1, S22.4.3.1, S24.1.2, S24.3.1, S24.4.3.1, S26.2.3, S26.3.1)  
☒ N/A – No seat height adjustment. Go to 1.18
- ☐ 1.14 Use only the controls that primarily move the seat and/or seat cushion in the fore-aft direction to place the seat in the mid-fore-aft position.
- ☐ 1.15 Use any part of any control, other than the parts which primarily move the seat or seat cushion fore-aft, to find and visually **mark** the maximum, minimum, and middle height of the seat cushion reference point with the seat cushion reference line at the mid-angle determined in 1.8. (S20.1.9.4, S22.1.2, S22.1.7.4, S22.3.1, S24.1.2, S24.3.1)
- ☐ 1.16 Use only the control that change the seat in the fore-aft direction to place the seat in the foremost position. (S16.2.10.3.2)
- ☐ 1.17 Use any part of any control, other than the parts which primarily move the seat or seat cushion fore-aft, to find and visually **mark** the maximum, minimum, and middle height of the seat cushion reference point with the seat cushion reference line at the mid-angle determined in 1.8. (S16.2.10.3.3, S20.1.9.4, S22.1.2, S22.1.7.4, S22.3.1, S24.1.2, S24.3.1)
- ☒ 1.18. Is the seat a bucket seat?  
☒ Yes, go to 1.19 and skip 1.20  
☐ No, go to 1.20 and skip 1.19
- ☒ 1.19 Bucket seats:  
Locate and **mark** for future reference the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S16.3.1.10 & S20.1.10)



- ☐ 1.20 Bench seats (complete ONLY the one that is applicable to the seat being marked):  
Locate and **mark** for future reference the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface.

## 2. Head Restraint Position

- ☐ N/A Vehicle contains automatic head restraints.  
☐ N/A, there is no head restraint adjustment Go to 3
- ☒ 2.1 Adjust the head restraint to its lowest position. (S16.2.10.2, S20.1.9.6, S20.4.1, S22.1.7.6, S22.4.2.1, S22.4.3.1, S24.4.3.1, S26.2.3, S26.3.1)
- ☒ 2.2 All adjustments 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.  
**Mark** the foremost position. (S16.2.10.2 & S16.3.4.4 & S20.1.9.6, S20.4.1, S22.4.2.1, S22.4.3.1, S24.4.3.1, S26.2.3, S26.3.1)
- ☒ 2.3 Measure the vertical distance from the top most point of the head restraint to the bottom most point. Locate and **mark** a horizontal plane through the midpoint of this distance. (S16.3.4.3)  
Vertical height of head restraint: 180 mm  
Mid-point height: 90 mm
- ☒ 3. Is the **steering wheel** adjustable up and down and/or in and out?  
☒ Yes – go to 3.1  
☐ No – Go to 4
- ☒ 3.1. Find and **mark** for future reference each up and down position. Label three of the positions with the following: H for highest, M for mid-position (if there is no mid-position, label the next lowest adjustment position), and L for lowest.  
☐ N/A – steering wheel is not adjustable up and down
- ☒ 3.2. Find and **mark** for future references each in and out position. Label three of the Positions with the following: F for foremost, M for mid-position (if there is no mid-position, label the next rearmost adjustment position), and R for rearmost.  
☒ N/A – steering wheel is not adjustable in and out.
- ☒ 3.3. Use the markings to position the steering controls in the mid-position or if applicable next lowest detent position. (S16.2.9)
- ☒ 4. Place the SCRP in the full rearward, mid-height position, and mid-seat cushion angle, determined in Item 1. (S16.3.2.1.1)
- ☒ 5. If the vehicle has an adjustable accelerator pedal, place it in the full forward position. (S16.3.2.2.1)  
☒ N/A accelerator pedal not adjustable
- ☒ 6. Fully recline the seat back. (S16.3.2.1.2)  
☐ N/A seat back not adjustable.
- ☒ 7. Place the dummy in the seat with the legs at an angle of 120 degrees to the thighs. The calves should not be touching the seat cushion. (S16.3.2.1.2)
- ☒ 8. Position the dummy in the seat such that the midsagittal plane is coincident with the longitudinal seat cushion markings as determined in Item 1.19 or 1.20. (S16.3.2.1.3 and S16.3.2.1.4)

- ☒ 9. Hold down the dummy's thighs and push rearward on the upper torso to maximize the pelvic angle. (S16.3.2.1.5)
- ☒ 10. Set the angle between the legs and the thighs to 120 degrees. (S16.3.2.1.6)
- ☒ 11. Set the transverse distance between the centers of the front of the knees at 160 to 170 mm. (6.3 to 6.7 inches) Center the knee separation with respect to the longitudinal seat cushion marking as determined in Item 1.19 or 1.20. (S16.3.2.1.6)  
Record Knee Separation: 165 mm
- ☒ 12. Push rearward on the dummy's knees until the pelvis contacts the seat back, or the backs of the calves contact the seat cushion, whichever occurs first. (S16.3.2.1.6)  
☐ Pelvis contacted seat back.  
☒ Calves contacted seat cushion.
- ☒ 13. Gently rock the upper torso  $\pm 5$  degrees (approximately 51 mm (2 inches)) side-to-side three time. (S16.3.2.1.7)
- ☒ 14. If needed, extend the legs until the feet do not contact the floor pan. The thighs should be resting on the seat cushion. (S16.3.2.1.8)
- ☒ 15. Position the right foot until the foot is in line with a longitudinal vertical plane passing through the center of the accelerator pedal. Maintain the leg and thigh in a vertical plane. (S16.3.2.1.8)
- ☒ 16. Rotate the left leg and thigh laterally to equalize the distance between each knee and the longitudinal seat cushion marking as determined in Item 1.19 or 1.20. (S16.3.2.1.8)
- ☒ 17. Attempt to return the seat to the foremost fore-aft position, mid-height, and seat cushion mid-angle as determined in Item 1. The foot may contact and depress the accelerator and/or change the angle of the foot with respect to the leg. (S16.3.2.1.8)  
☒ Foremost position achieved. Proceed to step 22.  
☐ Foremost not achieved because of foot interference. Proceed to step 19.  
☐ Foremost not achieved because of steering wheel contact.
- ☐ 18. If either of the dummy's legs contact the steering wheel, move the steering wheel up the minimum amount required to avoid contact. If the steering wheel is not adjustable separate the knees the minimum required to avoid contact. (S16.3.2.1.8)  
☐ N/A- there was no leg contact  
☐ Steering wheel repositioned  
☐ Knees separated
- ☐ 19. If the left foot interferes with the clutch or brake pedals, rotate the left foot about the leg to provide clearance. If this is not sufficient, rotate the thigh outboard at the hip the minimum amount required for clearance. (S16.3.2.1.8)  
☐ N/A, No foot interference with pedals.  
☐ Foot adjusted to provide clearance.  
☐ Foot and Thigh adjusted to provide clearance.

- ☐ 20. Continue to move the seat. Use seat controls to line up the seat markings determined during item 1 to set the foremost fore-aft position, mid-height position and the seat cushion mid-angle. If the dummy contacts the interior move the seat rearward until a maximum clearance of 5 mm (0.2 inches) is achieved or the seat is in the closest detent position that does not cause dummy contact. (S16.3.2.1.8)
- ☐ Foremost, mid-height position and the seat cushion mid-angle reached
- ☐ Dummy Contact. Clearance set at maximum of 5 mm  
Measured Clearance: \_\_\_\_\_
- ☐ Dummy Contact. Seat set at nearest detent position.  
Seat position \_\_\_\_\_ detent positions rearward of foremost  
(foremost is position zero)
- ☐ 21. If the steering wheel was repositioned in step 18, return the steering wheel to the original position. If the steering wheel contacts the dummy before reaching the original position, position the wheel until a maximum clearance of 5 mm (.2 inches) is achieved, or the steering wheel is in the closest detent position that does not cause dummy contact. (S16.3.2.1.8)
- ☐ N/A Steering wheel was not repositioned.
- ☐ Original position achieved.
- ☐ Dummy Contact. Clearance set at maximum of 5 mm  
Measured Clearance: \_\_\_\_\_
- ☐ Dummy Contact. Steering wheel set at nearest detent position.  
Steering wheel position \_\_\_\_\_ detent positions upward of original position.  
(Original position is position zero)
- ☒ 22. If the seat back is adjustable, rotate the seat back forward while holding the thighs in place. Continue rotating the seat back forward until the transverse instrument platform of the dummy head is level  $\pm 0.5$  degrees. If the head cannot be leveled using the seat back adjustment, or the seat back is not adjustable, use the lower neck bracket adjustment to level the head. If a level position cannot be achieved, minimize the angle. (S16.3.2.1.9)
- ☒ Head Level Achieved. (Check all that apply)
- ☒ Head leveled using the adjustable seat back
- ☐ Head leveled using the neck bracket.  
Head Angle: 0.2 degrees
- ☐ Head Level NOT Achieved. (Check all that apply)
- ☐ Head adjusted using the adjustable seat back
- ☐ Head adjusted using the neck bracket.  
Head Angle: \_\_\_\_\_ degrees
- ☒ 23. Verify the pelvis is not interfering with the seat bight. (S16.3.2.1.9)
- ☒ No interference
- ☐ Pelvis moved forward the minimum amount so that it is not caught in the seat bight.
- ☒ 24. Verify the dummy abdomen is properly installed. (S16.3.2.1.9)
- ☒ Abdomen still seated properly into dummy
- ☐ Abdomen was adjusted because it was not seated properly into dummy

X 25. Head Angle

X N/A, neither the pelvis nor the abdomen were adjusted.

X 25.1 Head still level (Go to 26)

   25.2 Head level adjusted

   Head Level Achieved. (Check all that apply)

   Head leveled using the adjustable seat back

   Head leveled using the neck bracket.

Head Angle: \_\_\_\_\_ degrees

   Head Level NOT Achieved. (Check all that apply)

   Head level adjusted using the adjustable seat back

   Head level adjusted using the neck bracket.

Head Angle: \_\_\_\_\_ degrees

X 26. If the dummy torso contacts the steering wheel while performing step 22, reposition the steering wheel in the following order to eliminate contact. (S16.3.2.1.9)

X N/A, No dummy torso contact with the steering wheel.

   26.1 Adjust telescoping mechanism.

   N/A No telescoping adjustment.

   Adjustment performed (fill in appropriate change)

Steering wheel moved \_\_\_\_\_ detent positions in the forward direction.

Steering wheel moved \_\_\_\_\_ mm in the forward direction.

   26.2 Adjust tilt mechanism.

   N/A No tilt adjustment.

   No adjustment performed.

   Adjustment performed. (circle one)

Steering wheel moved \_\_\_\_\_ detent positions Upward/Downward.

Steering wheel moved \_\_\_\_\_ degrees Upward/Downward

   26.3 Adjust Seat in the aft direction.

   No Adjustment performed.

   Seat moved aft \_\_\_\_\_ mm from original position.

   Seat moved aft \_\_\_\_\_ detent positions from the original position.

X 27. Measure and set the pelvic angle using the pelvic angle gage TE-2504. The pelvic angle should be 20.0 degrees  $\pm$  2.5 degrees. If the pelvic angle cannot be set to the specified range because the head will not be level or because the dummy will have need major repositioning, adjust the pelvis as closely as possible to the angle range, but keep the head level. (S16.3.2.1.11)

X Pelvic angle set to 20.0 degrees  $\pm$  2.5 degrees.

   Pelvic angle of 20.0 degrees not achieved, the angular difference was minimized.

X Record the pelvic angle: 21.3 degrees

X 28. Check the dummy for contact with the interior after completing adjustments. (S16.3.2.1.12)

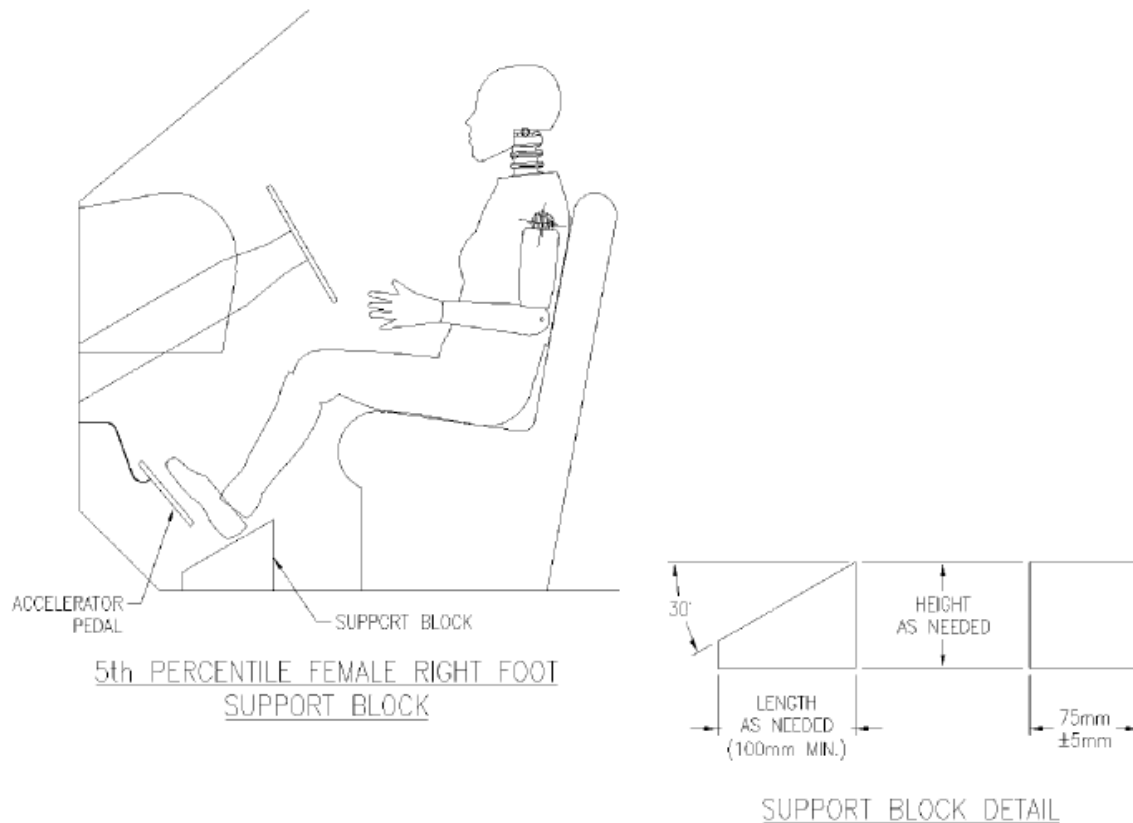
X No contact.

   Dummy in contact with interior.

   Seat moved aft \_\_\_\_\_ mm from the previous position.

   Seat moved aft \_\_\_\_\_ detent positions from the previous position.

- ☒ 29. Check the dummy to see if additional interior clearance is obtained, allowing the seat to be moved forward. (S16.3.2.1.12)  
☒ N/A, Seat already at foremost position.  
☐ Clearance unchanged. No adjustments required.  
☐ Additional clearance available  
    ☐ Seat moved Forward \_\_\_\_\_ mm from the previous position.  
    ☐ Seat moved Forward \_\_\_\_\_ detent positions from the previous position.
- ☒ 30. Driver's foot positioning, right foot. Place the foot perpendicular to the leg and determine if the heel contacts the floor pan at any leg position. If the heel contacts the floor pan proceed to step 31 otherwise, proceed to step 32. (S16.3.2.2.1)
- ☒ 31. Perform the following steps until either all steps are completed, or the foot contacts the accelerator pedal. Step 31.6 shall be completed in all cases. (S16.3.2.2.1 (a))
- ☒ 31.1 With the rear of the heel contacting the floor pan, move the foot forward until pedal contact occurs or the foot is at the full forward position.
- ☐ 31.2 If the vehicle has an adjustable accelerator pedal, move the pedals rearward until pedal contact occurs or the pedals reach the full rearward position.
- ☐ 31.3 Extend the leg, allowing the heel to lose contact with the floor until the foot contacts the pedal. Do not raise the toe of the foot higher than the top of the accelerator pedal. If the foot does not contact the pedal, proceed to the next step. If pedal contact does occur, place a tapered foam block as shown in Figure G1 under the heel with the shallow part of the taper facing forward. (S16.3.2.2.3)
- ☐ 31.4 Angle the foot to achieve contact between the foot and the pedal. If the foot does not contact the pedal, return the foot to the perpendicular orientation. If pedal contact does occur, place a tapered foam block as shown in Figure G1 under the heel with the shallow part of the taper facing forward. (S16.3.2.2.3)
- ☐ 31.5 Align the centerline of the foot with the vertical-longitudinal plane passing through the center of the accelerator pedal. Place a tapered foam block as shown in Figure G1 under the heel with the shallow part of the taper facing forward. (S16.3.2.2.3)
- ☒ 31.6 Record foot position  
    ☒ Pedal Contact achieved. Contact occurred at step 31.1.  
        ☒ Heel contacts floor pan  
        ☐ Heel set \_\_\_\_\_ mm from floor pan.  
    ☐ Pedal Contact not achieved. Heel set \_\_\_\_\_ mm from the floor pan.



**FIGURE G1**

- \_\_\_32. Perform the following steps until either all steps are completed, or the foot contacts the accelerator pedal. Step 30.5 shall be completed in all cases.
- \_\_\_32.1 Extend the leg until the foot contacts the pedal. Do not raise the toe of the foot higher than the top of the accelerator pedal. If the foot does not contact the pedal, proceed to the next step. If pedal contact does occur, place a tapered foam block as shown in Figure G1 under the heel with the shallow part of the taper facing forward. (S16.3.2.2.1(b) & S16.3.2.2.3)
- \_\_\_32.2 If the vehicle has an adjustable accelerator pedal, move the pedals rearward until pedal contact occurs or the pedals reach the full rearward position. If pedal contact does occur, place a tapered foam block as shown in Figure G1 under the heel with the shallow part of the taper facing forward. (S16.3.2.2.1(b) & S16.3.2.2.3)
  - \_\_\_N/A No pedal adjustment
- \_\_\_32.3 Angle the foot to achieve contact between the foot and the pedal. If the foot does not contact the pedal, return the foot to the perpendicular orientation. If pedal contact does occur, place a tapered foam block as shown in Figure G1 under the heel with the shallow part of the taper facing forward. (S16.3.2.2.2 & S16.3.2.2.3)
- \_\_\_32.4 Align the centerline of the foot in the same horizontal plane as the centerline of the accelerator pedal. Place a tapered foam block as shown in Figure G1 under the heel with the shallow part of the taper facing forward. (S16.3.2.2.3)
- \_\_\_32.5 Record foot position
  - \_\_\_Pedal Contact achieved. Contact occurred at step \_\_\_\_\_.
  - \_\_\_Heel set \_\_\_\_\_ mm from floor pan.
  - \_\_\_Pedal Contact not achieved. Heel set \_\_\_\_\_ mm from the floor pan.

X 33. Driver's foot positioning, left foot.

X 33.1 Place the foot perpendicular to the leg and determine if the heel contacts the floor pan at any leg position. If the heel contacts the floor pan proceed to step 33.2, otherwise position the leg as perpendicular to the thigh as possible with the foot parallel to the floor pan. (S16.2.2.6)

X 33.2 Place the foot on the toe board with the heel resting on the floor pan as close to the intersection of the floor pan and the toe board as possible. Adjust the angle of the foot if necessary to contact the toe board. If the foot will not contact the toe board, set the foot perpendicular to the leg, and set the heel on the floor pan as far forward as possible. Avoid contact with the brake pedal, clutch pedal, wheel well projection, and footrest. To avoid this contact use the following three manipulations in the order listed, with each subsequent option incorporating the previous, until contact is avoided: rotate the foot about the lower leg (abduction/adduction), plantar flex the foot, rotate the leg outboard about the hip. Movement should be the minimum amount necessary. If it is not possible to avoid all foot contact, give priority to avoiding brake or clutch pedal contact. (S16.2.2.4 & S16.2.2.5 & S16.2.2.7)

X No contact

   Foot rotated about the leg (abduction/adduction)

   Foot rotated about the leg, and foot plantar flexed

   Foot rotated about the leg, foot plantar flexed, and the leg rotated about the hip.

X 33.3 Record foot position.

   Heel does not contact floor pan.

   Heel on floor pan and foot on toe board.

X Heel on floor pan and foot not on toe board.

X 34. Driver arm/hand positioning.

X 34.1 Place the dummy's upper arms adjacent to the torso with the arm centerlines as close to a vertical longitudinal plane as possible. (S16.3.2.3.1)

X 34.2 Place the palms of the dummy in contact with the outer part of the steering wheel rim at its horizontal centerline with the thumbs over the steering wheel rim. (S16.3.2.3.2)

X 34.3 If it is not possible to position the thumbs inside the steering wheel rim at its horizontal centerline, then position them above and as close to the horizontal centerline of the steering wheel rim as possible. (S16.3.2.3.3)

X 34.4 Lightly tape the hands to the steering wheel rim so that if the hand of the test dummy is pushed upward by a force of not less than 9 N (2 lb) and not more than 22 N (5 lb), the tape releases the hand from the steering wheel rim. (S16.3.2.3.4)

X 35. Adjustable head restraints

   N/A, there is no head restraint adjustment

   35.1 If the head restraint has an automatic adjustment, leave it where the system positions the restraint after the dummy is placed in the seat. (S16.3.4.1) Go to 36.

   35.2 Adjust each head restraint vertically so that the mid-horizontal plane determined in Item 2 is aligned with the center of gravity (CG) of the dummy head. (S16.3.4.3)

☒ 35.3 If the above position is not attainable, move the vertical center of the head restraint to the closest detent below the center of the head CG. (S16.3.4.3)

☐ N/A midpoint position attained in previous step

☒ Headrest set at nearest detent below the head CG

☒ 35.4 If the head restraint has a fore and aft adjustment, place the restraint in the foremost position or until contact with the head is made, whichever occurs first. (S16.3.4.4)

☒ 36. Driver and passenger manual belt adjustment (for tests conducted with a belted dummy). (S16.3.5)

☒ N/A Dummies are unbelted for this test.

☐ 36.1 If an adjustable seat belt D-ring anchorage exists, place it in the manufacturer's design position for a 5th percentile adult female. (S16.3.5.1) **This information will be supplied by the COTR.**

Manufacturer's specified position:

Actual Position:

☐ 36.2 Place the Type 2 manual belt around the test dummy and fasten the latch. (S16.3.5.2)

☐ 36.3 Ensure that the dummy's head remains as level as possible. (S16.3.5.3)

☐ 36.4 Remove all slack from the lap belt. Pull the upper torso webbing out of the retractor and allow it to retract; repeat this operation four times. Apply a 9 N (2 lbf) to 18 N (4 lbf) tension load to the lap belt. If the belt system is equipped with a tension-relieving device, introduce the maximum amount of slack into the upper torso belt that is recommended by the manufacturer. If the belt system is not equipped with a tension-relieving device, allow the excess webbing in the shoulder belt to be retracted by the retractive force of the retractor. (S16.3.5.4)

I certify that I have read and performed each instruction.

Signature: 

Date: 7/28/14



**DATA SHEET 36 - APPENDIX G**  
**DUMMY POSITIONING PROCEDURES**  
**FOR 5<sup>th</sup> PERCENTILE FEMALE PASSENGER TEST DUMMY**  
**CONFORMING TO SUBPART O OF PART 572**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Jon Miller

NHTSA No.: C20140103  
 Test Date: 7/28/14

|                          |    |               |                        |              |                       |
|--------------------------|----|---------------|------------------------|--------------|-----------------------|
| IMPACT ANGLE:            | 0° |               |                        |              |                       |
| BELTED DUMMIES (YES/NO): | No |               |                        |              |                       |
| TEST SPEED:              | X  | 32 to 40 kmph |                        | 0 to 48 kmph | 0 to 56 kmph          |
| DRIVER DUMMY:            | X  |               | 5 <sup>th</sup> female |              | 50 <sup>th</sup> male |
| PASSENGER DUMMY:         | X  |               | 5 <sup>th</sup> female |              | 50 <sup>th</sup> male |

(Check this item ONLY if it applies to this vehicle.)

     **The passenger seat adjustments are controlled by the adjustments made to the driver's seat. Therefore, positioning of the passenger dummy is made simultaneously with the driver dummy. Adjustments made to the seat to position the driver will over ride any adjustments that would normally be made to position the passenger. (S16.2.10.3)**

**1. Seat Position**

X 1.1 Position the seat's adjustable lumbar supports so that the lumbar supports are in the lowest, retracted or deflated adjustment positions. (S16.2.10.1, S20.1.9.1, S20.4.1, S22.1.7.1)

X N/A – No lumbar adjustment

X 1.2 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, S20.1.9.2, S20.4.1, S22.1.7.1, S22.4.2.1, S22.4.3.1, S24.4.2.1, S26.2.3, S26.3.1)

X N/A – No additional support adjustment

X 1.3 Position an adjustable leg support system in its rearmost position. (8/27/04 interpretation to Toyota)

X N/A – No adjustable leg support system

X 1.4 **Mark** a point (seat cushion reference point) on the side of the seat cushion that is between 150 mm and 250 mm from the front edge of the seat cushion. (S16.3.1.12)

X 1.5 Draw a line (seat cushion reference line) through the seat cushion reference point. (S16.3.1.13)

X 1.6 Use only the controls that primarily move the seat in the fore-aft direction to move the seat cushion reference point to the rearmost position. (S16.2.10.3.1, S22.1.7.3)

X 1.7 If the seat cushion adjusts fore-aft, independent of the seat back, use only the controls that primarily move the seat cushion in the fore-aft direction to move the seat cushion reference point to the rearmost position. (S16.2.10.3.1, S20. 1.9.3)

X N/A – No independent fore-aft seat cushion adjustment

- ☒ 1.8 Use any part of any control, other than the parts just used for fore-aft positioning, to determine the range of angles of the seat cushion reference line and to set the seat cushion reference line at the mid-angle. (S16.2.10.3.1)  
Maximum angle: FIXED  
Minimum angle: FIXED  
Mid-angle: FIXED
- ☒ 1.9 If the seat and/or seat cushion height is adjustable, use any part of any control other than the parts which primarily move the seat or seat cushion fore-aft, to put the seat cushion reference point in its lowest position with the seat cushion reference line angle at the mid-angle found in 1.8. (S16.2.10.3.1)  
☒ N/A – No seat height adjustment
- ☒ 1.10 Use only the controls that primarily move the seat in the fore-aft direction to verify the seat is in the rearmost position.
- ☒ 1.11 Use only the controls that primarily move the seat in the fore-aft direction to **mark** the fore-aft seat positions. **Mark** each position so that there is a visual indication when the seat is at a particular position. For manual seats, move the seat forward one detent at a time and **mark** each detent. For power seats, **mark** only the rearmost, middle, and foremost positions. Label three of the positions with the following: F for foremost, 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 rearmost.
- ☒ 1.12 Use only the controls that primarily move the seat in the fore-aft direction to place the seat in the rearmost position.
- ☒ 1.13 Use any part of any control, other than the parts which primarily move the seat or seat cushion fore-aft, to find and visually **mark** the maximum, minimum, and middle height of the seat cushion reference point with the seat cushion reference line at the mid-angle determined in 1.8. (S20.1.9.4, S22.1.2, S22.1.7.4, S22.3.1, S22.4.3.1, S24.1.2, S24.3.1, S24.4.3.1, S26.2.3, S26.3.1)  
☒ N/A – No seat height adjustment. Go to 1.18
- ☐ 1.14 Use only the controls that primarily move the seat and/or seat cushion in the fore-aft direction to place the seat in the mid-fore-aft position.
- ☐ 1.15 Use any part of any control, other than the parts which primarily move the seat or seat cushion fore-aft, to find and visually **mark** the maximum, minimum, and middle height of the seat cushion reference point with the seat cushion reference line at the mid-angle determined in 1.8. (S20.1.9.4, S22.1.2, S22.1.7.4, S22.3.1, S24.1.2, S24.3.1)
- ☐ 1.16 Use only the controls that change the seat in the fore-aft direction to place the seat in the foremost position. (S16.2.10.3.2)
- ☐ 1.17 Use any part of any control, other than the parts which primarily move the seat or seat cushion fore-aft, to find and visually **mark** the maximum, minimum, and middle height of the seat cushion reference point with the seat cushion reference line at the mid-angle determined in 1.8. (S16.2.10.3.3, S20.1.9.4, S22.1.2, S22.1.7.4, S22.3.1, S24.1.2, S24.3.1)
- ☒ 1.18. Is the seat a bucket seat?  
☒ Yes, go to 1.19 and skip 1.20  
☐ No, go to 1.20 and skip 1.19

X 1.19 Bucket seats:

Locate and **mark** for future reference the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S16.3.1.10 & S20.1.10)

   1.20 Bench seats:

Locate and **mark** the longitudinal centerline of the passenger seat cushion. The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S20.2.1.4, S22.2.1.3, S24.2.3, S20.4.4, S22.2.2.1(b), S22.2.2.3(b), S22.2.2.4(a), S22.2.2.5(a), S22.2.2.6(a), S22.2.2.7(a), S24.2.3(a))

Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. \_\_\_\_\_

Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. (The vertical plane through this longitudinal centerline is Plane B for suppression.) \_\_\_\_\_

## 2. Head Restraint Position

   N/A Vehicle contains automatic head restraints.

   N/A, there is no head restraint adjustment Go to 3

X 2.1 Adjust the head restraint to its lowest position. (S16.2.10.2, S20.1.9.6, S20.4.1, S22.1.7.6, S22.4.2.1, S22.4.3.1, S24.4.3.1, S26.2.3, S26.3.1)

X 2.2 All adjustments 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. **Mark** the foremost position. (S16.2.10.2 & S16.3.4.4 & S20.1.9.6, S20.4.1, S22.4.2.1, S22.4.3.1, S24.4.3.1, S26.2.3, S26.3.1)

X 2.3 Measure the vertical distance from the top most point of the head restraint to the bottom most point. Locate and **mark** a horizontal plane through the midpoint of this distance. (S16.3.4.3)

Vertical height of head restraint: 180 mm

Mid-point height: 90 mm

X 3. Place the SCRIP in the full rearward, mid-height position, and mid-seat cushion angle. (S16.3.3.1.1)

X 4. Fully recline the seat back. (S16.3.3.1.2)

   N/A seat back not adjustable.

X 5. Place the dummy in the seat with the legs at an angle of 120 degrees to the thighs. The calves should not be touching the seat cushion. (S16.3.3.1.2)

X 6. Position the dummy in the seat such that the midsagittal plane is coincident with the longitudinal seat cushion marking that was determined in item 1.19 or 1.20. (S16.3.3.1.3 and S16.3.3.1.4)

X 7. Hold down the dummy's thighs and push rearward on the upper torso to maximize the pelvic angle. (S16.3.3.1.5)

X 8. Set the angle between the legs and the thighs to 120 degrees. (S16.3.3.1.6)

- X 9. Set the transverse distance between the centers of the front of the knees at 160 to 170 mm. (6.3 to 6.7 inches). Center the knee separation with respect to the longitudinal seat cushion marking that was determined in item 1.19 or 1.20. (S16.3.3.1.6)  
Record Knee Separation: 165 mm
- X 10. Push rearward on the dummy's knees until the pelvis contacts the seat back, or the backs of the calves contact the seat cushion, whichever occurs first. (S16.3.3.1.6)  
   Pelvis contacted seat back.  
X Calves contacted seat cushion.
- X 11. Gently rock the upper torso  $\pm 5$  degrees (approximately 51 mm (2 inches)) side-to-side three times. (S16.3.3.1.7)
- X 12. If needed, extend the legs until the feet do not contact the floor pan. The thighs should be resting on the seat cushion. (S16.3.3.1.8)
- X 13. Use seat controls to line up the seat markings determined during the completion of item 1 to set the foremost fore-aft position, mid-height position and the seat cushion mid-angle. If the dummy contacts the interior move the seat rearward until a maximum clearance of 5 mm (0.2 inches) is achieved or the seat is in the closest detent position that does not cause dummy contact. (S16.3.3.1.8)  
X Foremost, mid-height position and the seat cushion mid-angle reached  
   Dummy contact. Clearance set at maximum of 5 mm  
Measured Clearance: \_\_\_\_\_  
   Dummy Contact. Seat set at nearest detent position.  
Seat position \_\_\_\_\_ detent positions rearward of foremost  
(foremost is position zero)
- X 14. If the seat back is adjustable, rotate the seat back forward while holding the thighs in place. Continue rotating the seat back forward until the transverse instrument platform of the dummy head is level  $\pm 0.5$  degrees. If head cannot be leveled using the seat back adjustment, or the seat back is not adjustable, use the lower neck bracket adjustment to level the head. If a level position cannot be achieved, adjust the head as closely as possible to the  $\pm 0.5$  degree range. (S16.3.3.1.9 and S16.3.3.1.10)  
(Check All That Apply)  
   Seat back not adjustable  
   Seat back not independent of driver side seat back  
X Head Level Achieved. (Check all that apply)  
   Head leveled using the adjustable seat back  
   Head leveled using the neck bracket.  
Head Angle: 0.3 degrees  
   Head Level NOT Achieved. (Check all that apply)  
   Head adjusted using the adjustable seat back  
   Head adjusted using the neck bracket.  
Head Angle: \_\_\_\_\_ degrees
- X 15. Verify the pelvis is not interfering with the seat bight. (S16.3.3.1.9)  
X No interference  
   Pelvis moved forward the minimum amount so that it is not caught in the seat bight.
- X 16. Verify the dummy abdomen is properly installed. (S16.3.3.1.9)  
X Abdomen still seated properly into dummy  
   Abdomen was adjusted because it was not seated properly into dummy
- X 17. Head Angle  
X N/A, neither the pelvis nor the abdomen were adjusted.

☒ 17.1 Head still level (Go to 18)

☐ 17.2 Head level adjusted

☐ Head Level Achieved. (Check all that apply)

☐ Head leveled using the adjustable seat back

☐ Head leveled using the neck bracket.

Head Angle: \_\_\_\_\_ degrees

☐ Head Level NOT Achieved. (Check all that apply)

☐ Head adjusted using the adjustable seat back

☐ Head adjusted using the neck bracket.

Head Angle: \_\_\_\_\_ degrees

☒ 18. Measure and set the pelvic angle using the pelvic angle gage TE-2504. The pelvic angle should be 20.0 degrees  $\pm$  2.5 degrees. If the pelvic angle cannot be set to the specified range because the head will not be level or because the dummy will have need major repositioning, adjust the pelvis as closely as possible to the angle range, but keep the head level.

☒ Pelvic angle set to 20.0 degrees  $\pm$  2.5 degrees.

☐ Pelvic angle of 20.0 degrees not achieved, the angular difference was minimized.

☒ Record the pelvic angle: 21.6 degrees

☒ 19. Check the dummy for contact with the interior after completing adjustments.

☒ No contact.

☐ Dummy in contact with interior.

☐ Seat moved aft \_\_\_\_\_ mm from the previous position.

☐ Seat moved aft \_\_\_\_\_ detent positions from the previous position.

☒ 20. Verify the transverse instrument platform of the dummy head is level  $\pm$  0.5 degrees. Use the lower neck bracket adjustment to level the head. If a level position cannot be achieved, minimize the angle. (S16.3.3.1.9, S16.3.3.1.10, and S16.3.3.1.11)

☒ Head Level Achieved

Head Angle: 0.2 degrees

☐ Head Level NOT Achieved.

Head Angle: \_\_\_\_\_ degrees

☒ 21. Check the dummy to see if additional interior clearance is obtained, allowing the seat to be moved forward. (S16.3.3.1.12)

☐ N/A Bench Seat

☒ N/A Seat already at full forward position.

☐ Clearance unchanged. No adjustments required.

☐ Additional clearance available

☐ Seat moved Forward \_\_\_\_\_ mm from the previous position.

☐ Seat moved Forward \_\_\_\_\_ detent positions from the previous position.

☐ Seat moved Forward, Full Forward position reached.

☒ 22. Passenger foot positioning. (Indicate final position achieved) (S16.3.3.2)

☐ 22.1 Place feet flat on the toe board; OR (S16.3.3.2.1)

☒ 22.2 If the feet cannot be placed flat on the toe board, set the feet perpendicular to the lower leg, and rest the heel as far forward on the floor pan as possible; OR (S16.3.3.2.2)

☐ 22.3 If the heels do not touch the floor pan, set the legs as perpendicular to the thighs as possible and set the feet parallel to the floor pan. (S16.3.3.2.2)

☒ 23. Passenger arm/hand positioning. (S16.3.3.3)

☒ 23.1 Place the dummy's upper arms adjacent to the torso with the arm centerlines as close to a vertical longitudinal plane as possible. (S16.3.3.3.1)

☒ 23.2 Place the palms of the dummy in contact with the outer part of the thighs (S16.3.3.3.2)

☒ 23.3 Place the little fingers in contact with the seat cushion. (S16.3.3.3.3)

☒ 24. Adjustable head restraints (S16.3.4)  
☐ N/A, there is no head restraint adjustment

☐ 24.1 If the head restraint has an automatic adjustment, leave it where the system positions the restraint after the dummy is placed in the seat. (S16.3.4.1) Go to 25.

☒ 24.2 Adjust each head restraint vertically so that the horizontal plane determined in Item 2 is aligned with the center of gravity (CG) of the dummy head. (S16.3.4.3)

☐ 24.3 If the above position is not attainable, move the vertical center of the head restraint to the closest detent below the center of the head CG. (S16.3.4.3)

☐ N/A midpoint position attained in previous step

☐ Headrest set at nearest detent below the head CG

☐ 24.4 If the head restraint has a fore and aft adjustment, place the restraint in the foremost position or until contact with the head is made, whichever occurs first. (S16.3.4.4)

☒ 25. Manual belt adjustment (for tests conducted with a belted dummy) S16.3.5  
☒ N/A, Unbelted test

☐ 25.1 If an adjustable seat belt D-ring anchorage exists, place it in the manufacturer's design position for a 5th percentile adult female. **This information will be supplied by the COTR.** (S16.3.5.1)

Manufacturer's specified position:

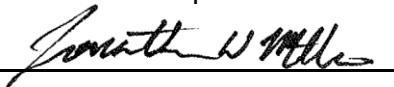
Actual Position:

☐ 25.2 Place the Type 2 manual belt around the test dummy and fasten the latch. (S16.3.5.2)

☐ 25.3 Ensure that the dummy's head remains as level as possible. (S16.3.5.3)

☐ 25.4 Remove all slack from the lap belt. Pull the upper torso webbing out of the retractor and allow it to retract; repeat this operation four times. Apply a 9 N (2 lbf) to 18 N (4 lbf) tension load to the lap belt. If the belt system is equipped with a tension-relieving device, introduce the maximum amount of slack into the upper torso belt that is recommended by the manufacturer. If the belt system is not equipped with a tension-relieving device, allow the excess webbing in the shoulder belt to be retracted by the retractive force of the retractor. (S16.3.5.4)

I certify that I have read and performed each instruction.

Signature: 

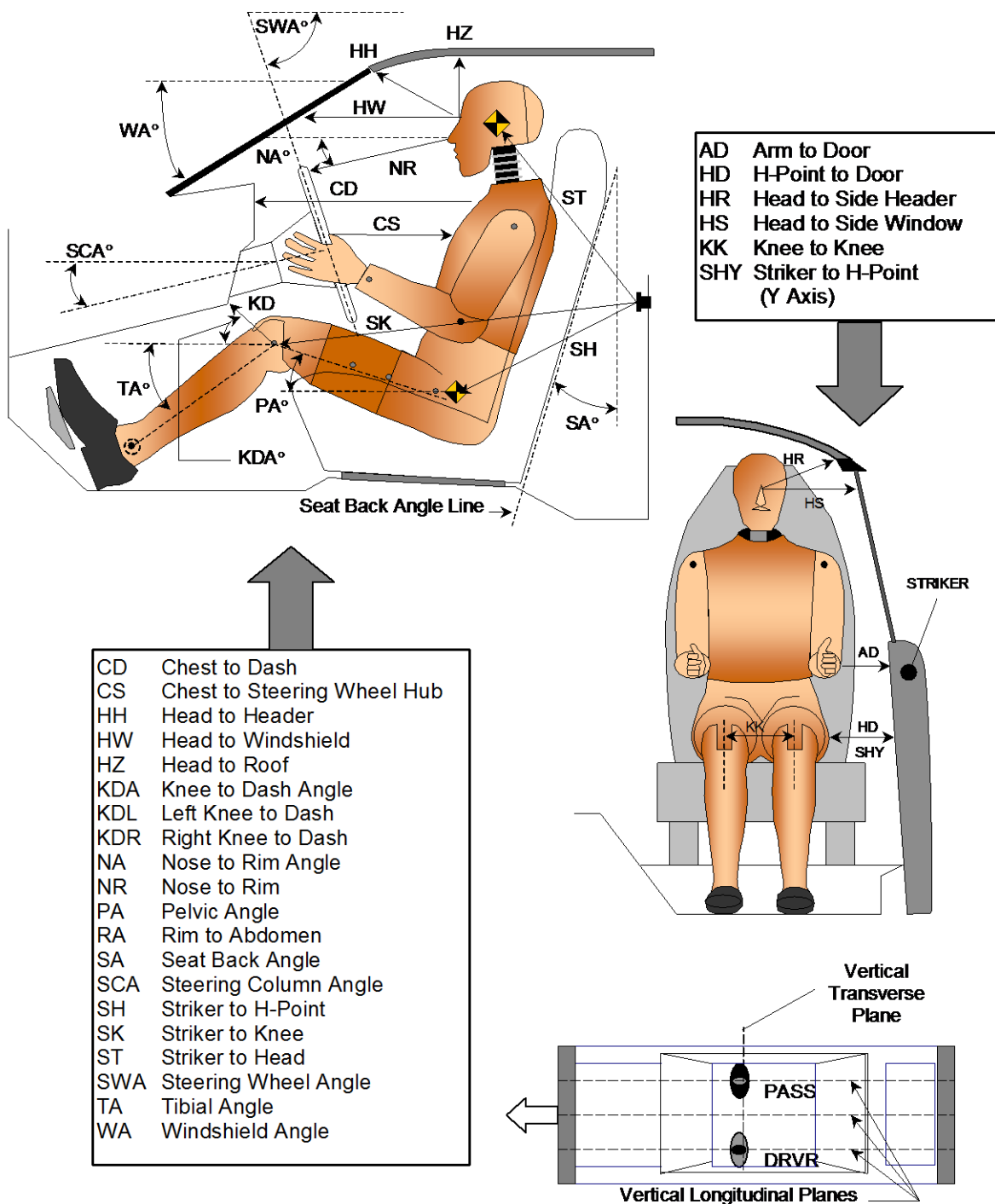
Date: 7/28/14

# **DATA SHEET 37** **DUMMY MEASUREMENTS**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Jon Miller

NHTSA No.: C20140103  
 Test Date: 7/28/14

## **DUMMY MEASUREMENTS FOR FRONT SEAT OCCUPANTS**

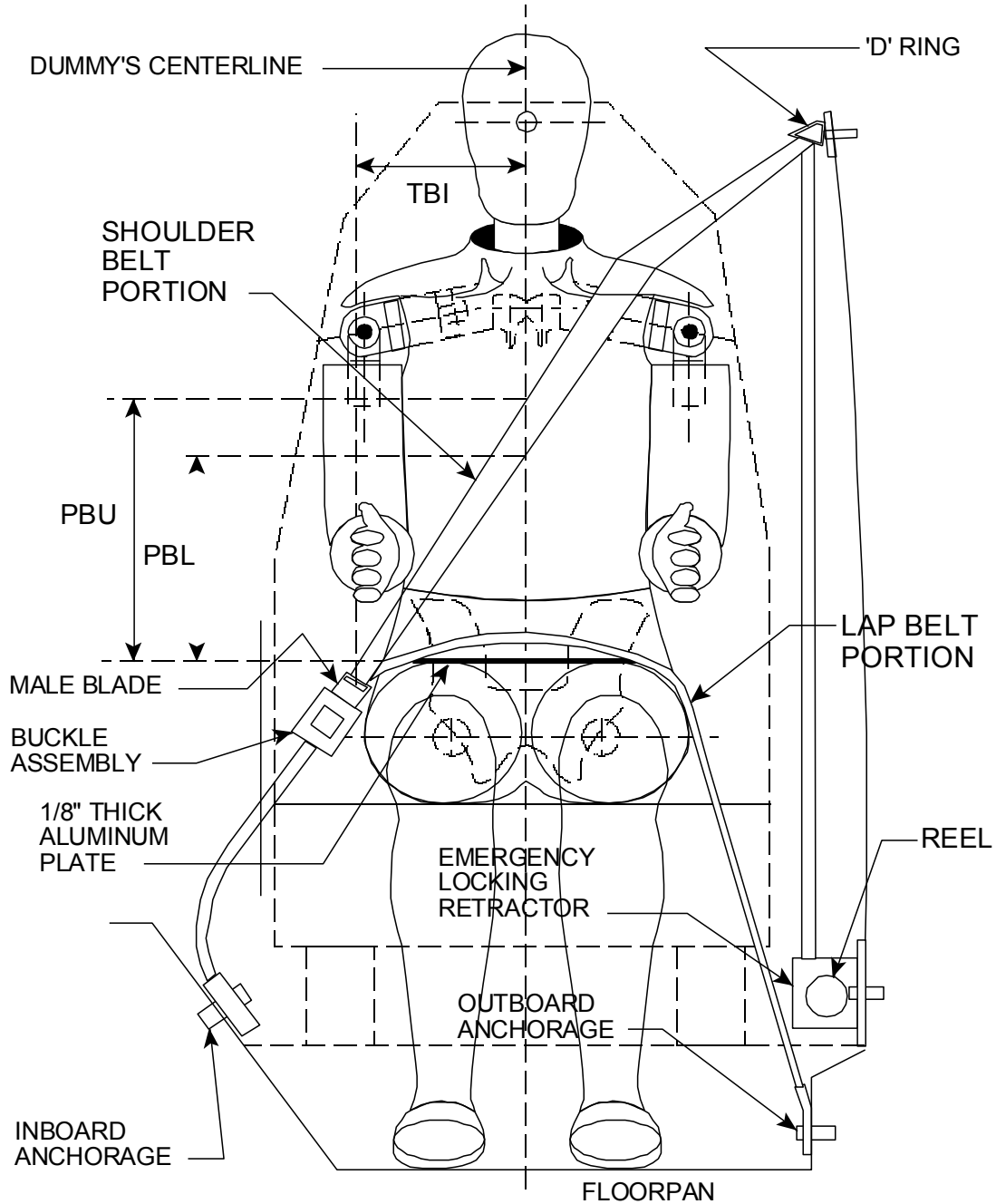


### TEST DUMMY POSITION MEASUREMENTS

| Code | Measurement Description            | Driver SN 511 |           | Passenger SN 510 |           |
|------|------------------------------------|---------------|-----------|------------------|-----------|
|      |                                    | Length (mm)   | Angle (°) | Length (mm)      | Angle (°) |
| WA   | Windshield Angle                   |               | 30.4      |                  |           |
| SWA  | Steering Wheel Angle               |               | 67.3      |                  |           |
| SCA  | Steering Column Angle              |               | 22.7      |                  |           |
| SA   | Seat Back Angle (On Headrest Post) |               | 3.4       |                  | 0.2       |
| HZ   | Head to Roof (Z)                   | 330           |           | 329              |           |
| HH   | Head to Header                     | 402           | 38.0      | 429              | 33.9      |
| HW   | Head to Windshield                 | 739           | 0.0       | 745              | 0.0       |
| HR   | Head to Side Header (Y)            | 300           |           | 302              |           |
| NR   | Nose to Rim                        | 313           | 5.7       |                  |           |
| CD   | Chest to Dash                      | 478           |           | 444              |           |
| CS   | Chest to Steering Hub              | 240           | 11.2      |                  |           |
| RA   | Rim to Abdomen                     | 127           | 0.0       |                  |           |
| KDL  | Left Knee to Dash                  | 101           | 32.1      | 149              |           |
| KDR  | Right Knee to Dash                 | 109           |           | 141              | 36.1      |
| PA   | Pelvic Angle                       |               | 21.3      |                  | 53.4      |
| TA   | Tibia Angle                        |               | 53.4      |                  | 53.7      |
| KK   | Knee to Knee (Y)                   | 297           |           | 227              |           |
| SK   | Striker to Knee                    | 699           | 87.3      | 660              | 87.0      |
| ST   | Striker to Head                    | 583           | 21.5      | 567              | 23.6      |
| SH   | Striker to H-Point                 | 372           | 94.1      | 326              | 90.3      |
| SHY  | Striker to H-Point (Y)             | 312           |           | 311              |           |
| HS   | Head to Side Window                | 355           |           | 353              |           |
| HD   | H-Point to Door (Y)                | 165           |           | 169              |           |
| AD   | Arm to Door (Y)                    | 177           |           | 84               |           |
| AA   | Ankle to Ankle                     | 281           |           | 174              |           |



## SEAT BELT POSITIONING DATA



## FRONT VIEW OF DUMMY

### SEAT BELT POSITIONING MEASUREMENTS

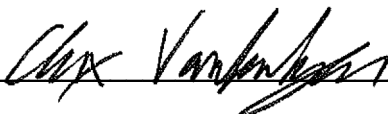
| Measurement Description                           | Units | Driver | Passenger |
|---------------------------------------------------|-------|--------|-----------|
| PBU - Top surface of reference to belt upper edge | mm    | N/A    | N/A       |
| PBL - Top surface of reference to belt lower edge | mm    | N/A    | N/A       |

## CRASH TEST

Test Date: 7/28/14

- ☒ 20. Describe the contact points of the dummy with the interior of the vehicle.
- ☒ Driver Dummy: Head to Air Bag, Headrest, Curtain Air Bag; Chest to Air Bag; Knees to Knee Bolster.
  - ☒ Passenger Dummy: Head to Air Bag, Headrest, Curtain Airbag; Chest to Air Bag; Knees to Glovebox

REMARKS:

Signature: 

Date: 7/28/14

I certify that I have read and performed each instruction.

# DATA SHEET 40

## ACCIDENT INVESTIGATION MEASUREMENTS

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Alex Vanderheyden

NHTSA No.: C20140103  
 Test Date: 7/28/14

|                          |    |               |                        |              |                       |
|--------------------------|----|---------------|------------------------|--------------|-----------------------|
| IMPACT ANGLE:            | 0° |               |                        |              |                       |
| BELTED DUMMIES (YES/NO): | No |               |                        |              |                       |
| TEST SPEED:              | X  | 32 to 40 kmph |                        | 0 to 48 kmph | 0 to 56 kmph          |
| DRIVER DUMMY:            | X  |               | 5 <sup>th</sup> female |              | 50 <sup>th</sup> male |
| PASSENGER DUMMY:         | X  |               | 5 <sup>th</sup> female |              | 50 <sup>th</sup> male |

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| Vehicle Year/Make/Model/Body Style: | 2014 Chevrolet Silverado 1500 TRUCK |
| VIN:                                | 3GCPCPEH5EG366679                   |
| Wheelbase:                          | 3658 mm                             |
| Build Date:                         | 01/14                               |
| Vehicle Size Category:              | 6                                   |
| Test Weight:                        | 2524.7 kg                           |
| Front Overhang:                     | 995 mm                              |
| Overall Width:                      | 2000 mm                             |
| Overall Length Center:              | 5835 mm                             |

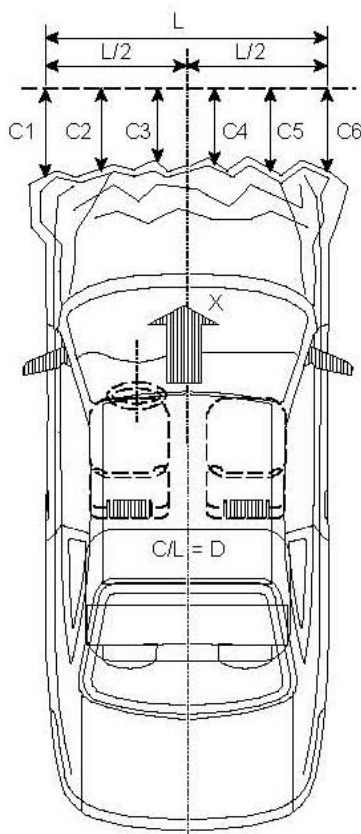
| Accelerometer Data |                                      |
|--------------------|--------------------------------------|
| Location:          | As per measurements on Data Sheet 33 |
| Linearity:         | >99.9%                               |

|                        |             |
|------------------------|-------------|
| Integration Algorithm: | Trapezoidal |
| Vehicle Impact Speed:  | 39.8 kmph   |
| Time of Separation:    | 125.5 ms    |
| Velocity Change:       | 40.4 kmph   |

## CRUSH PROFILE

Collision Deformation Classification: 12FDEW2  
 Midpoint of Damage: Vehicle Longitudinal Centerline  
 Damage Region Length (mm): 2070  
 Impact Mode: Frontal Barrier

| No. | Measurement Description    | Units | Pre-Test | Post-Test | Difference |
|-----|----------------------------|-------|----------|-----------|------------|
| C1  | Crush zone 1 at left side  | mm    | 5533     | 5324      | 209        |
| C2  | Crush zone 2 at left side  | mm    | 5720     | 5386      | 334        |
| C3  | Crush zone 3 at left side  | mm    | 5795     | 5370      | 425        |
| C4  | Crush zone 4 at right side | mm    | 5795     | 5374      | 421        |
| C5  | Crush zone 5 at right side | mm    | 5720     | 5396      | 324        |
| C6  | Crush zone 6 at right side | mm    | 5533     | 5314      | 219        |



REMARKS:

Signature: *Chex Vandenbergh*

Date: 7/28/14

I certify that I have read and performed each instruction.

**DATA SHEET 41**  
**WINDSHIELD MOUNTING (FMVSS 212)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Alex Vanderheyden

NHTSA No.: C20140103  
 Test Date: 7/28/14

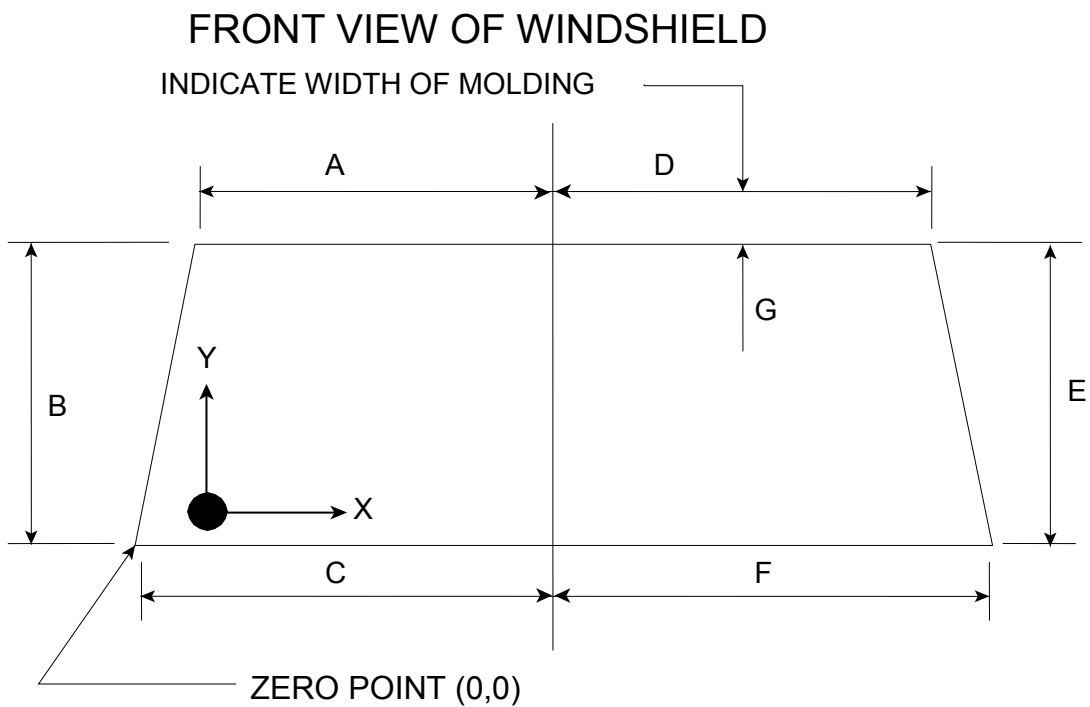
|                          |                                     |               |                          |              |                                       |
|--------------------------|-------------------------------------|---------------|--------------------------|--------------|---------------------------------------|
| IMPACT ANGLE:            | 0°                                  |               |                          |              |                                       |
| BELTED DUMMIES (YES/NO): | NO                                  |               |                          |              |                                       |
| TEST SPEED:              | <input checked="" type="checkbox"/> | 32 to 40 kmph | <input type="checkbox"/> | 0 to 48 kmph | <input type="checkbox"/> 0 to 56 kmph |
| DRIVER DUMMY:            | <input checked="" type="checkbox"/> |               | 5 <sup>th</sup> female   |              | 50 <sup>th</sup> male                 |
| PASSENGER DUMMY:         | <input checked="" type="checkbox"/> |               | 5 <sup>th</sup> female   |              | 50 <sup>th</sup> male                 |

1. Pre-Crash
- ☒ 1.1 Describe from visual inspection how the windshield is mounted and describe any trim material.
- Retained with glue, rubber and plastic trim
- ☒ 1.2 Mark the longitudinal centerline of the windshield.
- ☒ 1.3 Measure pre-crash A, B, and C for the left side and record in the chart below.
- ☒ 1.4 Measure pre-crash C, D, and E for the right side and record in the chart below.
- ☒ 1.5 Measure from the edge of the retainer or molding to the edge of the windshield.
- ☒ Dimension G (mm): 5 mm
2. Post Crash
- ☒ 2.1 Can a single thickness of copier type paper (as small a piece as necessary) slide between the windshield and the vehicle body?
- ☒ No - Pass. Skip to the table of measurements, complete it by repeating the pre-crash measurements in the post crash column, and calculate the retention percentage, which will be 100%.
- ☐ Yes, go to 2.2
- ☐ 2.2 Visibly mark the beginning and end of the portions of the periphery where the paper slides between the windshield and the vehicle body.
- ☐ 2.3 Measure and record post-crash A, B, C, D, E, and F such that the measurements do not include any of the parts of the windshield where the paper slides between the windshield and the vehicle body.
- ☐ 2.4 Calculate and record the percent retention for the right and left side of the windshield.
- ☐ 2.5 Is total right side percent retention less than 50%?
- ☐ Yes, Fail
- ☐ No, Pass
- ☐ 2.6 Is total left side percent retention less than 50%?
- ☐ Yes, Fail
- ☐ No, Pass

## WINDSHIELD RETENTION MEASUREMENTS

|            | Dimension | Pre-Crash<br>(mm) | Post-Crash<br>(mm) | Percent Retention<br>(Post-Test ÷ Pre-Crash) |
|------------|-----------|-------------------|--------------------|----------------------------------------------|
| Left Side  | A         | 684               | 684                | 100%                                         |
|            | B         | 808               | 808                | 100%                                         |
|            | C         | 810               | 810                | 100%                                         |
|            | Total     | 2302              | 2302               | 100%                                         |
| Right Side | D         | 684               | 684                | 100%                                         |
|            | E         | 808               | 808                | 100%                                         |
|            | F         | 810               | 810                | 100%                                         |
|            | Total     | 2302              | 2302               | 100%                                         |

Indicate area of mounting failure: NONE



REMARKS:

Signature: *Chex Vandenbosch*

Date: 7/28/14

I certify that I have read and performed each instruction.

**DATA SHEET 42**  
**WINDSHIELD ZONE INTRUSION (FMVSS 219)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance  
 Test Technician: Alex Vanderheyden

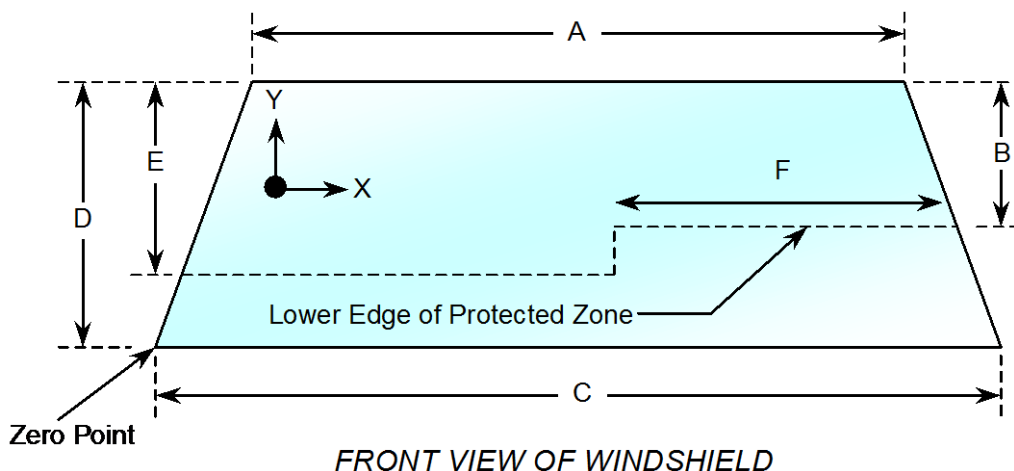
NHTSA No.: C20140103  
 Test Date: 7/28/14

|                          |    |               |                        |              |                       |
|--------------------------|----|---------------|------------------------|--------------|-----------------------|
| IMPACT ANGLE:            | 0° |               |                        |              |                       |
| BELTED DUMMIES (YES/NO): | No |               |                        |              |                       |
| TEST SPEED:              | X  | 32 to 40 kmph |                        | 0 to 48 kmph | 0 to 56 kmph          |
| DRIVER DUMMY:            | X  |               | 5 <sup>th</sup> female |              | 50 <sup>th</sup> male |
| PASSENGER DUMMY:         | X  |               | 5 <sup>th</sup> female |              | 50 <sup>th</sup> male |

This standard specifies limits for the displacement of vehicle components into the windshield area during a frontal barrier impact test at any speed up to and including 48 kmph.

- ☒ 1. Place a 165 mm diameter rigid sphere, with a mass of 6.8 kg on the instrument panel so that it is simultaneously touching the instrument panel and the windshield. (571.219 S6.1(a))
- ☒ 2. Roll the sphere from one side of the windshield to the other while marking on the windshield where the sphere contacts the windshield. (571.219 S6.1(b))
- ☒ 3. From the outermost contactable points on the windshield draw a horizontal line to the edges of the windshield. (571.219 S6.1(b))
- ☒ 4. Draw a line on the inner surface of the windshield that is 13 mm below the line determined in items 2 and 3.
- ☒ 5. After the crash test, record any points where a part of the exterior of the vehicle has marked, penetrated, or broken the windshield.

Provide all dimensions necessary to reproduce the protected area.





### WINDSHIELD DIMENSIONS

| Item | Units | Value |
|------|-------|-------|
| A    | mm    | 1368  |
| B    | mm    | 432   |
| C    | mm    | 1620  |
| D    | mm    | 808   |
| E    | mm    | 442   |
| F    | mm    | 512   |

### AREA OF PROTECTED ZONE FAILURES:

- B. Provide coordinates of the area that the protected zone was penetrated more than 0.25 inches by a vehicle component other than one which is normally in contact with the windshield.

| X    | Y |
|------|---|
| NONE |   |
|      |   |
|      |   |
|      |   |

- C. Provide coordinates of the area beneath the protected zone template that the inner surface of the windshield was penetrated by a vehicle component.

| X    | Y |
|------|---|
| NONE |   |
|      |   |
|      |   |
|      |   |

### REMARKS:

I certify that I have read and performed each instruction.

Signature: 

Date: 7/28/14

**DATA SHEET 43**  
**FUEL SYSTEM INTEGRITY (FMVSS 301)**

Test Vehicle: 2014 Chevrolet Silverado 1500  
Test Program: FMVSS 208 Compliance  
Test Technician: Ben Fischer

NHTSA No.: C20140103  
Test Date: 7/28/14

|                 |                            |
|-----------------|----------------------------|
| TYPE OF IMPACT: | 25 mph Unbelted 0° Frontal |
|-----------------|----------------------------|

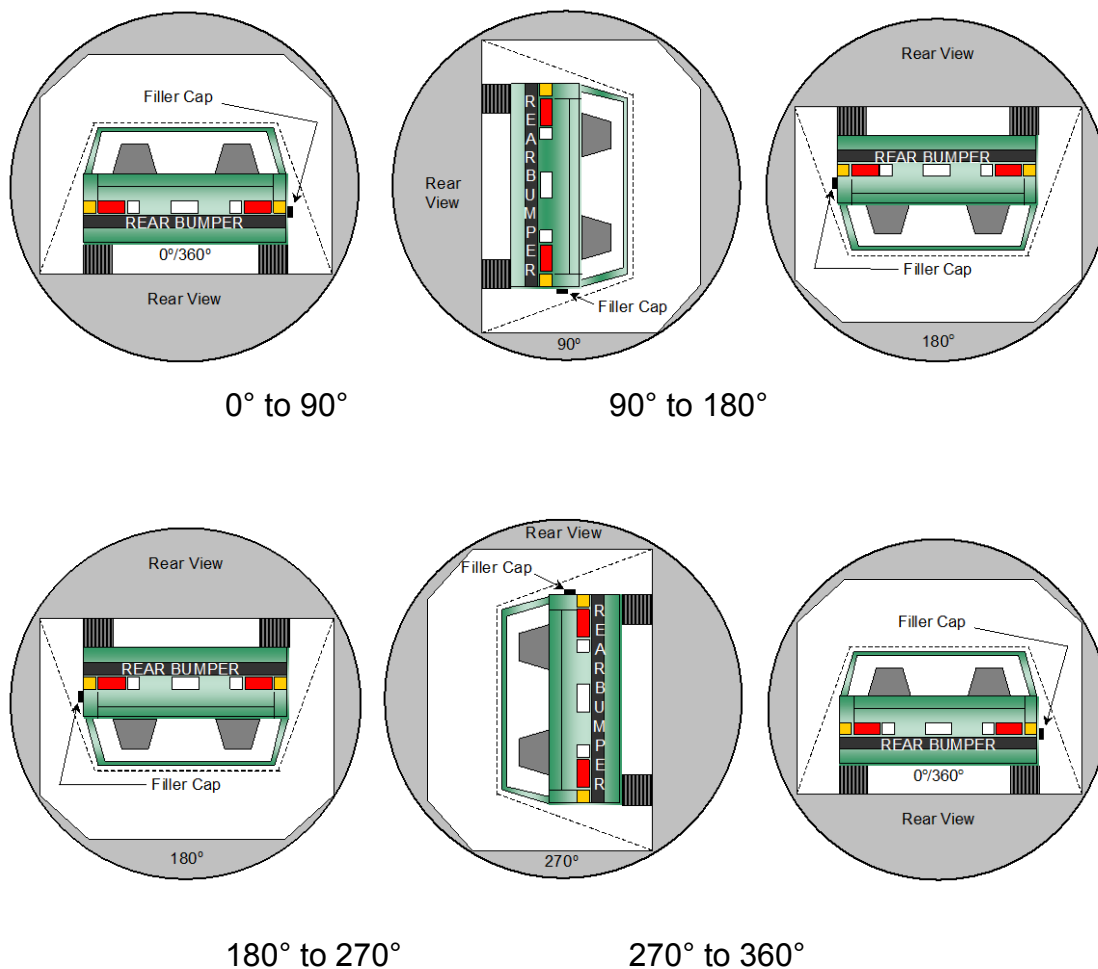
**Stoddard Solvent Spillage Measurements**

- A. From impact until vehicle motion ceases: 0 grams  
(Maximum Allowable = 28 grams)
- B. For the 5 minute period after motion ceases: 0 grams  
(Maximum Allowable = 142 grams)
- C. For the following 25 minutes: 0 grams  
(Maximum Allowable = 28 grams/minute)
- D. Spillage: None

**DATA SHEET 43**  
**FMVSS 301 STATIC ROLLOVER DATA**

Test Vehicle: 2014 Chevrolet Silverado 1500  
 Test Program: FMVSS 208 Compliance

NHTSA No.: C20140103  
 Test Date: 7/28/14



1. The specified fixture rollover rate for each 90° of rotation is 60 to 180 seconds.
2. The position hold time at each position is 300 seconds (minimum).
3. Details of Stoddard Solvent spillage locations: **None**

| Test Phase   | Rotation Time (sec.) | Hold Time (sec.) | Spillage (grams) |
|--------------|----------------------|------------------|------------------|
| 0° to 90°    | 166                  | 300              | 0                |
| 90° to 180°  | 152                  | 300              | 0                |
| 180° to 270° | 132                  | 300              | 0                |
| 270° to 360° | 158                  | 300              | 0                |

## APPENDIX A

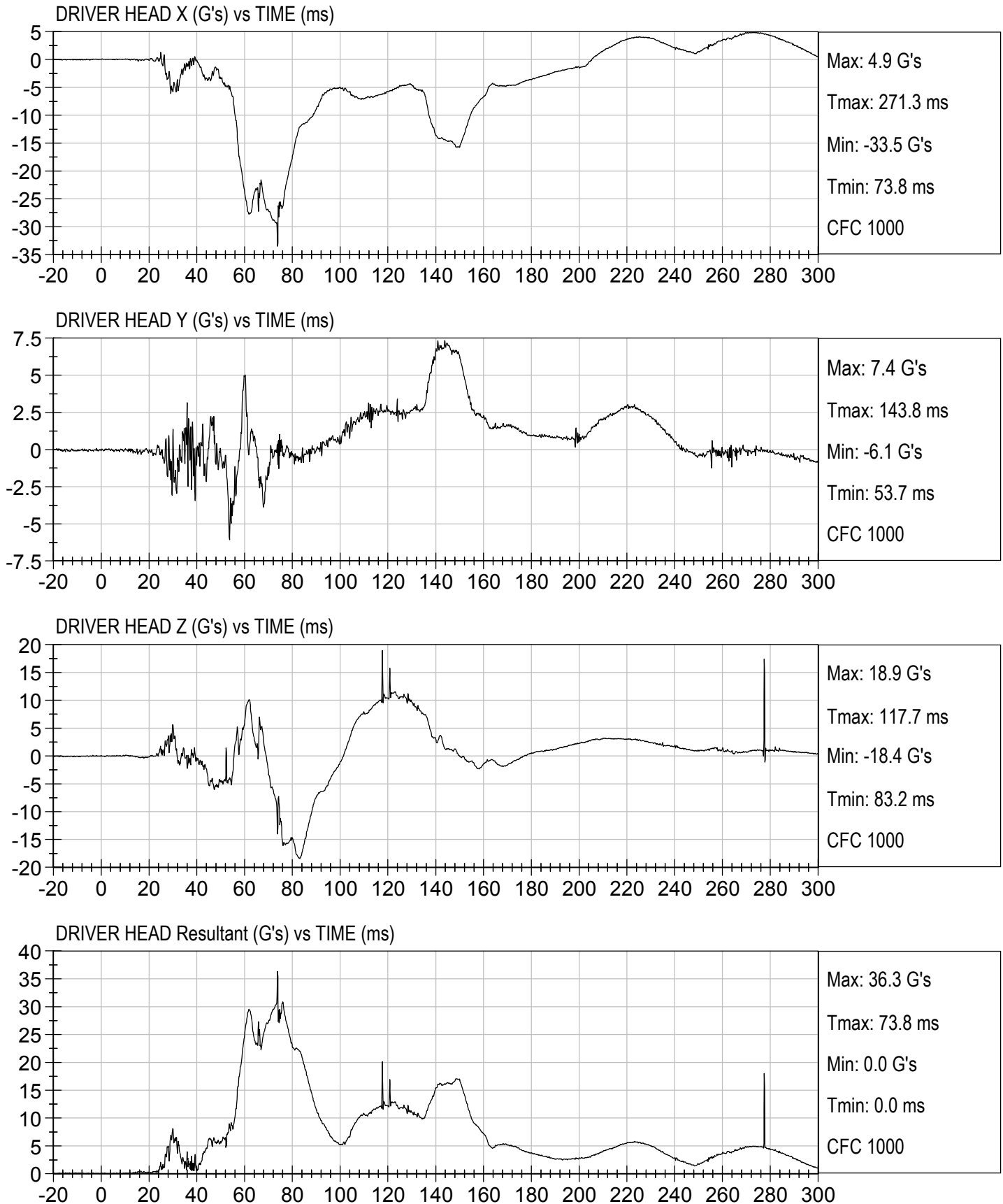
### CRASH TEST DATA

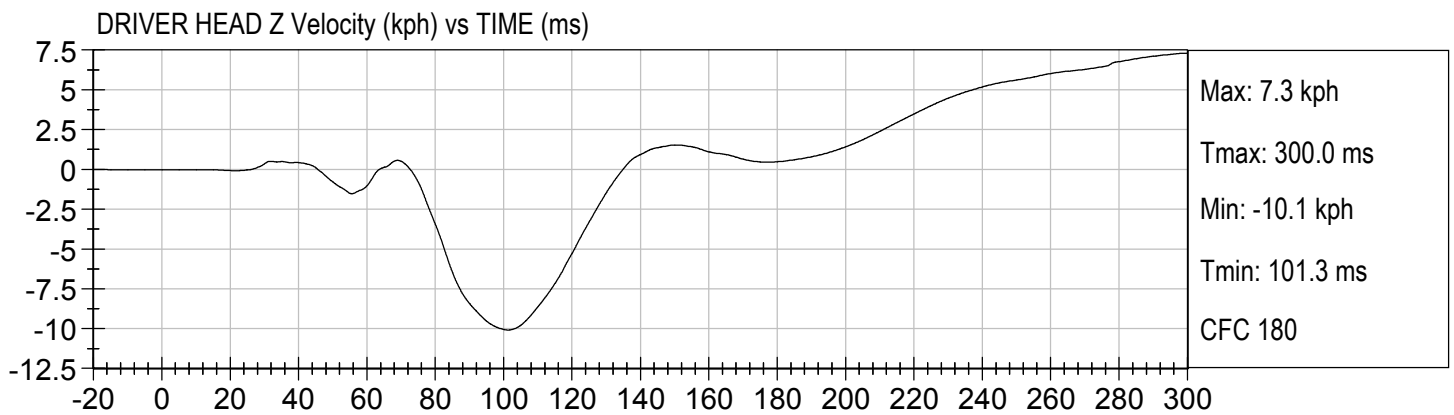
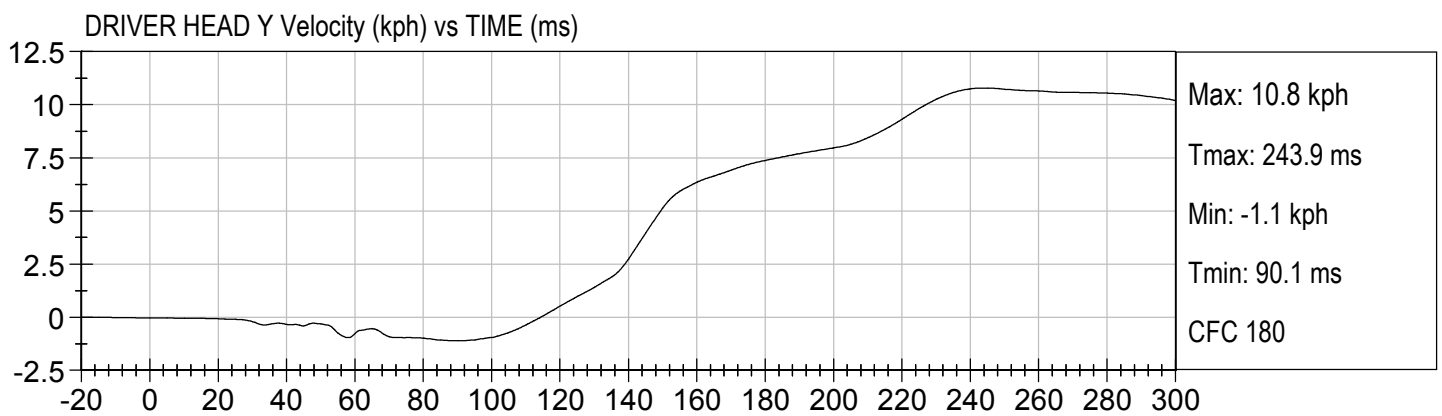
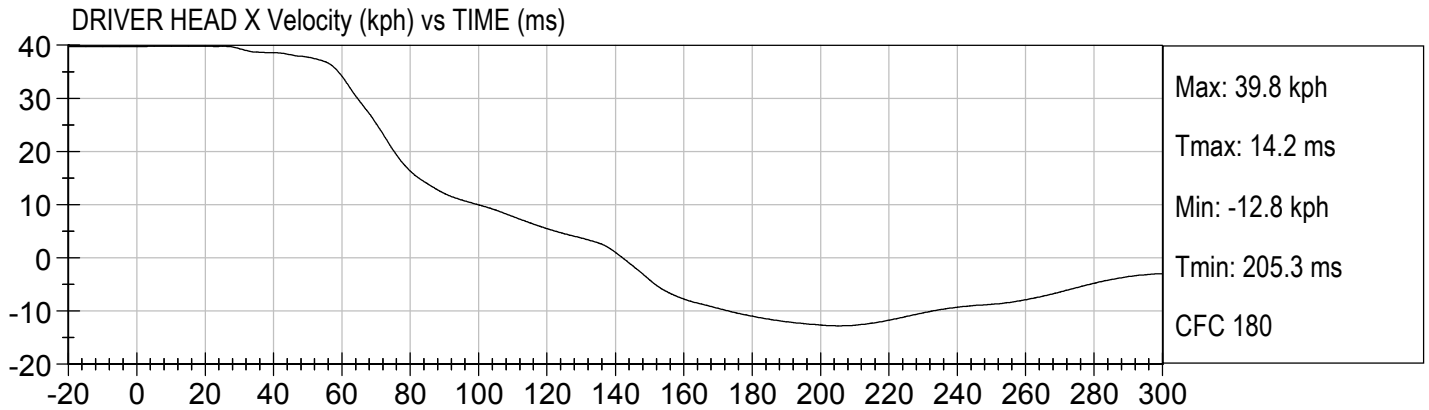
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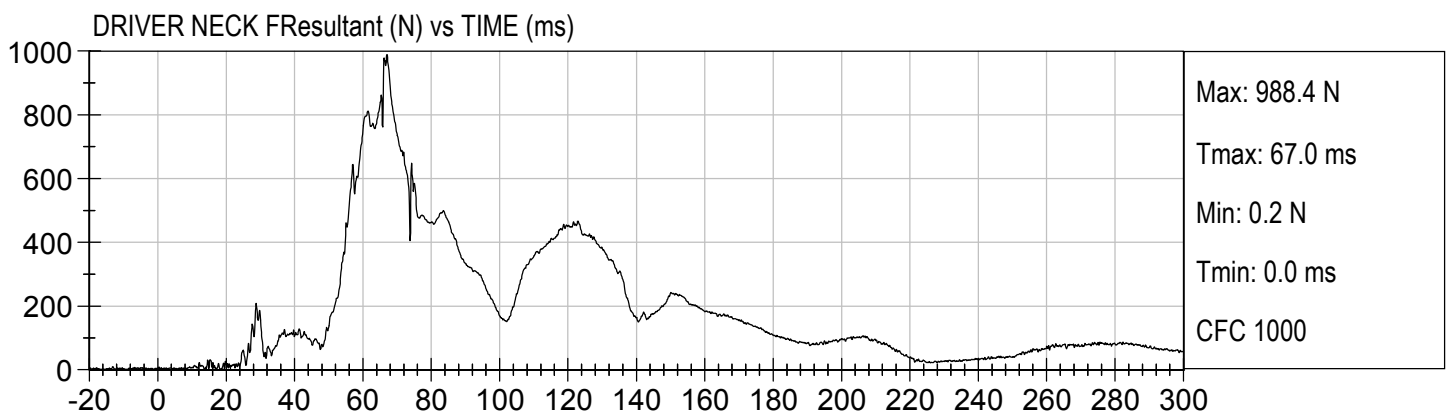
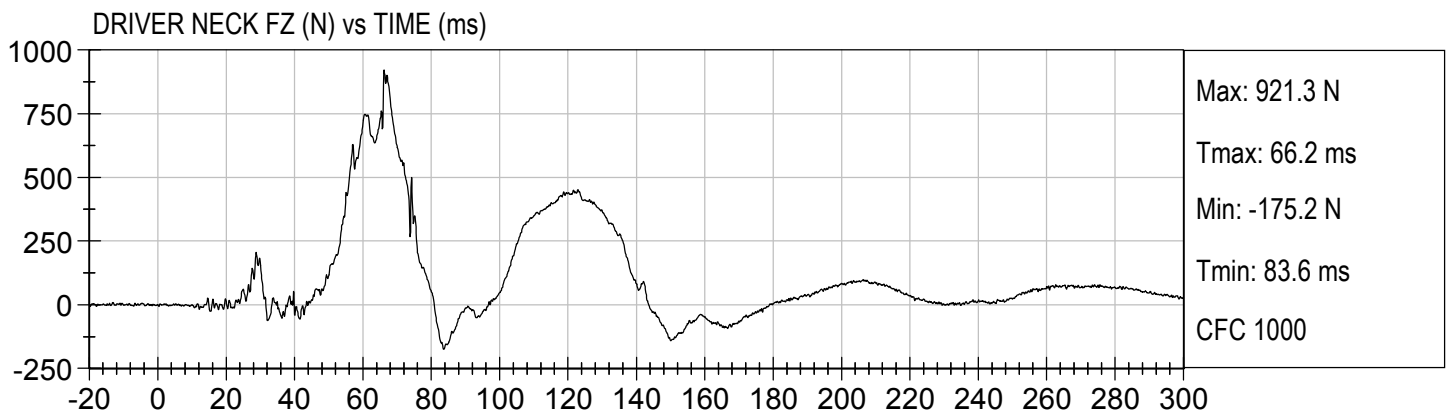
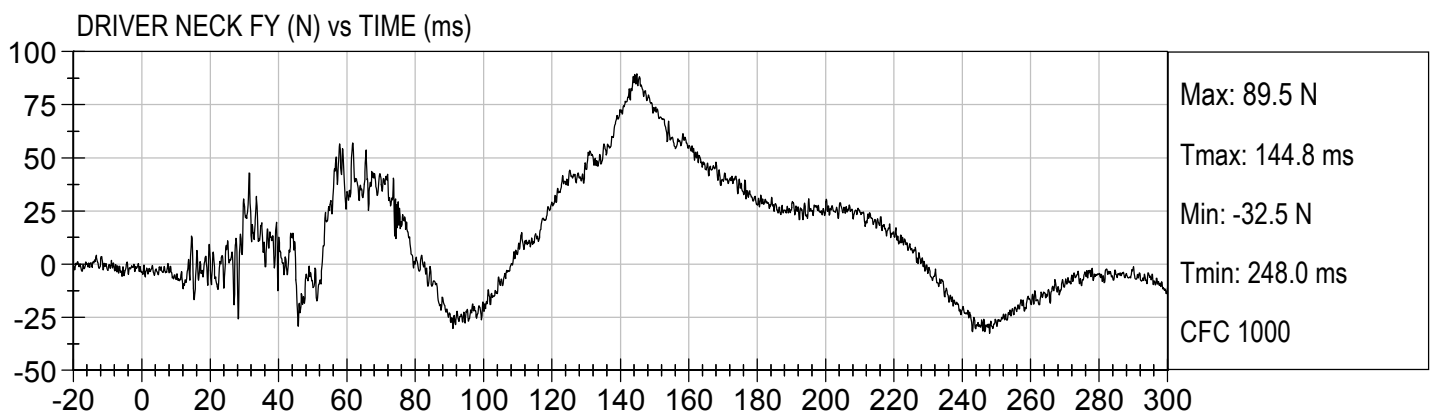
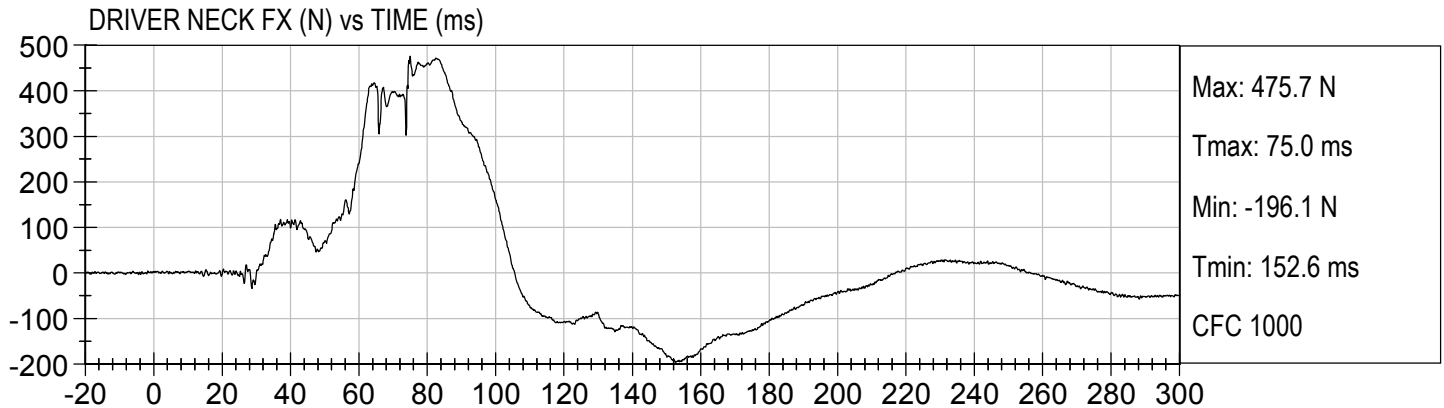
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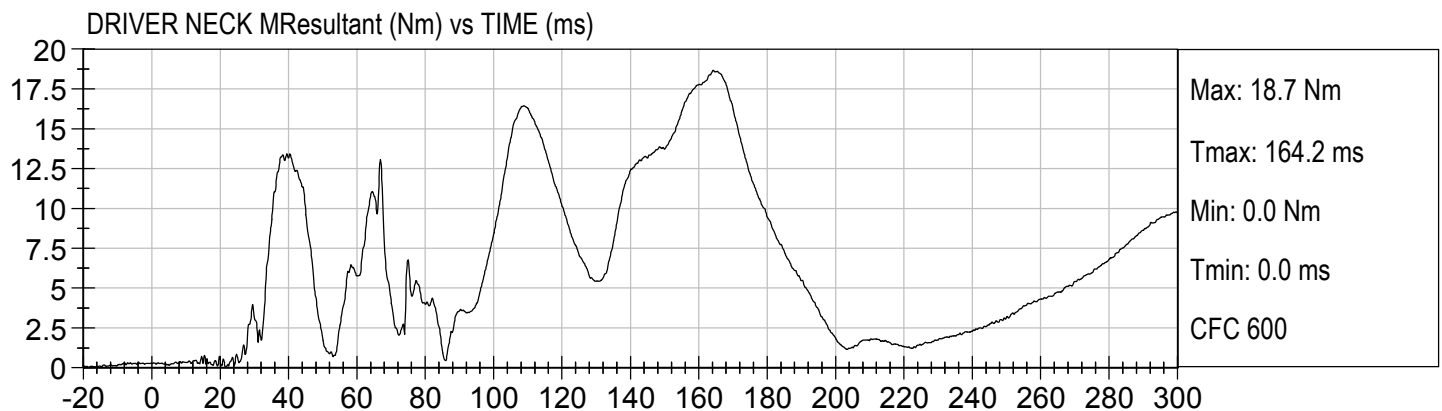
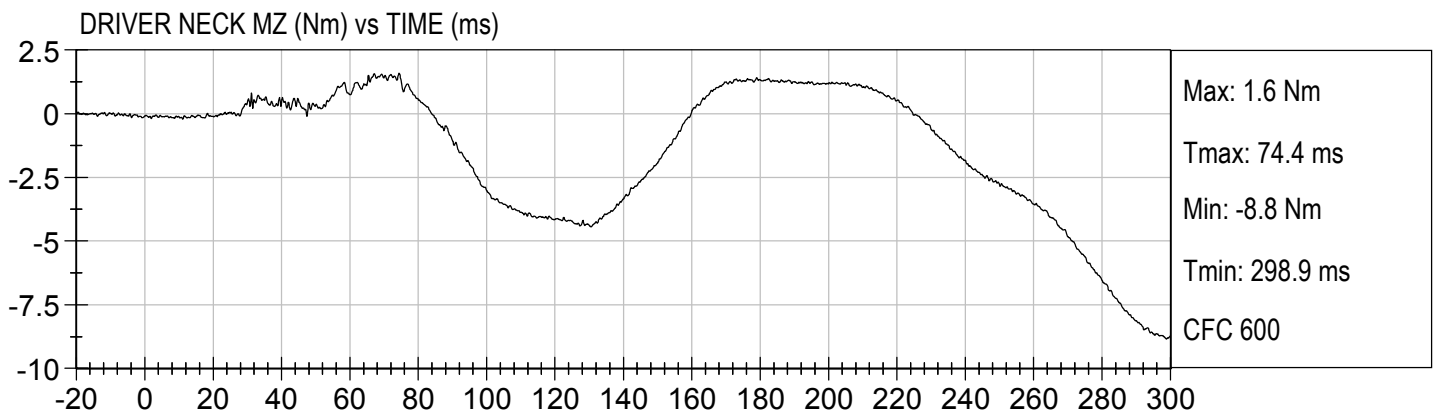
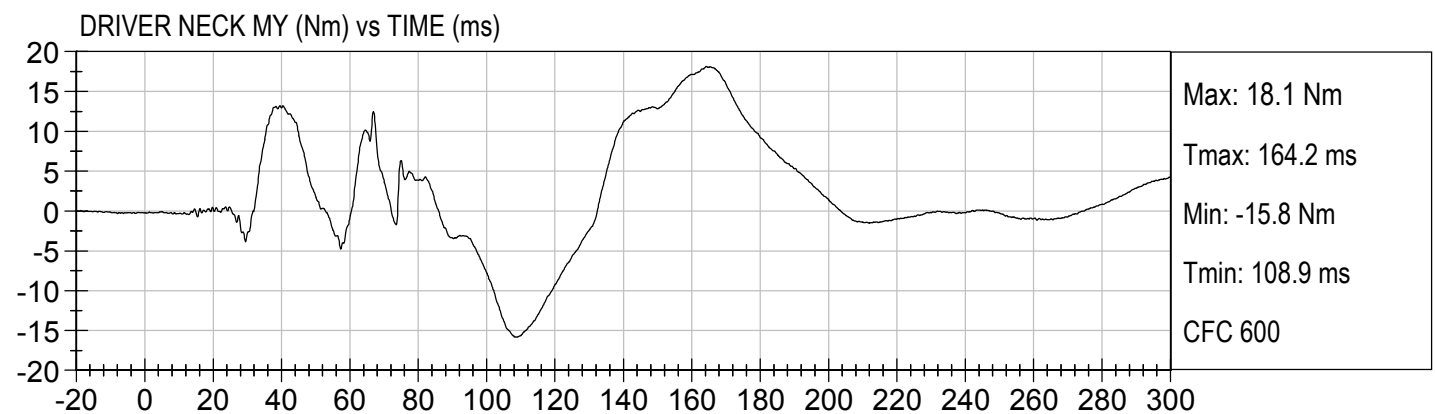
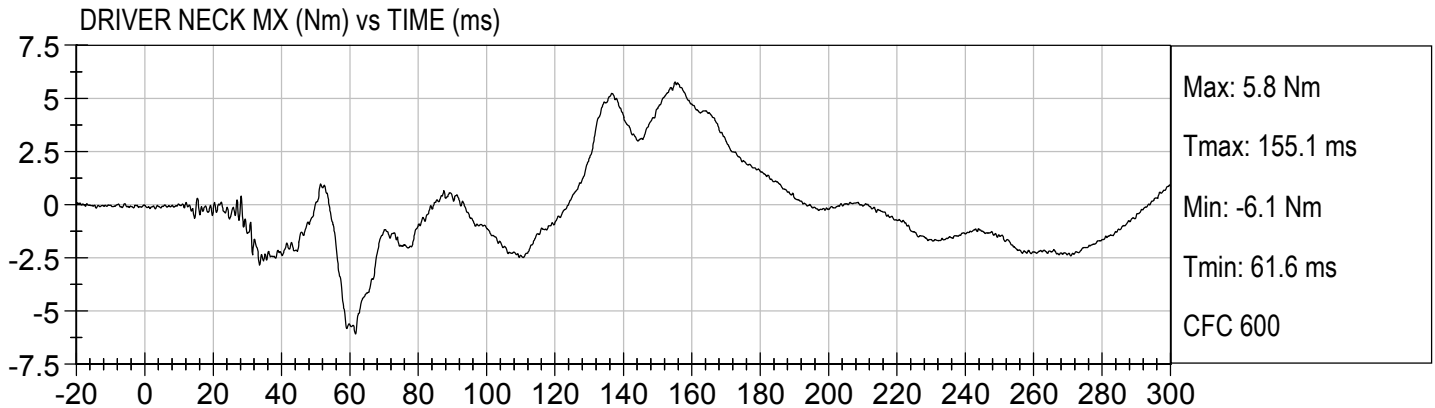
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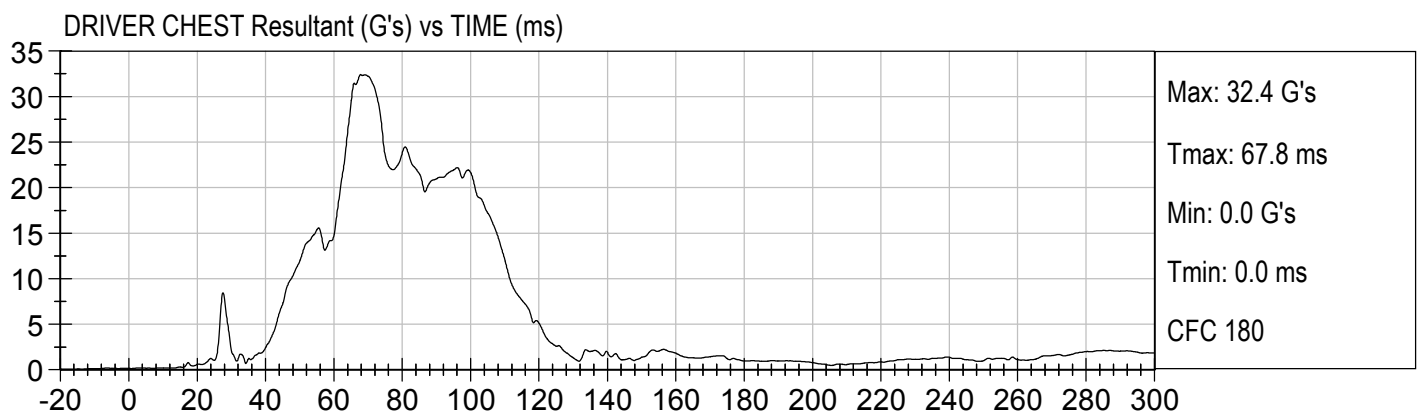
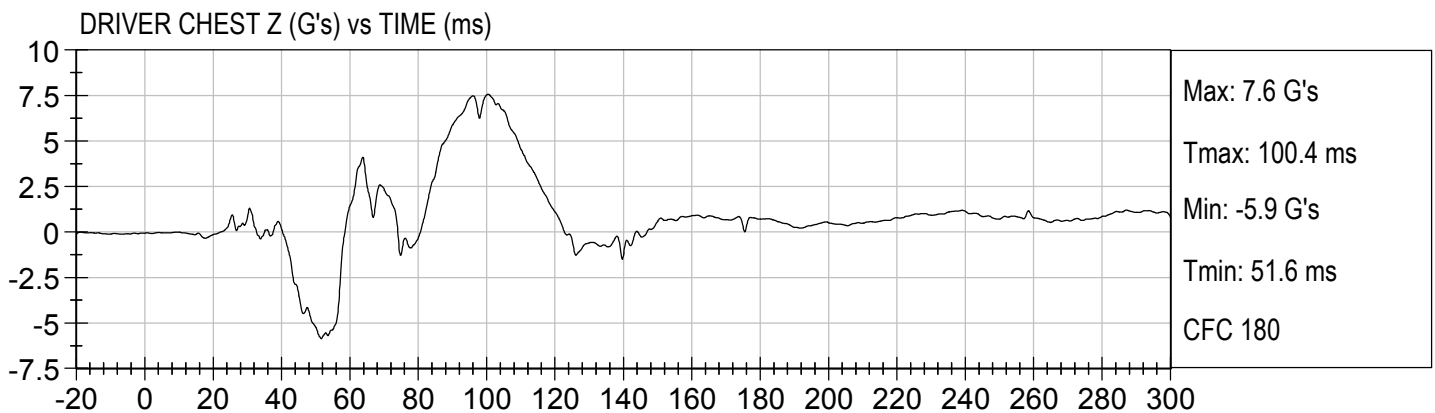
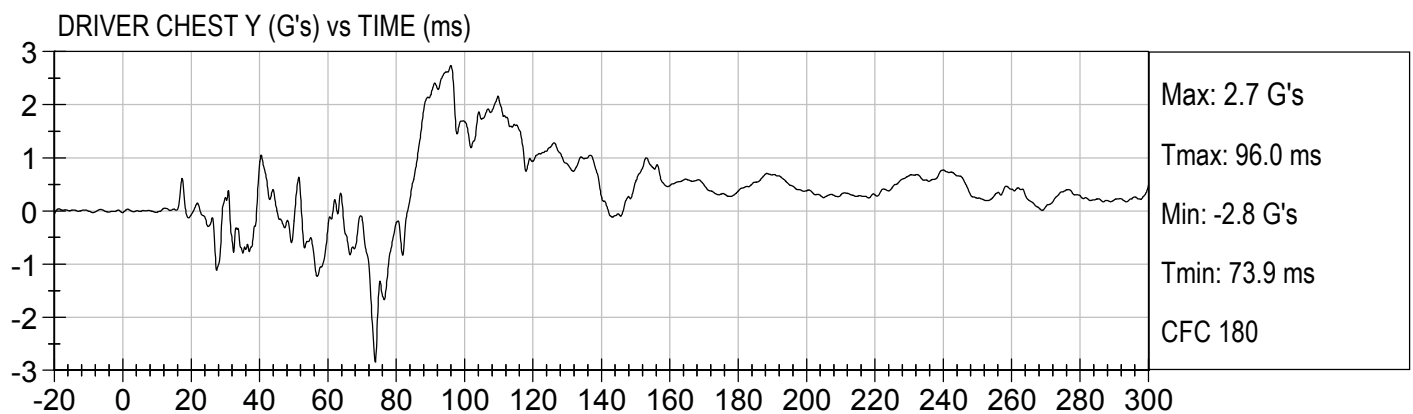
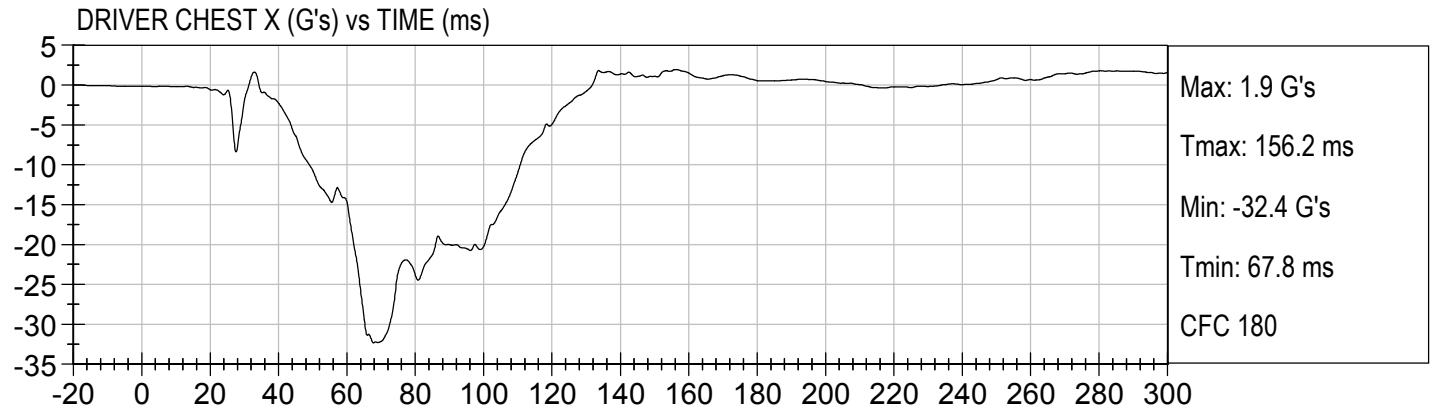


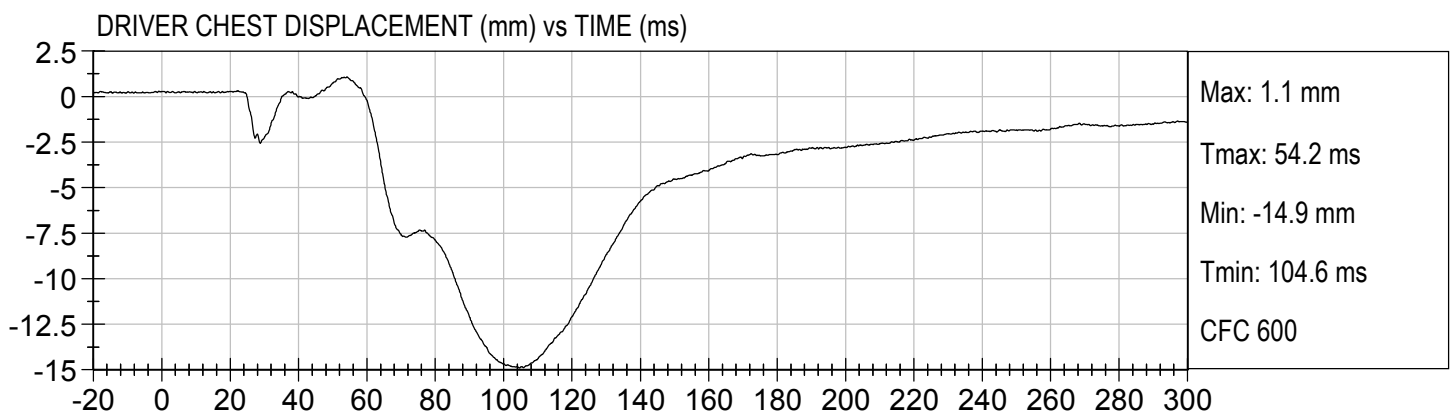
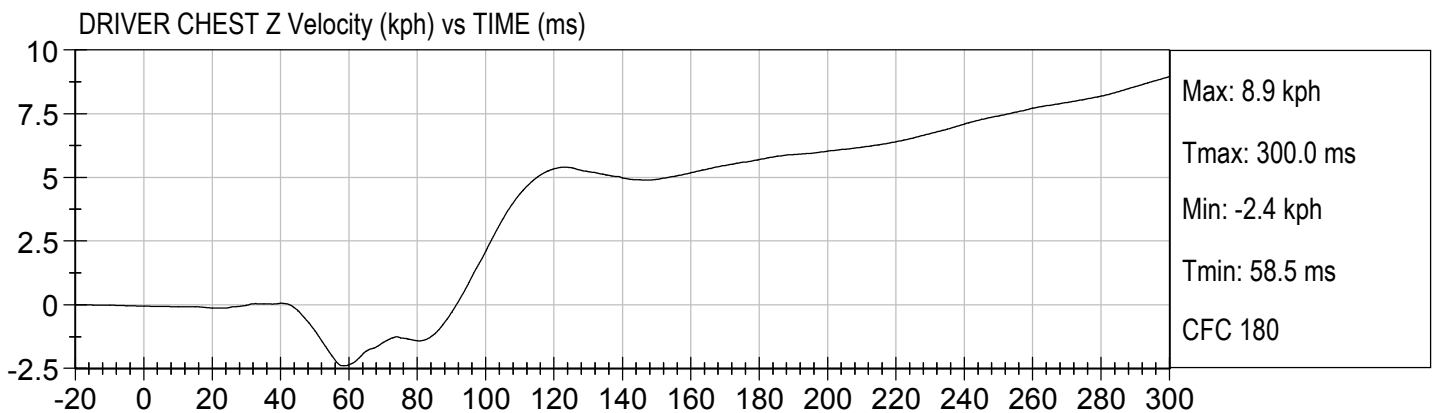
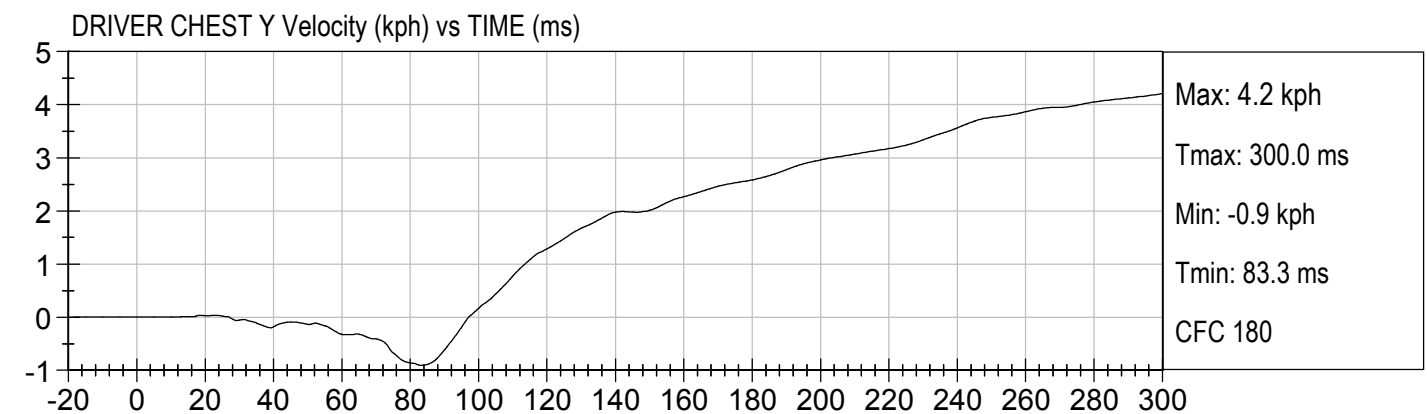
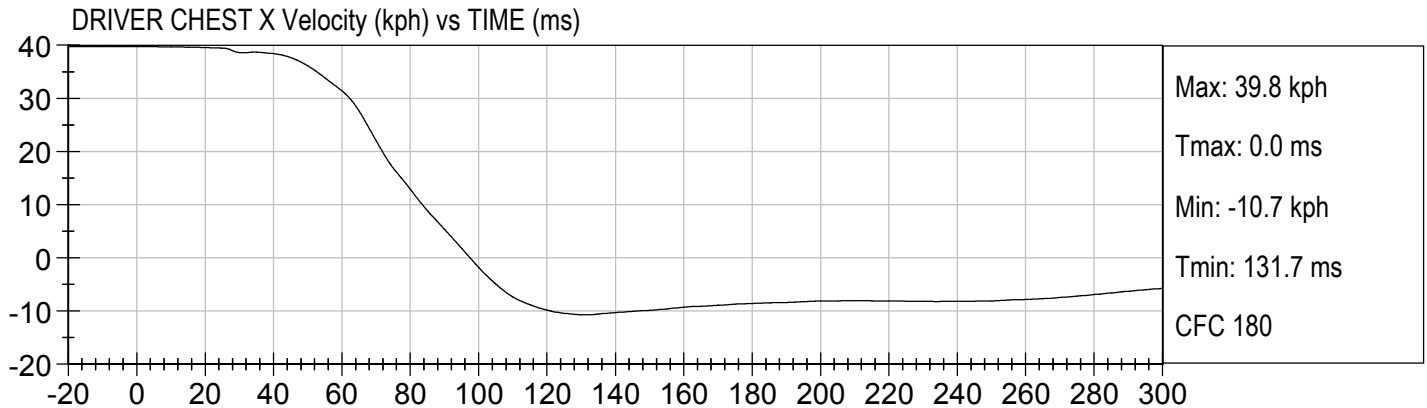


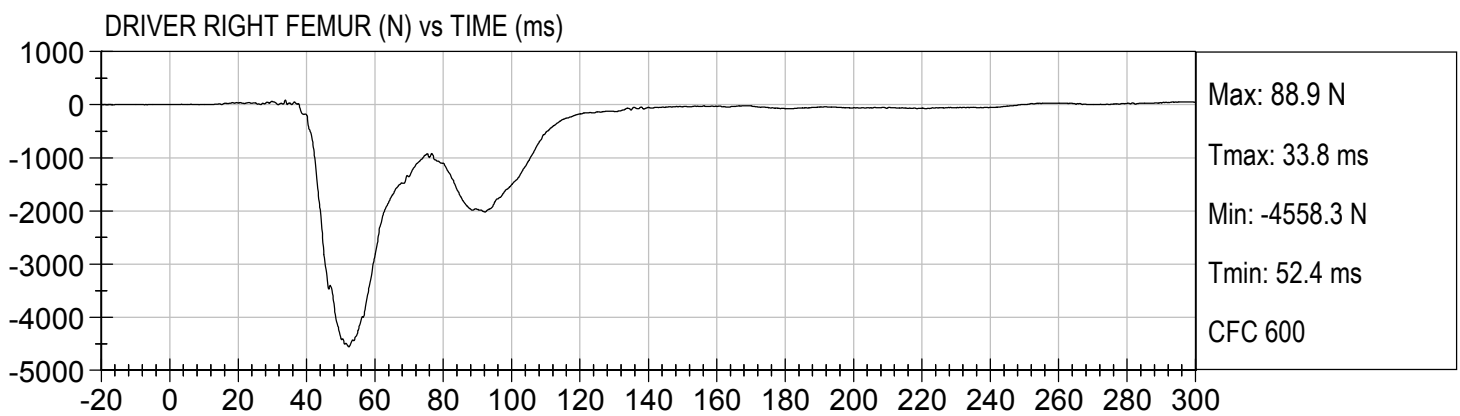
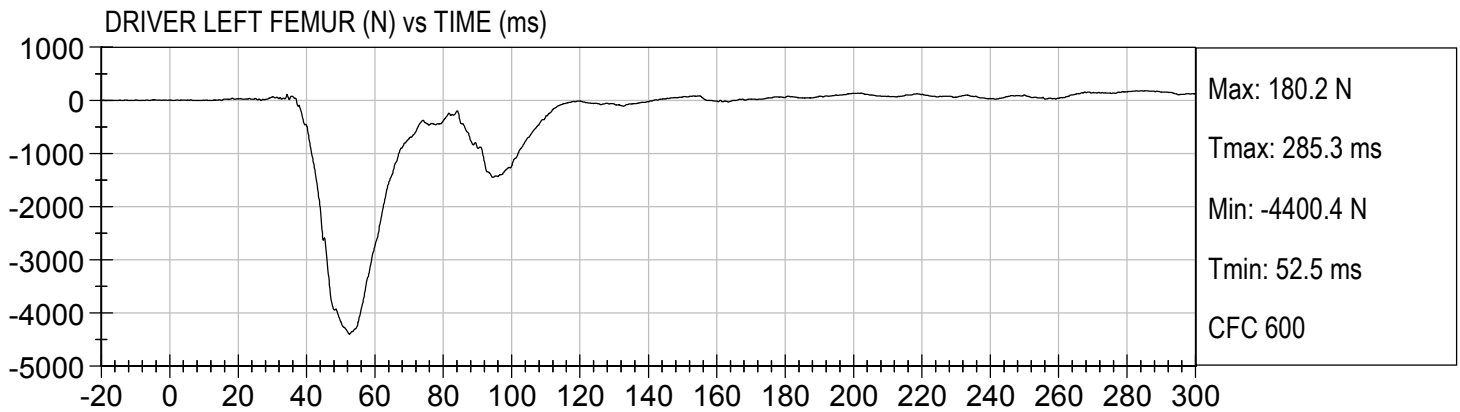


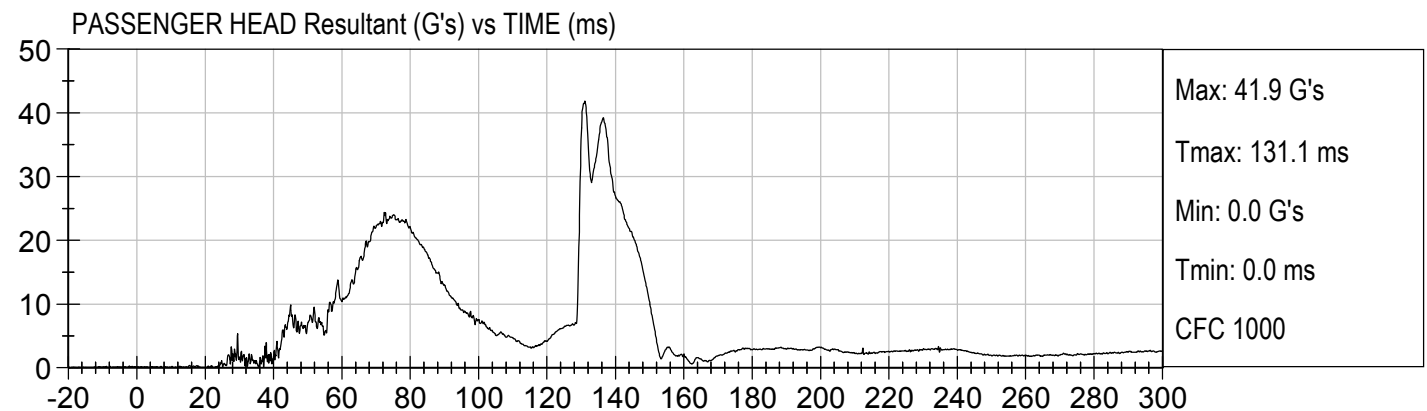
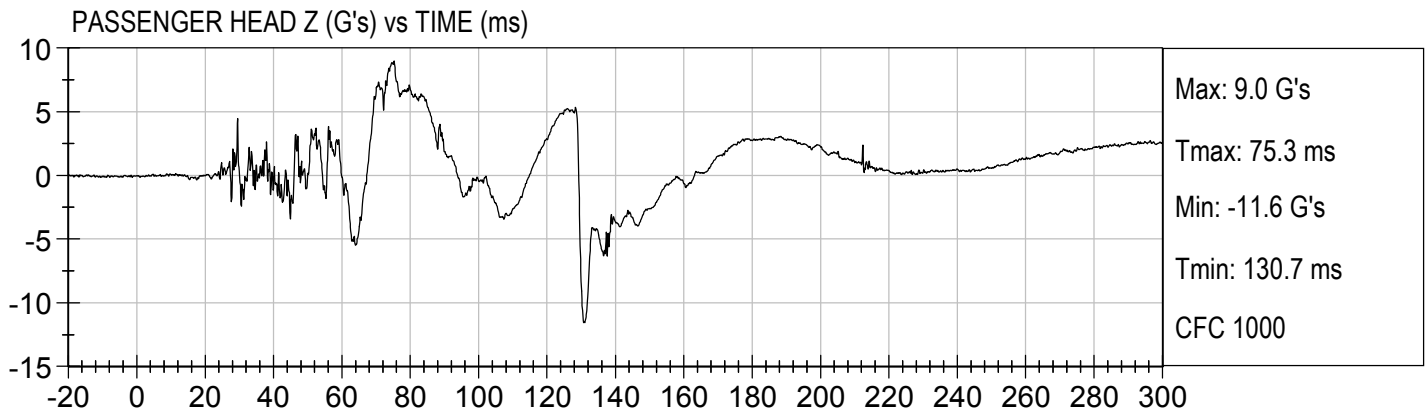
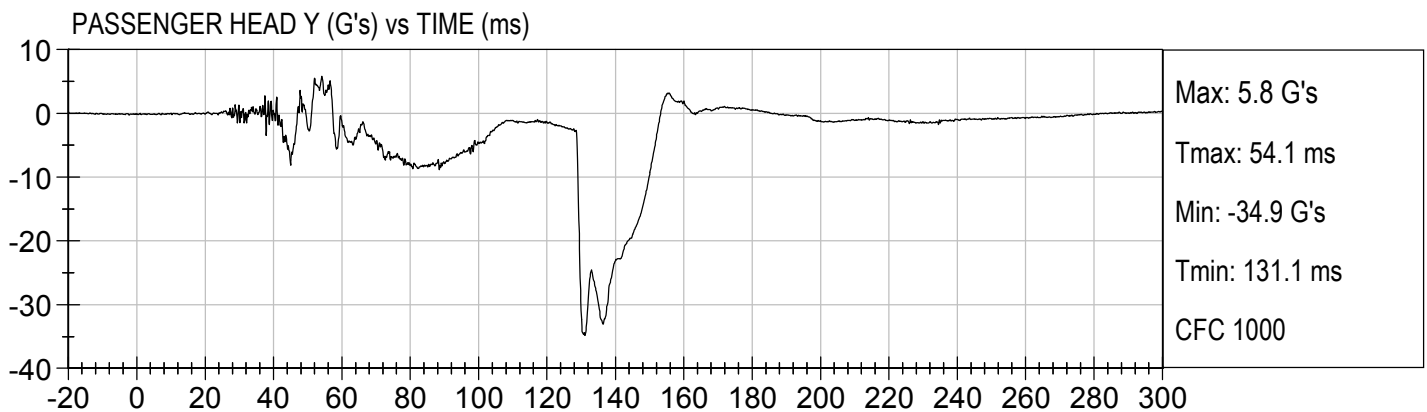
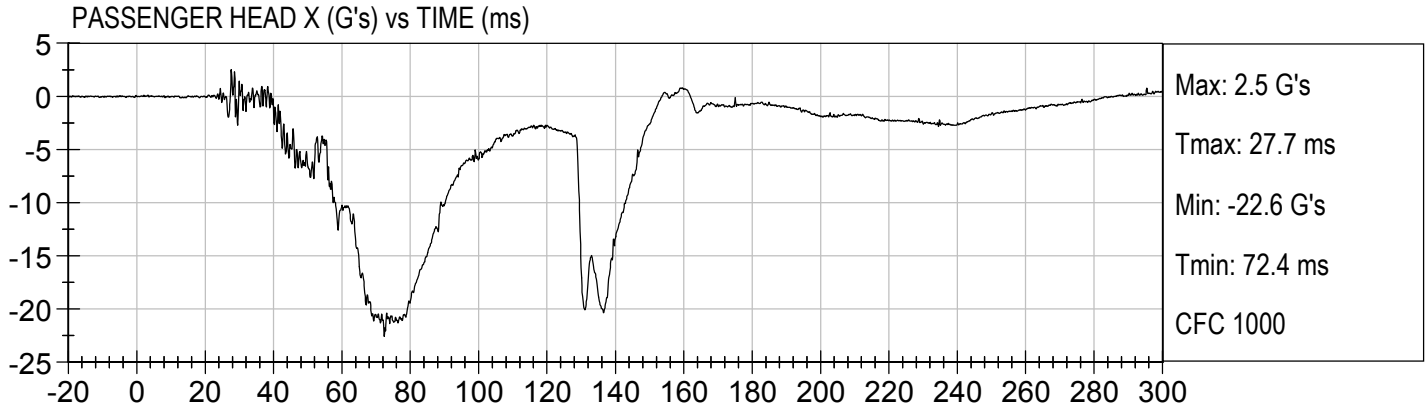


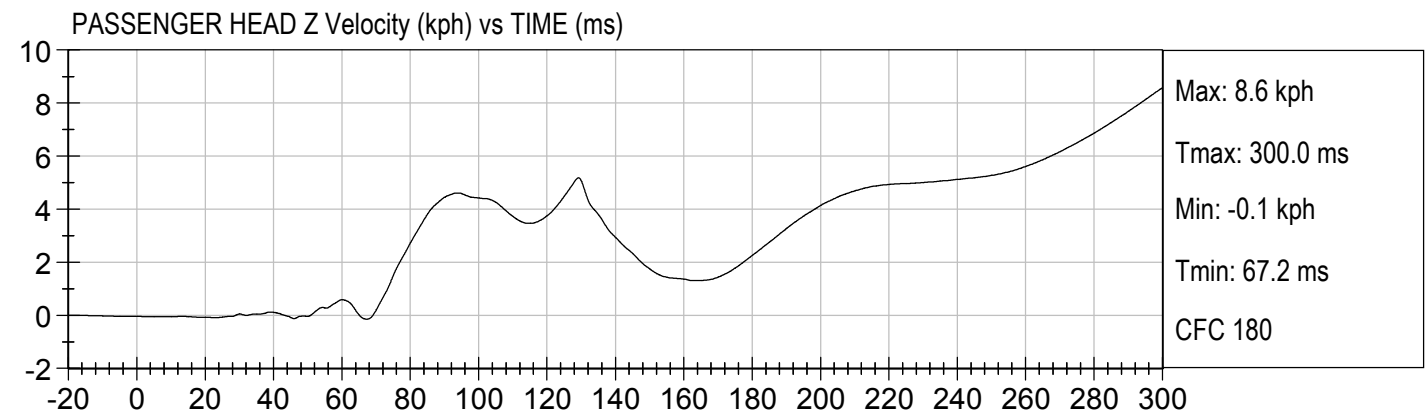
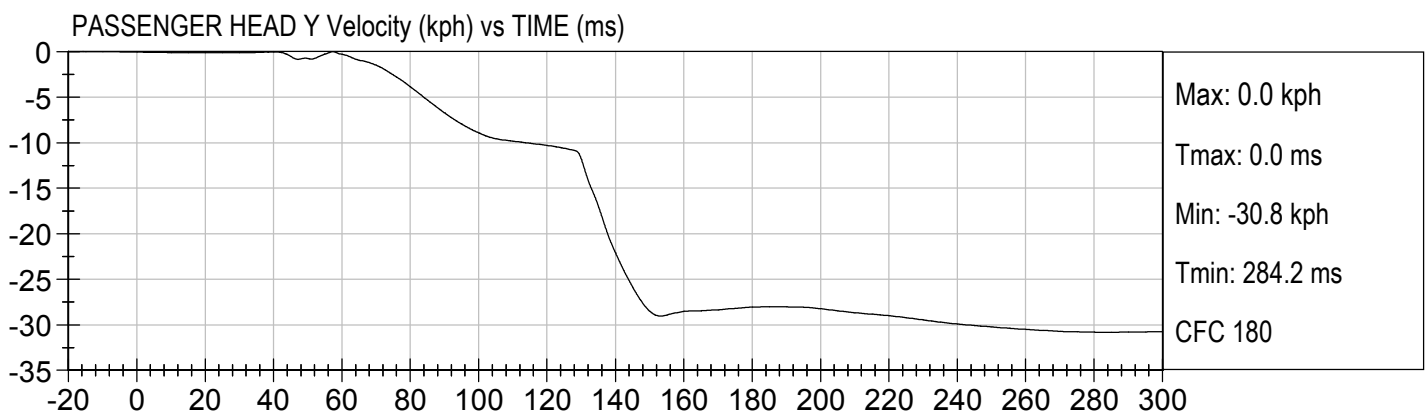
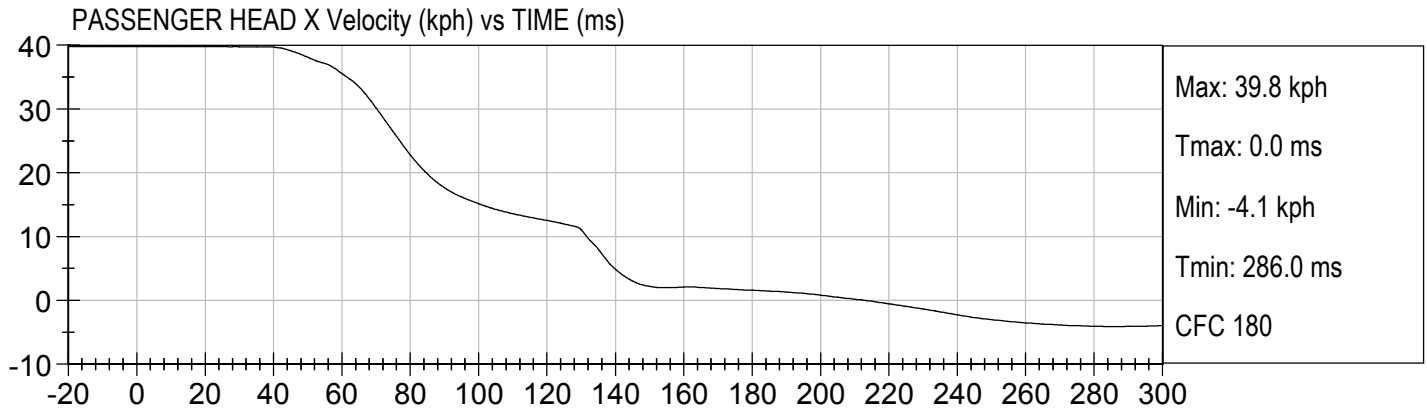


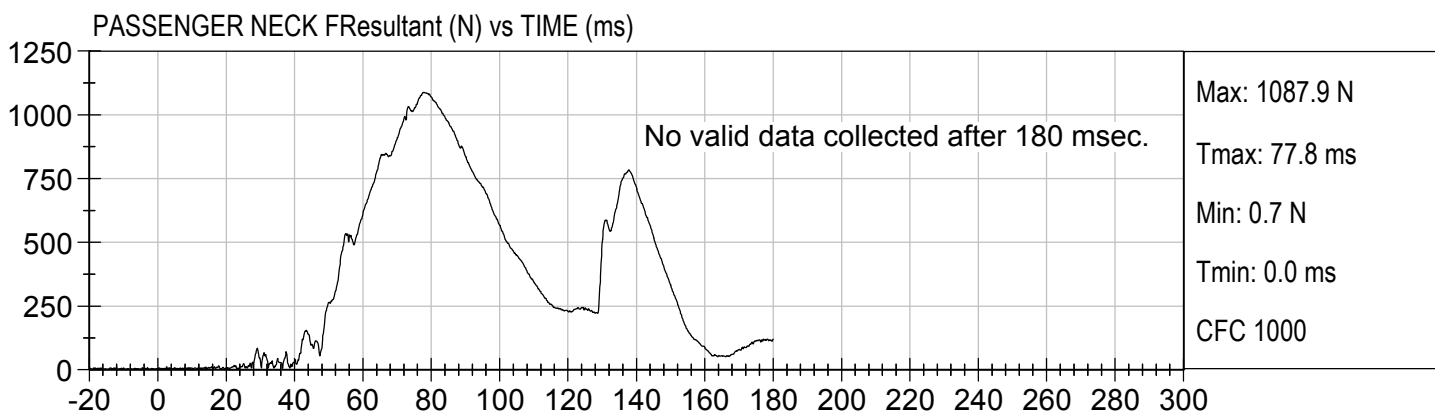
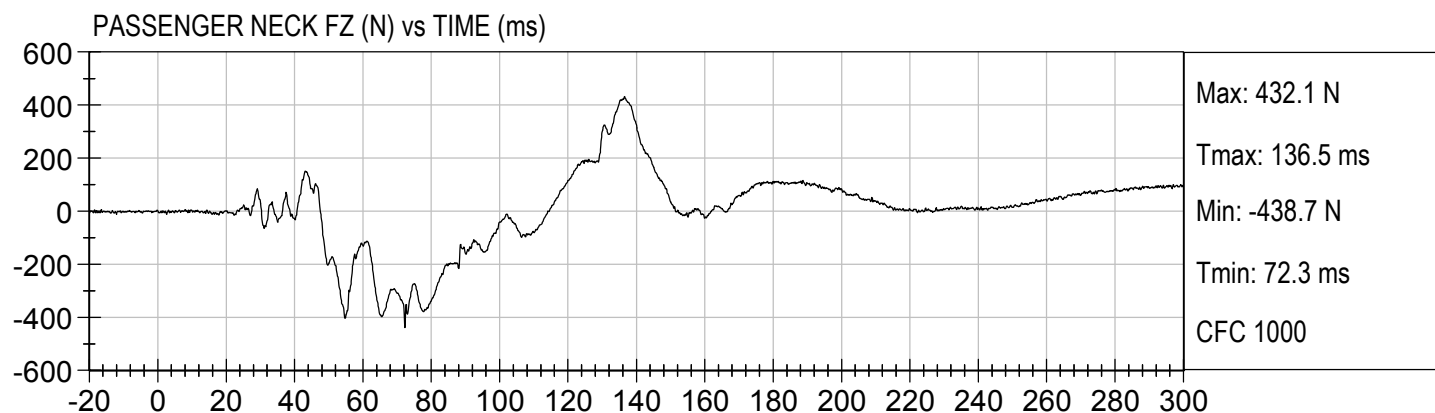
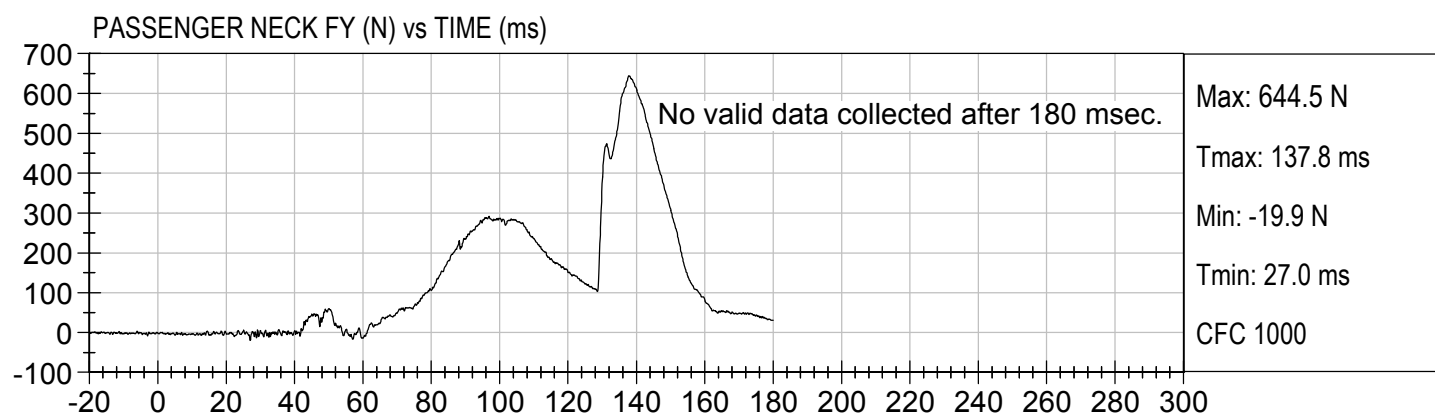
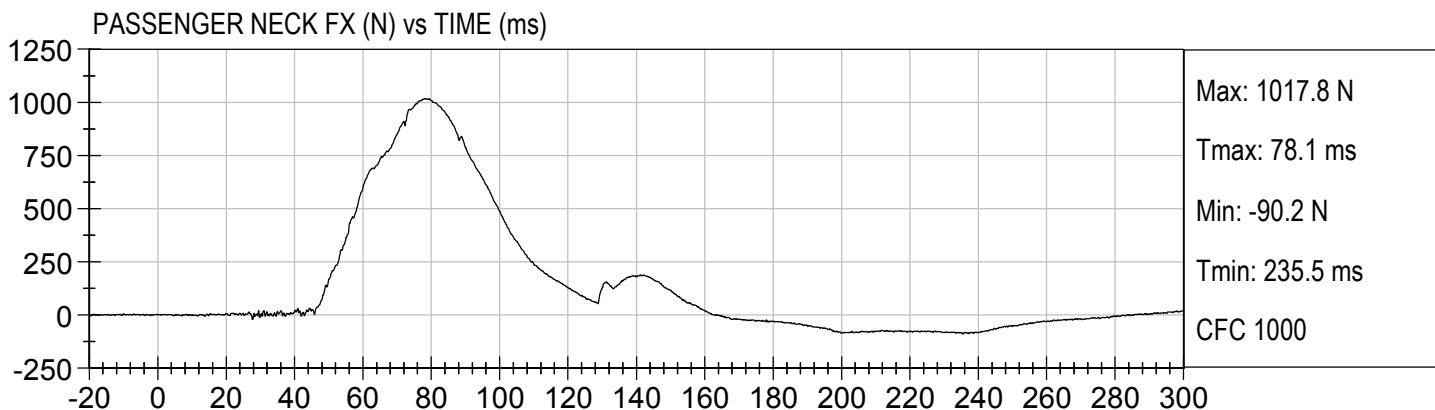




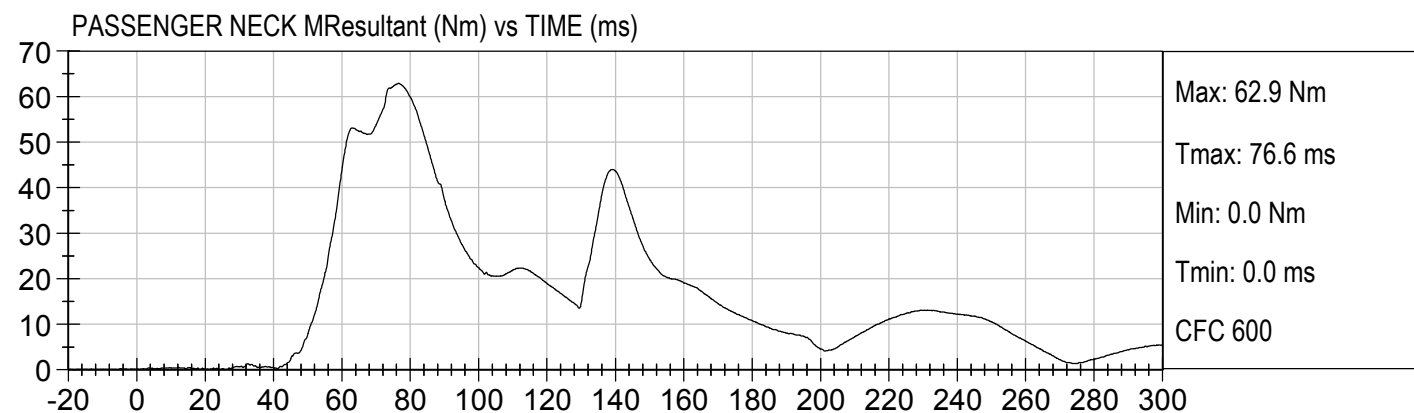
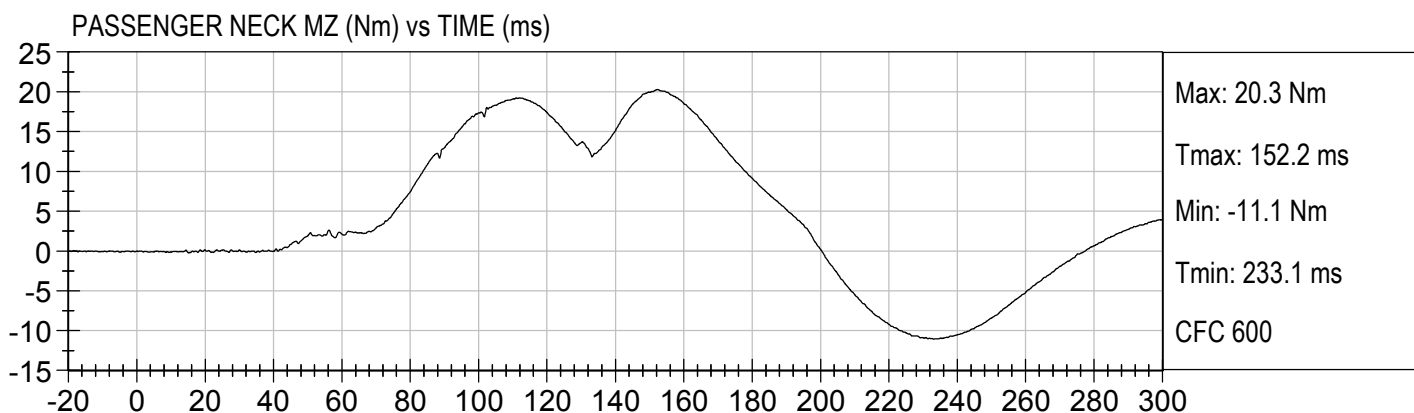
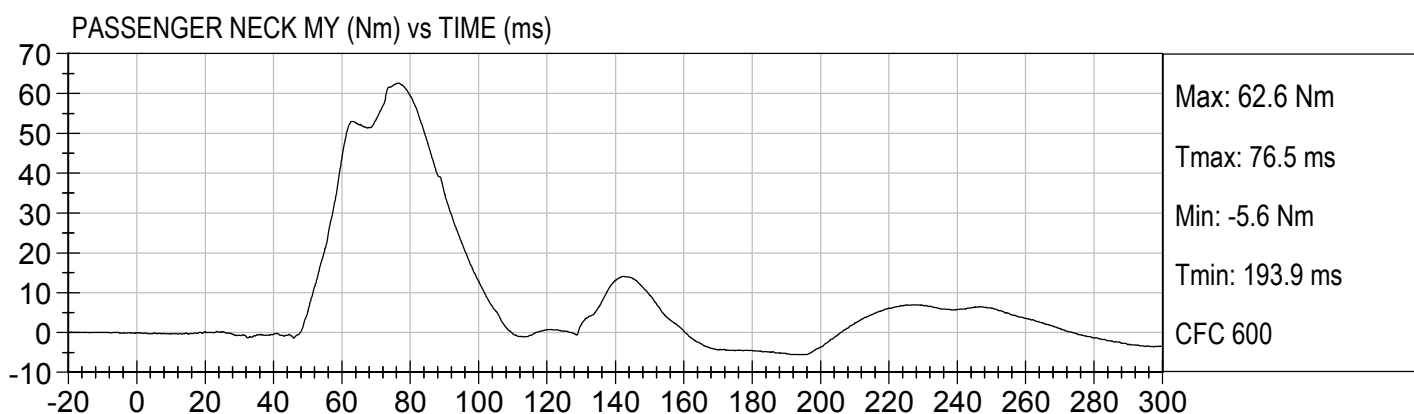
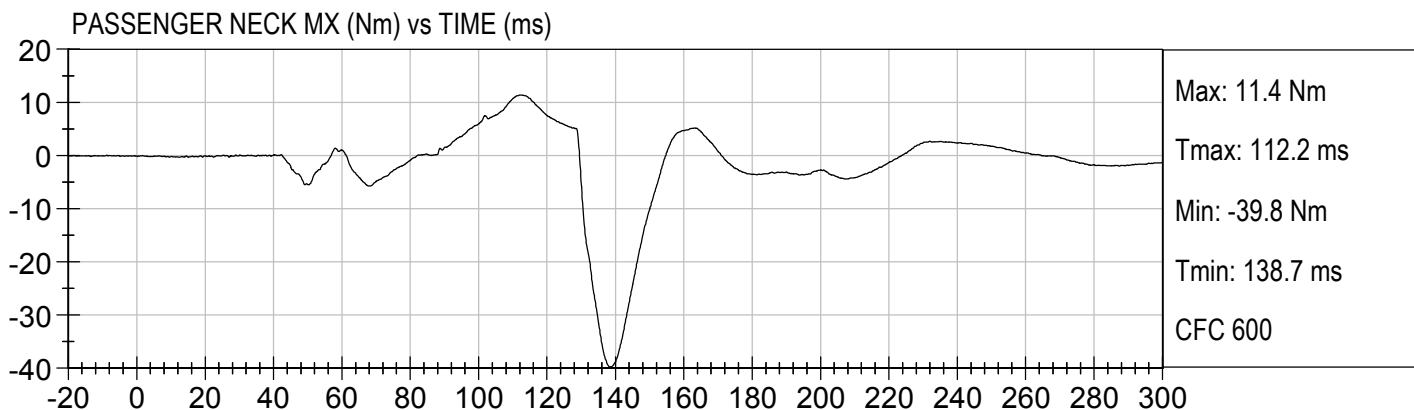


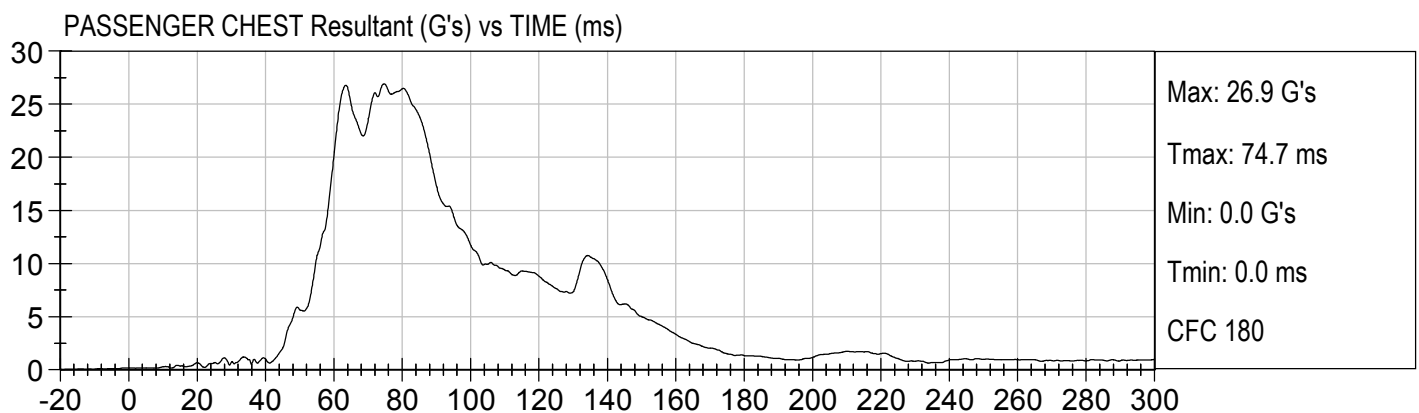
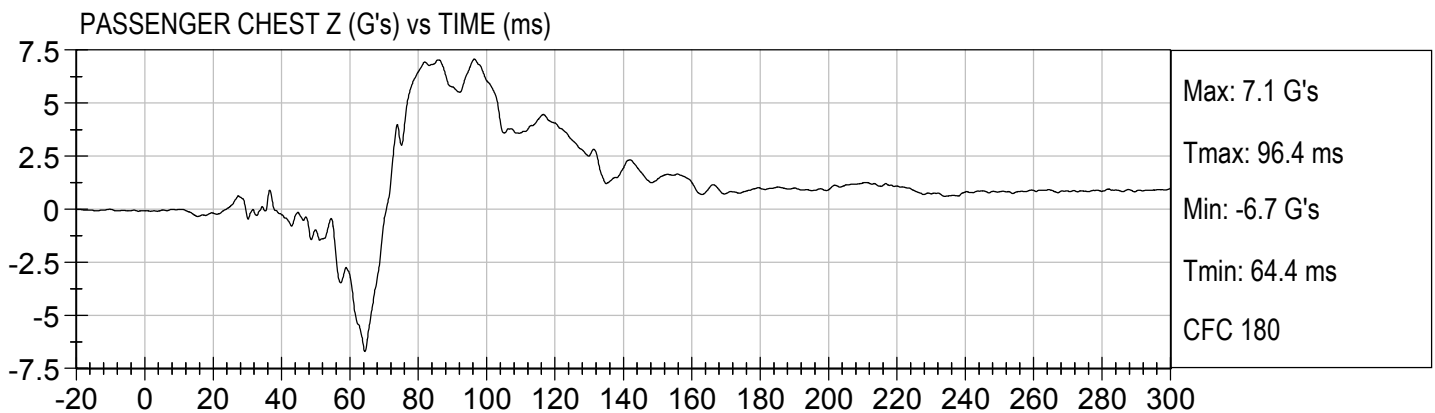
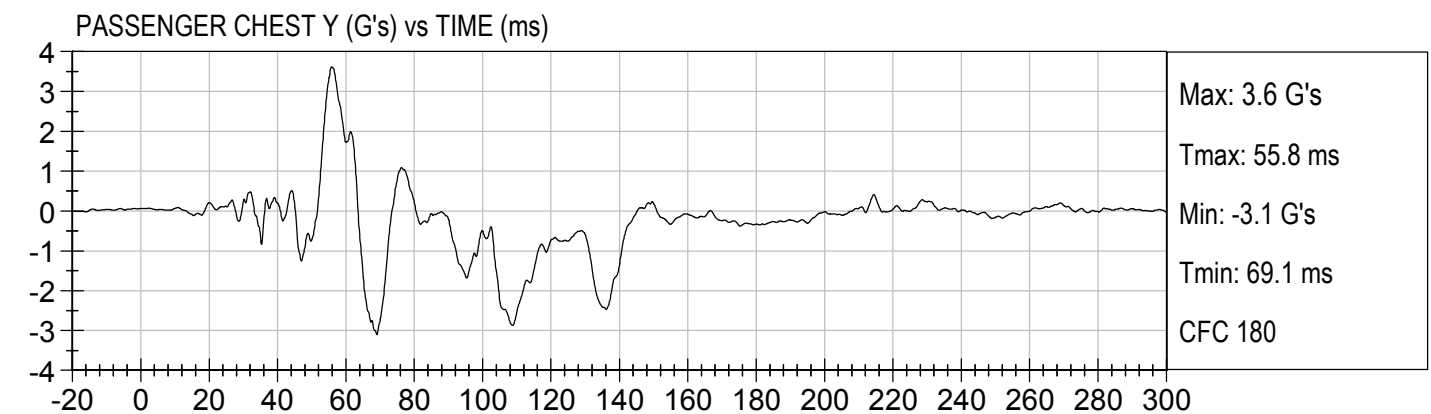
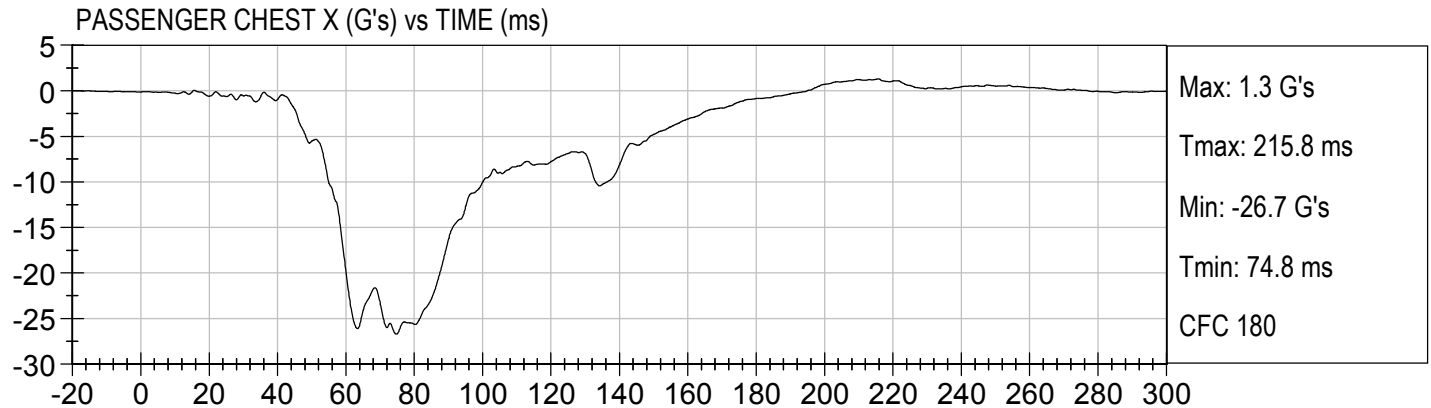


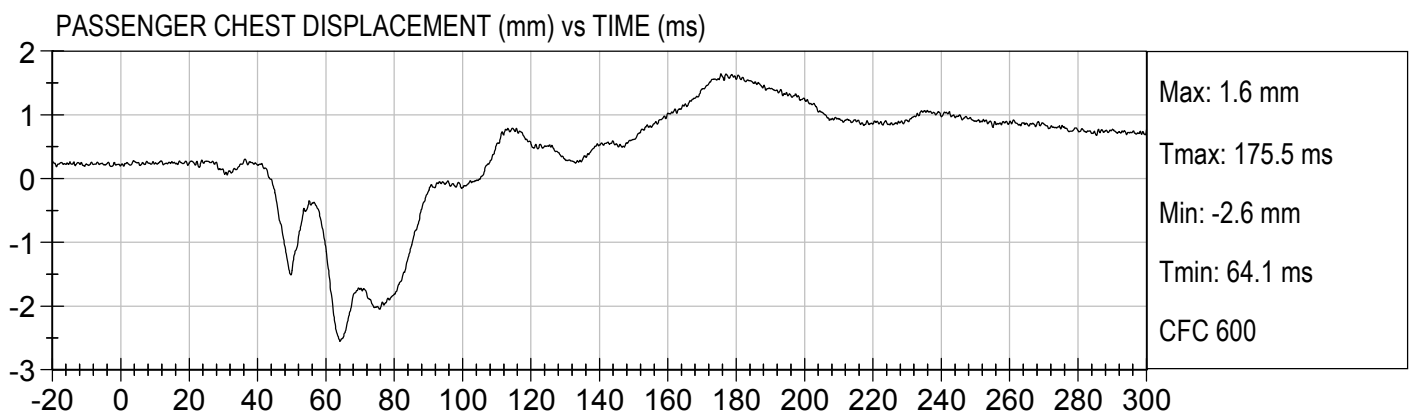
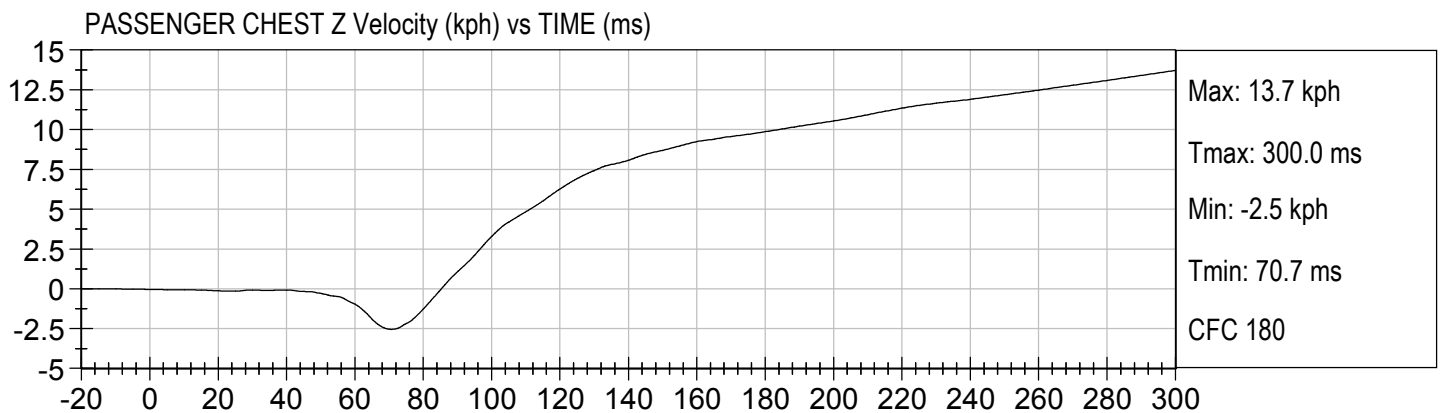
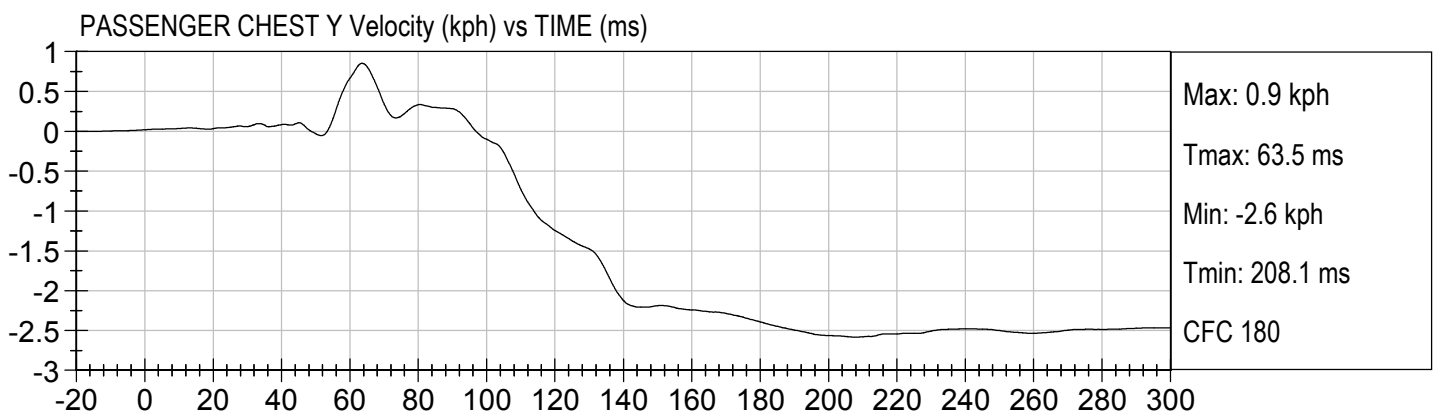
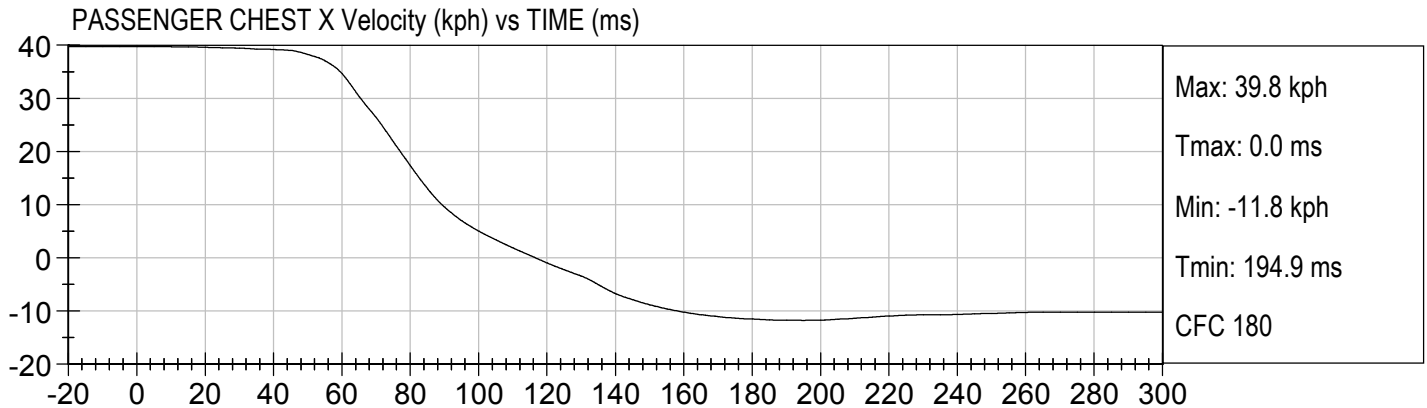


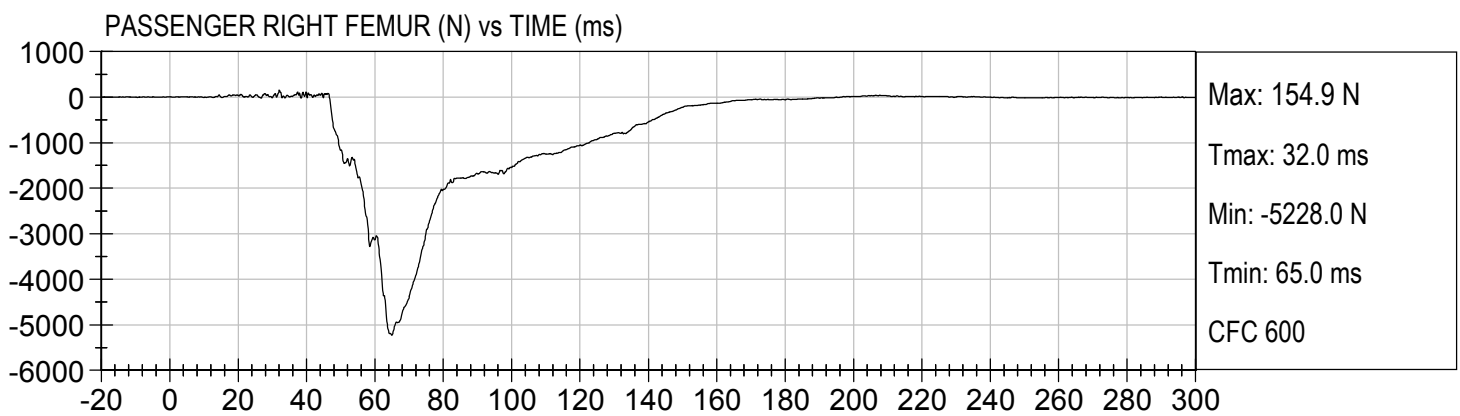
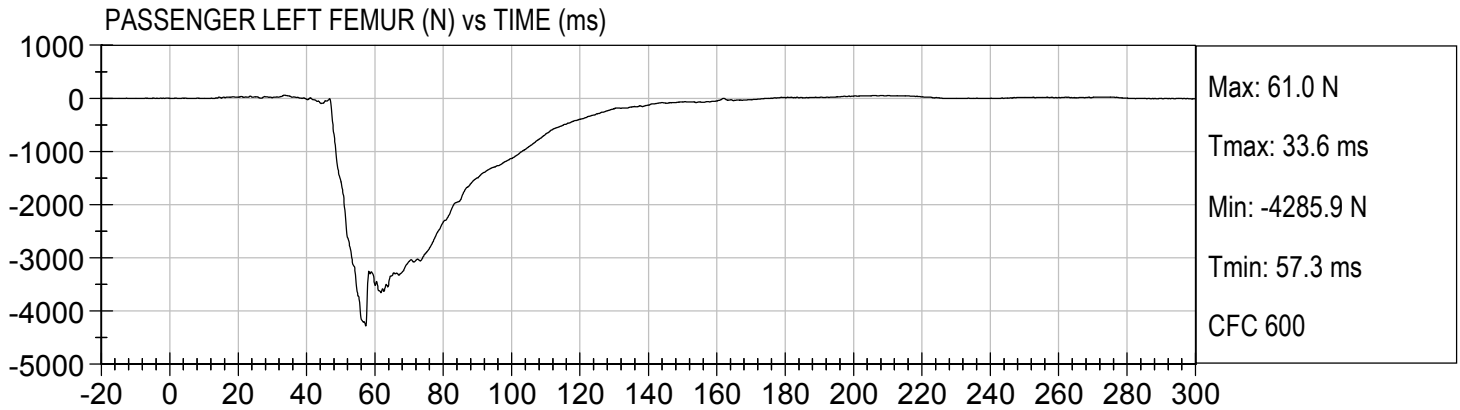


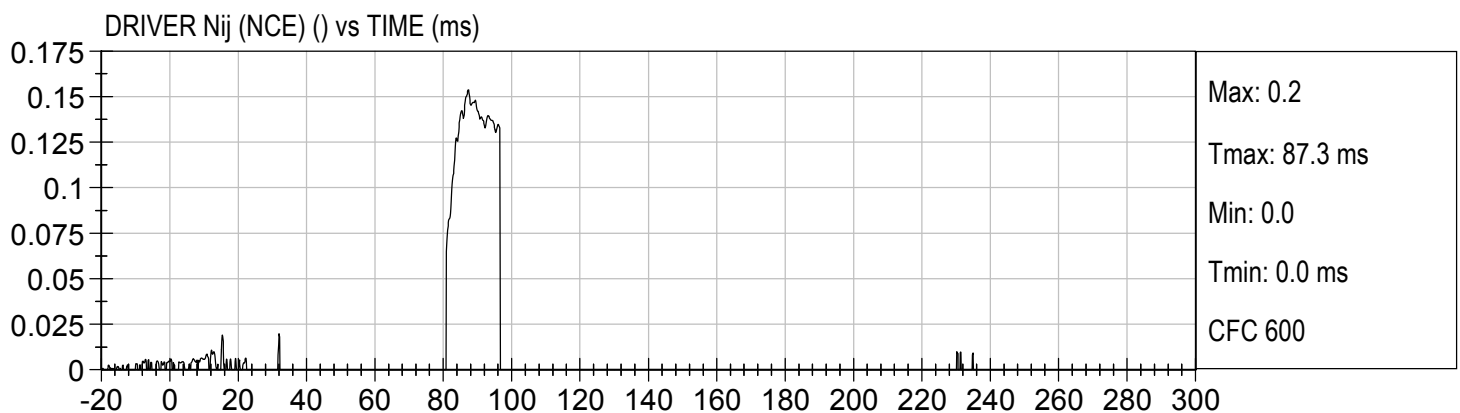
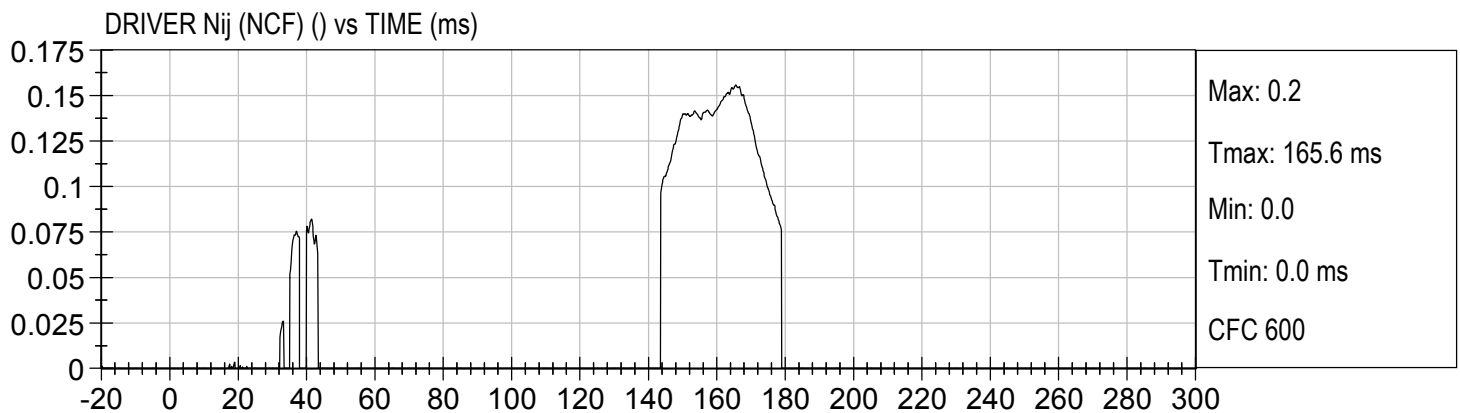
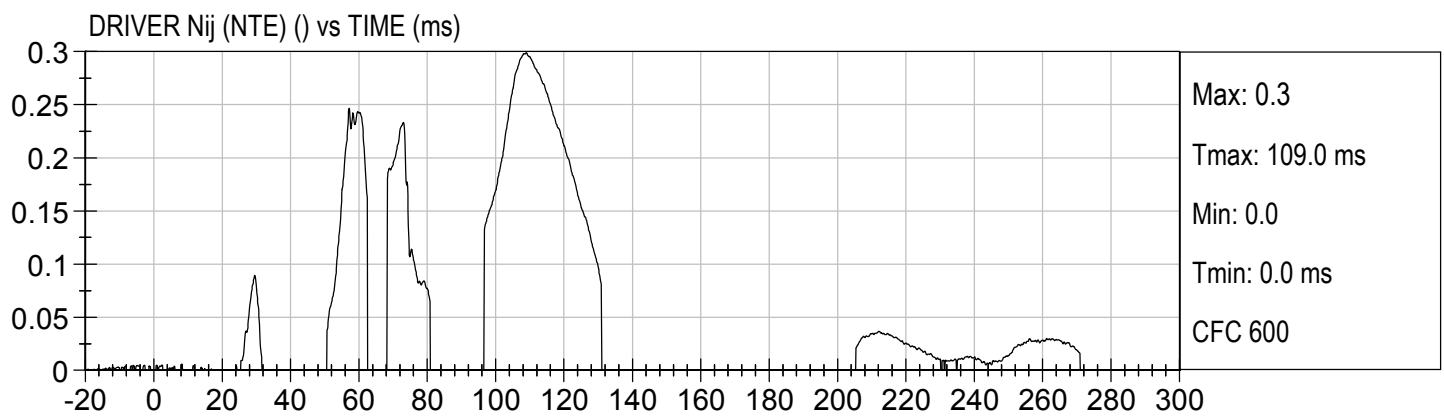
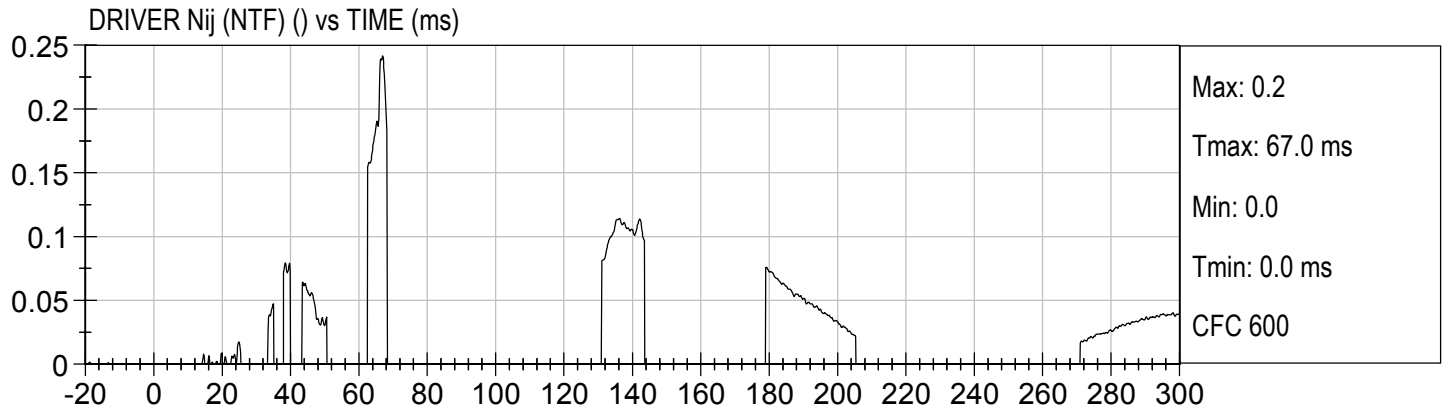


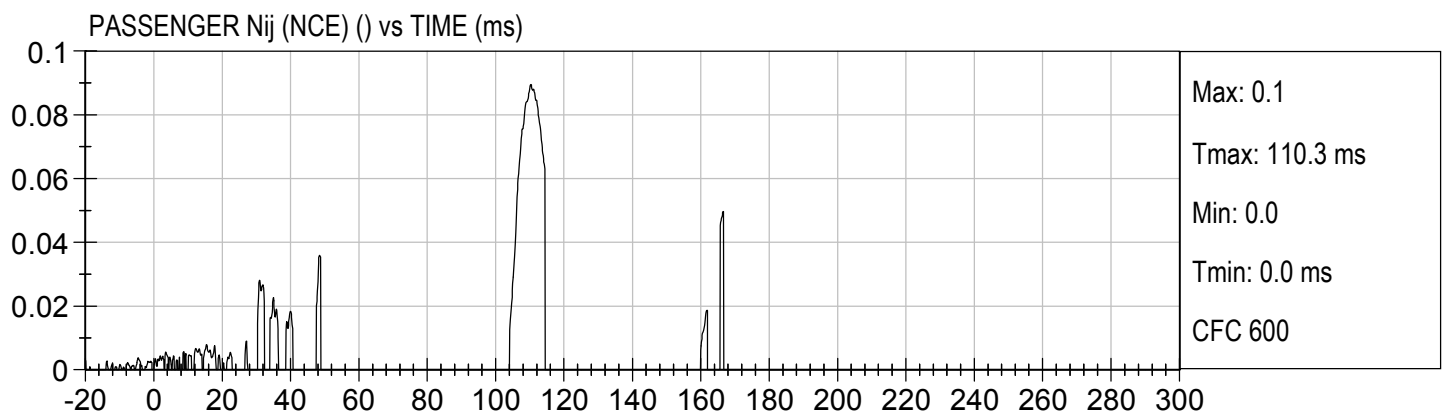
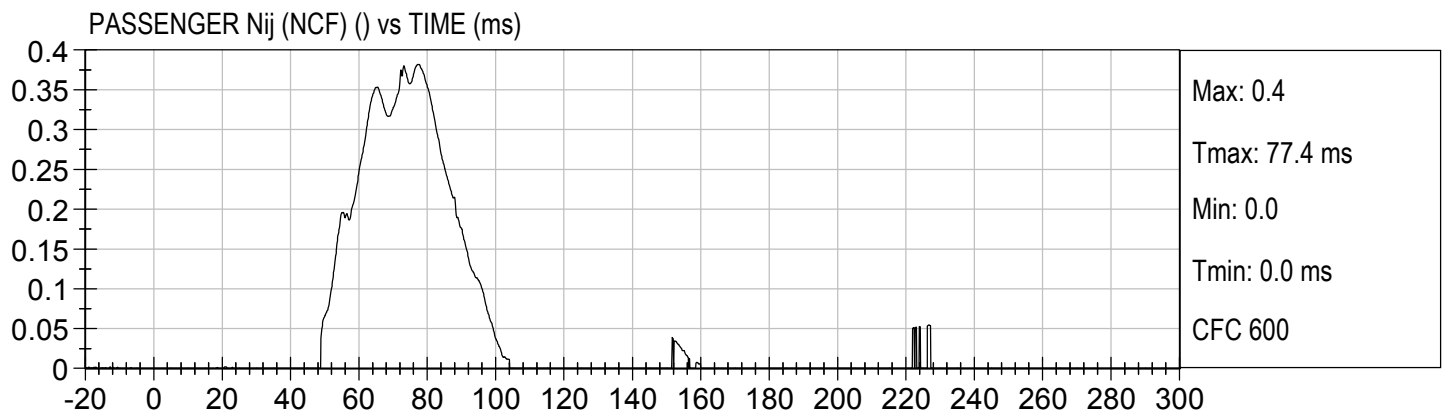
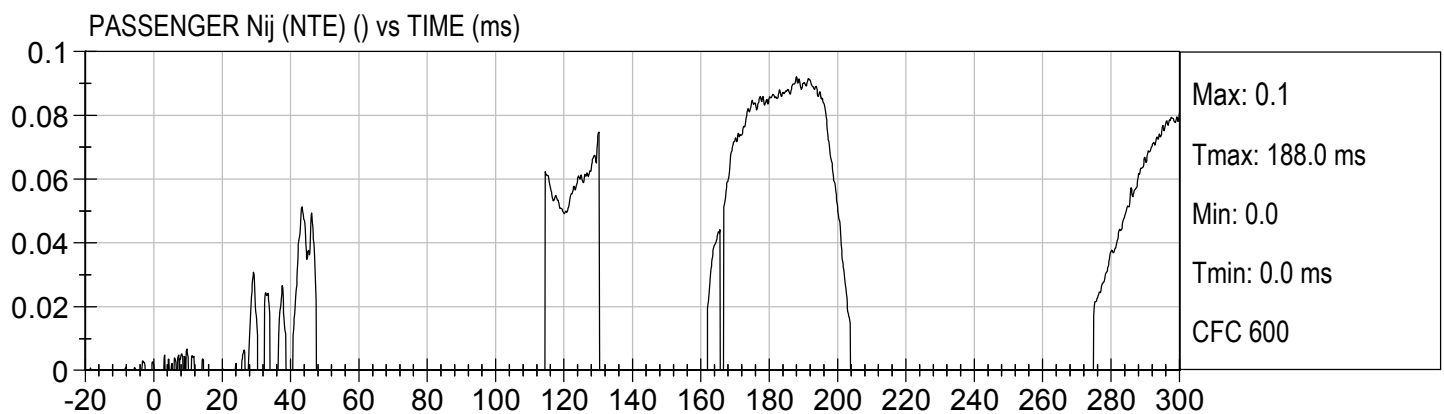
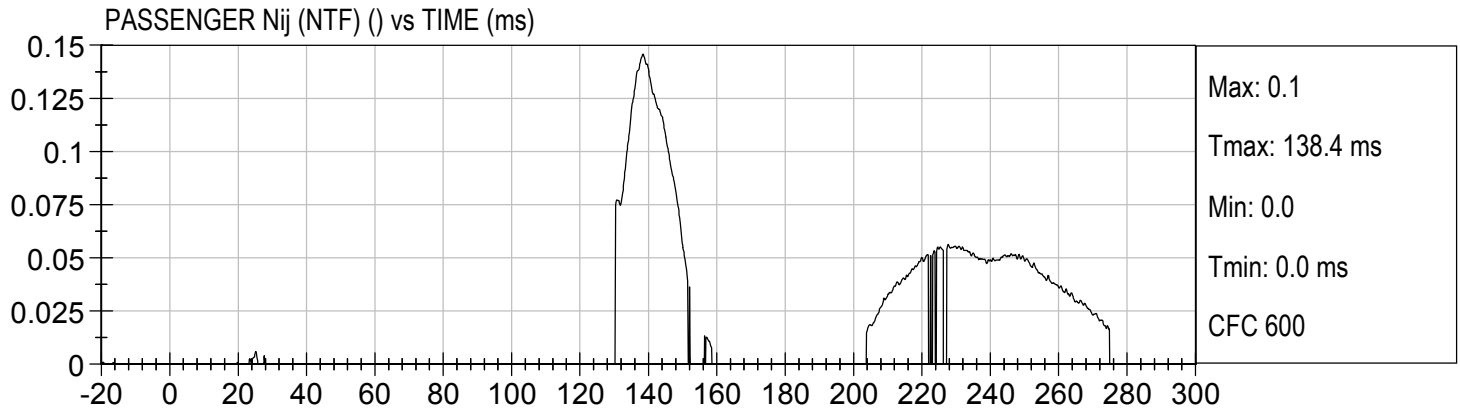


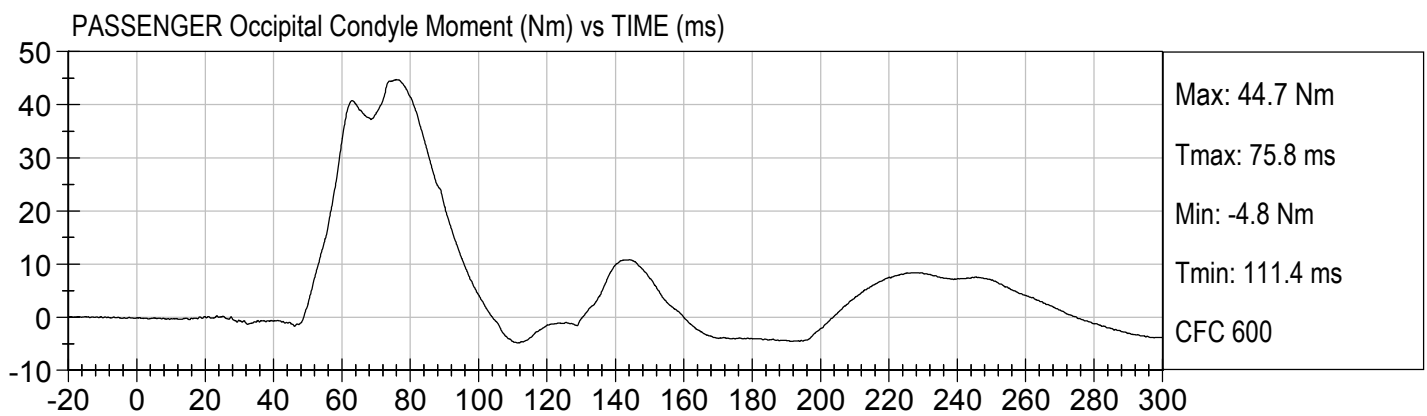
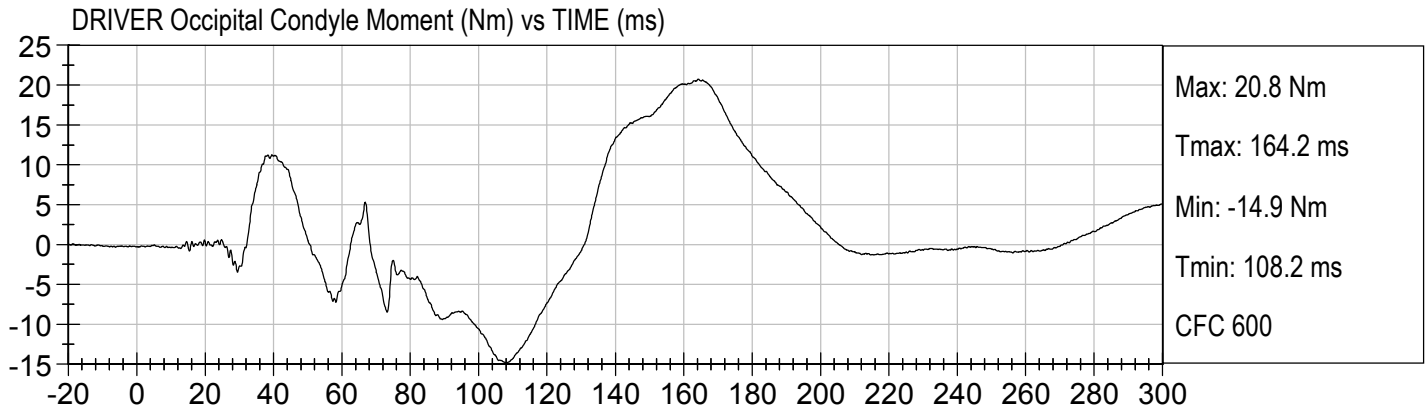


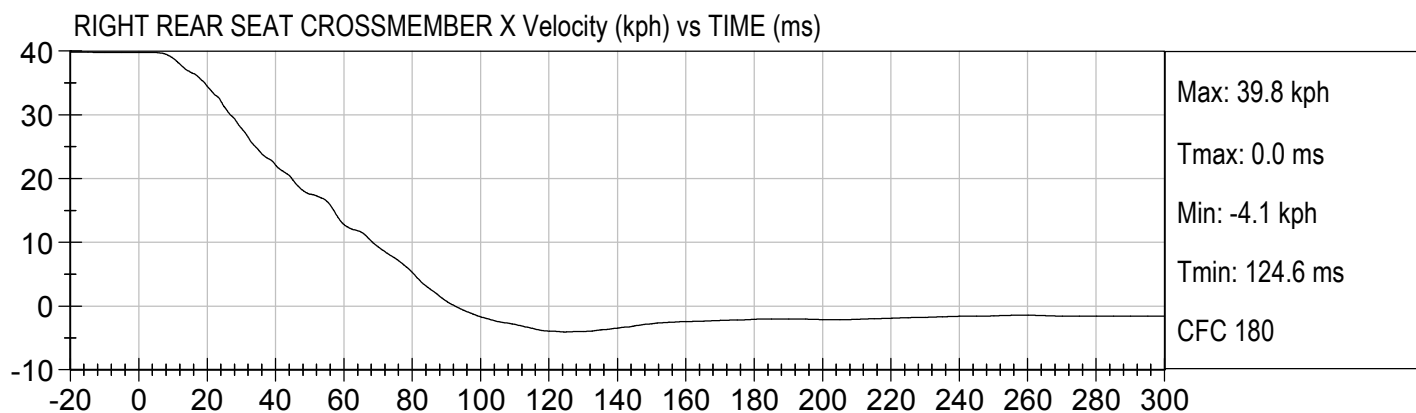
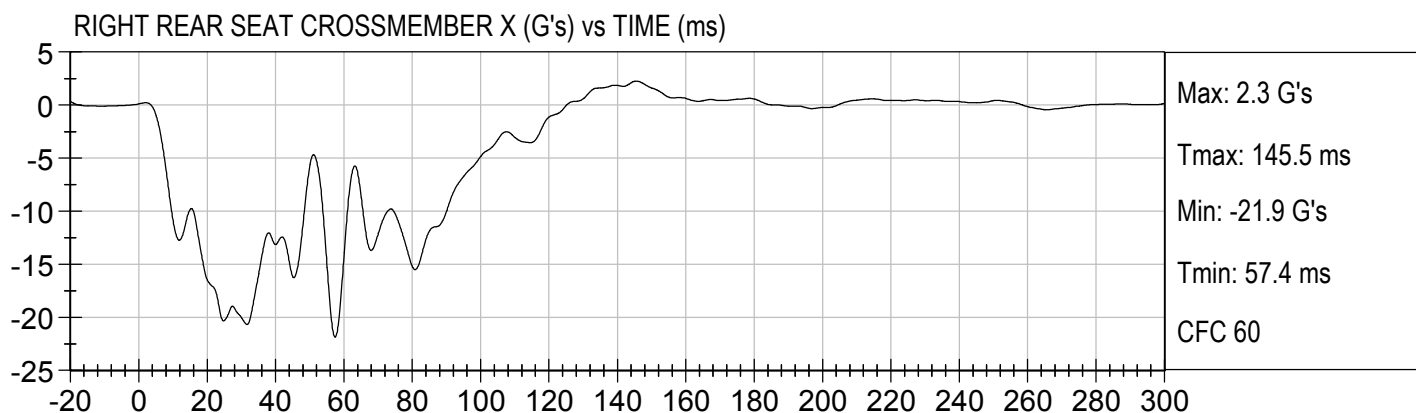
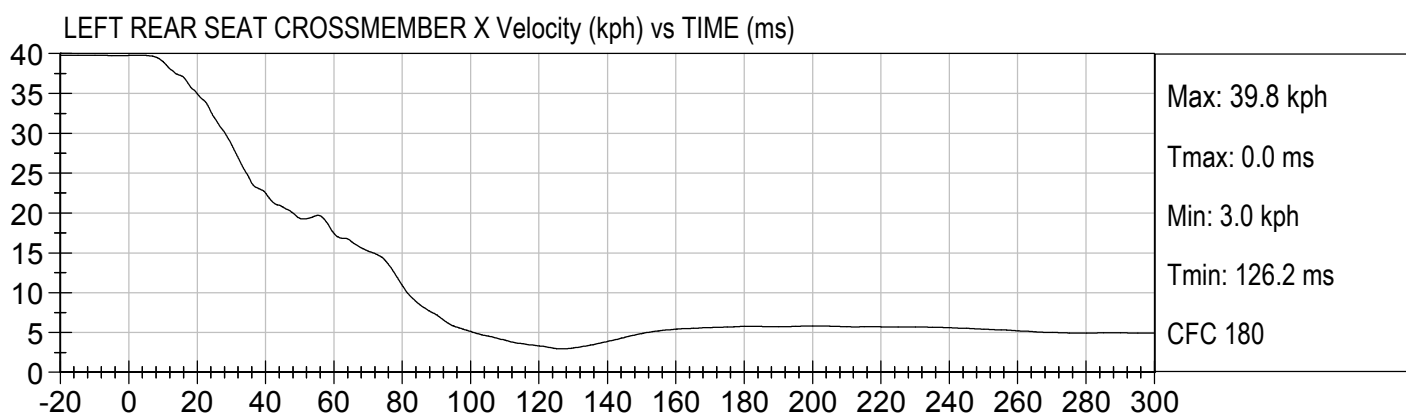
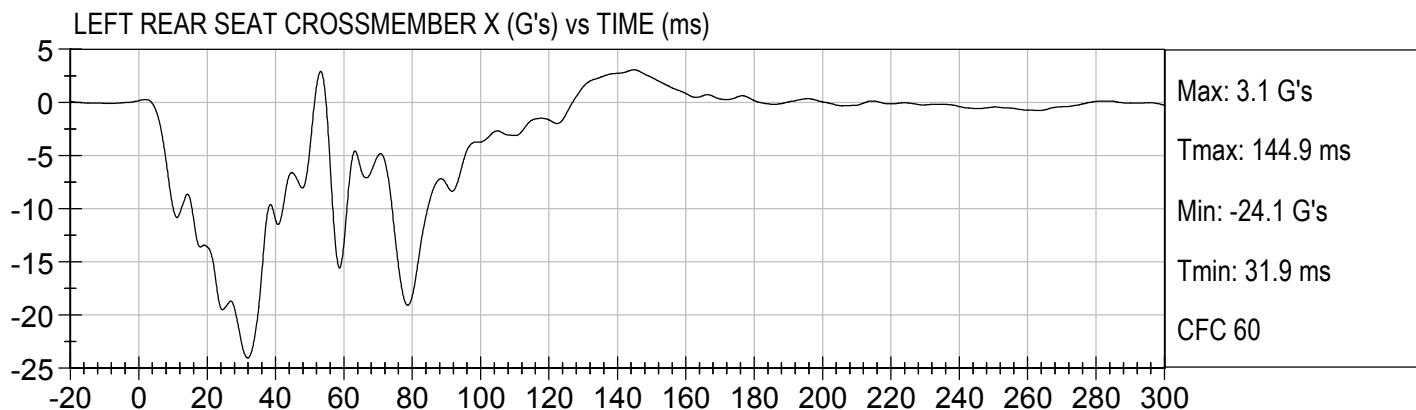




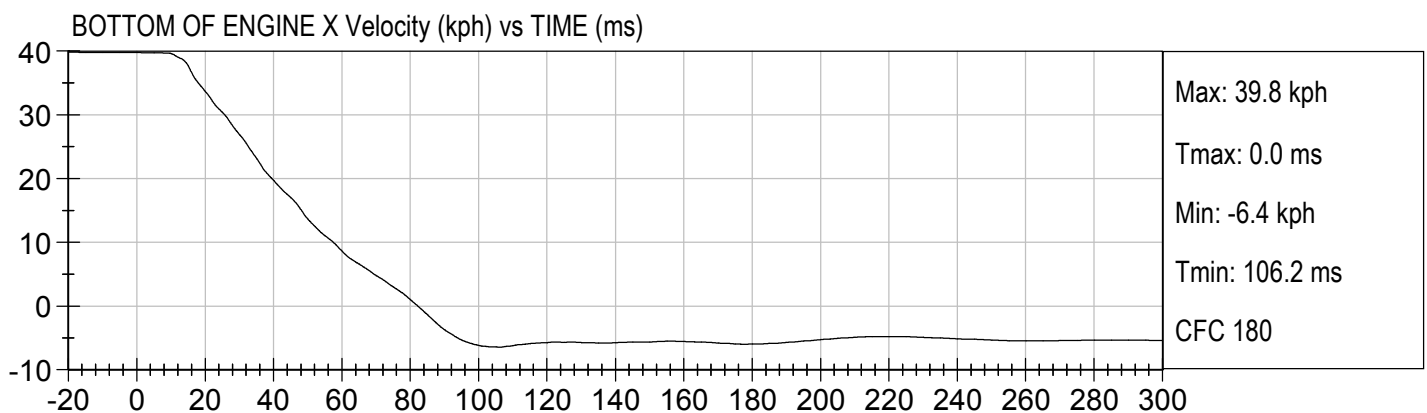
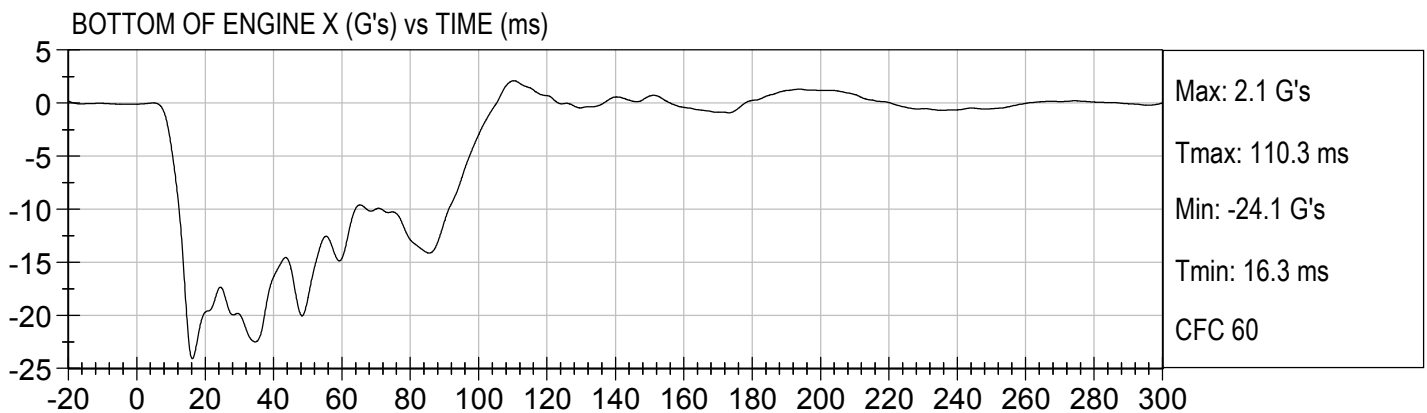
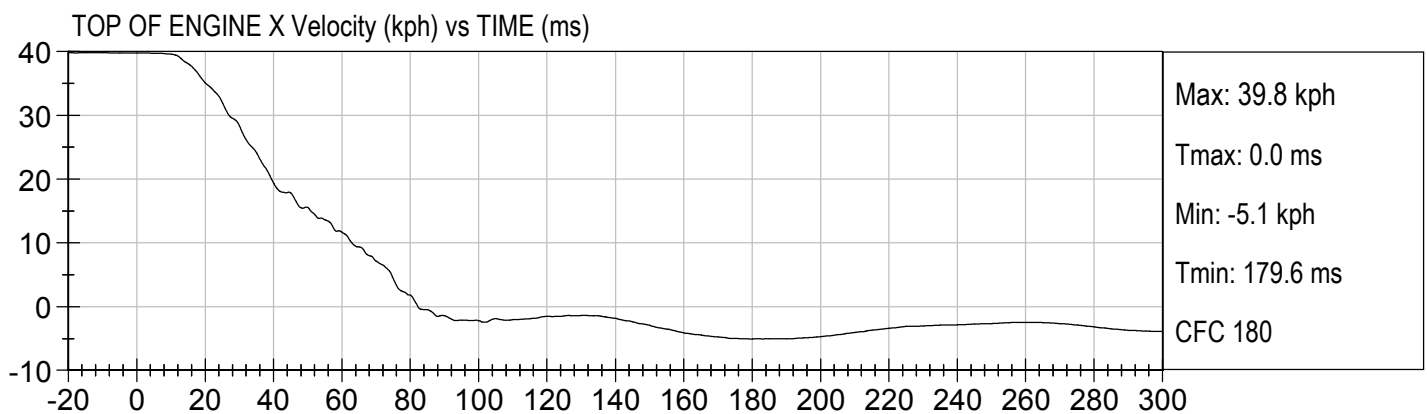
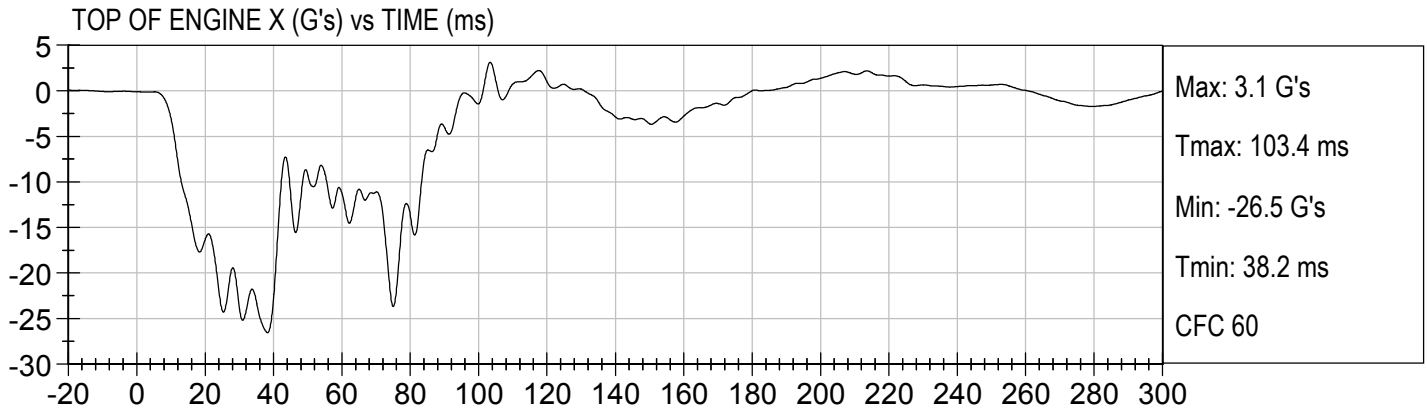


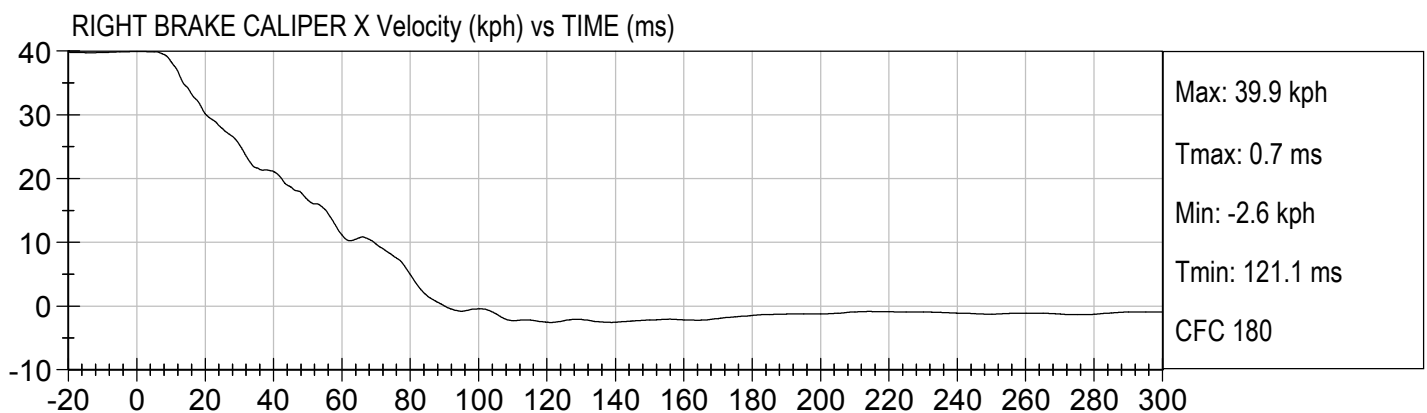
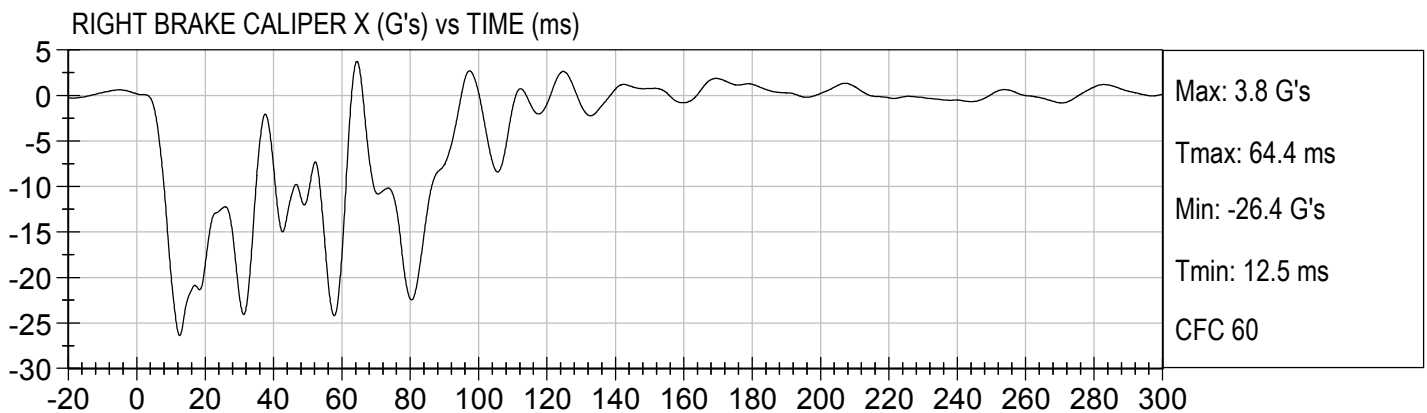
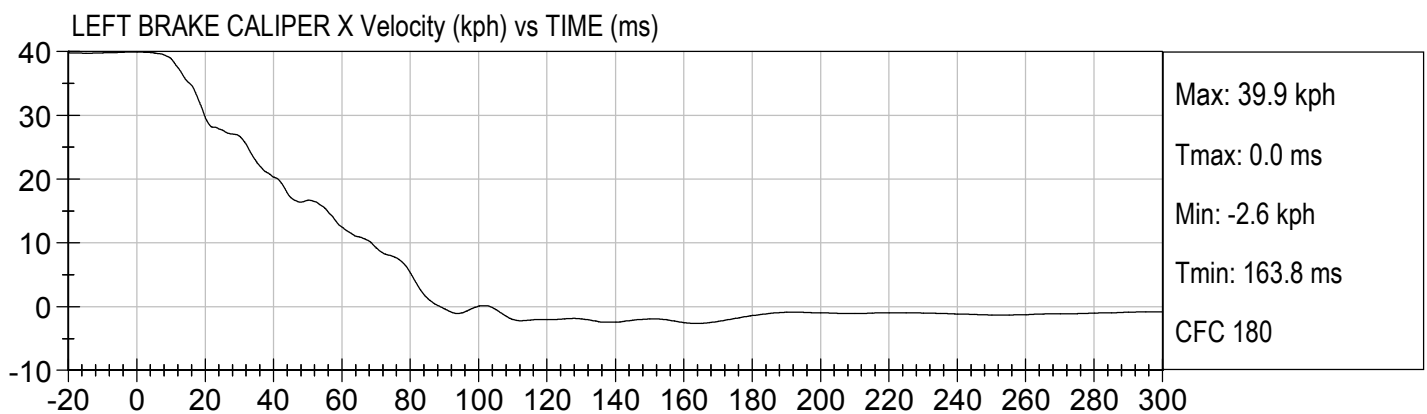
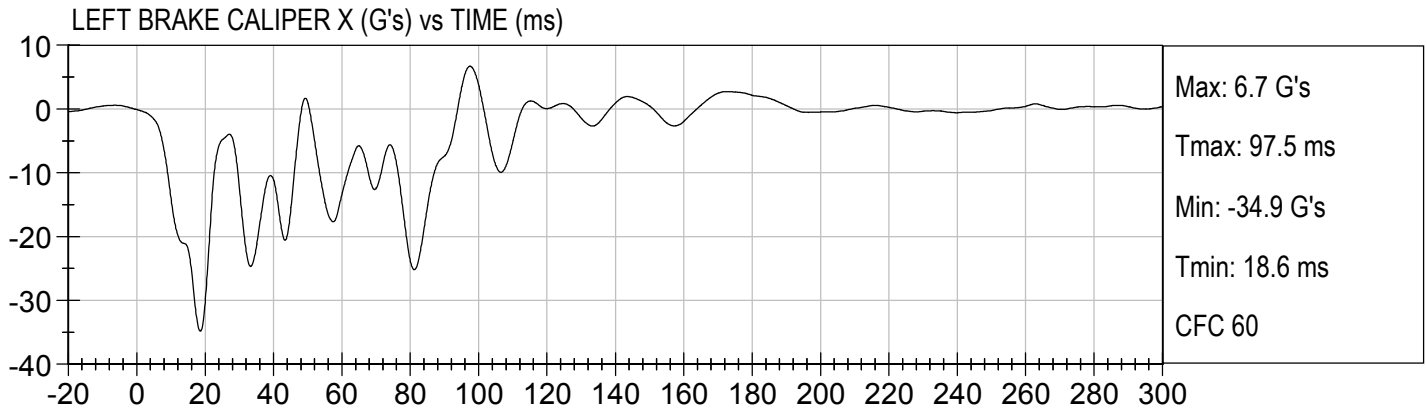


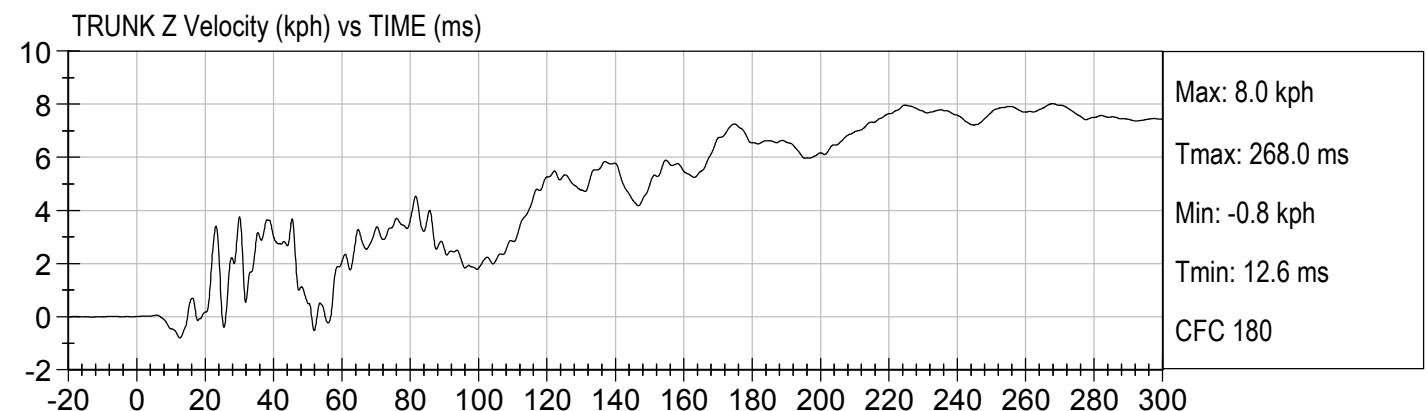
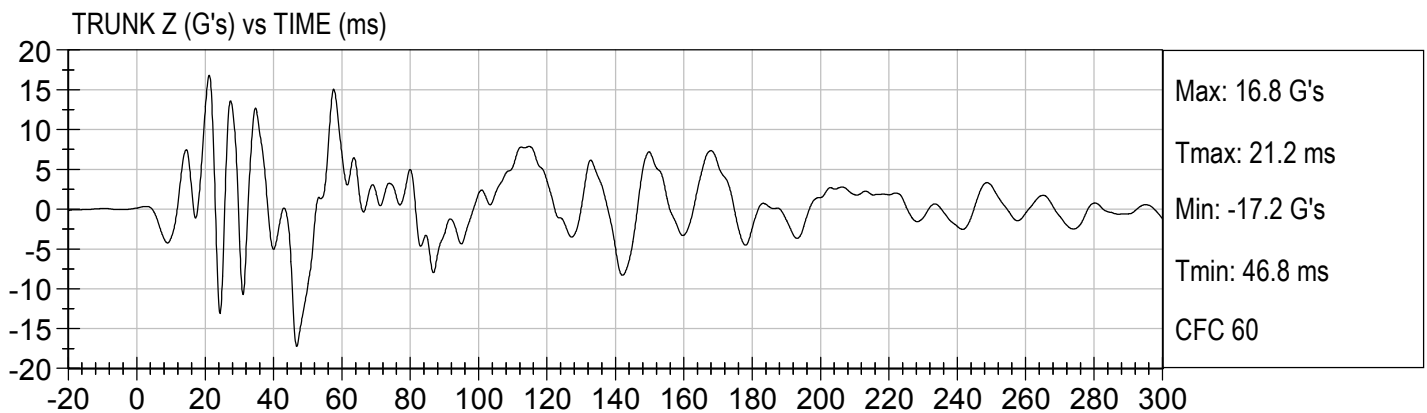
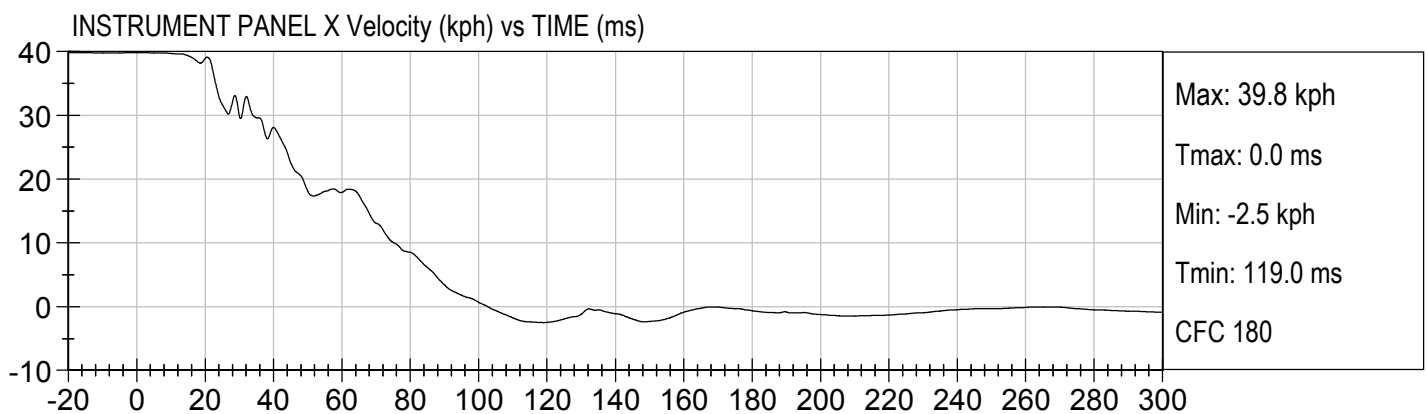
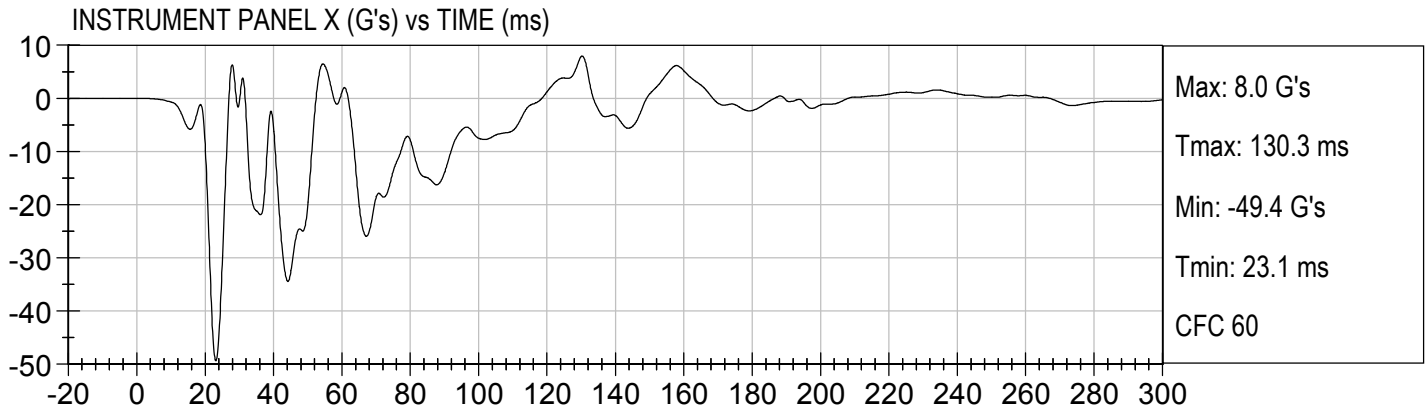












## APPENDIX B

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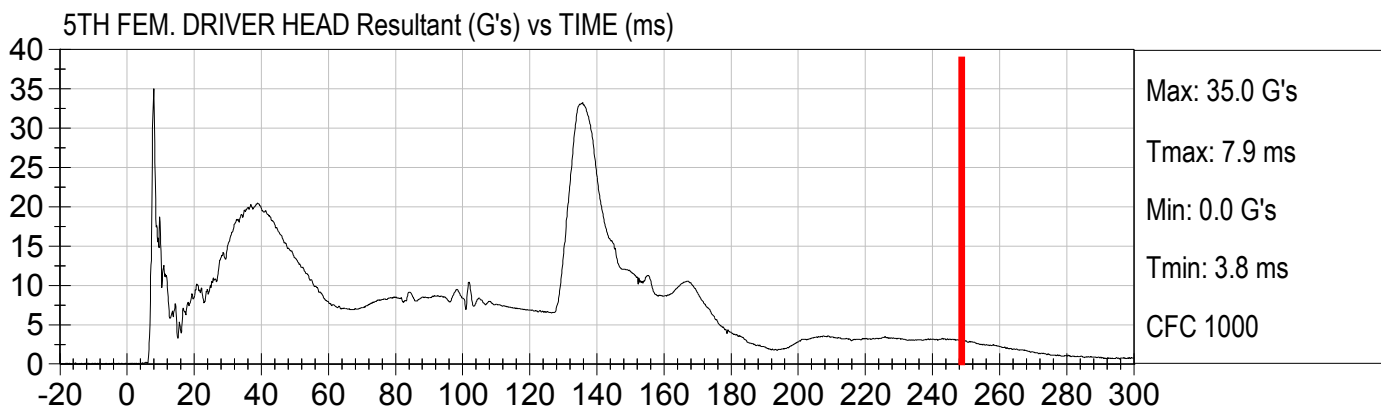
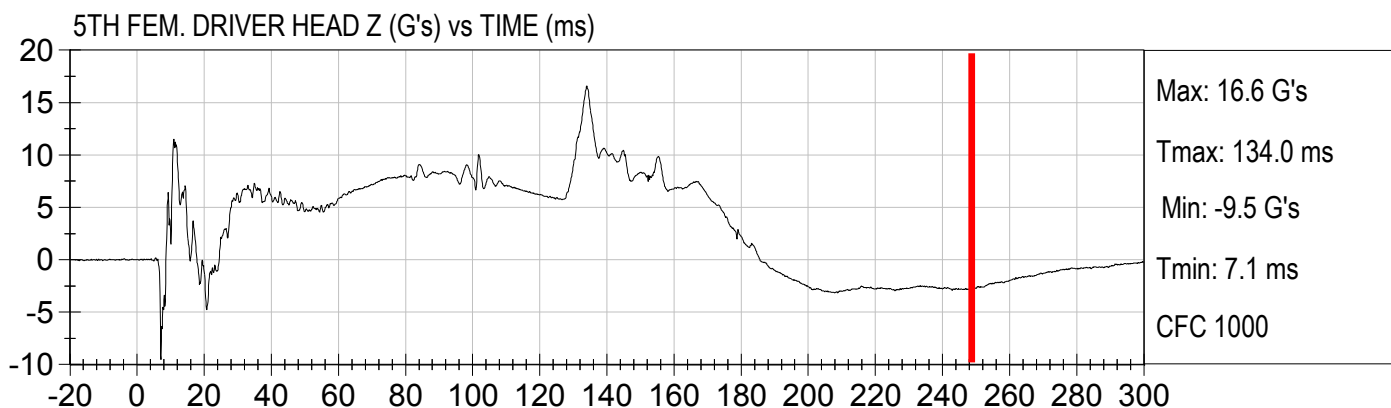
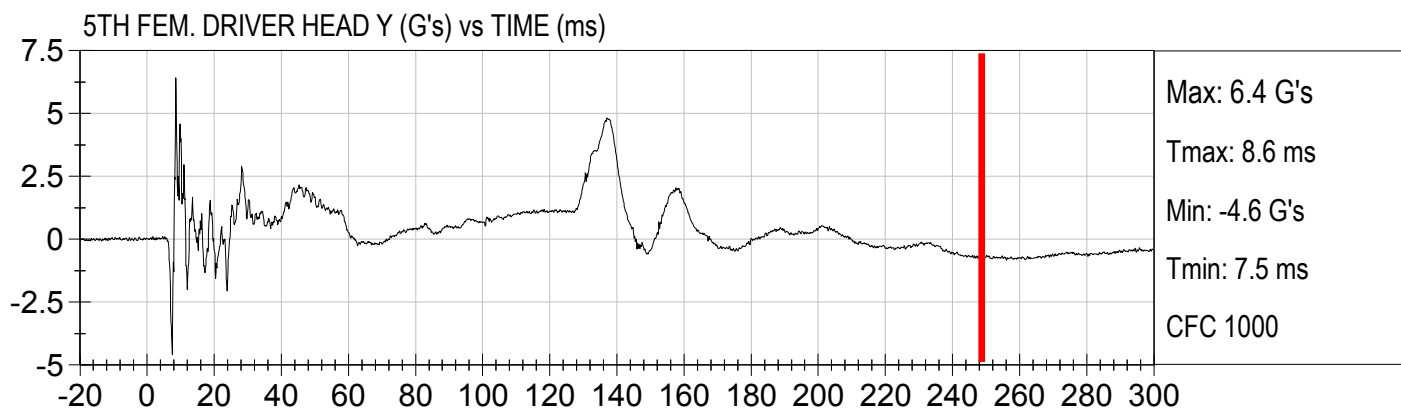
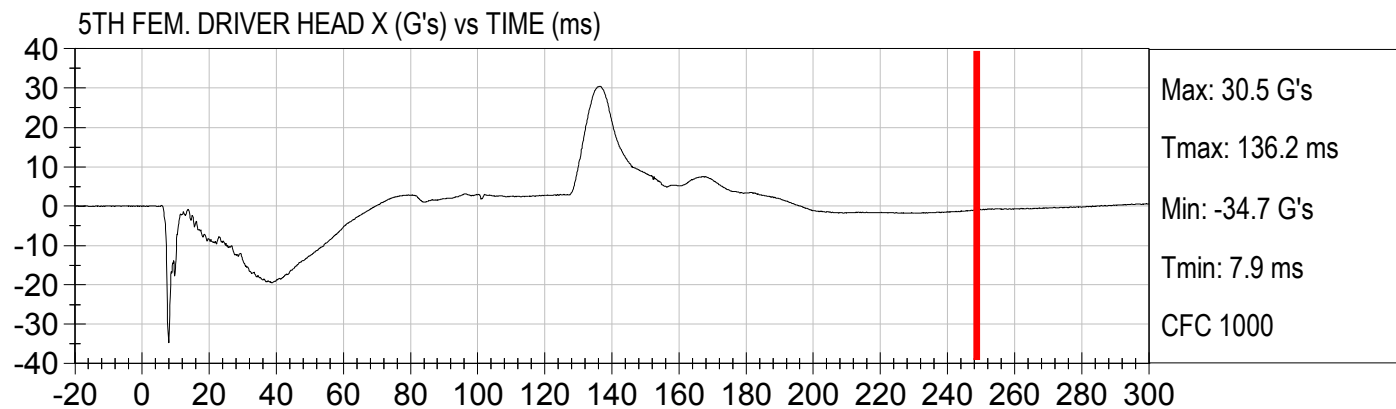
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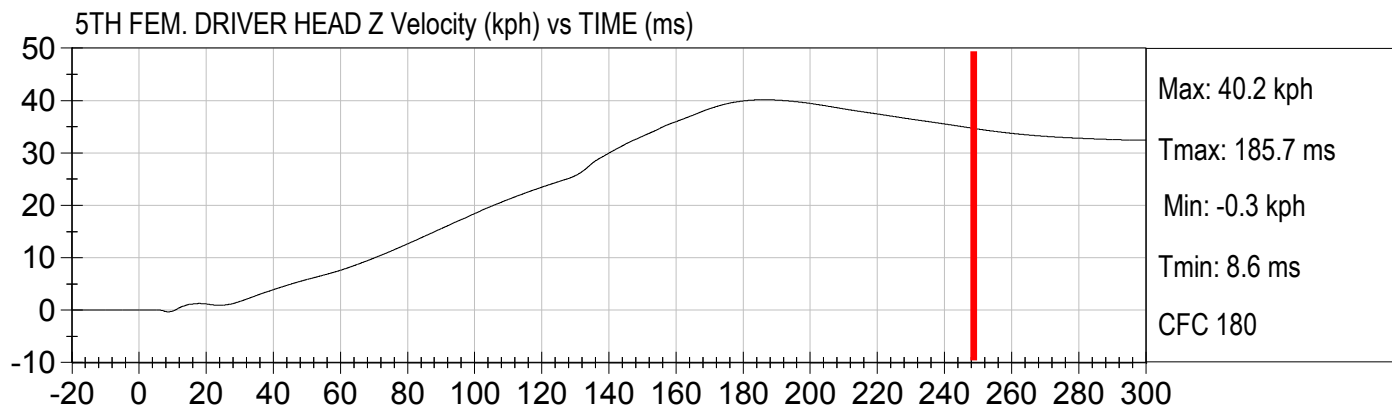
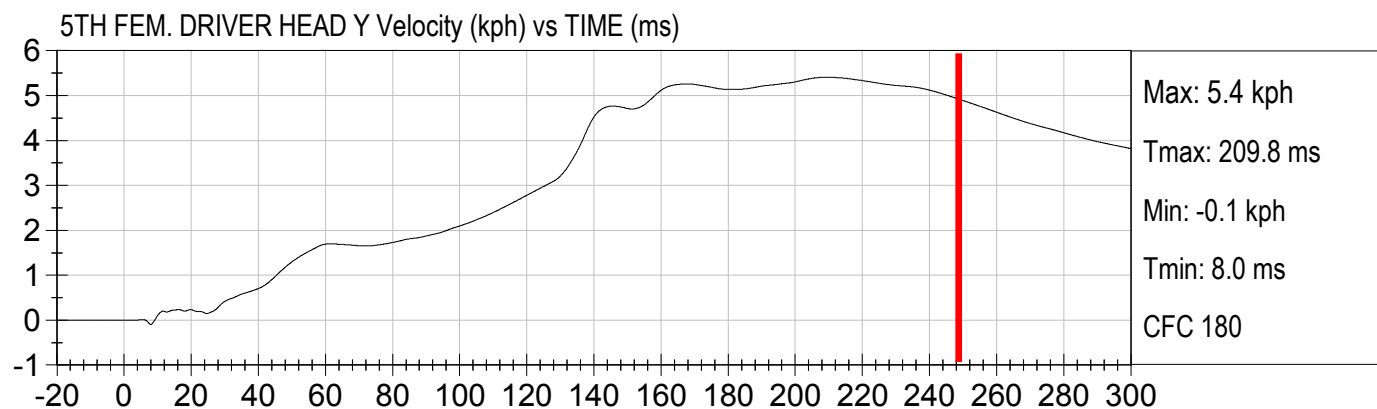
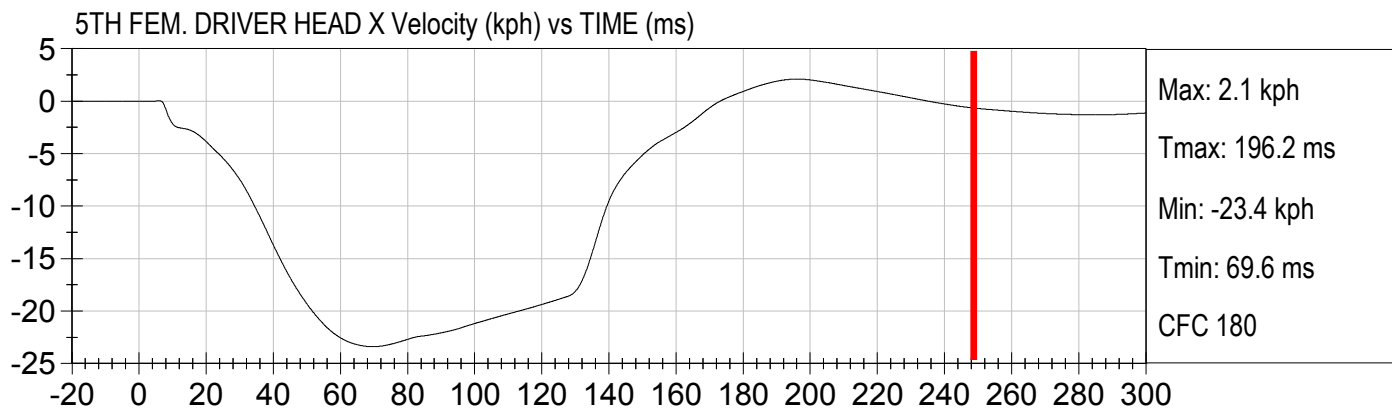


Injury Values Calculated between 0ms and 245ms



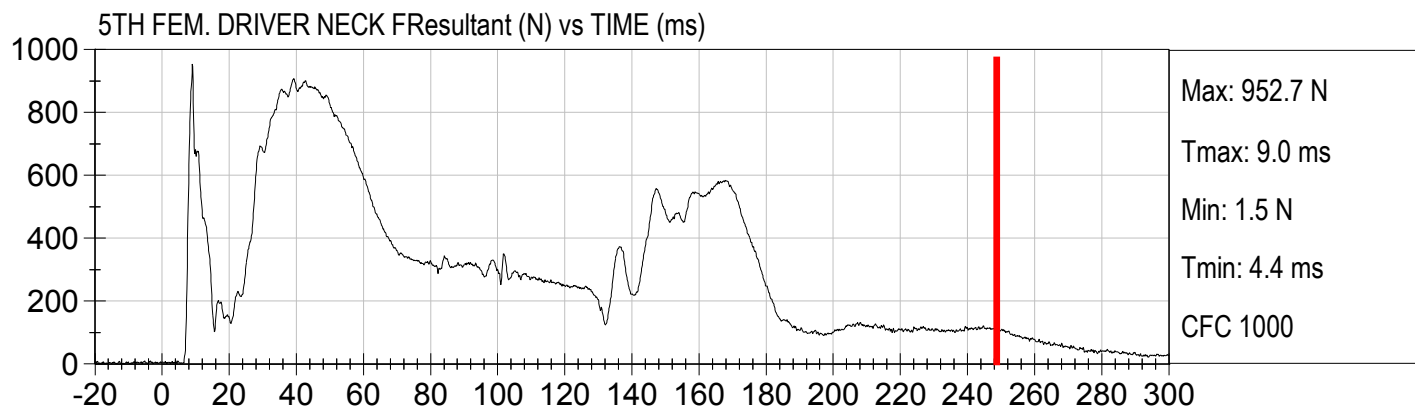
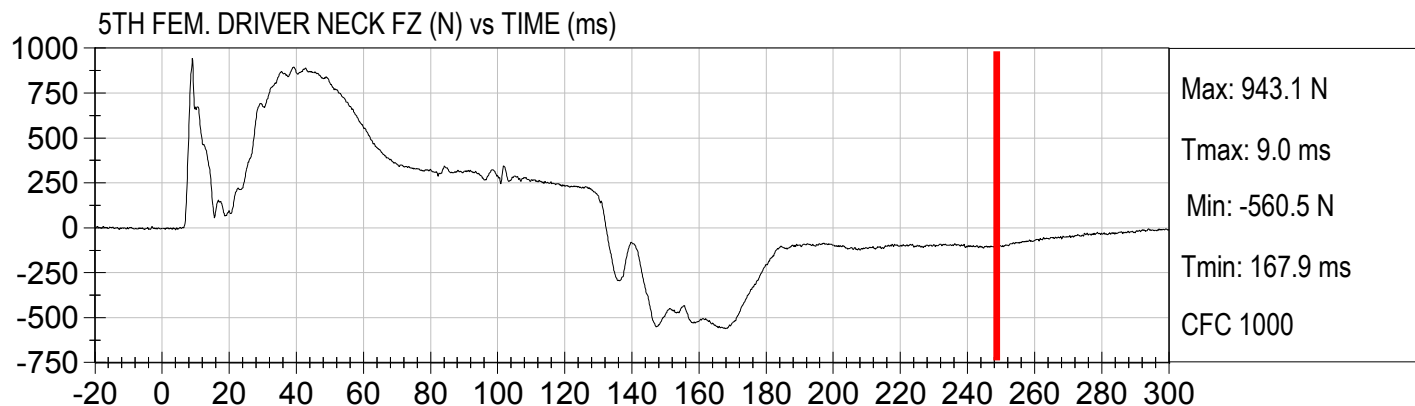
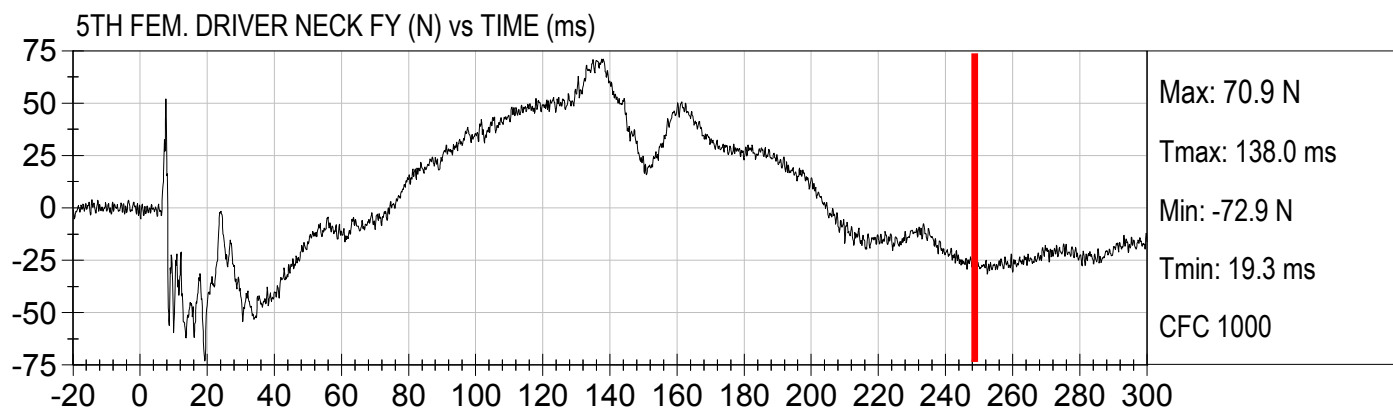
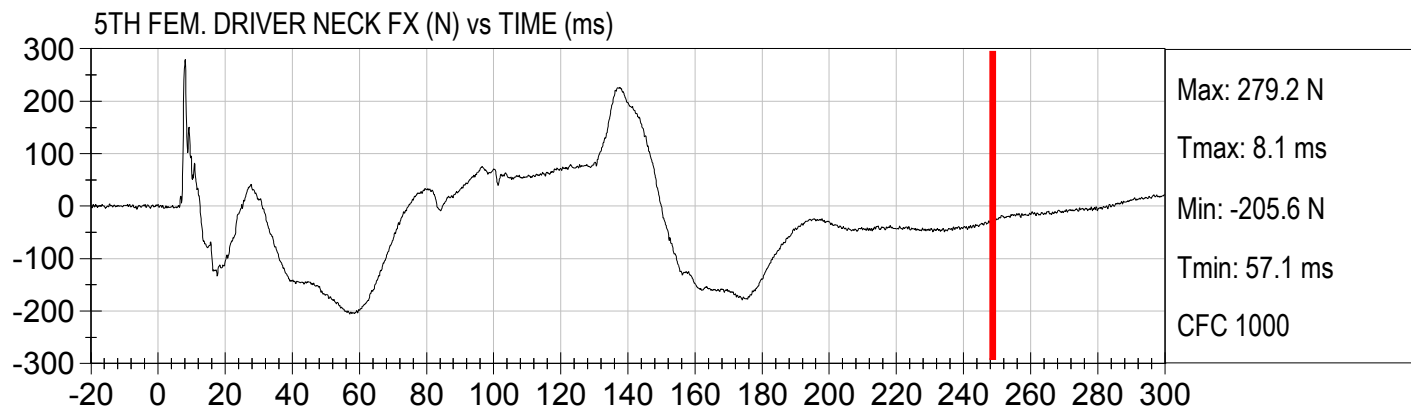


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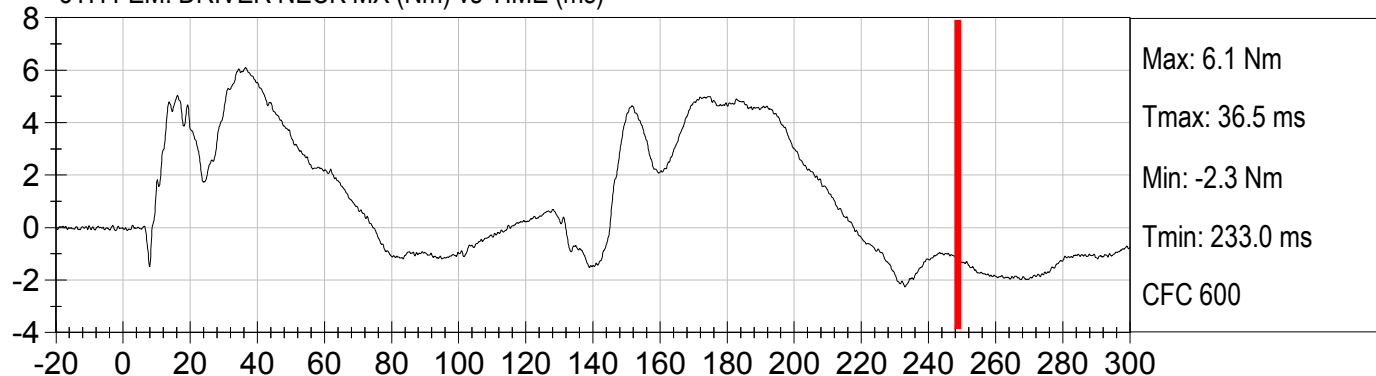
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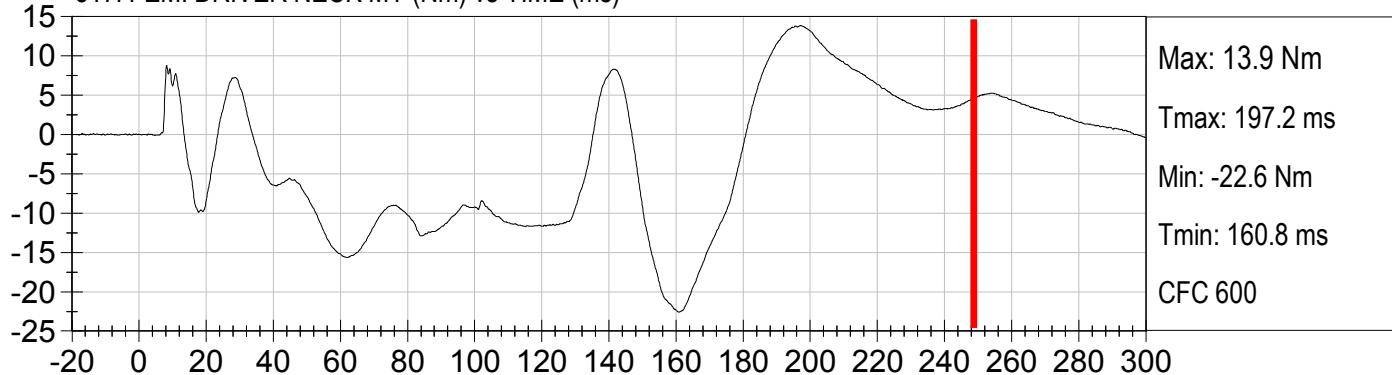


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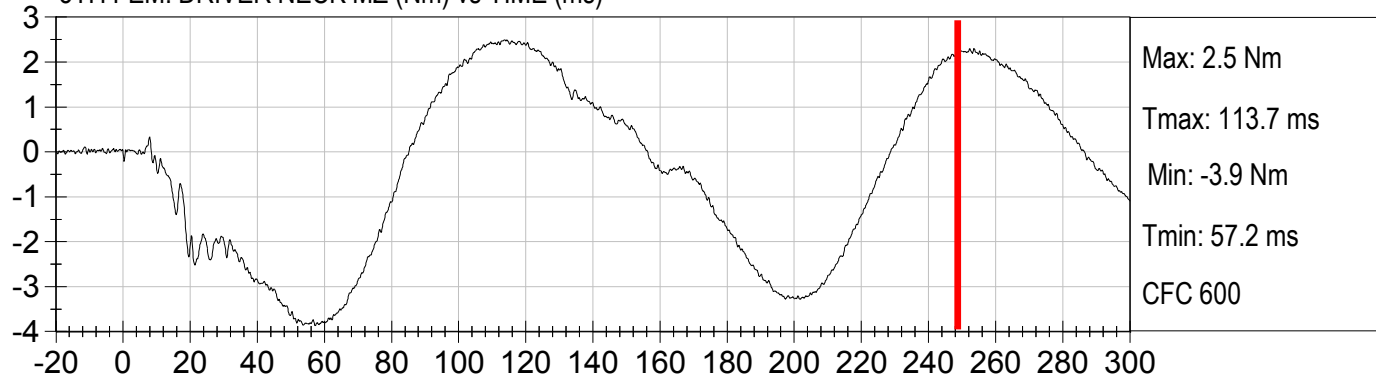
5TH FEM. DRIVER NECK MX (Nm) vs TIME (ms)



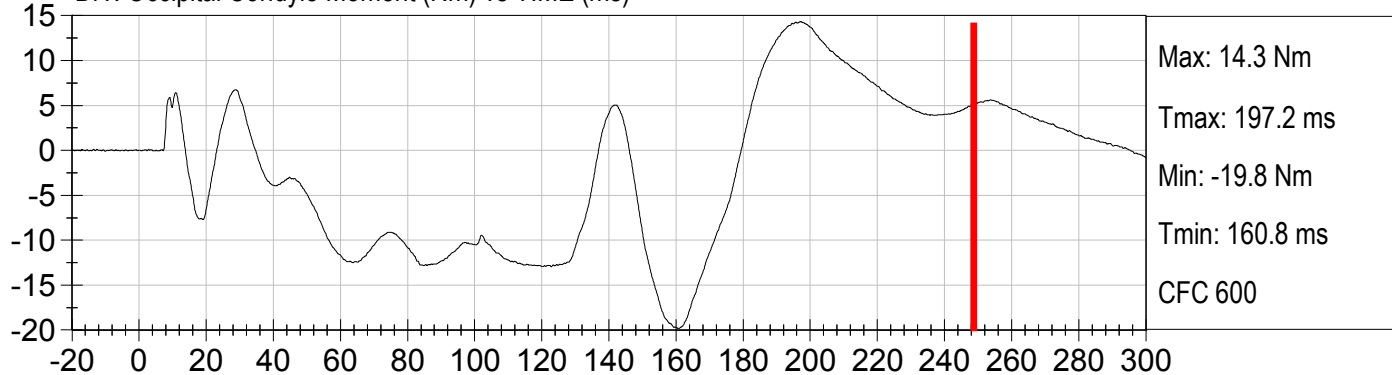
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5TH FEM. DRIVER NECK MZ (Nm) vs TIME (ms)

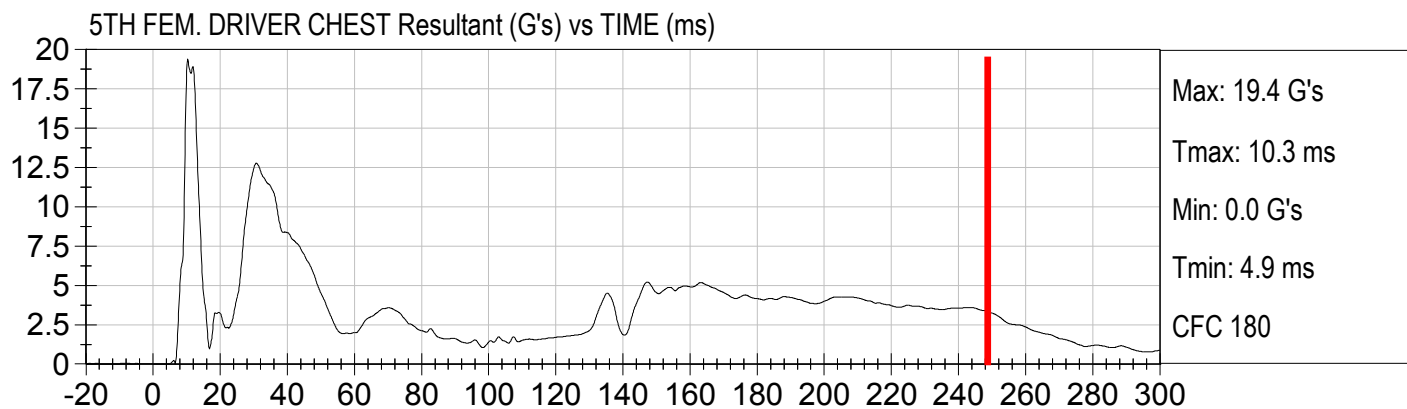
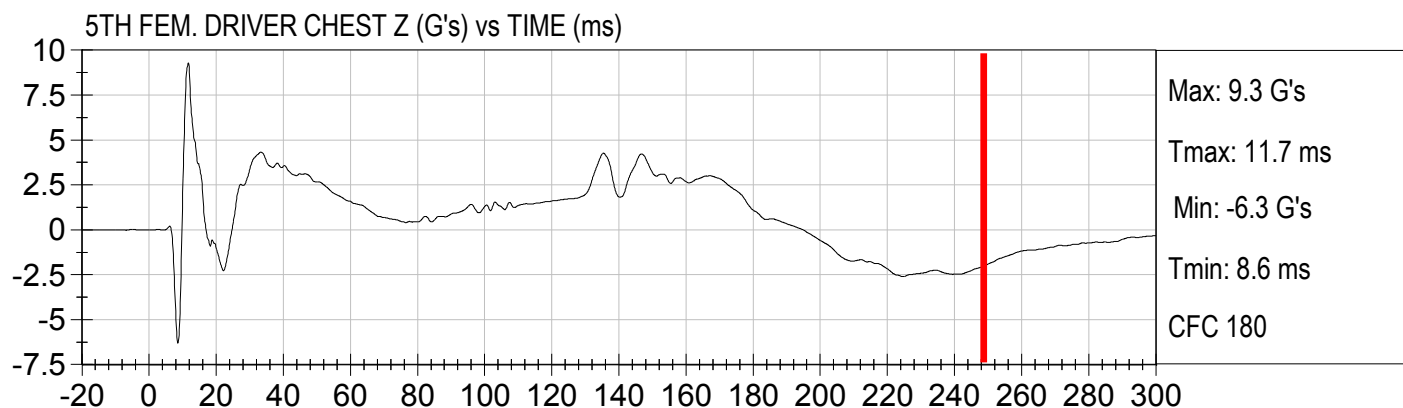
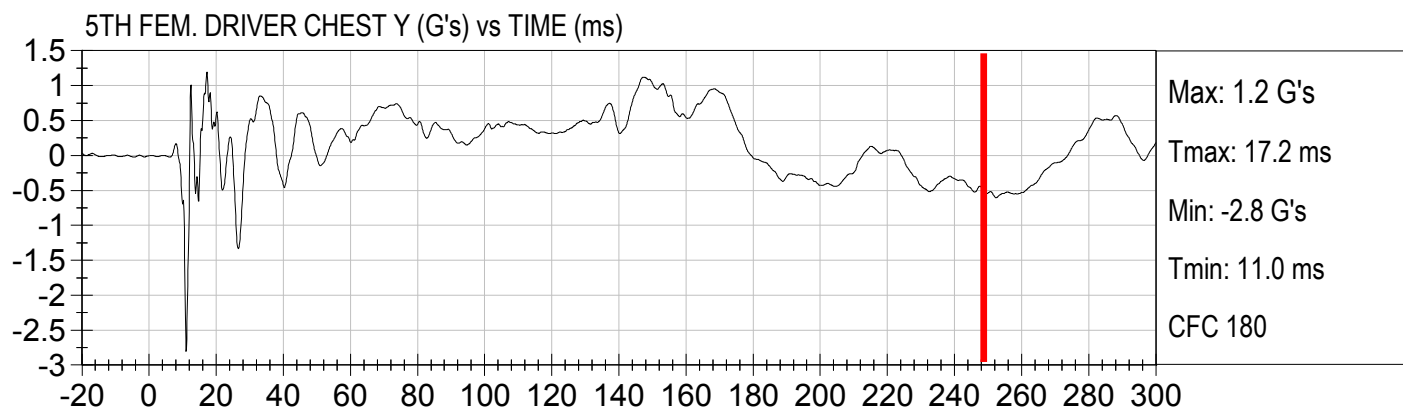
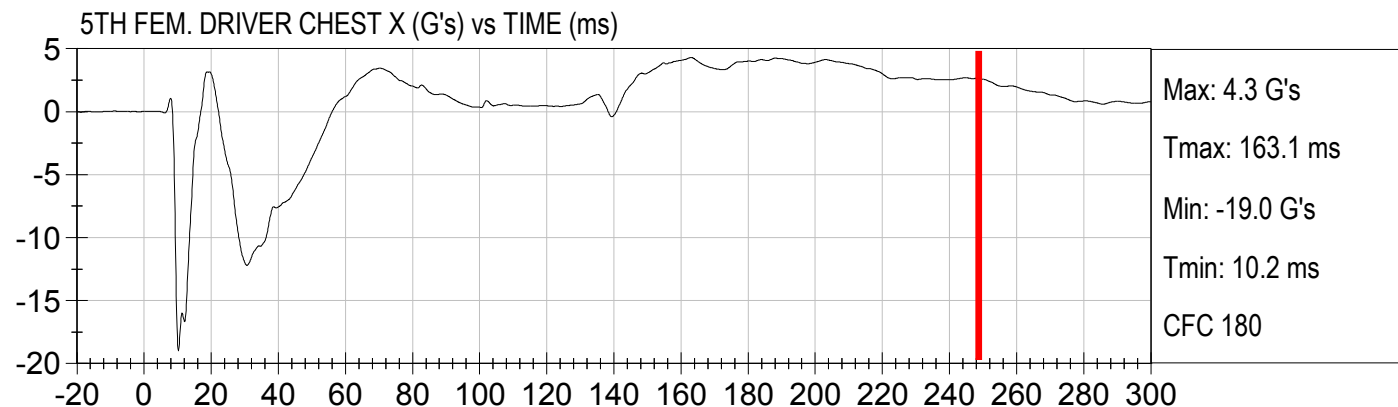


Drv. Occipital Condyle Moment (Nm) vs TIME (ms)



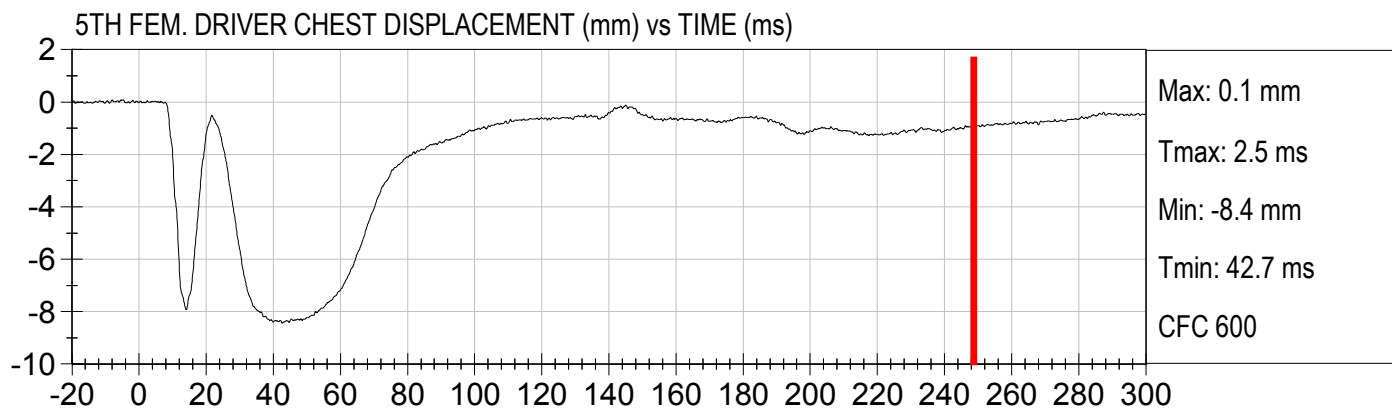
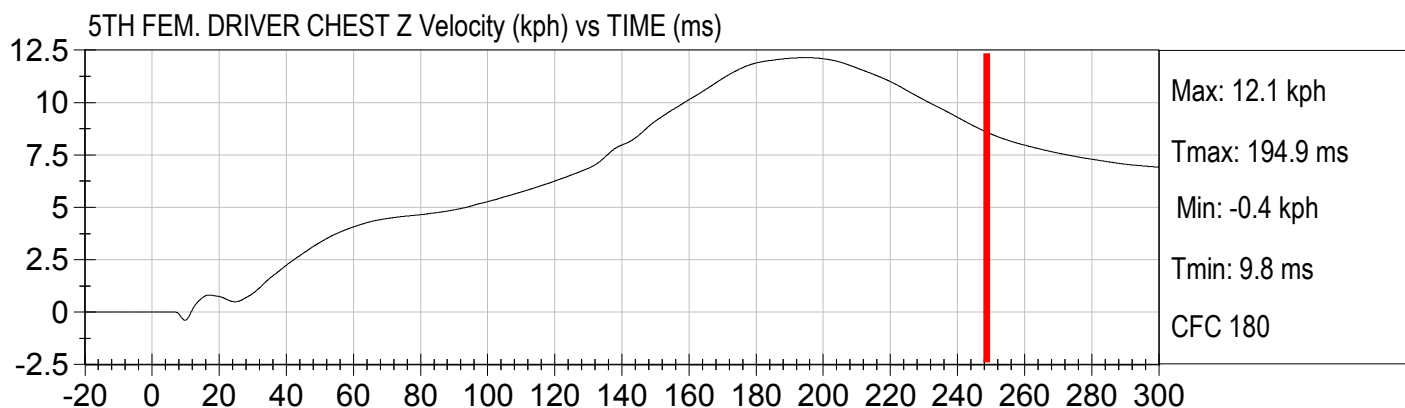
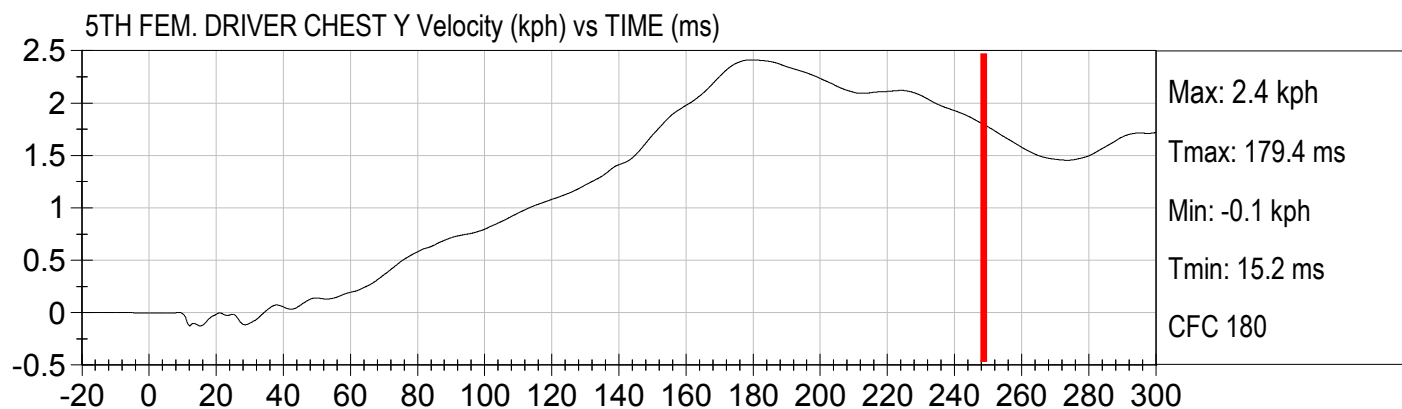
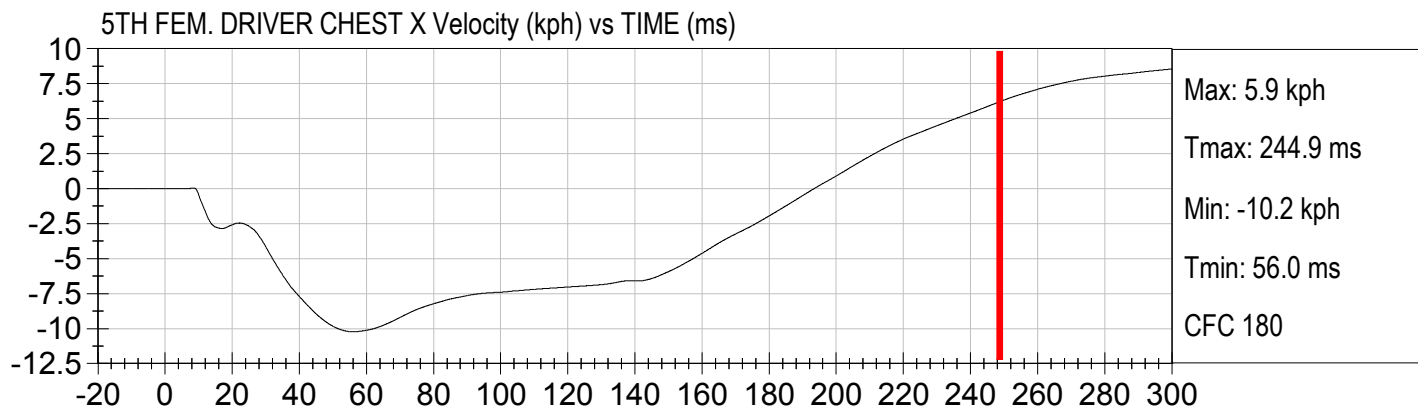


Injury Values Calculated between 0ms and 245ms



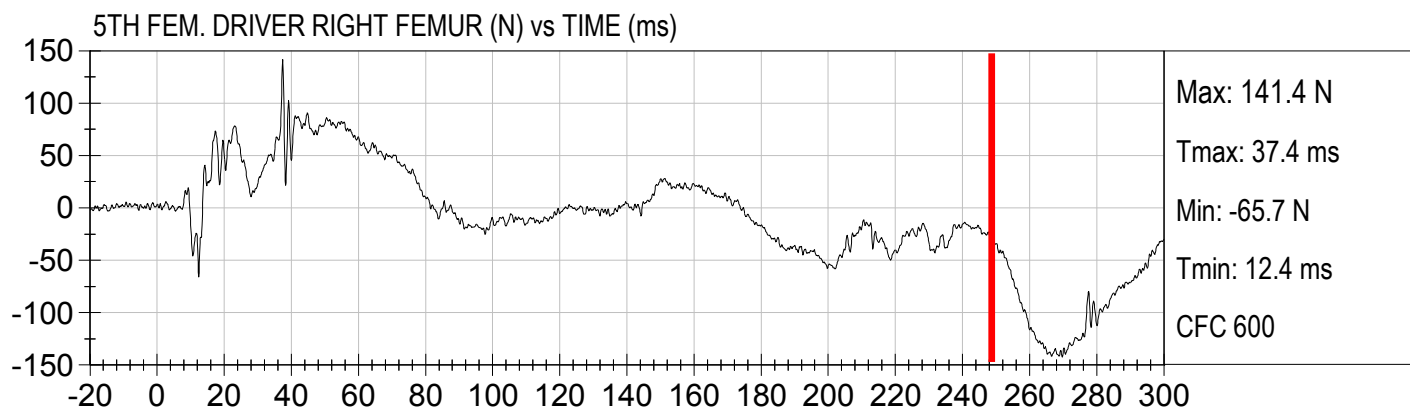
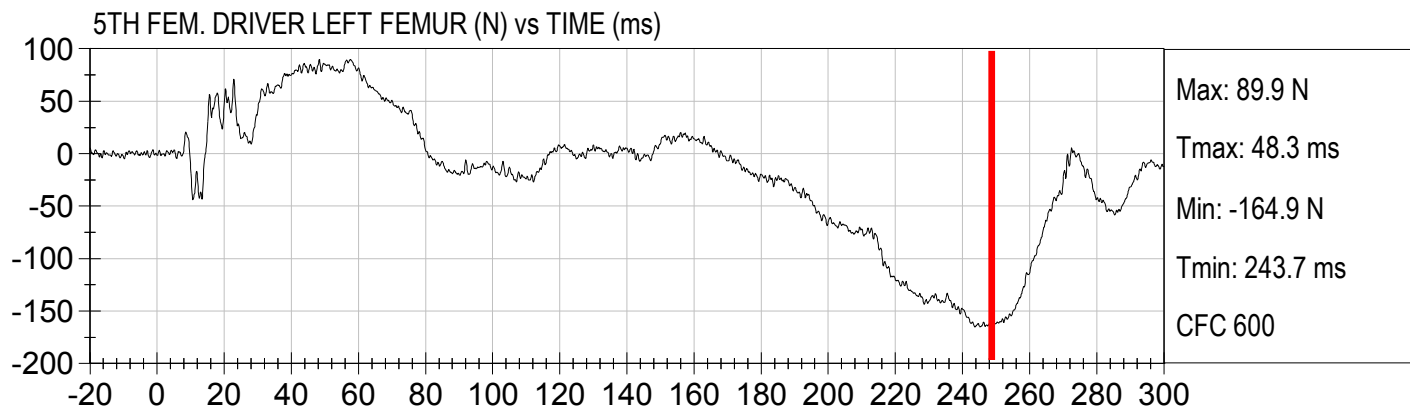


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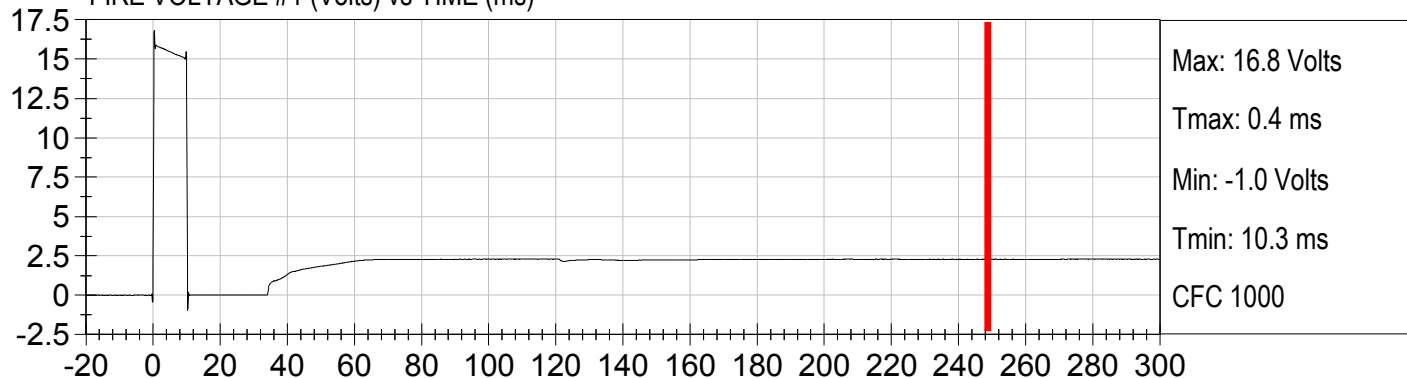




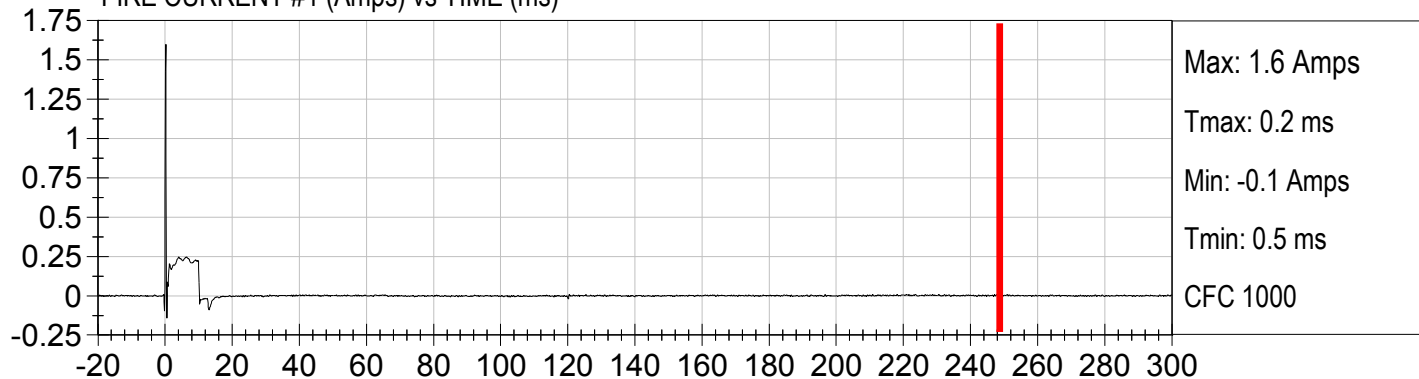


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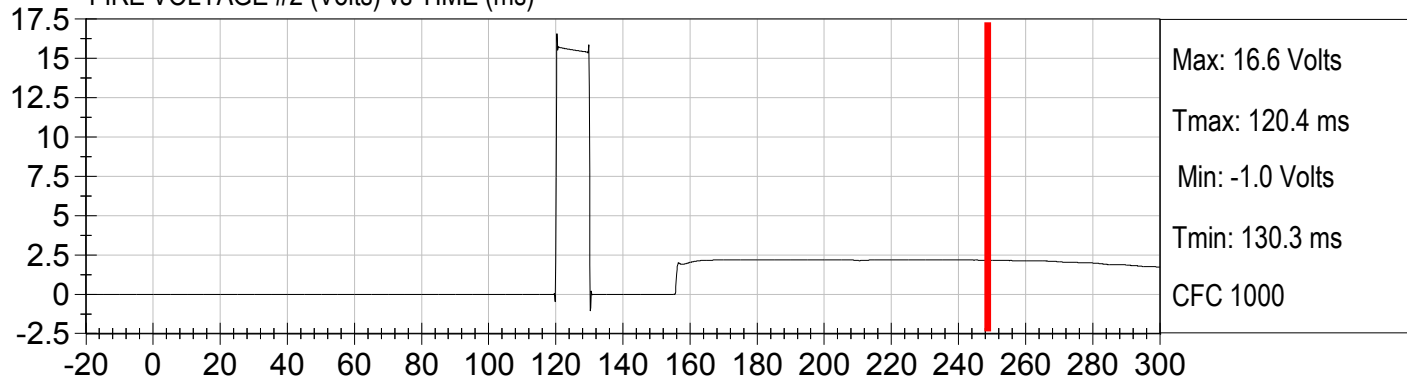
FIRE VOLTAGE #1 (Volts) vs TIME (ms)



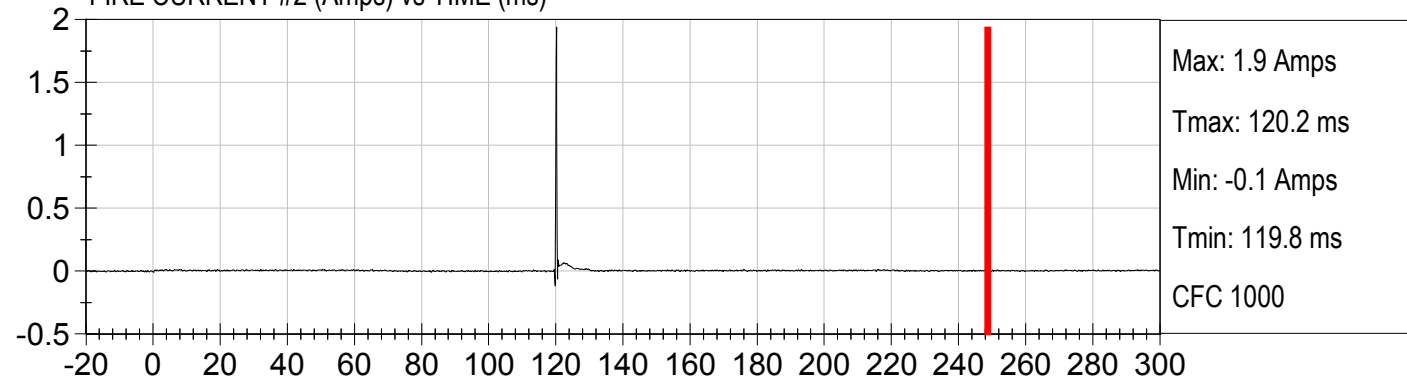
FIRE CURRENT #1 (Amps) vs TIME (ms)



FIRE VOLTAGE #2 (Volts) vs TIME (ms)

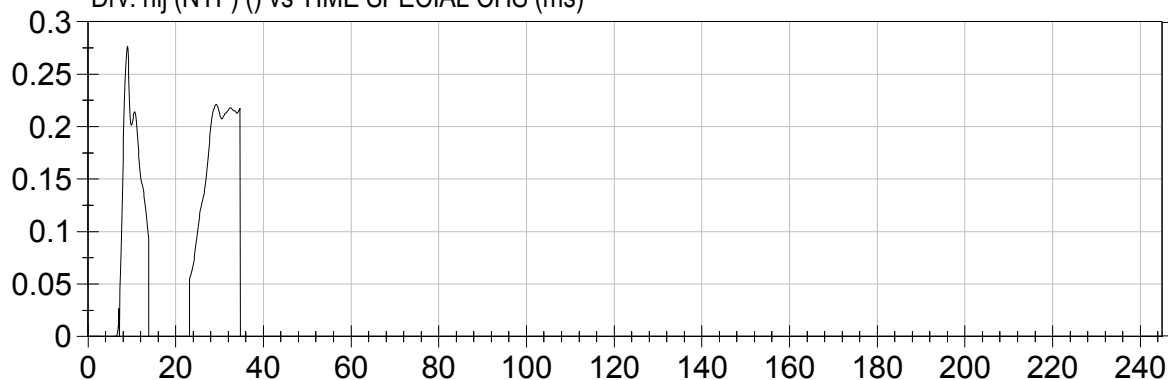


FIRE CURRENT #2 (Amps) vs TIME (ms)

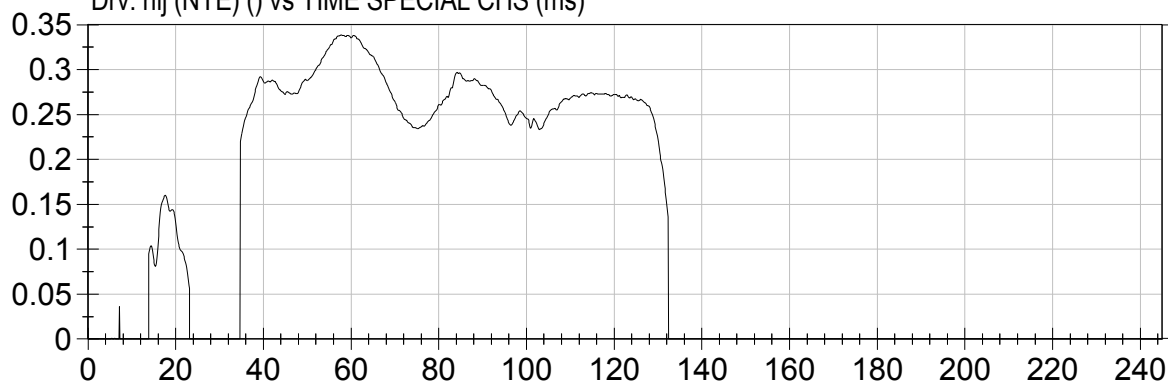




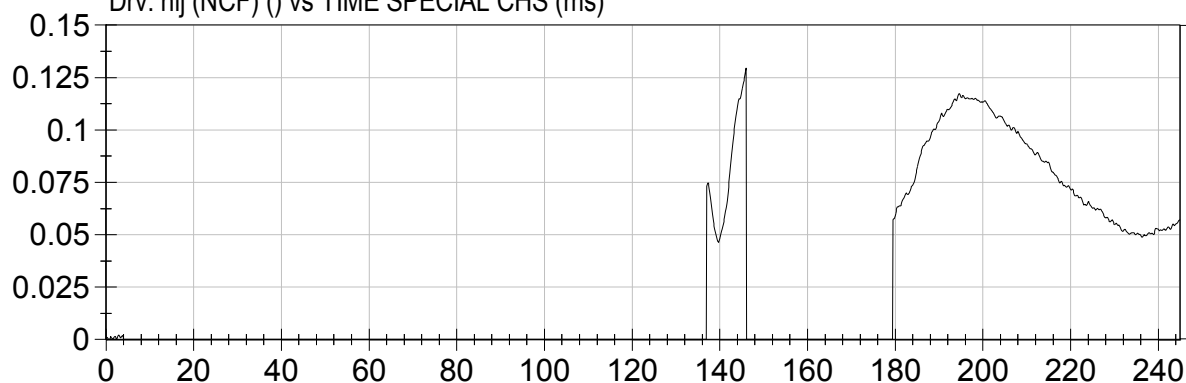
Drv. nij (NTF) ( ) vs TIME SPECIAL CHS (ms)



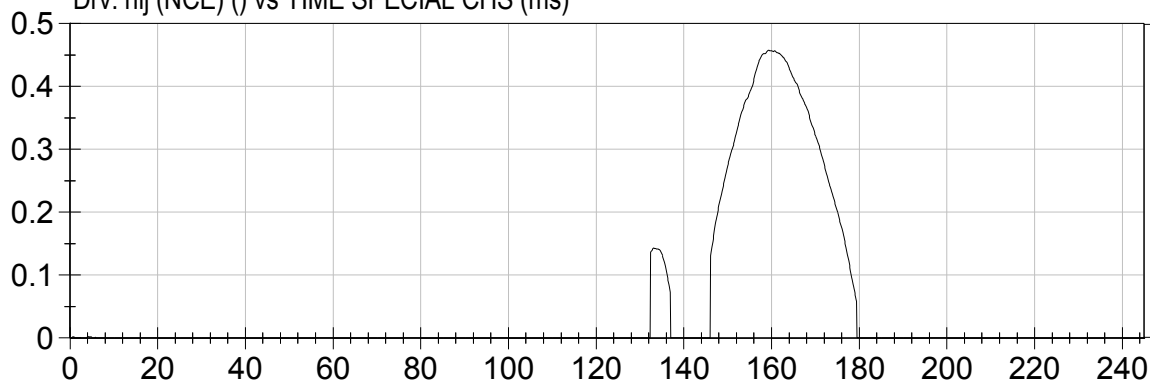
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Drv. nij (NCF) ( ) vs TIME SPECIAL CHS (ms)

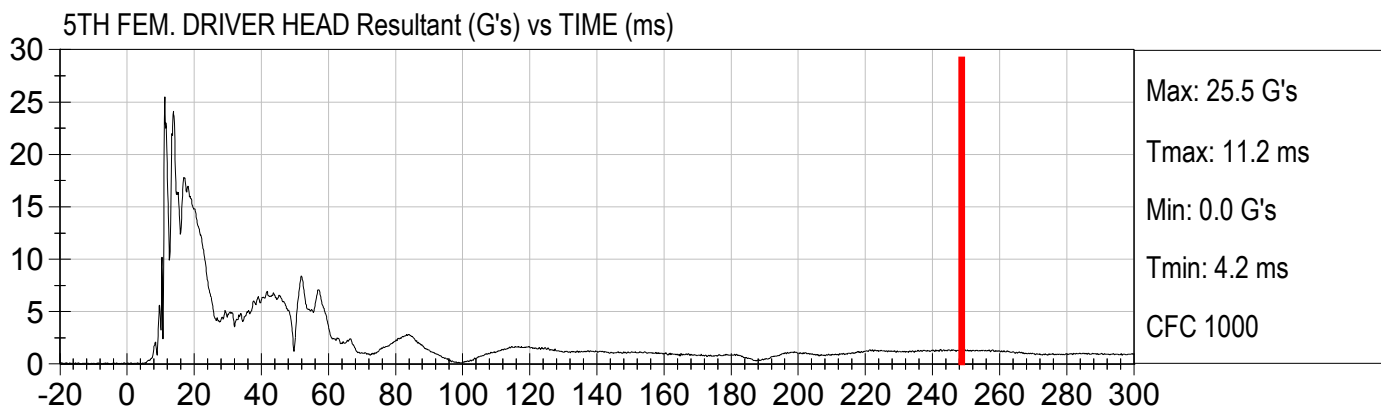
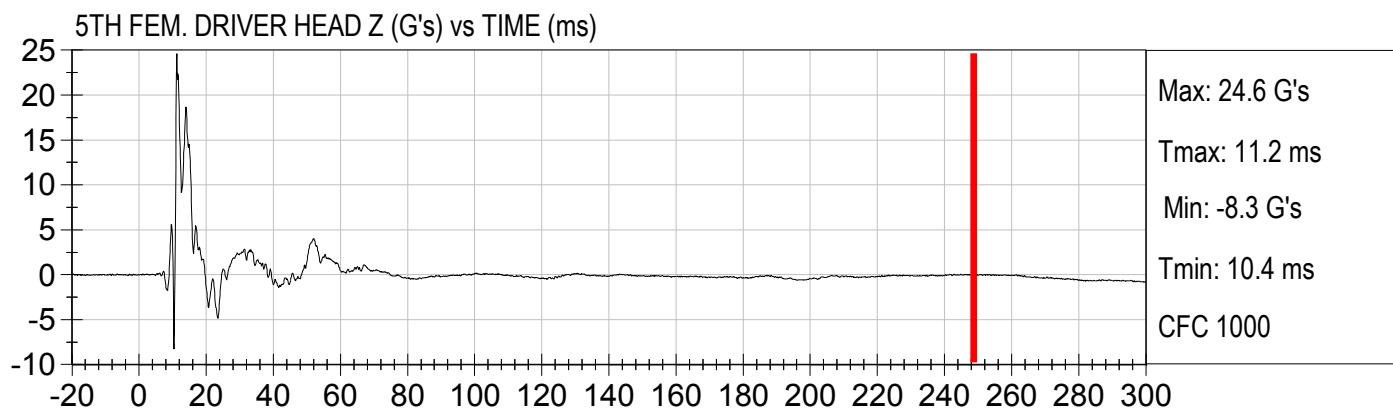
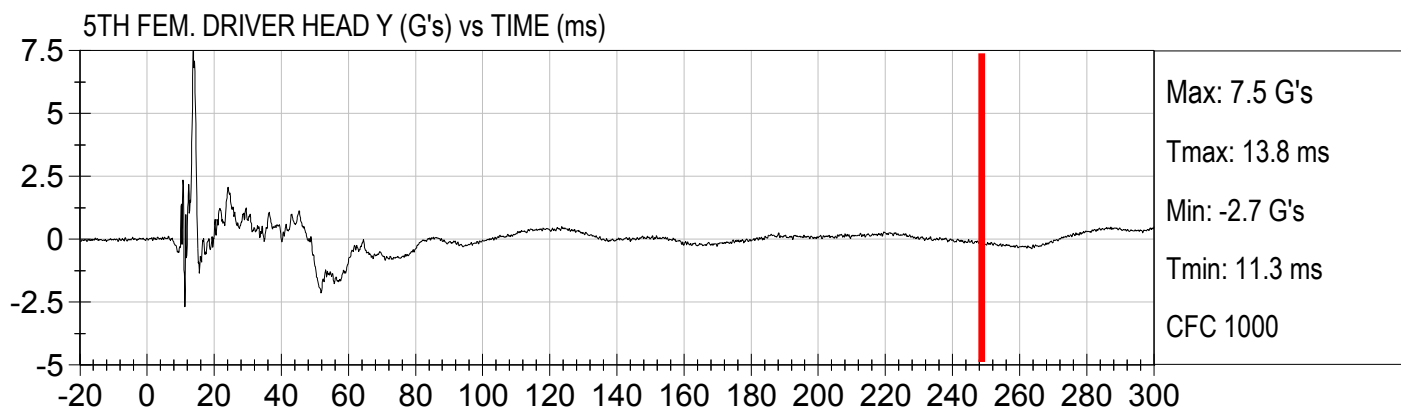
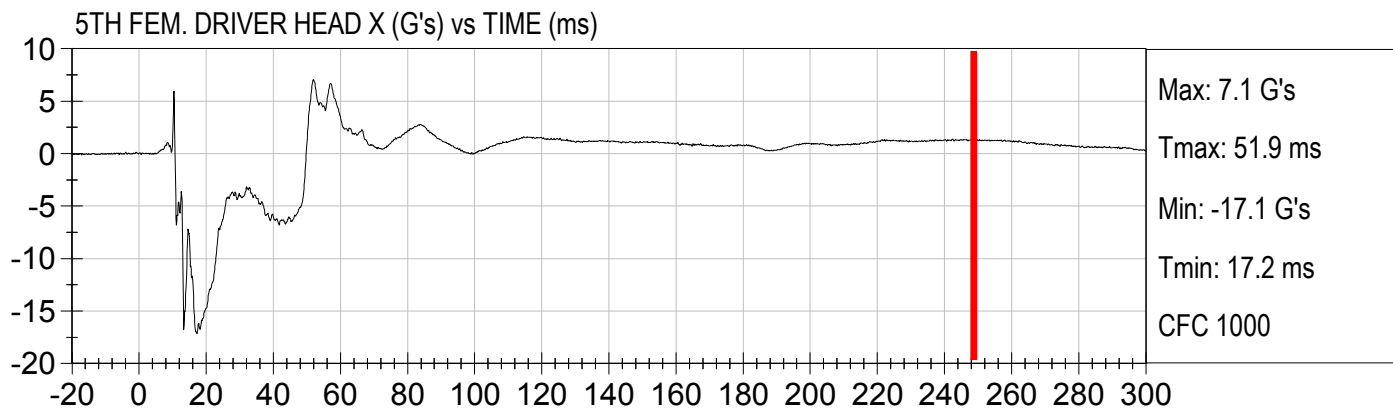


Drv. nij (NCE) ( ) vs TIME SPECIAL CHS (ms)



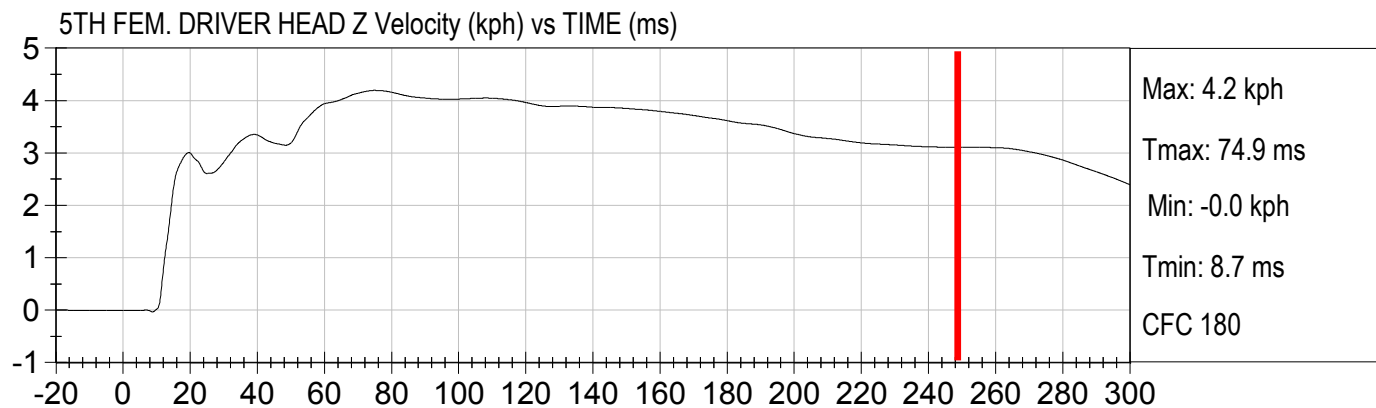
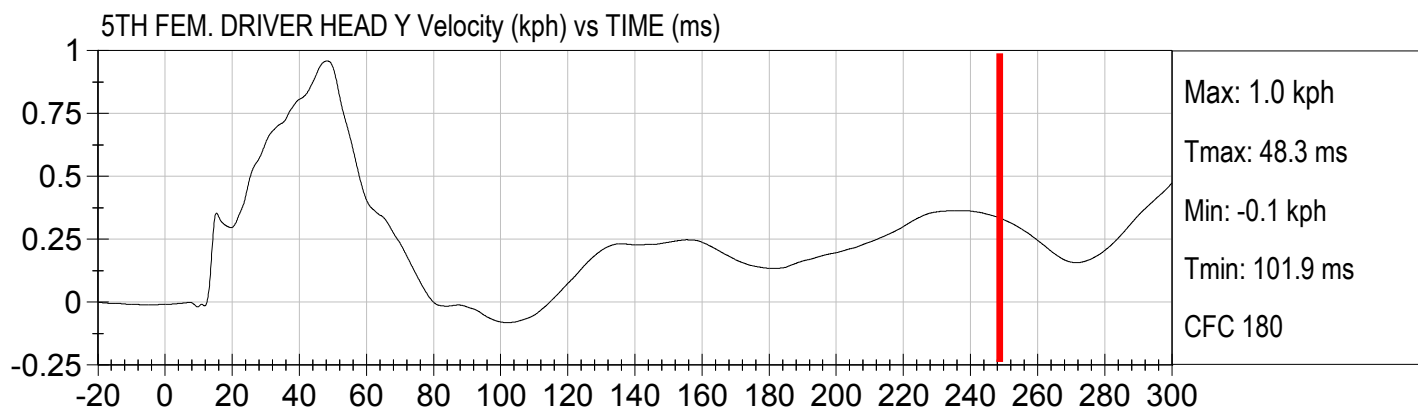
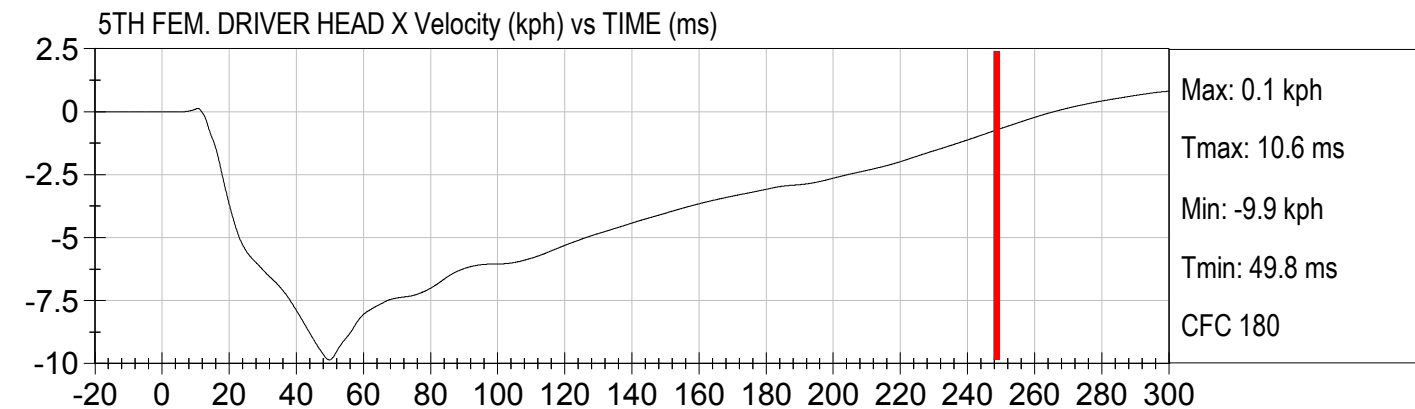


Injury Values Calculated between 0ms and 245ms



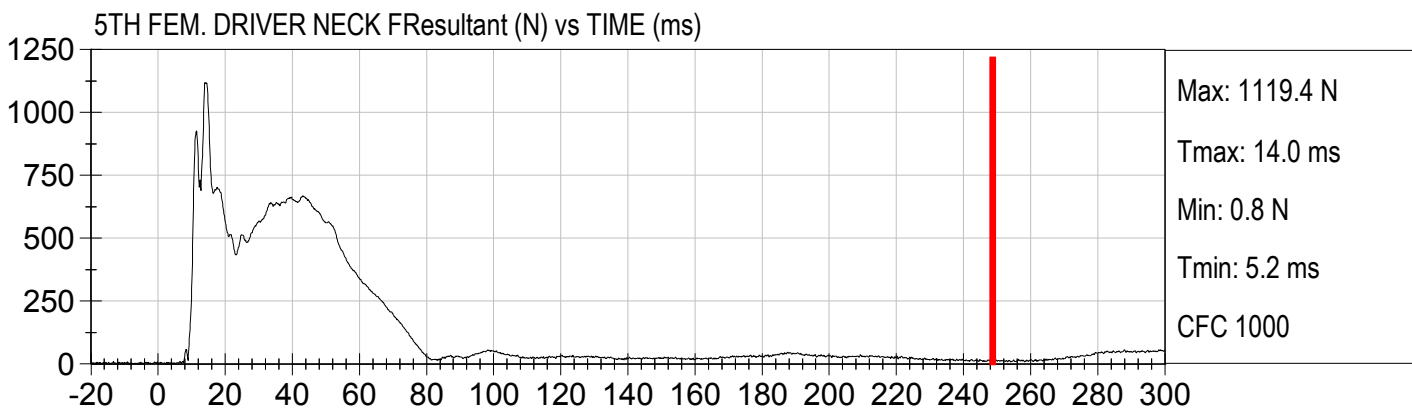
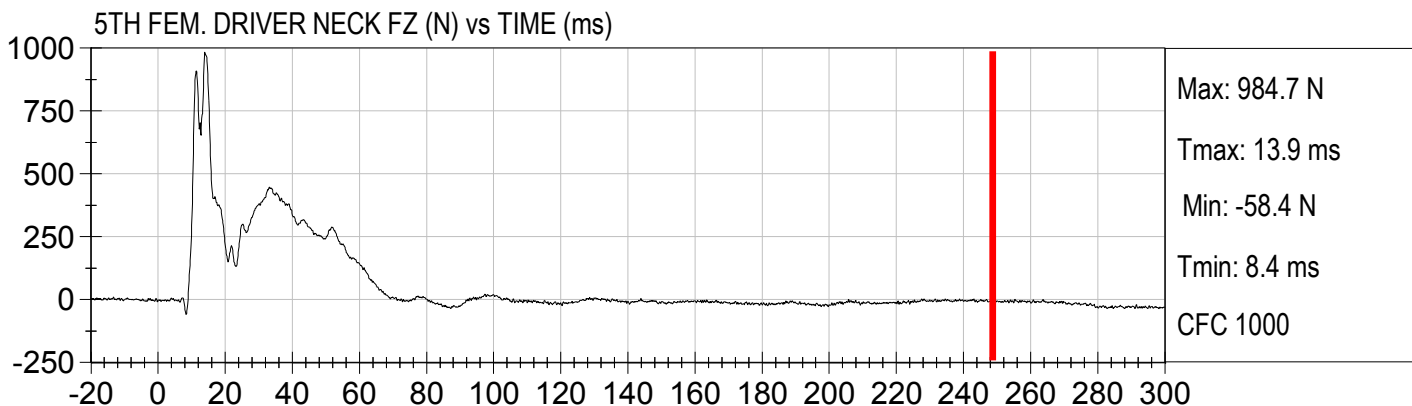
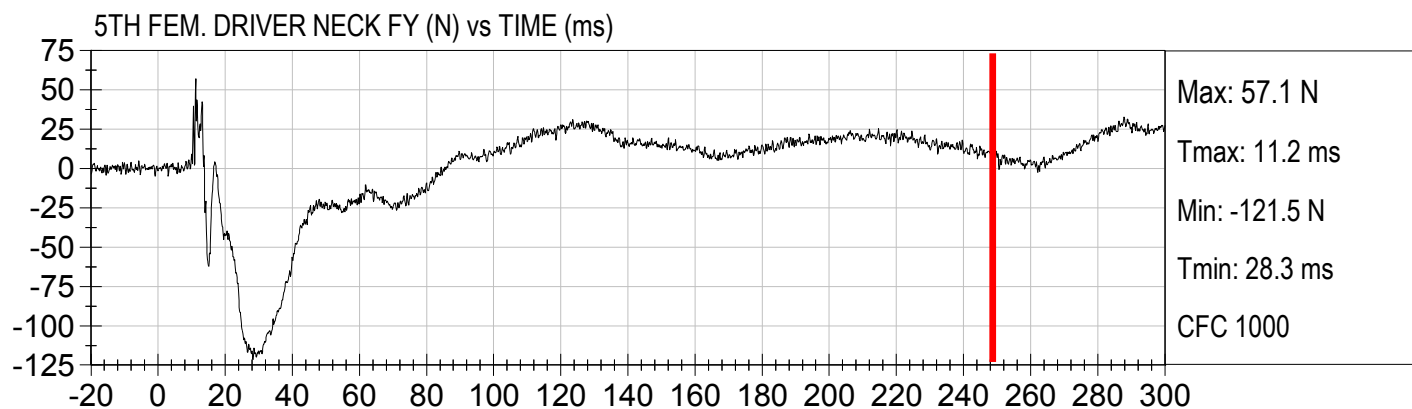
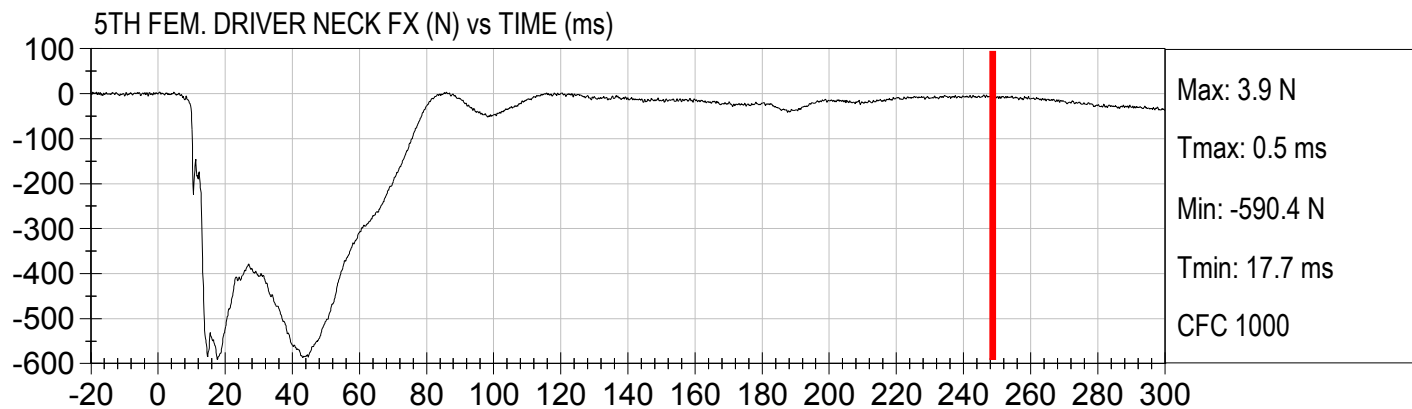


Injury Values Calculated between 0ms and 245ms



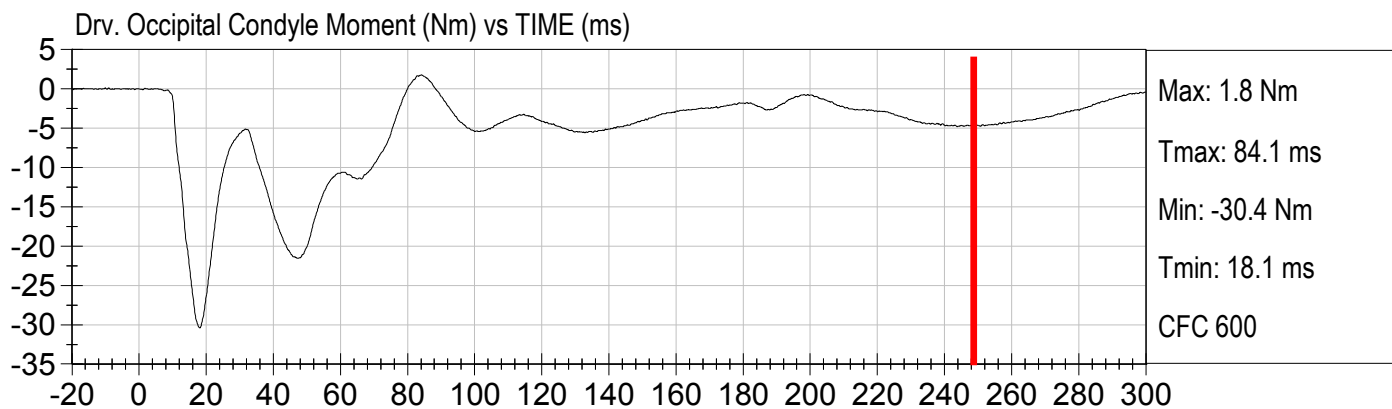
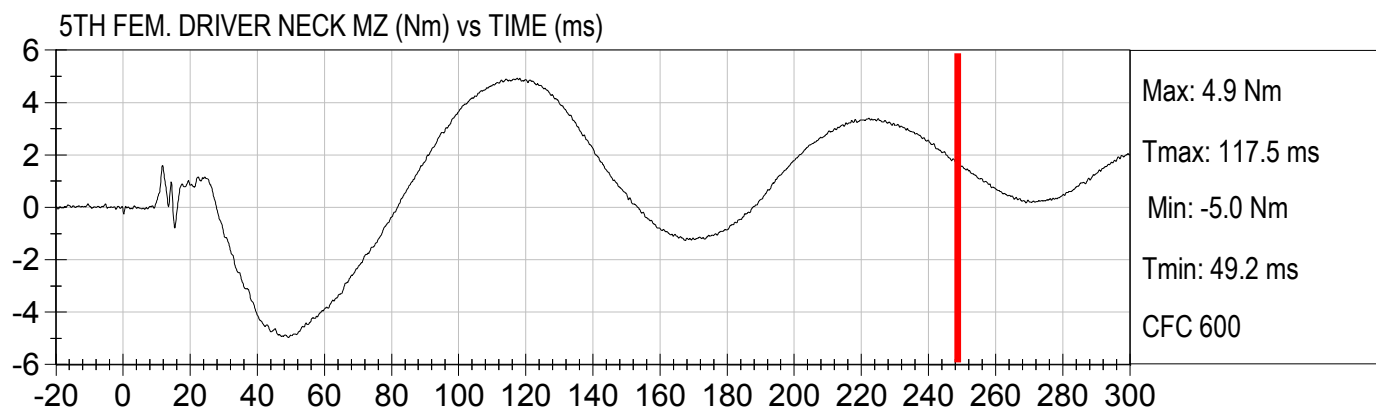
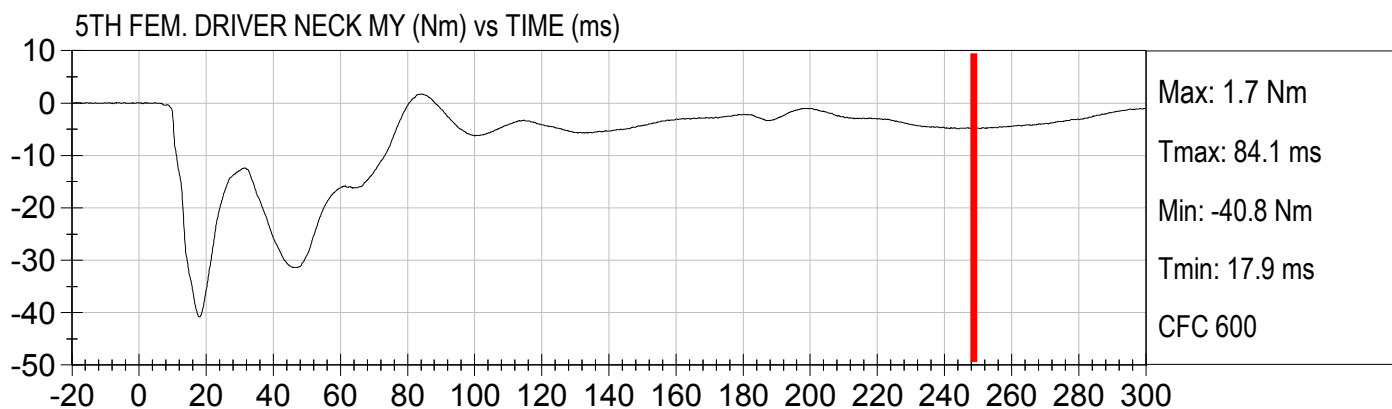
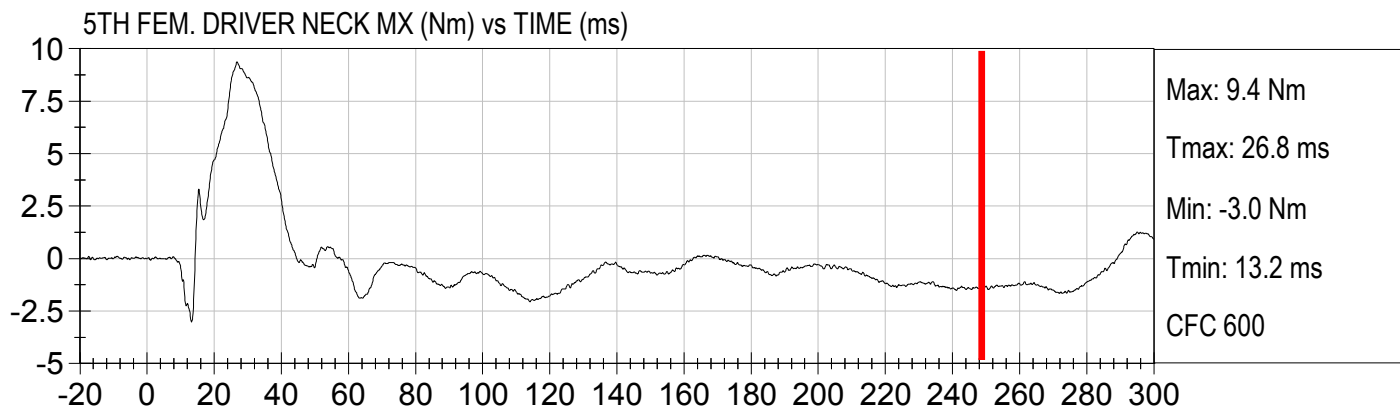


Injury Values Calculated between 0ms and 245ms



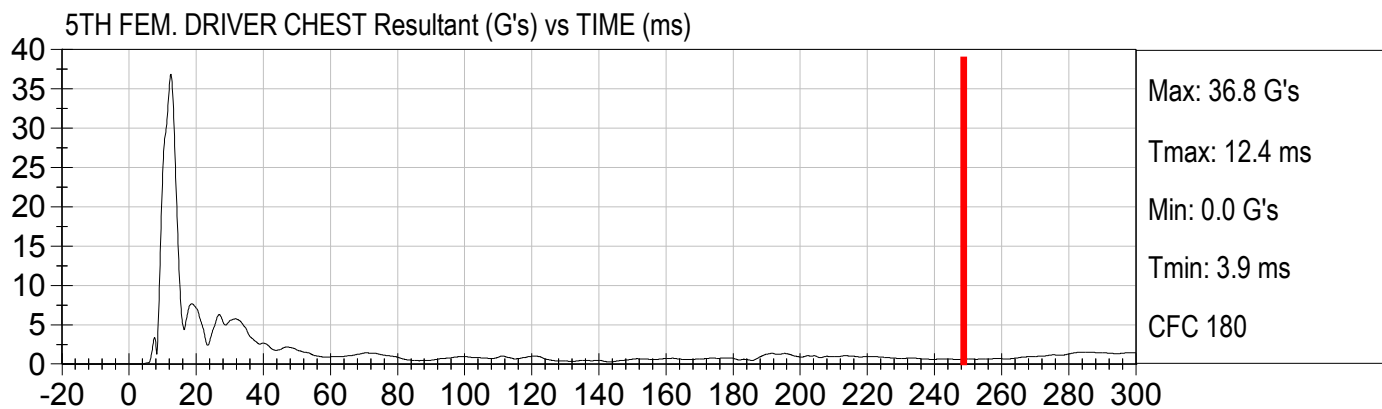
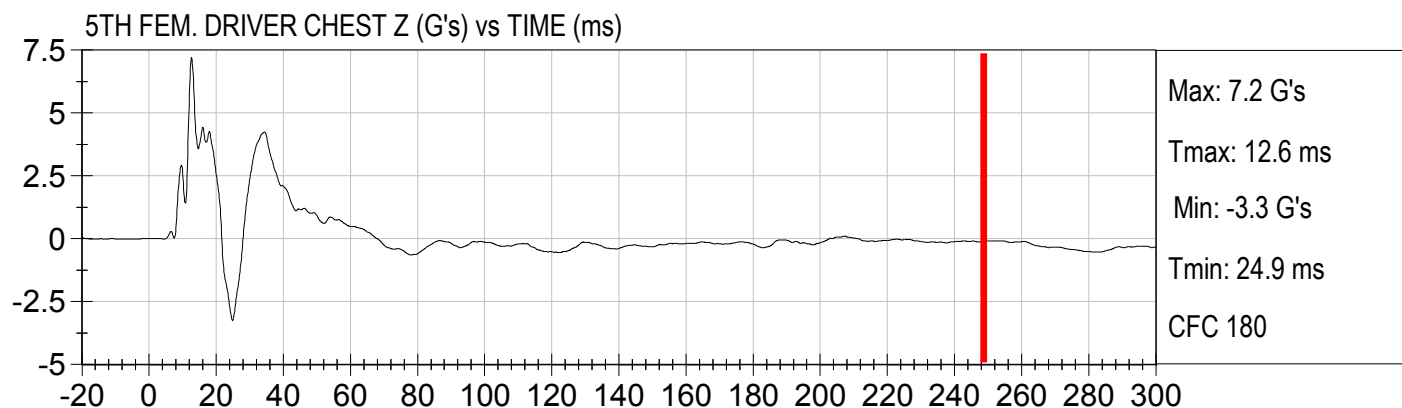
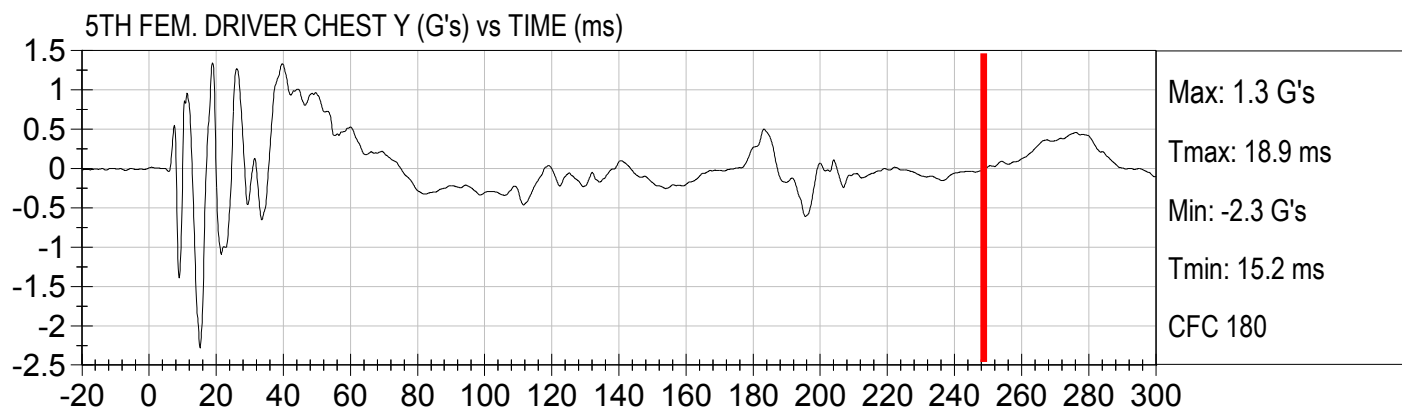
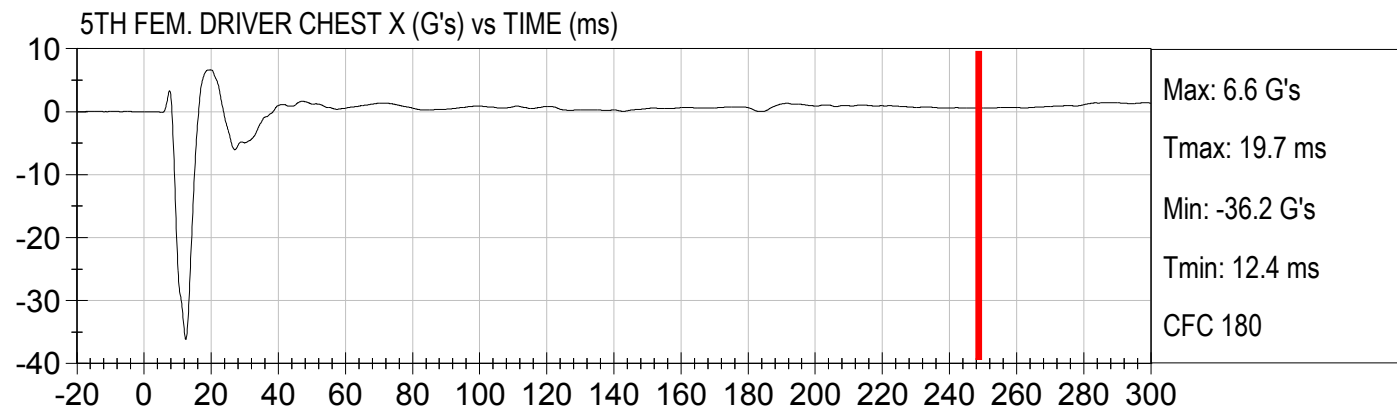


Injury Values Calculated between 0ms and 245ms





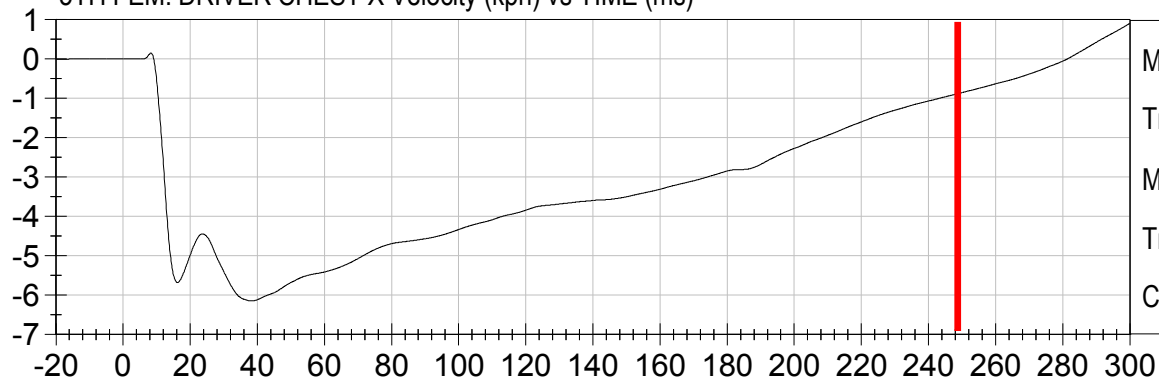
Injury Values Calculated between 0ms and 245ms



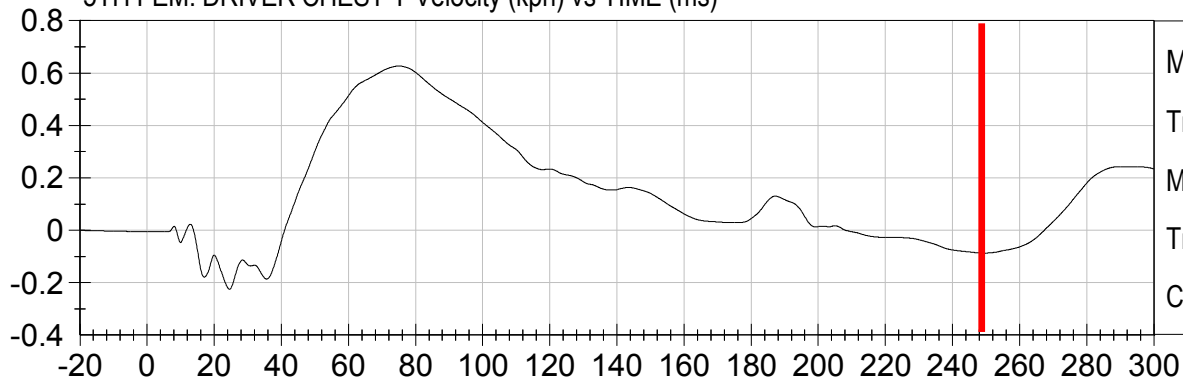


Injury Values Calculated between 0ms and 245ms

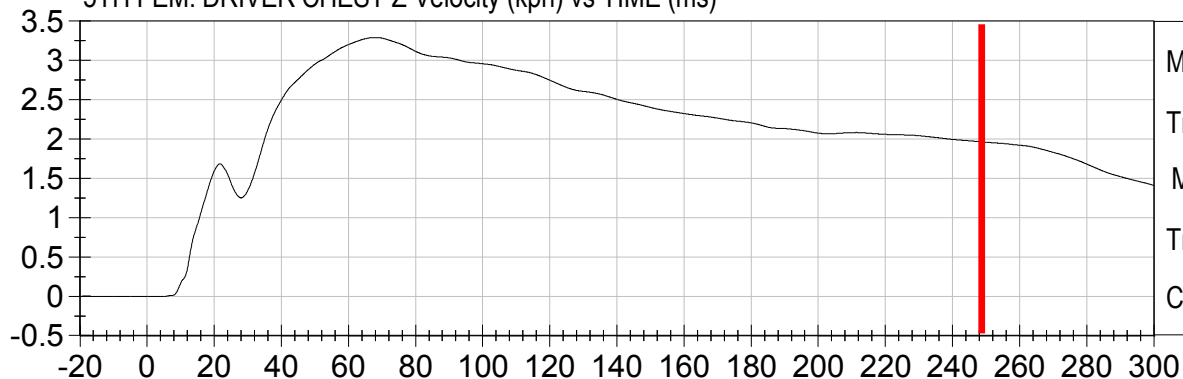
5TH FEM. DRIVER CHEST X Velocity (kph) vs TIME (ms)



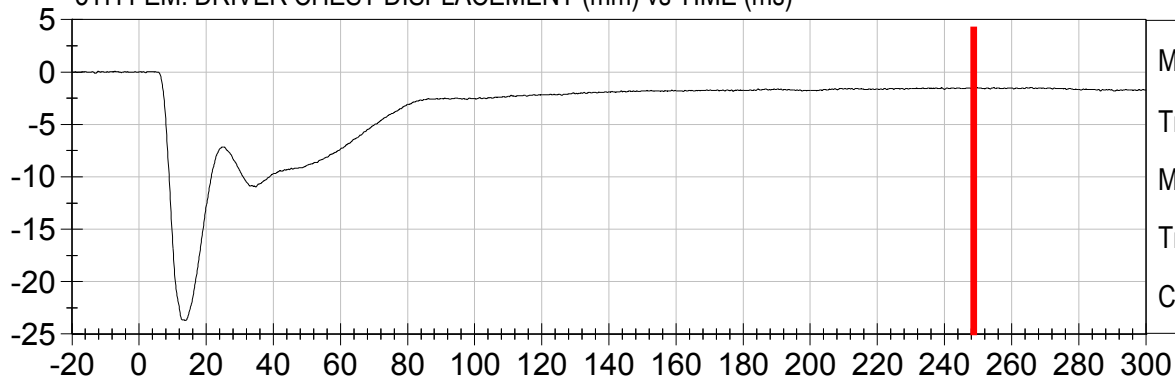
5TH FEM. DRIVER CHEST Y Velocity (kph) vs TIME (ms)



5TH FEM. DRIVER CHEST Z Velocity (kph) vs TIME (ms)



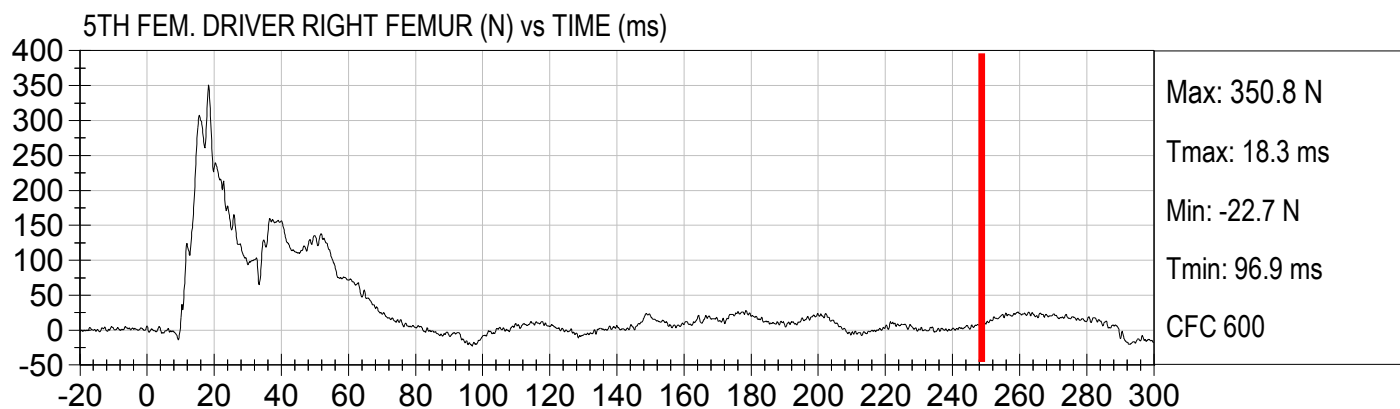
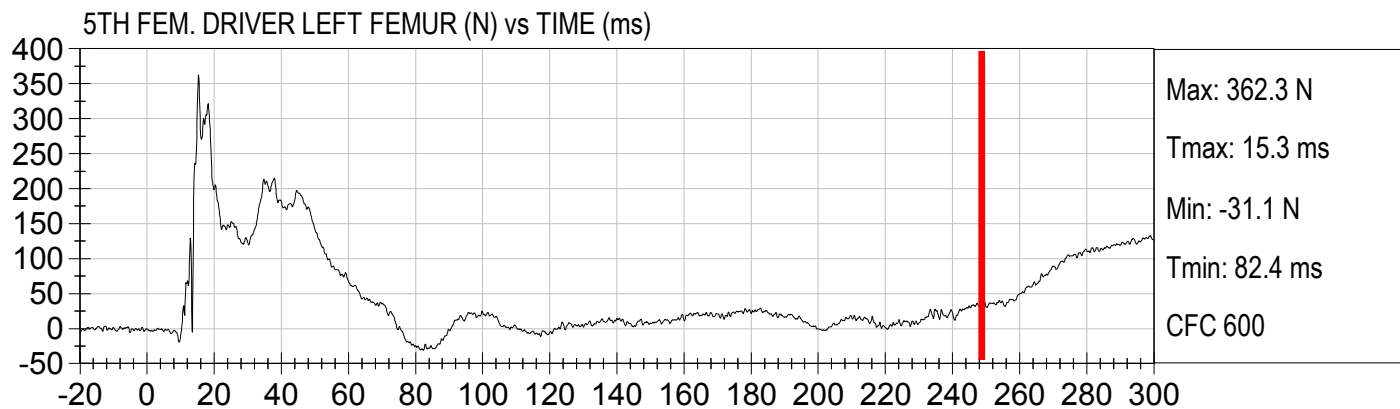
5TH FEM. DRIVER CHEST DISPLACEMENT (mm) vs TIME (ms)







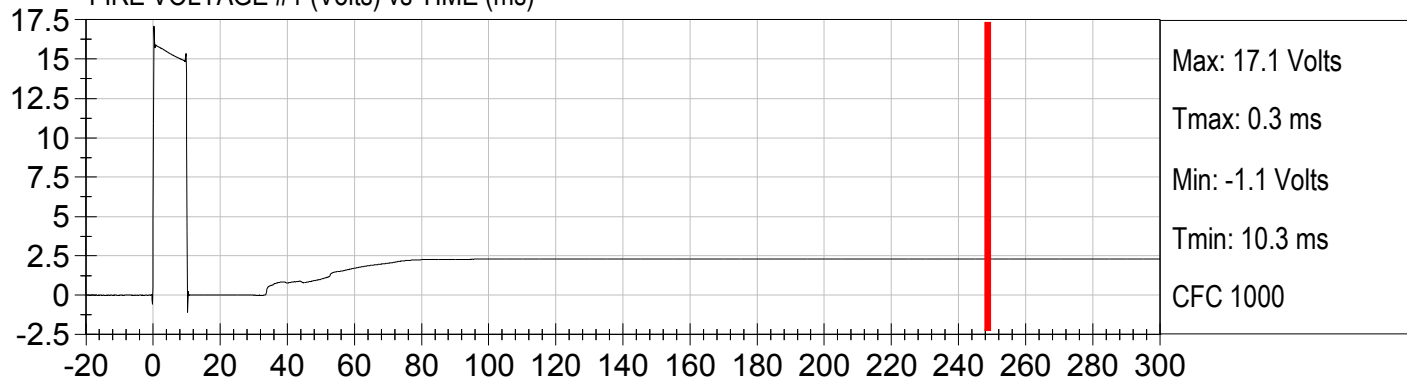
Injury Values Calculated between 0ms and 245ms



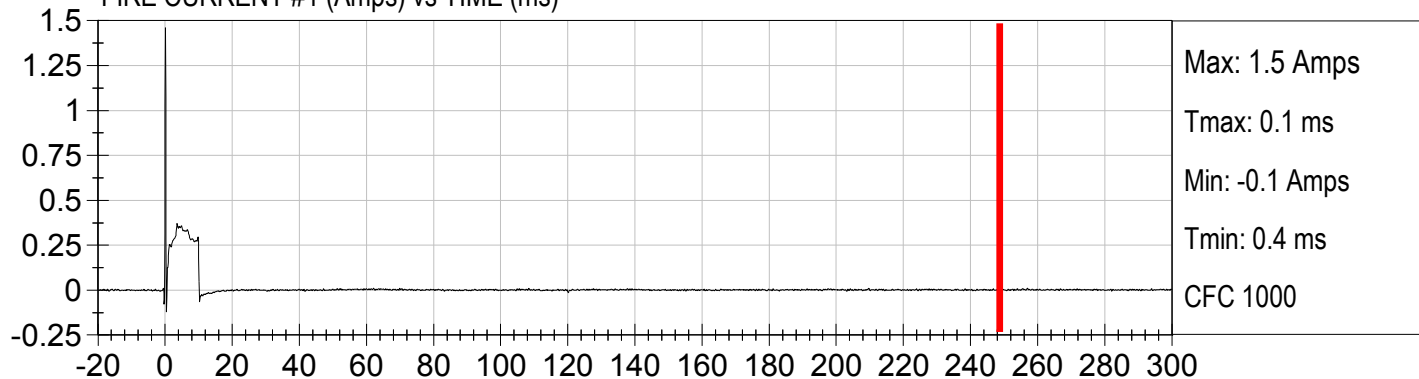


Injury Values Calculated between 0ms and 245ms

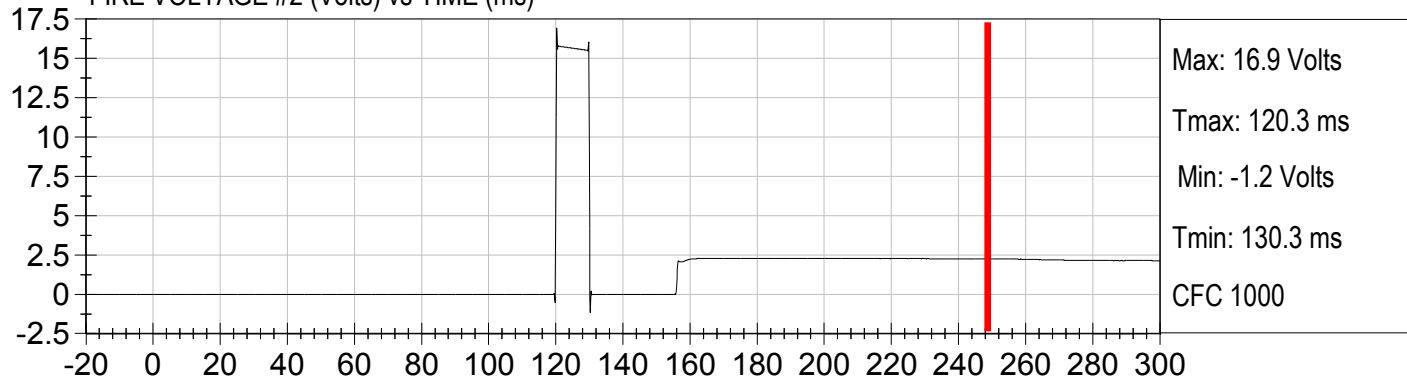
FIRE VOLTAGE #1 (Volts) vs TIME (ms)



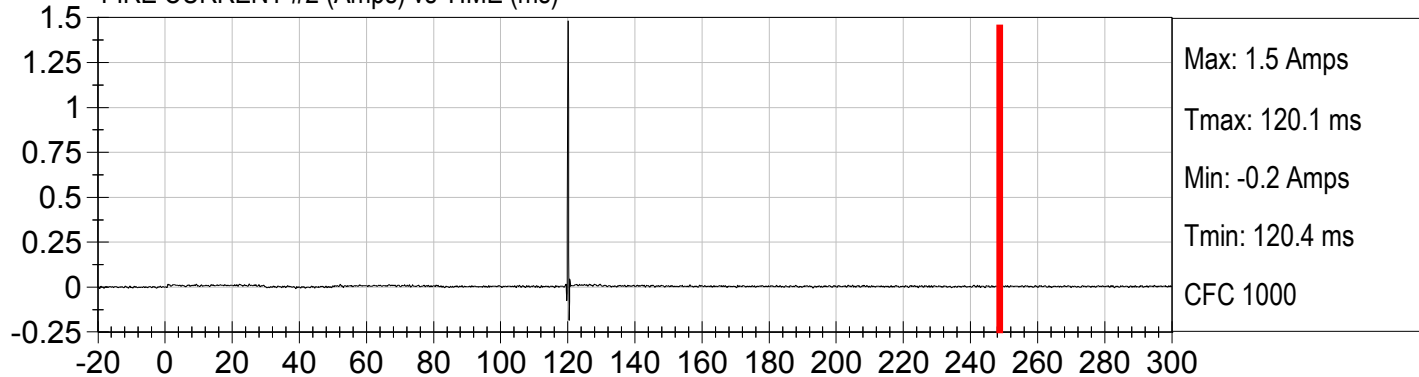
FIRE CURRENT #1 (Amps) vs TIME (ms)

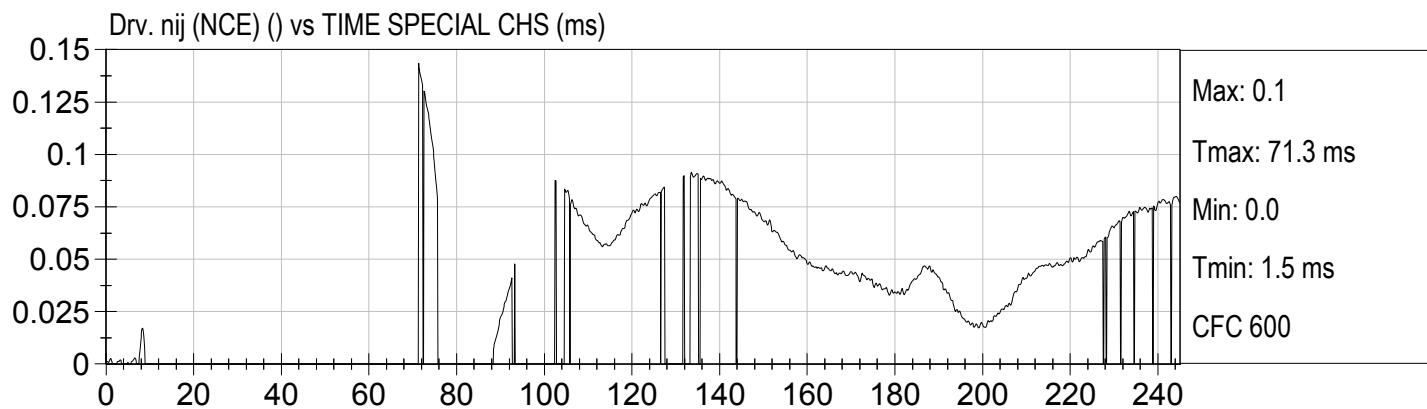
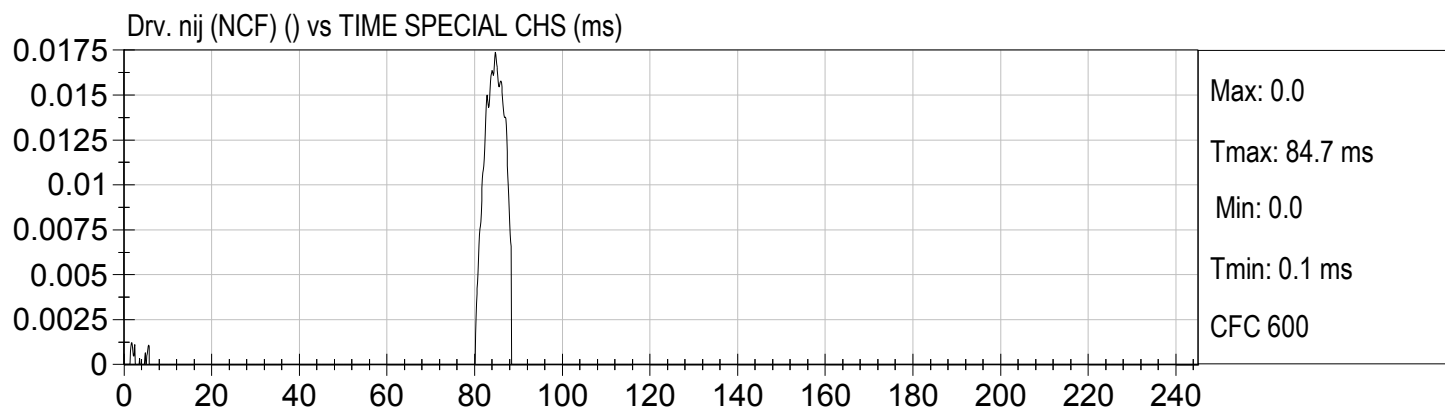
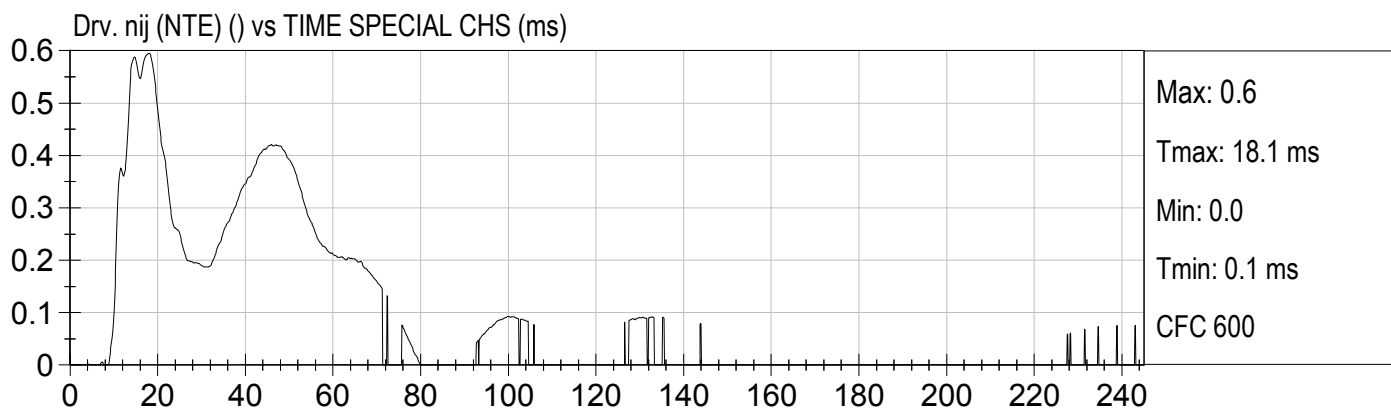
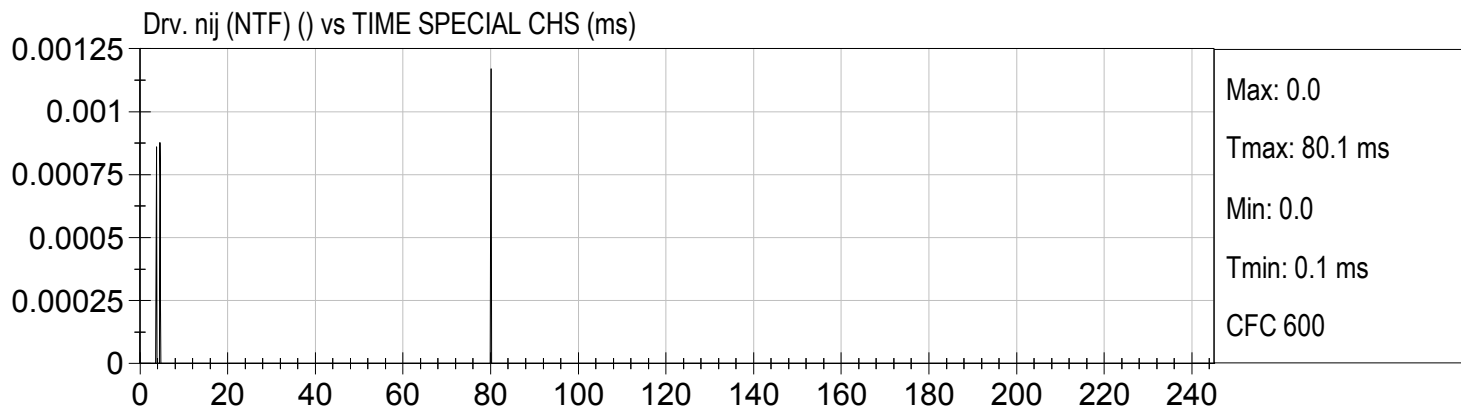


FIRE VOLTAGE #2 (Volts) vs TIME (ms)



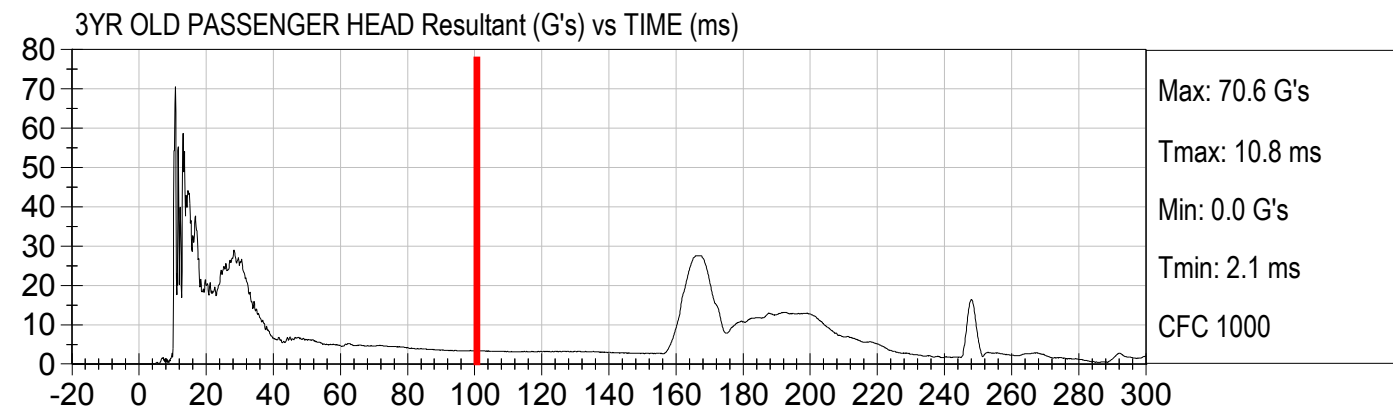
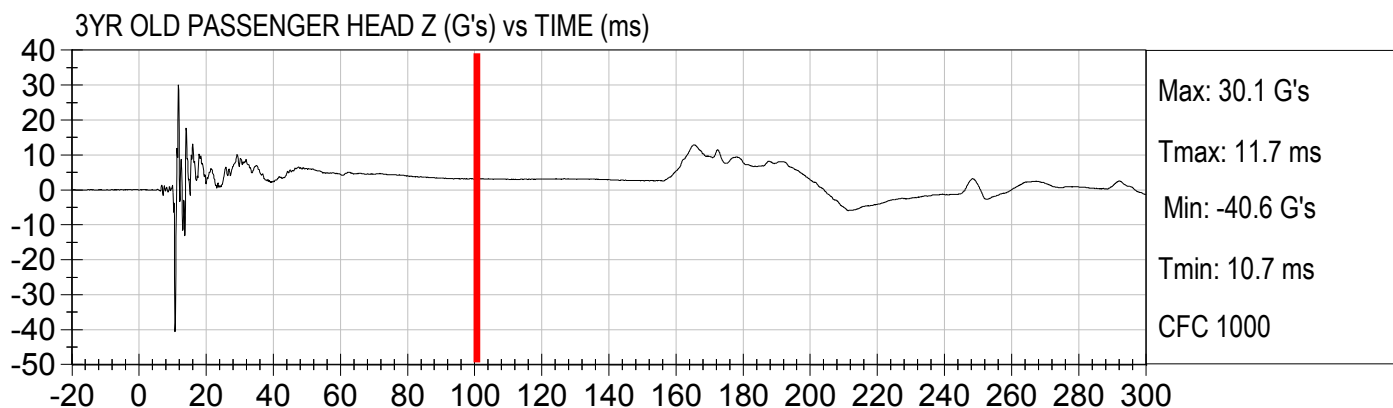
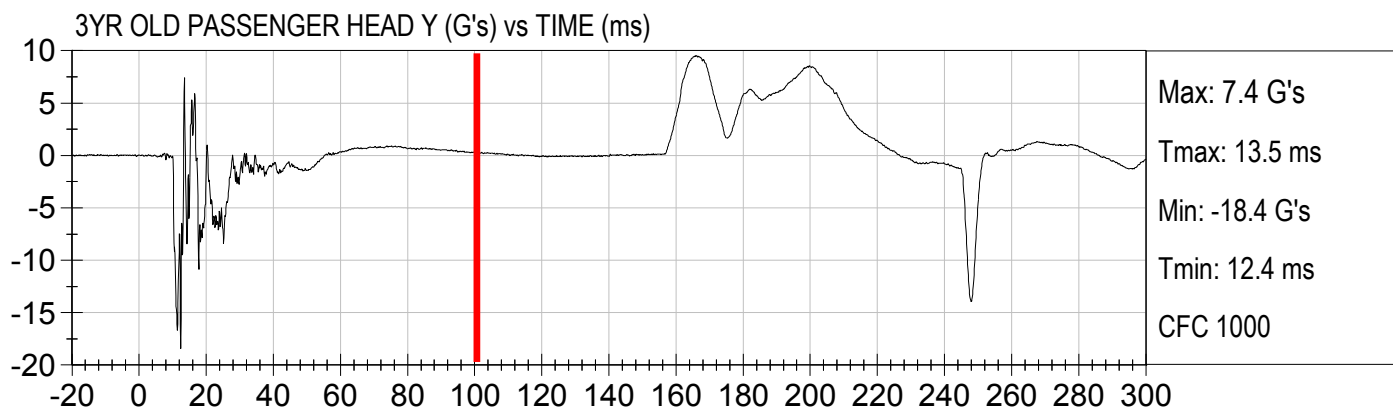
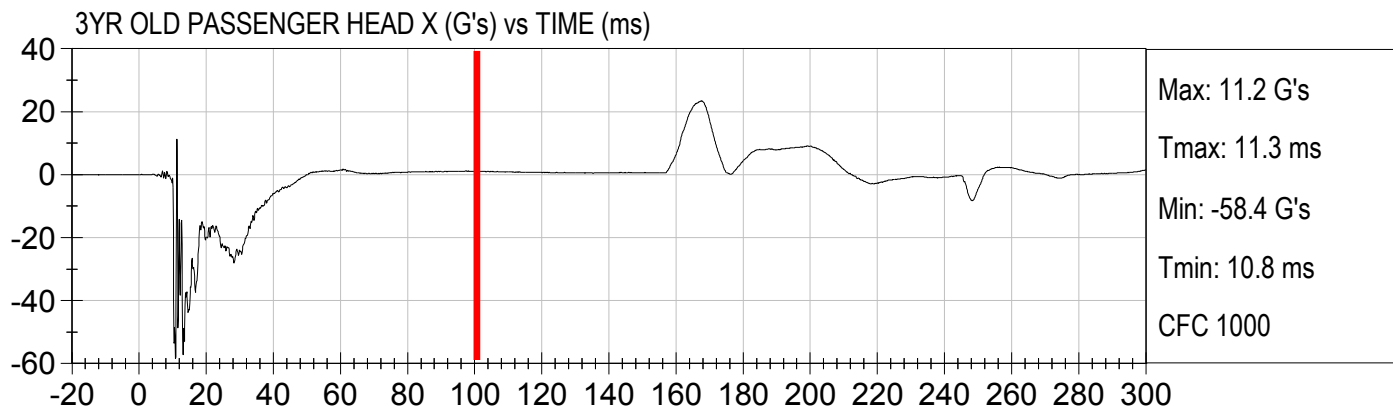
FIRE CURRENT #2 (Amps) vs TIME (ms)





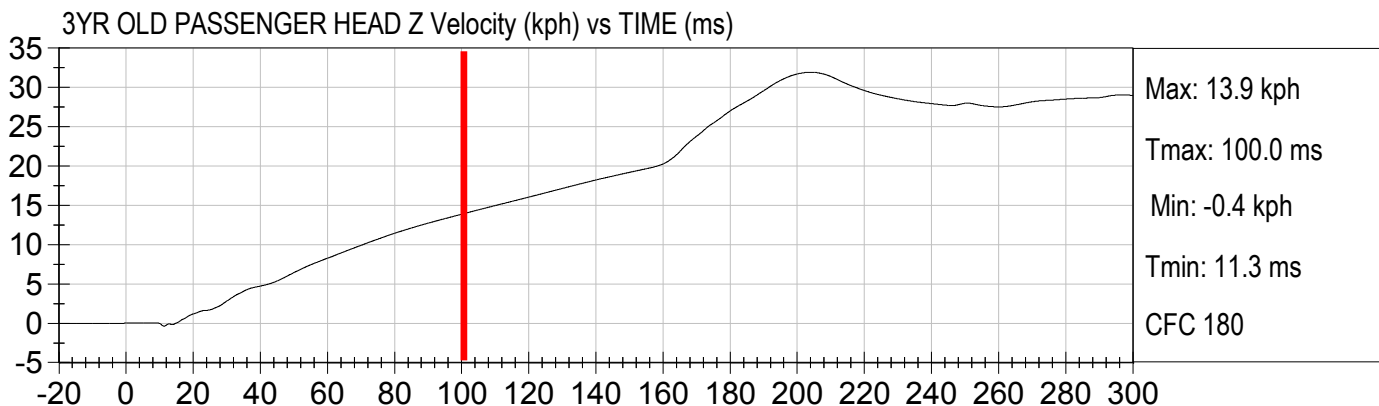
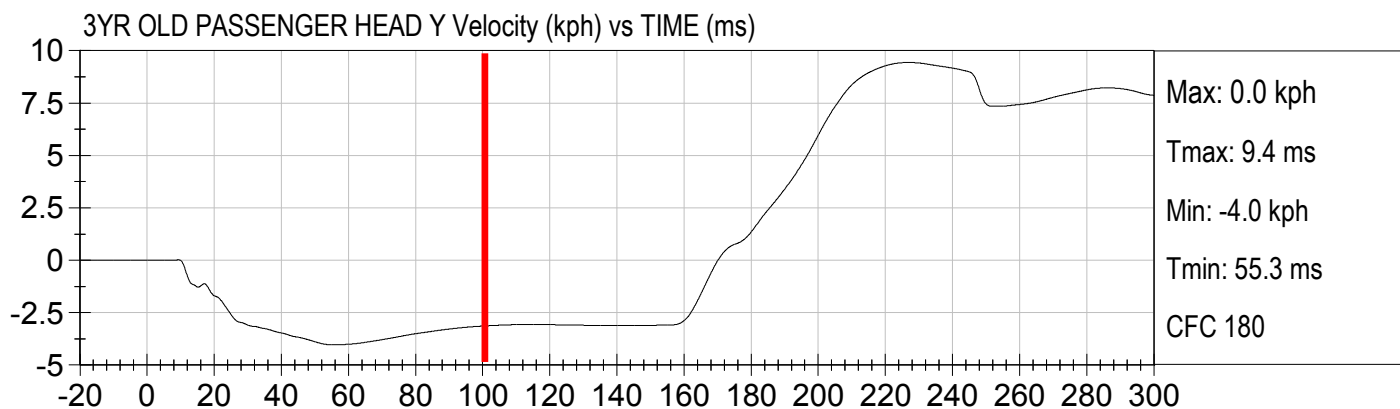
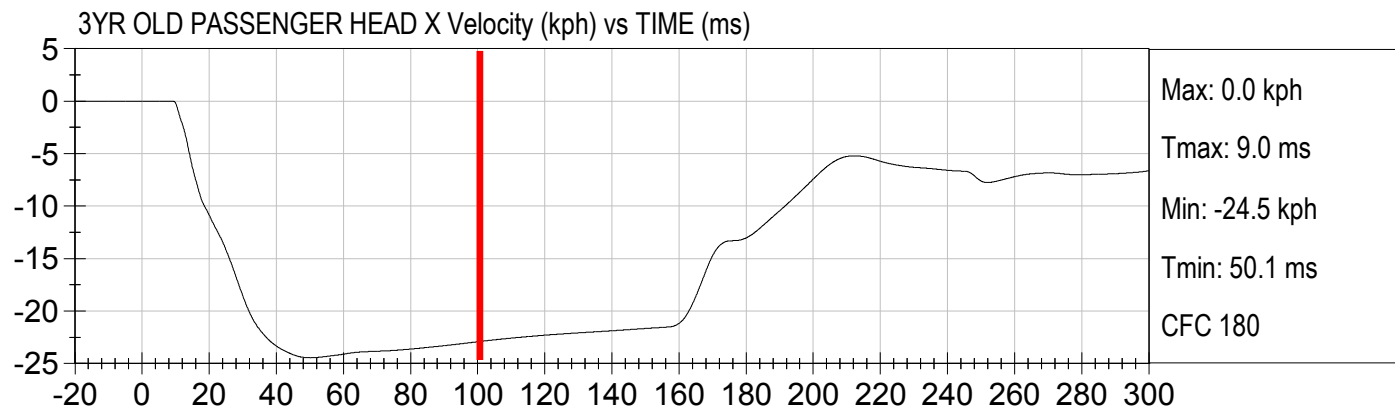


Injury Values Calculated between 0ms and 100ms





Injury Values Calculated between 0ms and 100ms

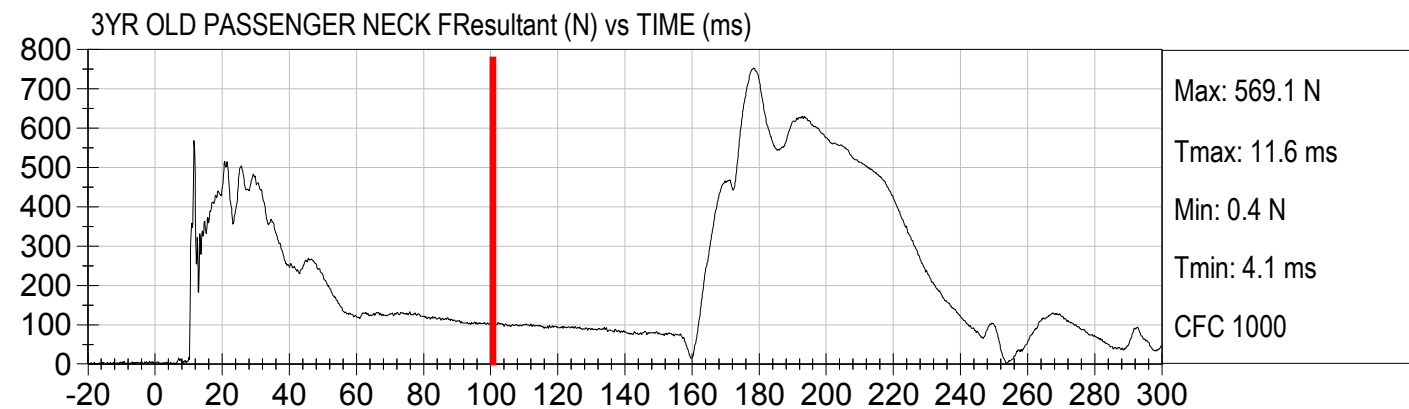
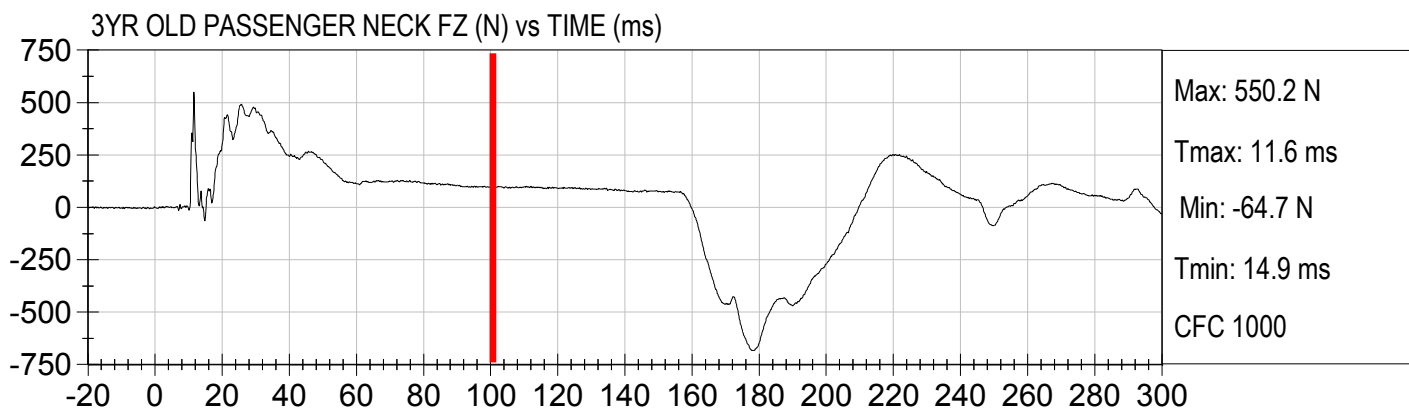
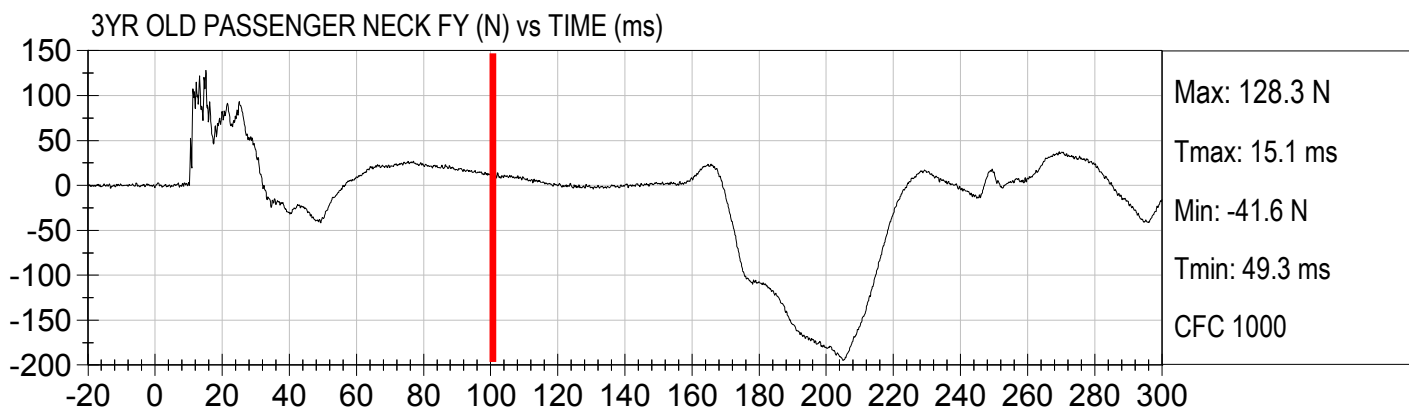
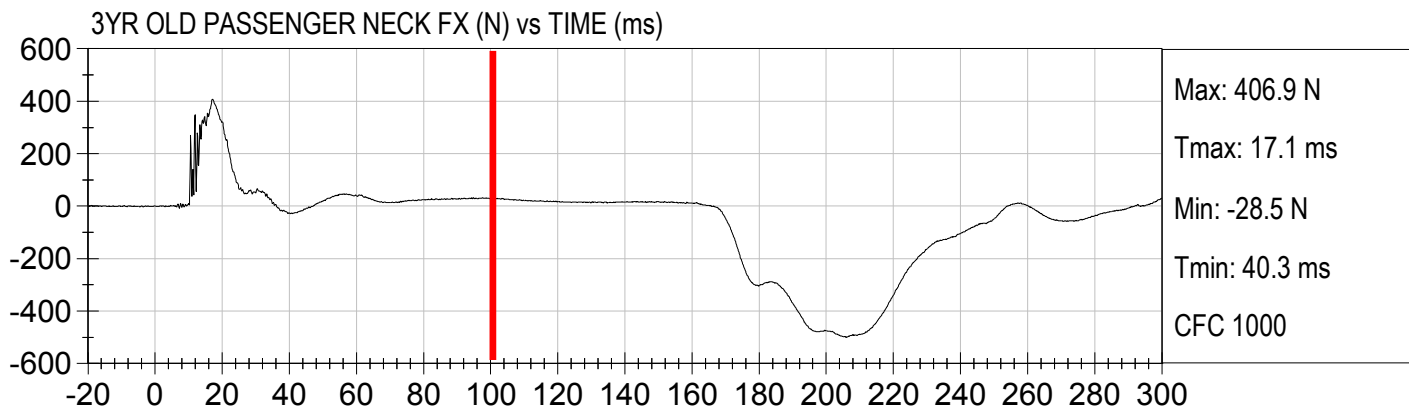




LOW RISK DEPLOYMENT  
2014 Chevrolet Silverado (C20140103) (3YO P1)

Test Date: 6/17/14  
Speed: 0.0 mph ( 0.0 km/h)

Injury Values Calculated between 0ms and 100ms

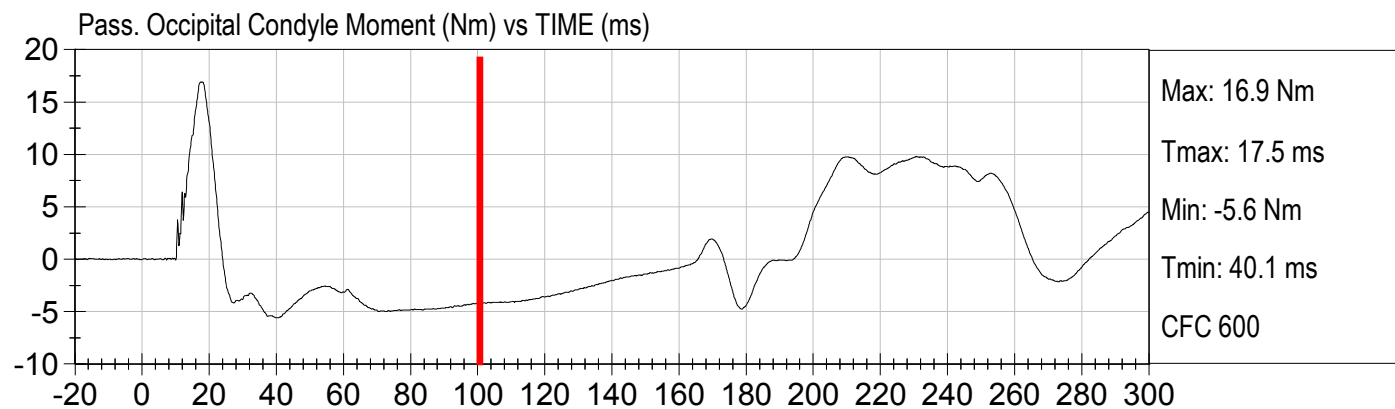
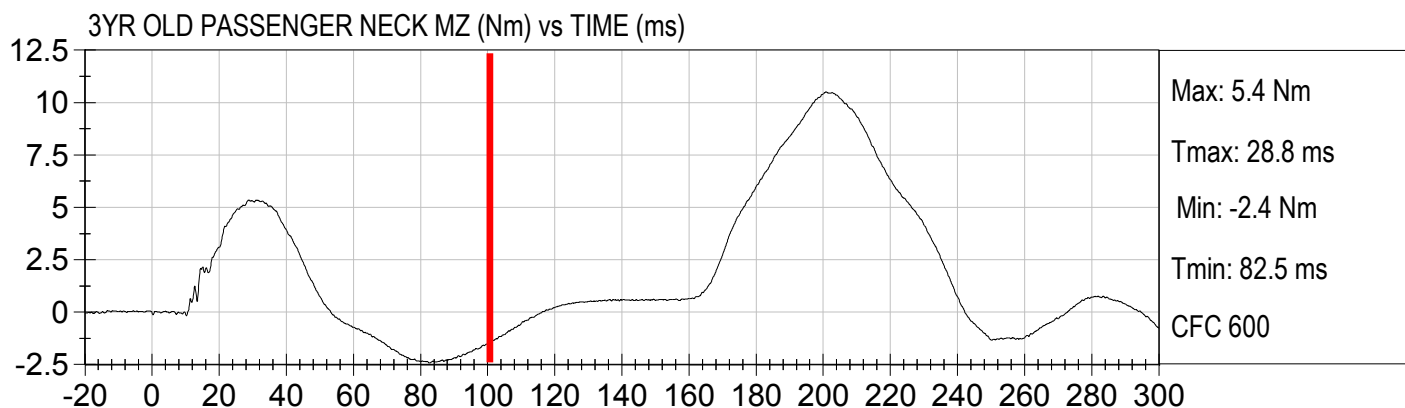
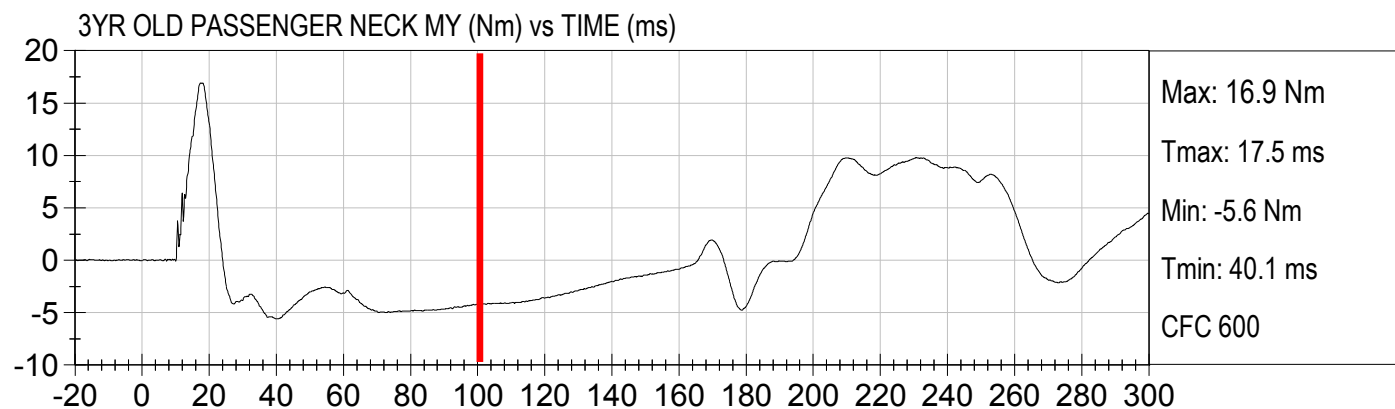
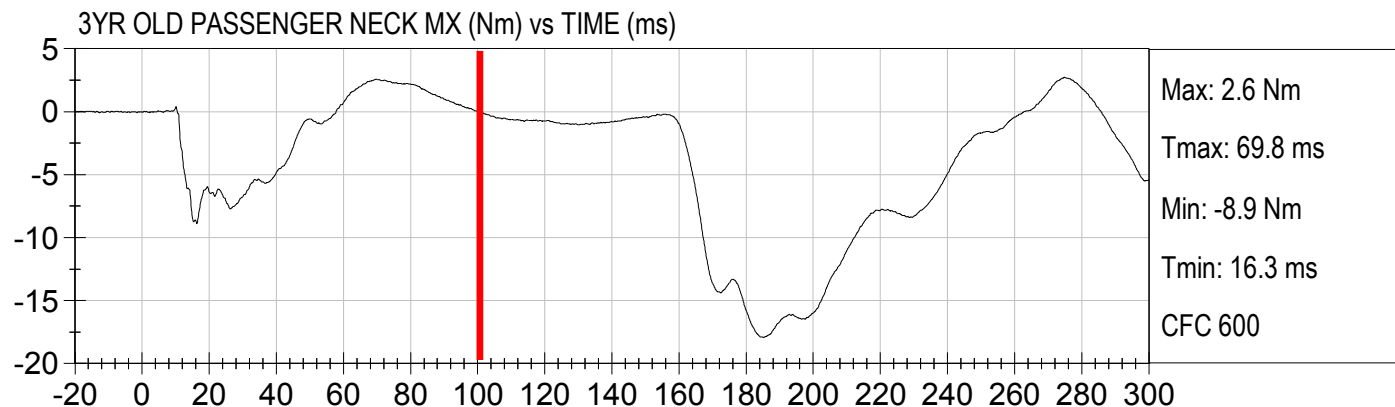




LOW RISK DEPLOYMENT  
2014 Chevrolet Silverado (C20140103) (3YO P1)

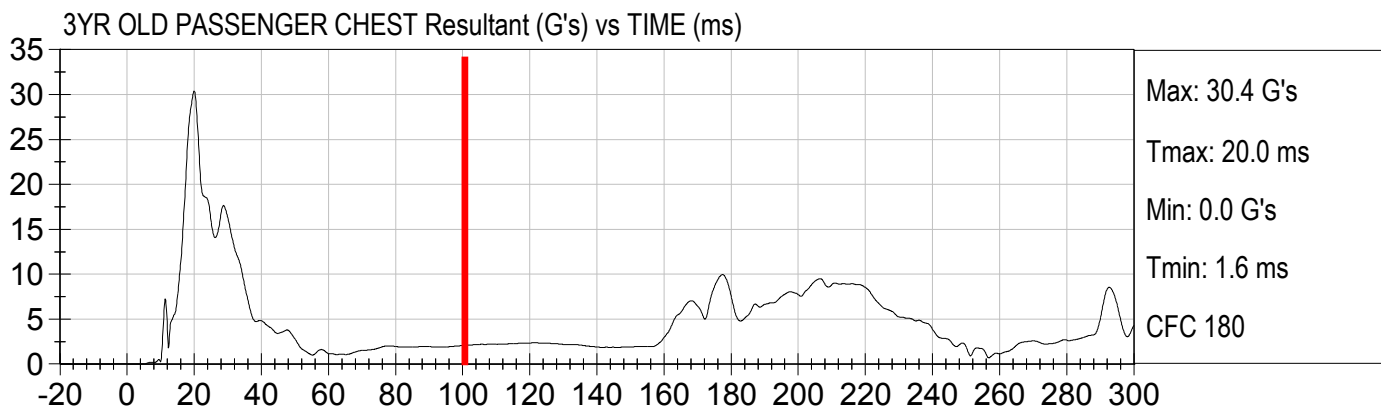
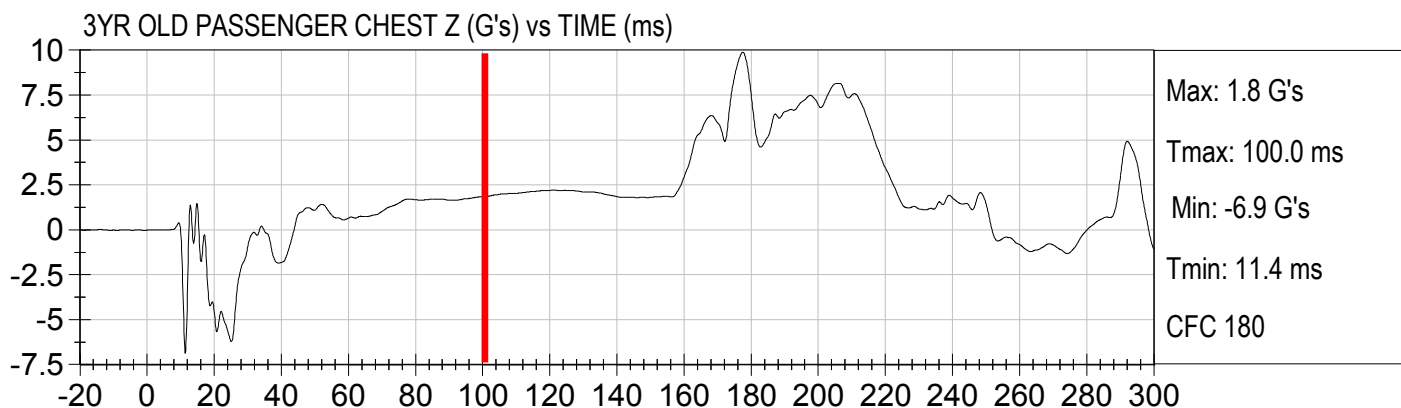
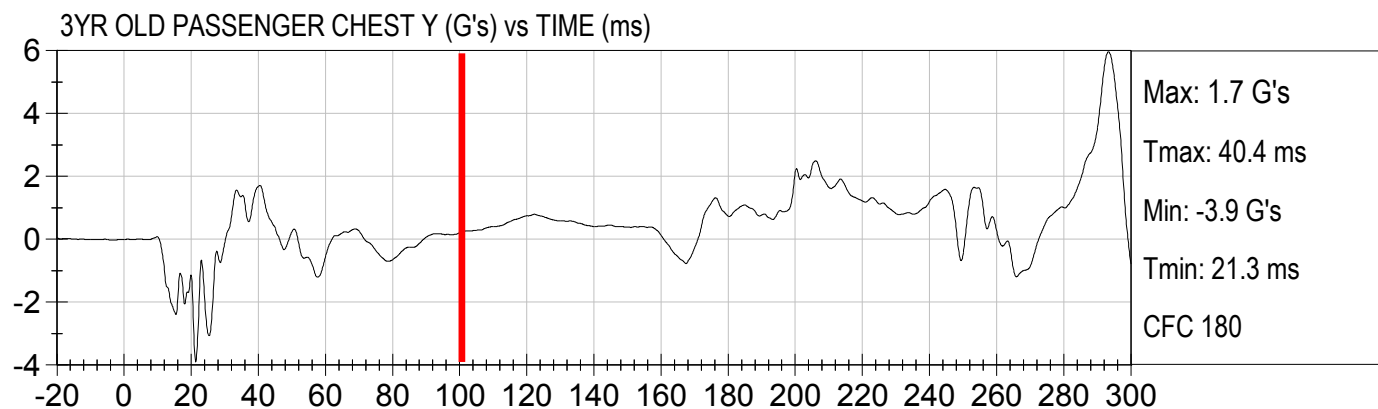
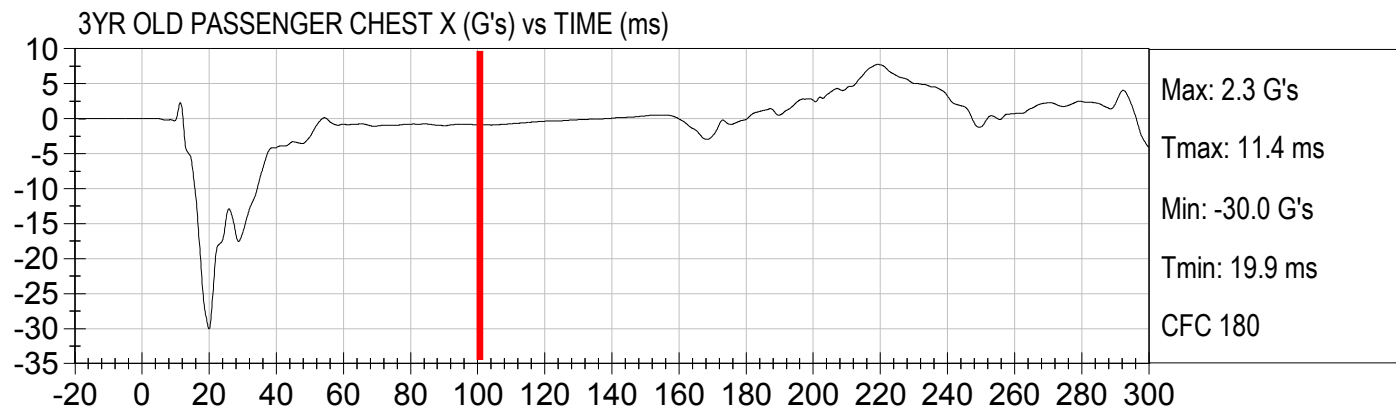
Test Date: 6/17/14  
Speed: 0.0 mph ( 0.0 km/h)

Injury Values Calculated between 0ms and 100ms





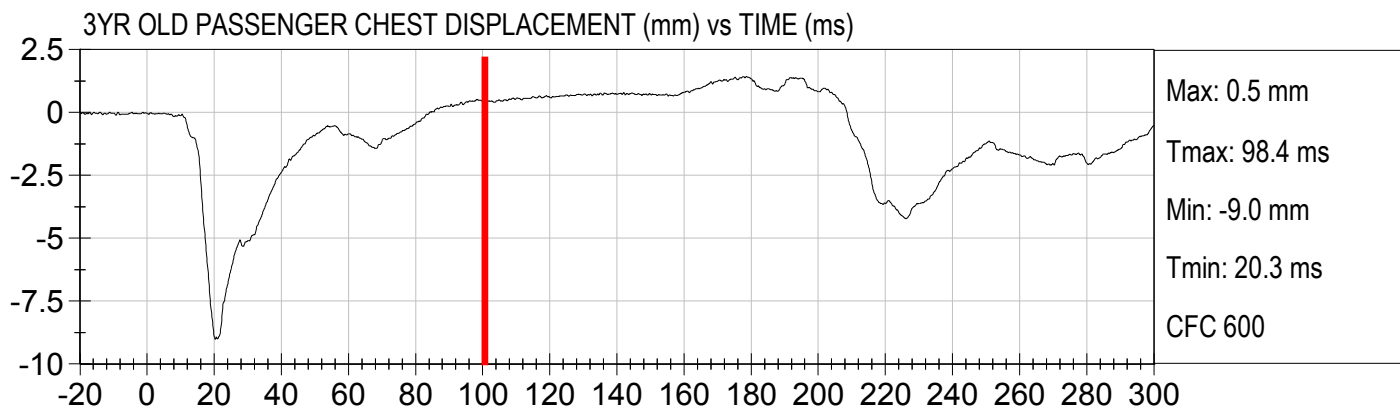
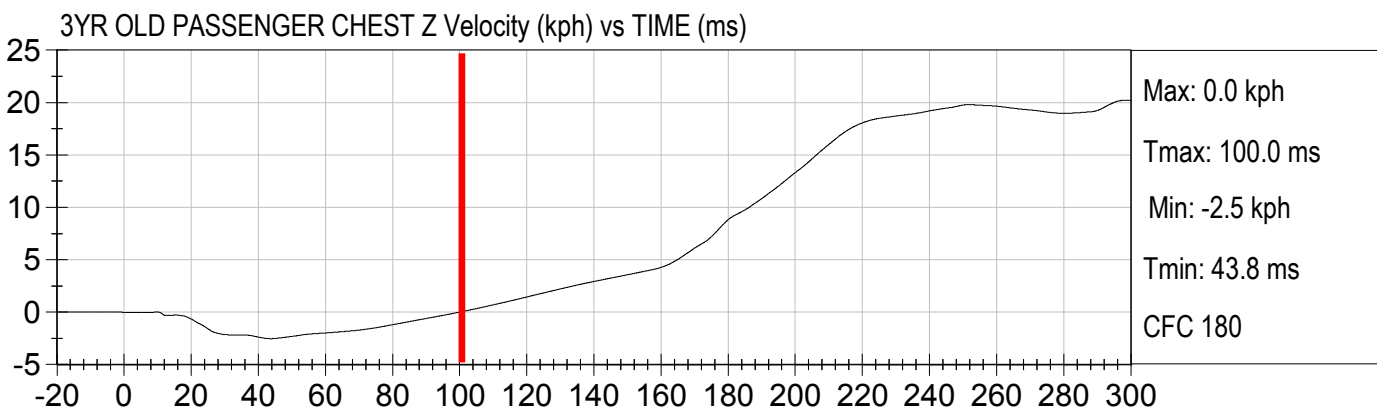
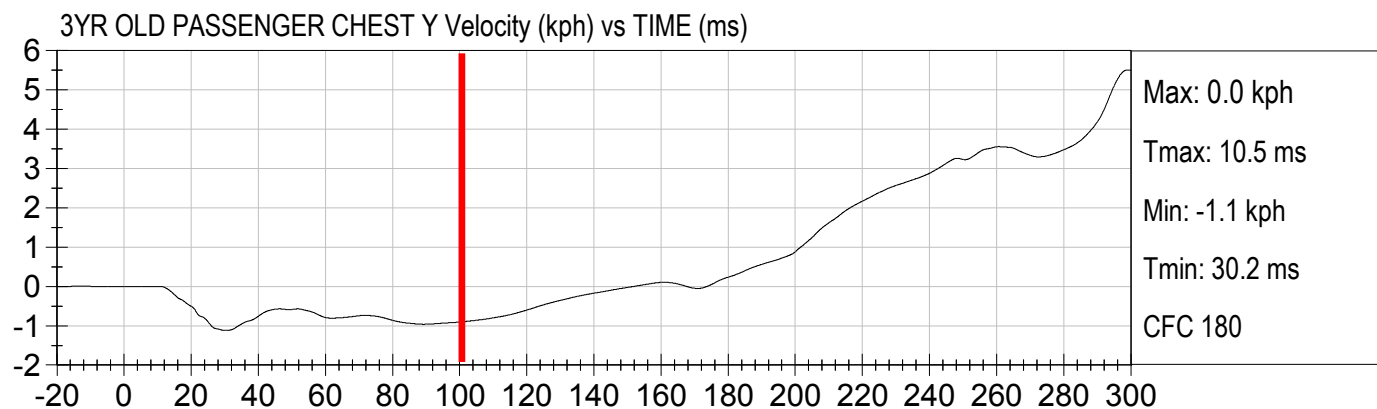
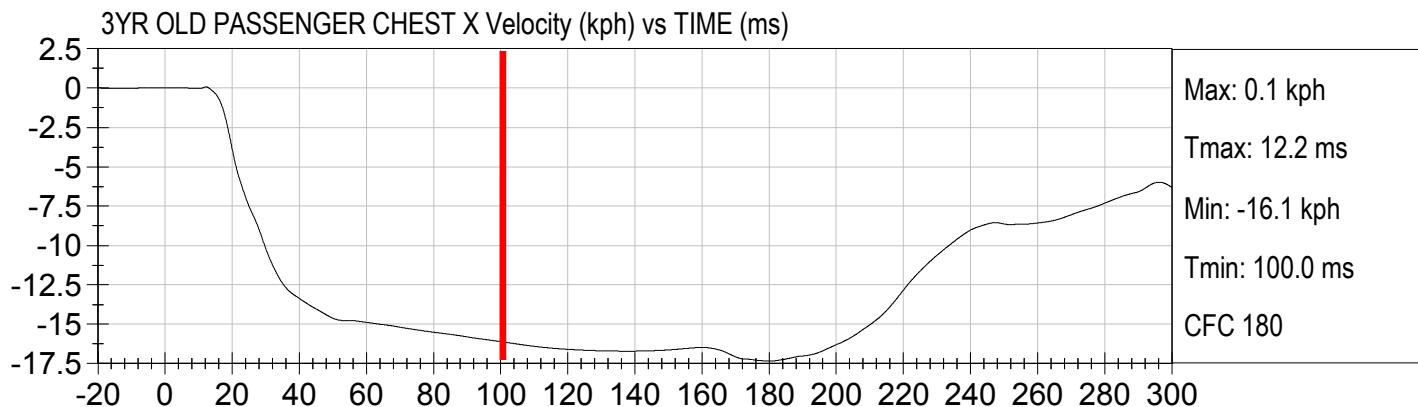
Injury Values Calculated between 0ms and 100ms







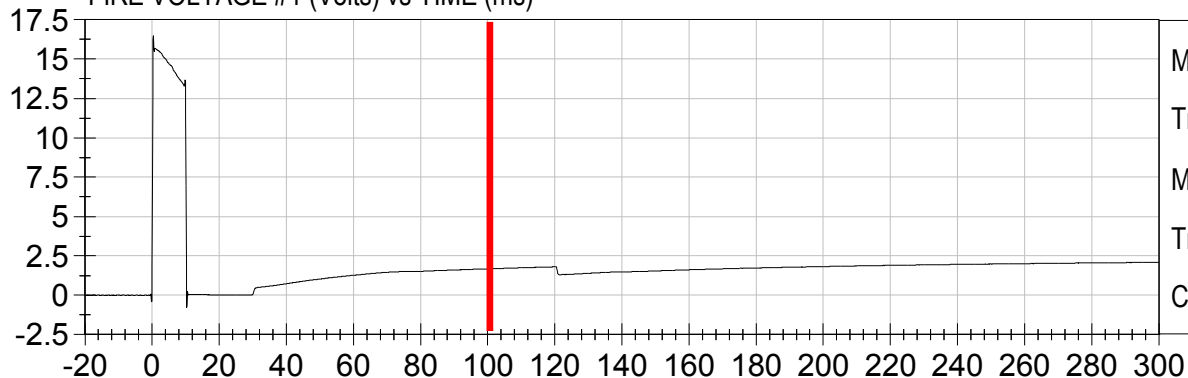
Injury Values Calculated between 0ms and 100ms





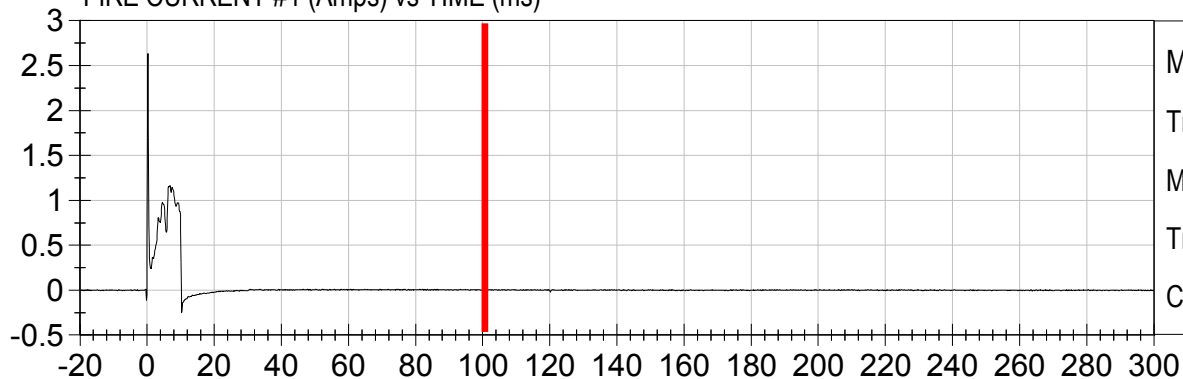
Injury Values Calculated between 0ms and 100ms

FIRE VOLTAGE #1 (Volts) vs TIME (ms)



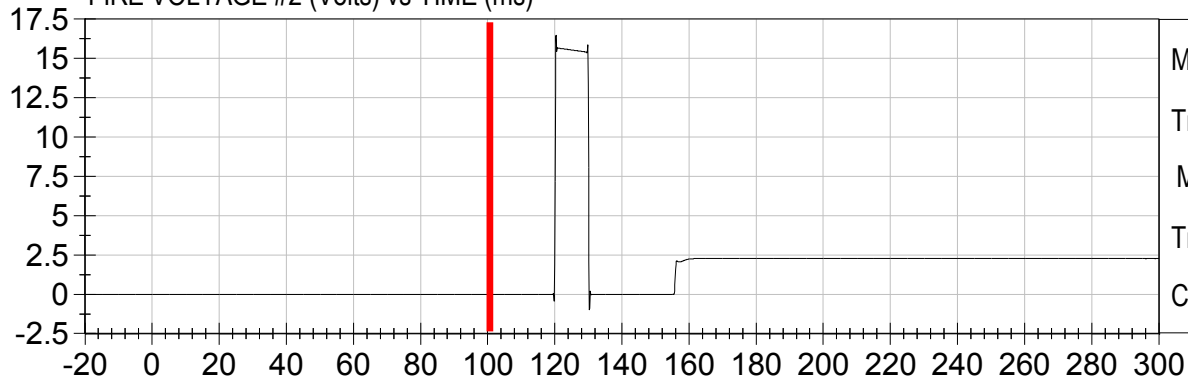
Max: 16.5 Volts  
Tmax: 0.4 ms  
Min: -0.8 Volts  
Tmin: 10.3 ms  
CFC 1000

FIRE CURRENT #1 (Amps) vs TIME (ms)



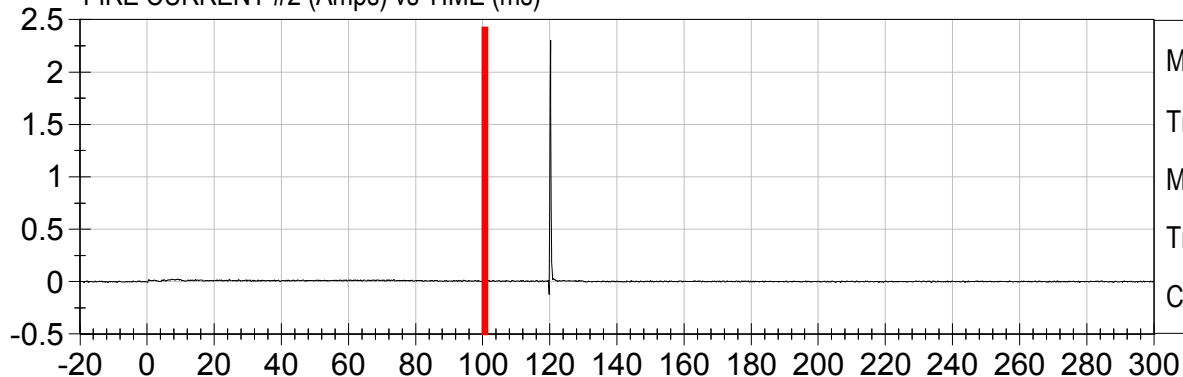
Max: 2.6 Amps  
Tmax: 0.2 ms  
Min: -0.2 Amps  
Tmin: 10.3 ms  
CFC 1000

FIRE VOLTAGE #2 (Volts) vs TIME (ms)



Max: 0.0 Volts  
Tmax: 86.6 ms  
Min: -0.0 Volts  
Tmin: 70.6 ms  
CFC 1000

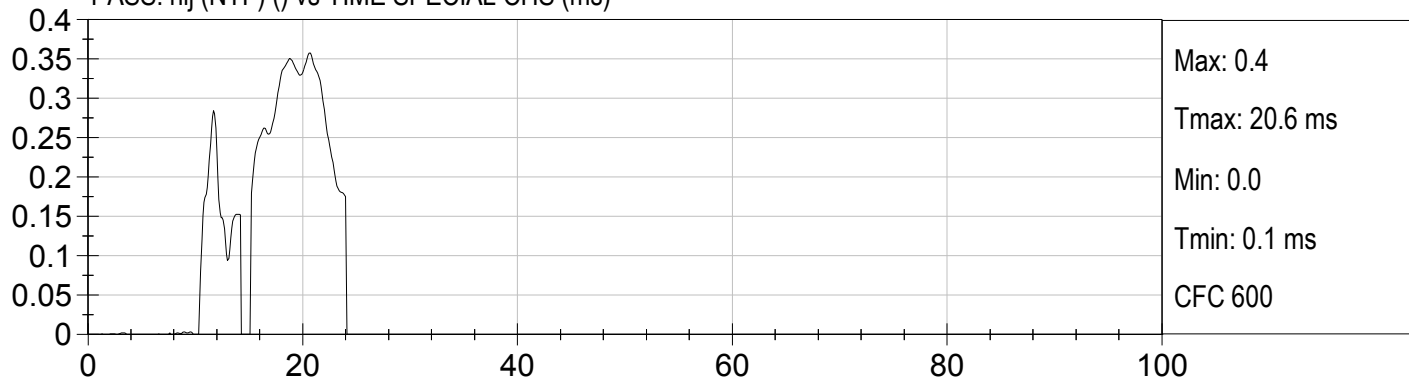
FIRE CURRENT #2 (Amps) vs TIME (ms)



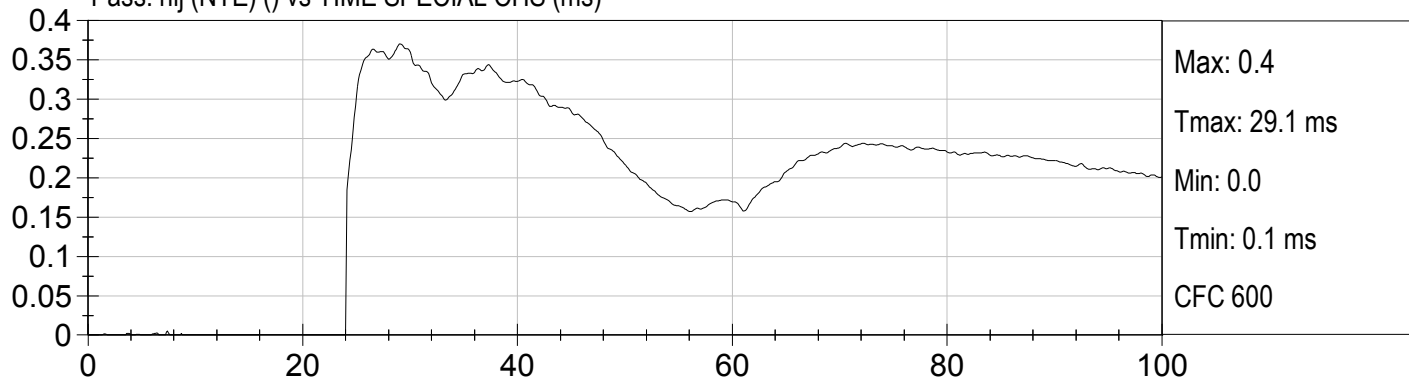
Max: 0.0 Amps  
Tmax: 9.2 ms  
Min: -0.0 Amps  
Tmin: 0.1 ms  
CFC 1000



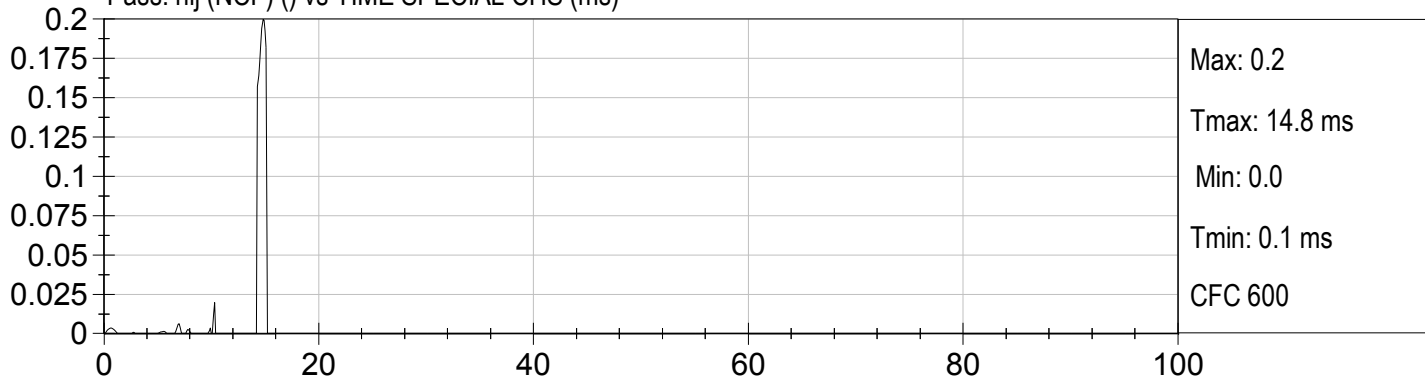
PASS. nij (NTF) () vs TIME SPECIAL CHS (ms)



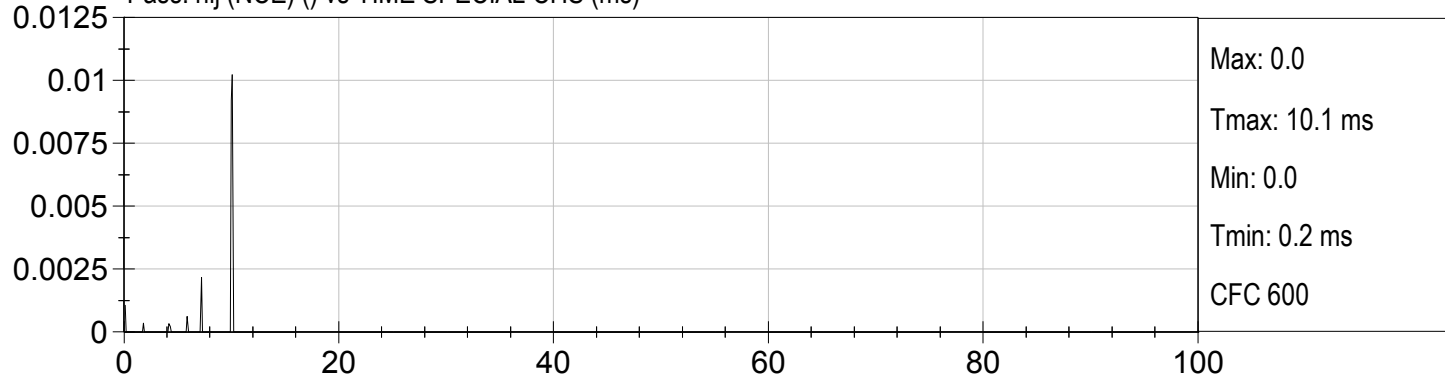
Pass. nij (NTE) () vs TIME SPECIAL CHS (ms)



Pass. nij (NCF) () vs TIME SPECIAL CHS (ms)

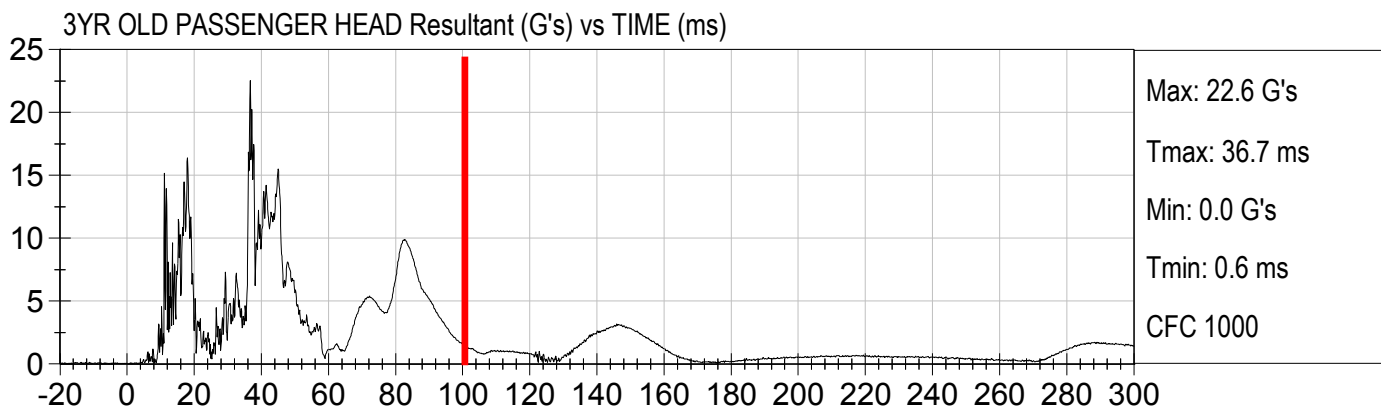
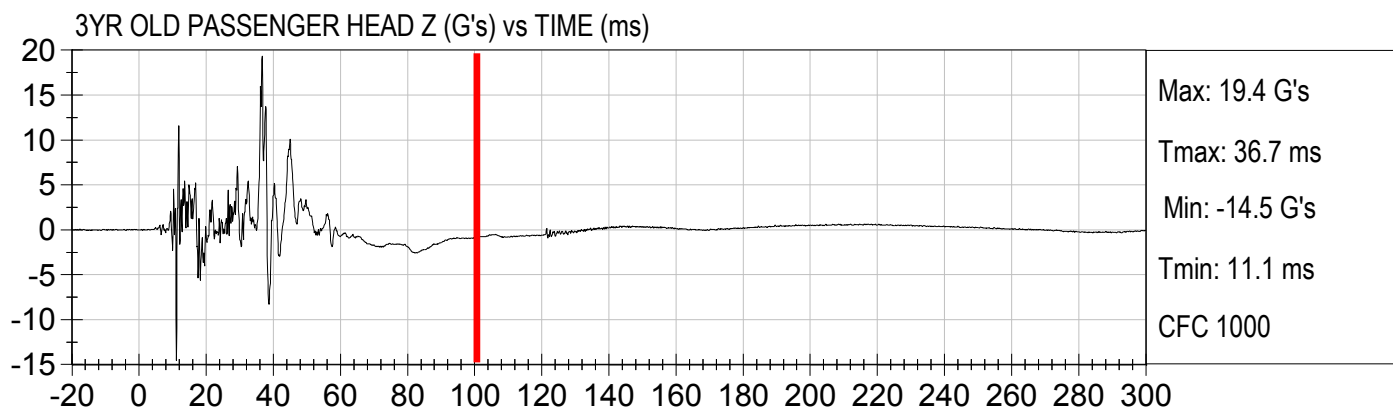
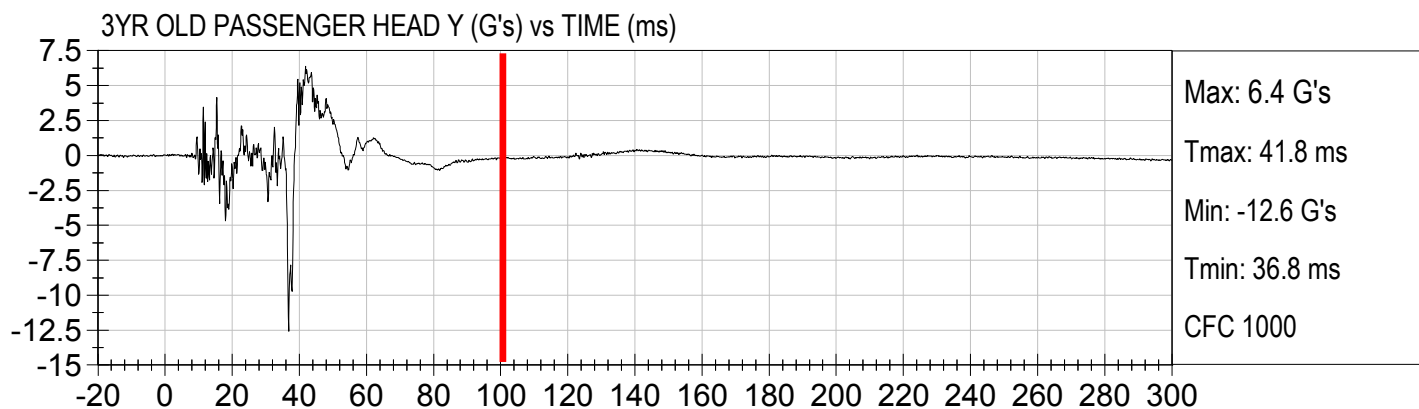
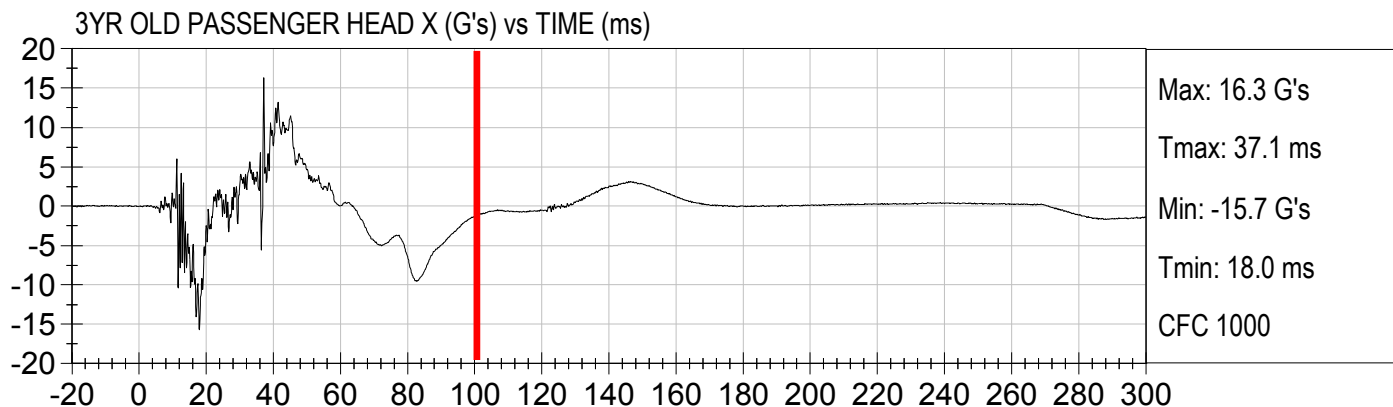


Pass. nij (NCE) () vs TIME SPECIAL CHS (ms)





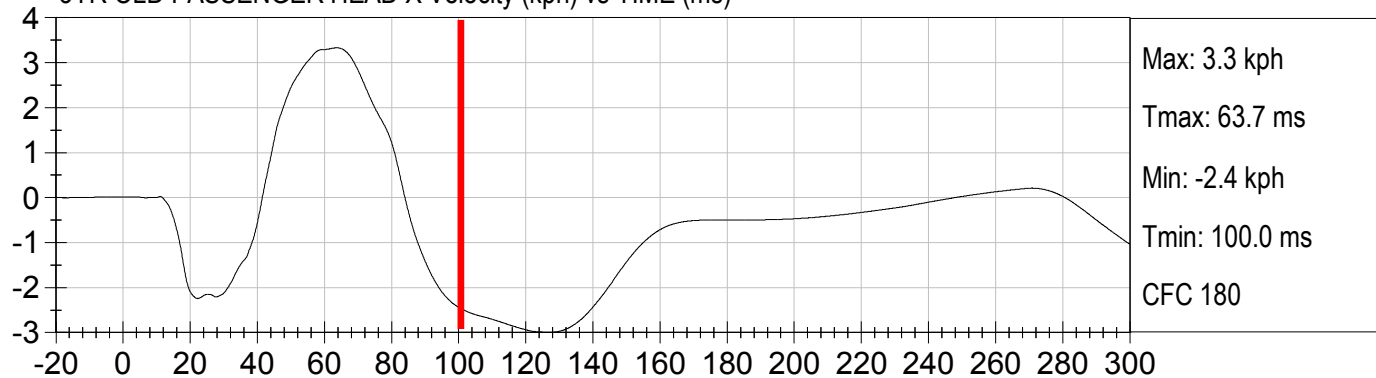
Injury Values Calculated between 0ms and 100ms



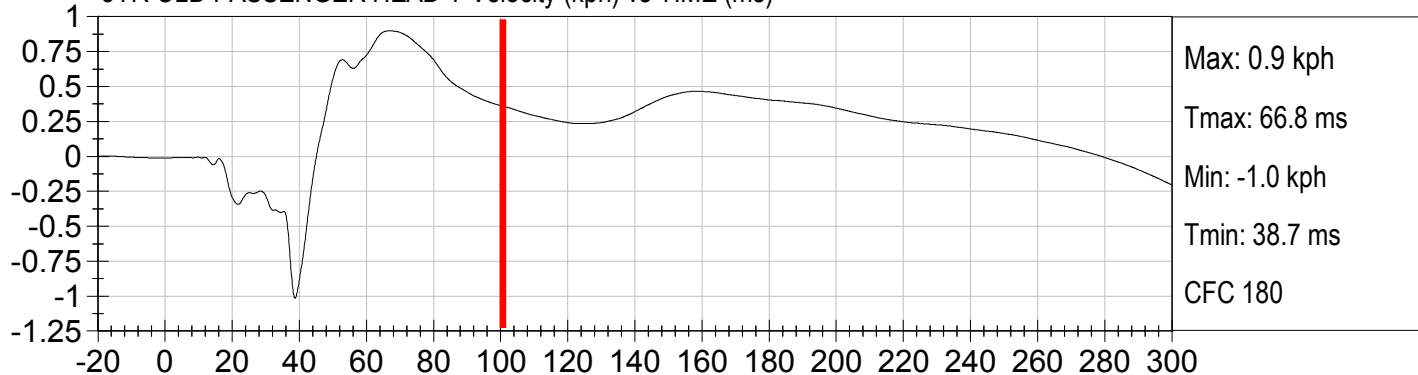


Injury Values Calculated between 0ms and 100ms

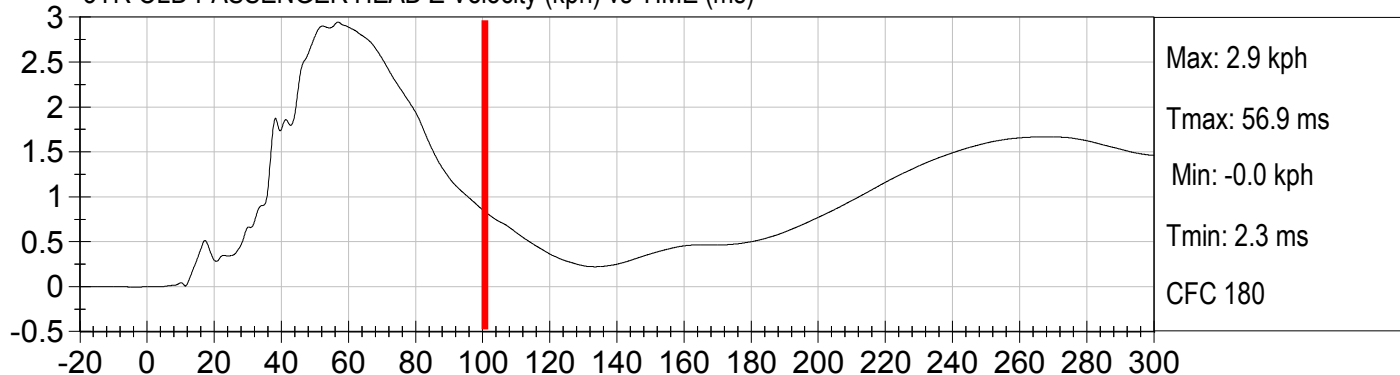
3YR OLD PASSENGER HEAD X Velocity (kph) vs TIME (ms)



3YR OLD PASSENGER HEAD Y Velocity (kph) vs TIME (ms)

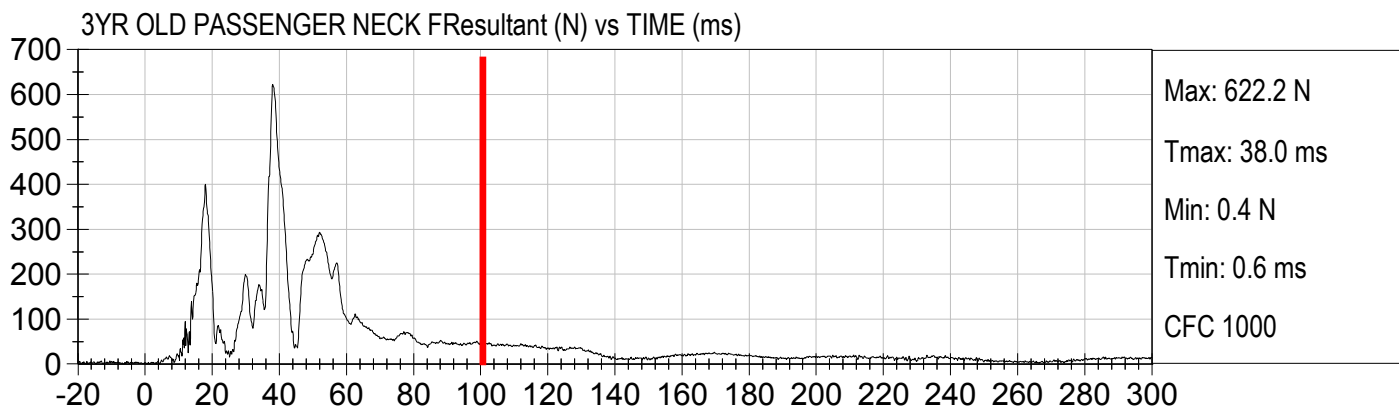
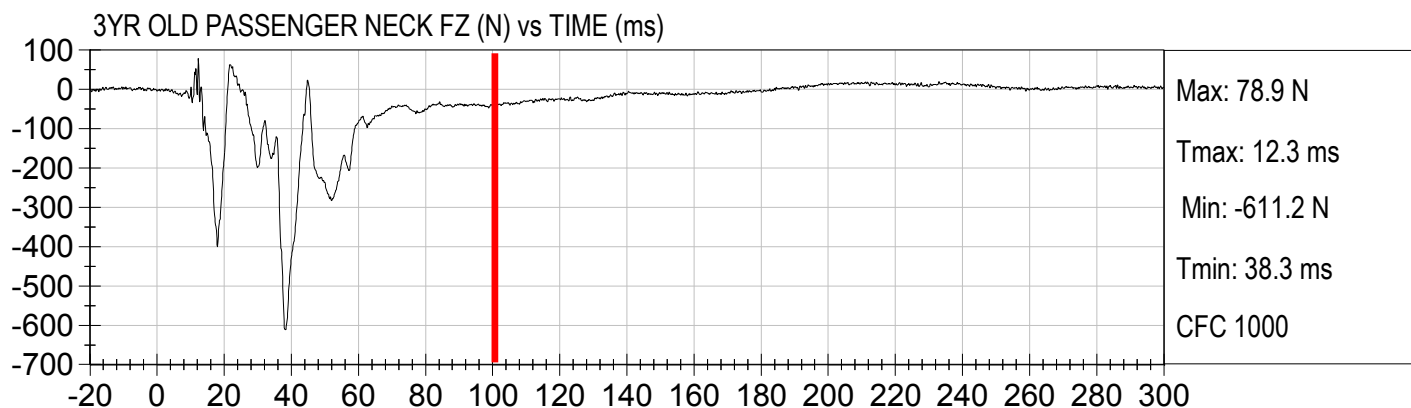
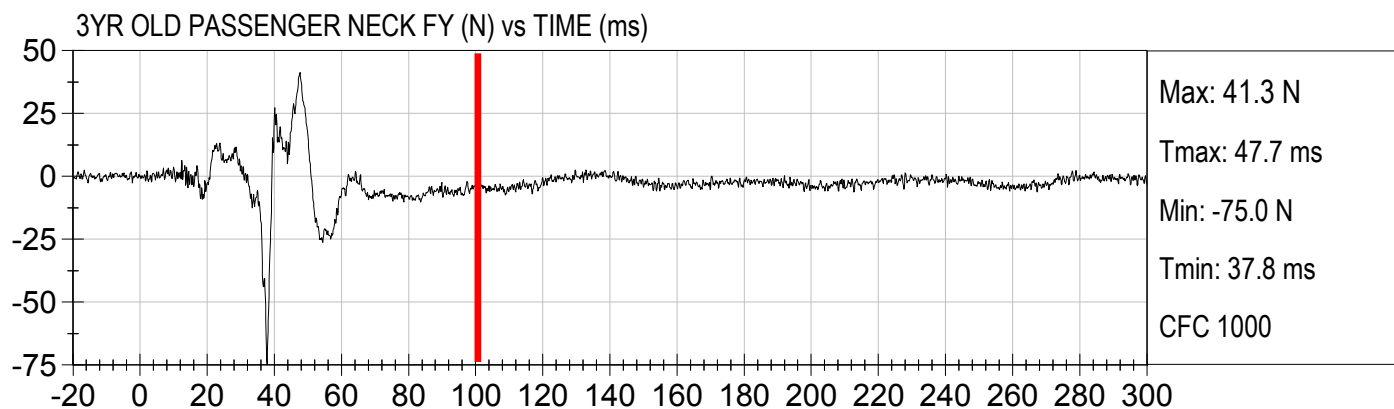
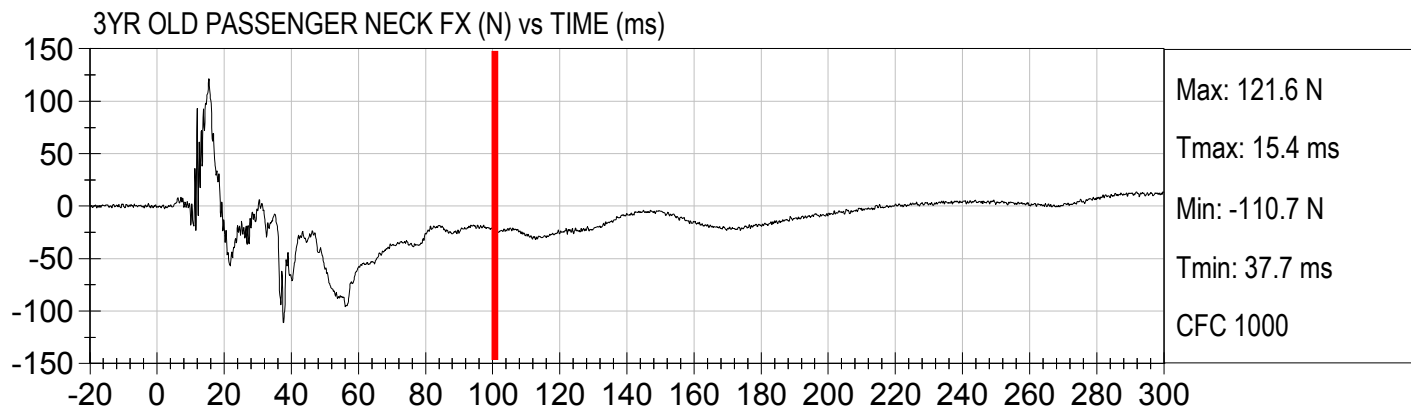


3YR OLD PASSENGER HEAD Z Velocity (kph) vs TIME (ms)



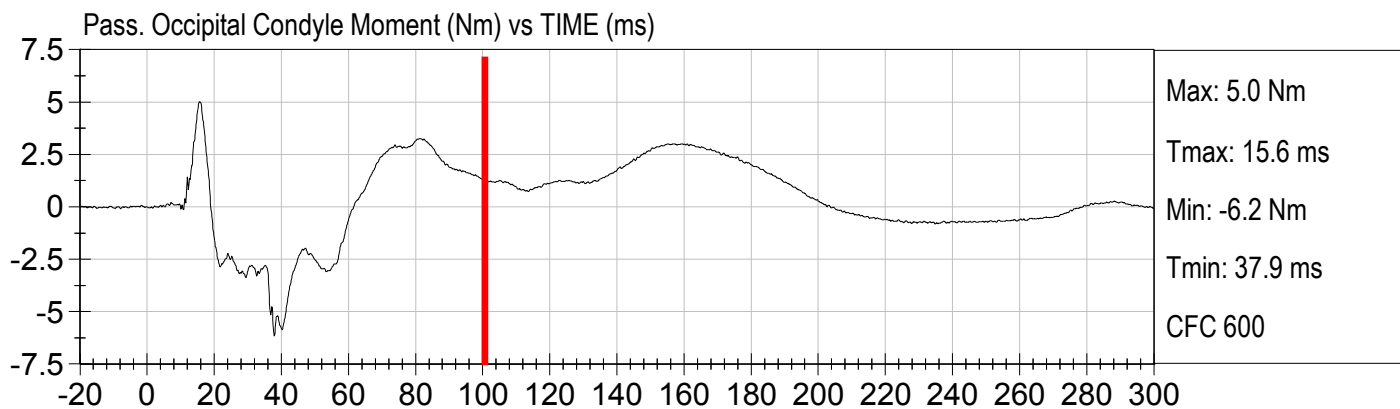
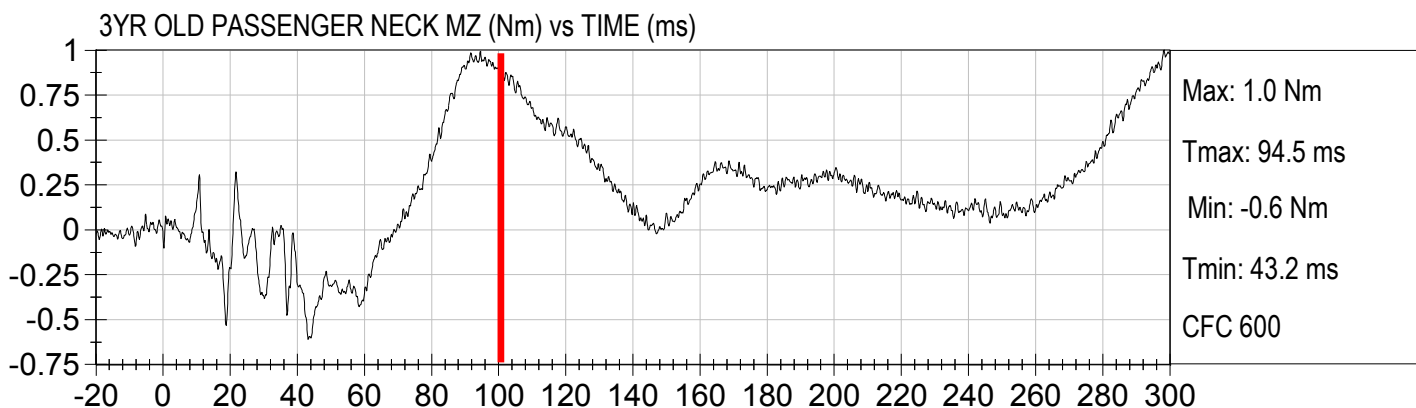
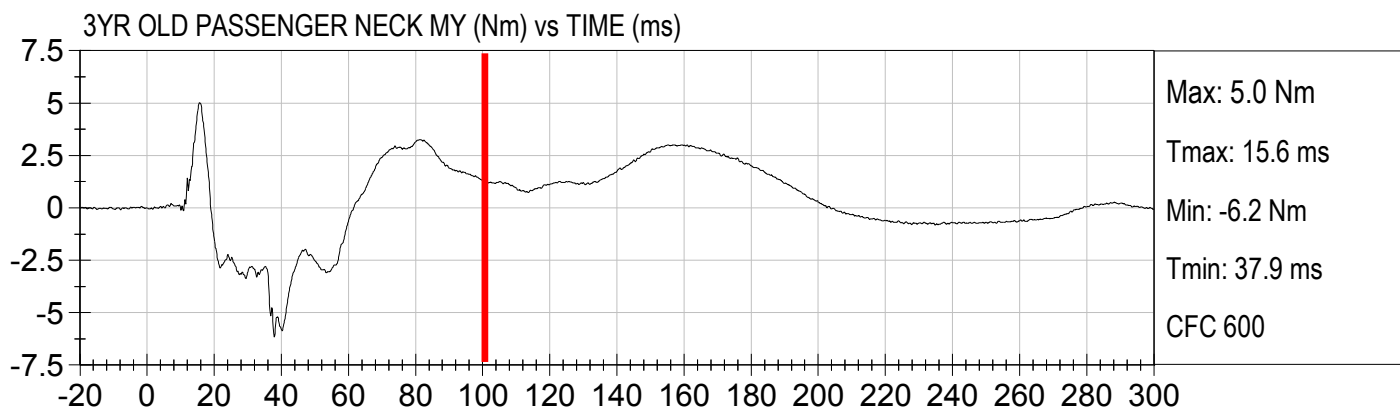
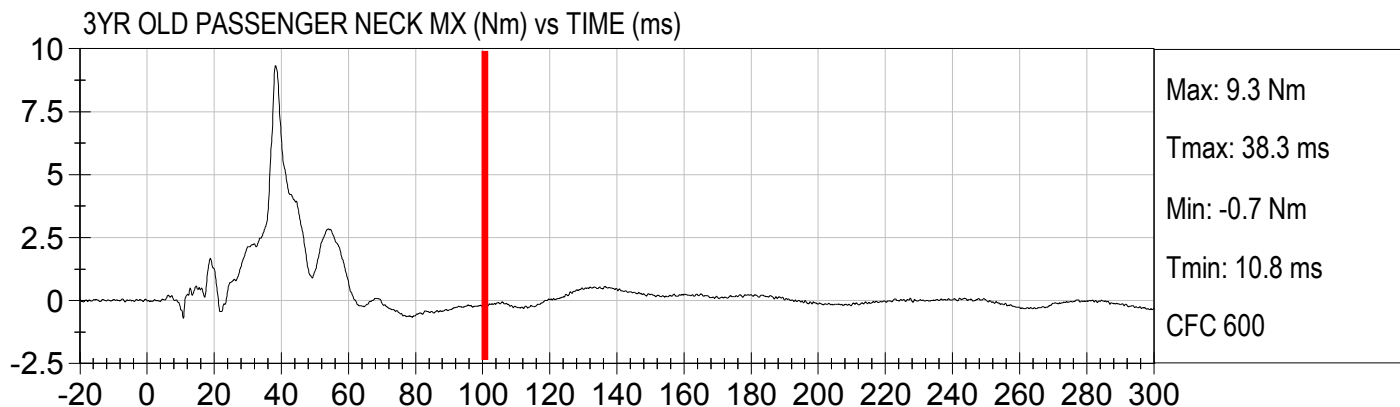


Injury Values Calculated between 0ms and 100ms





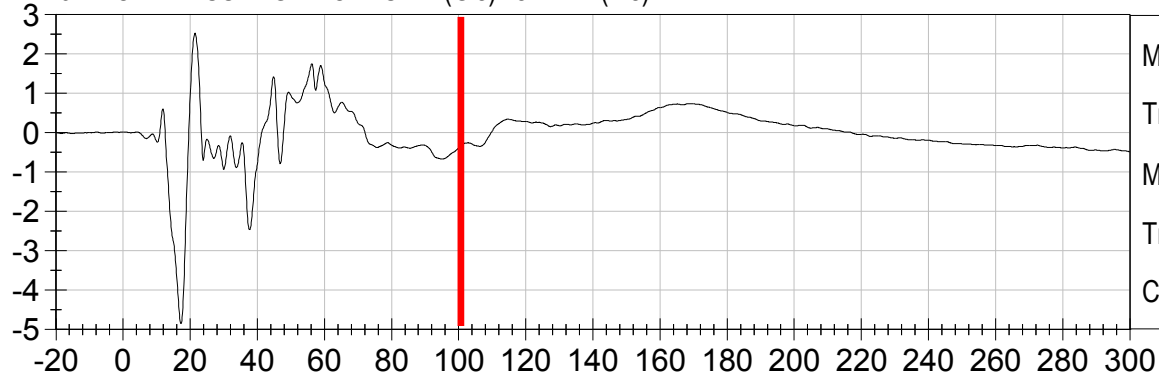
Injury Values Calculated between 0ms and 100ms





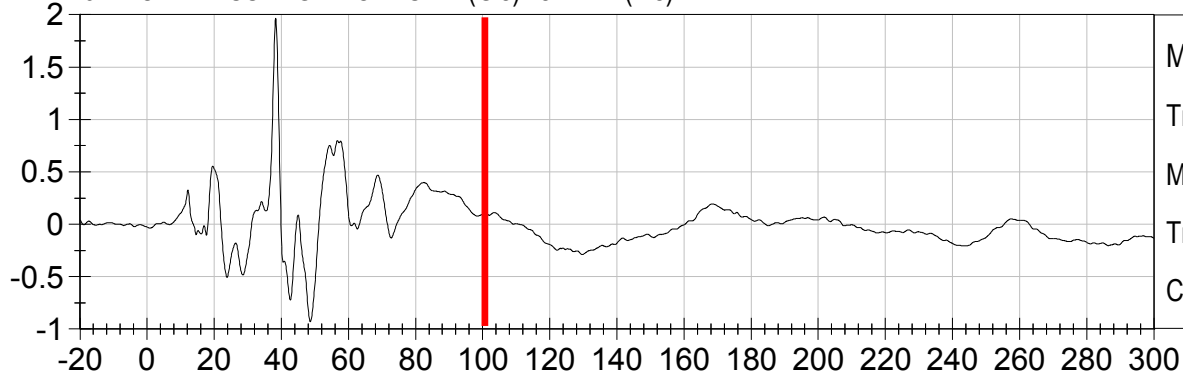
Injury Values Calculated between 0ms and 100ms

3YR OLD PASSENGER CHEST X (G's) vs TIME (ms)



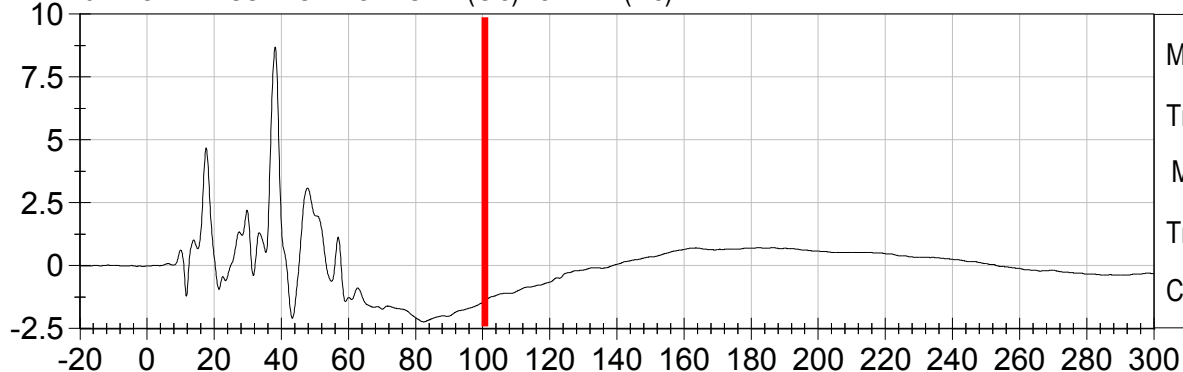
Max: 2.5 G's  
Tmax: 21.4 ms  
Min: -4.9 G's  
Tmin: 17.2 ms  
CFC 180

3YR OLD PASSENGER CHEST Y (G's) vs TIME (ms)



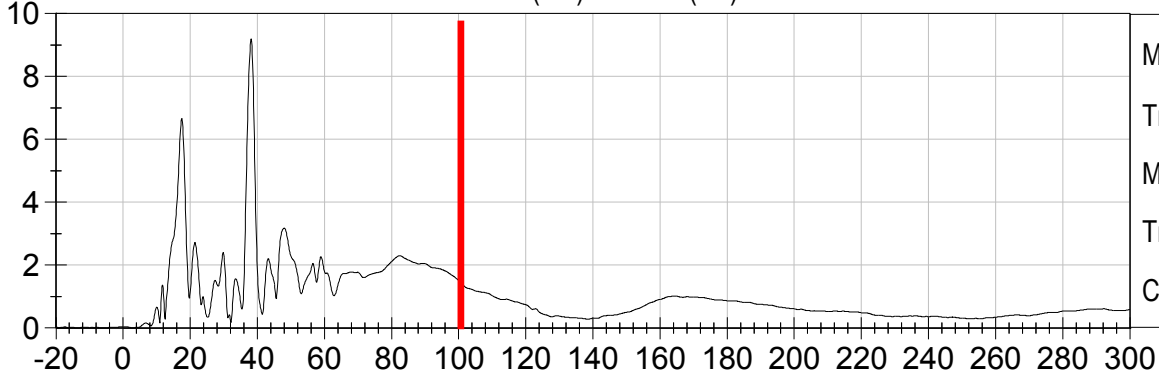
Max: 2.0 G's  
Tmax: 38.3 ms  
Min: -0.9 G's  
Tmin: 48.6 ms  
CFC 180

3YR OLD PASSENGER CHEST Z (G's) vs TIME (ms)



Max: 8.7 G's  
Tmax: 38.2 ms  
Min: -2.2 G's  
Tmin: 82.4 ms  
CFC 180

3YR OLD PASSENGER CHEST Resultant (G's) vs TIME (ms)

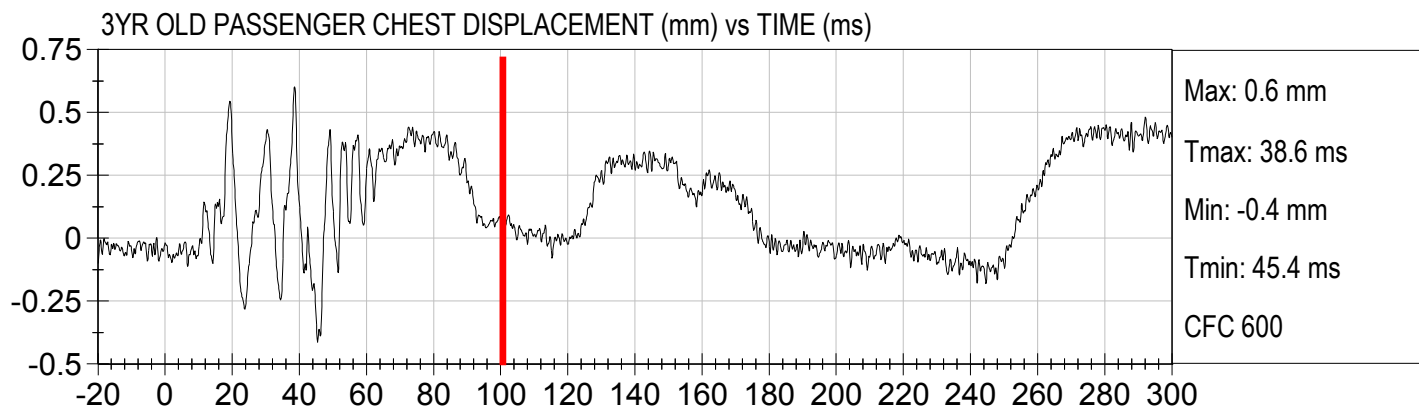
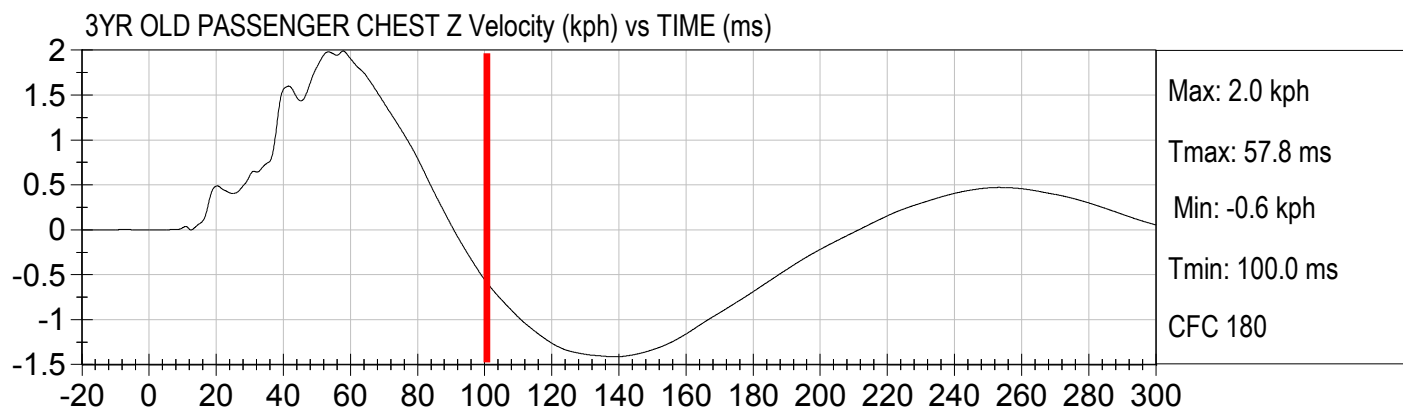
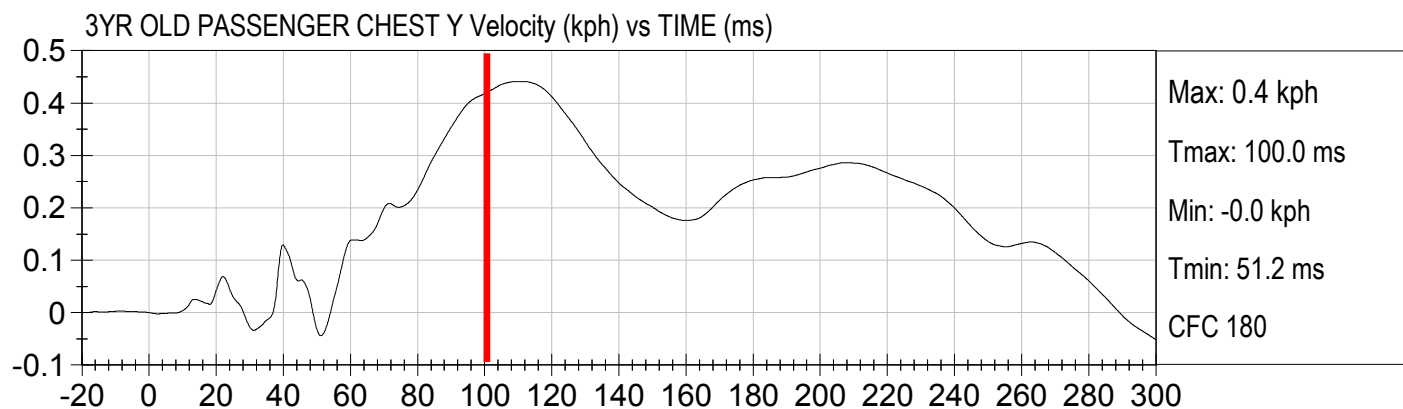
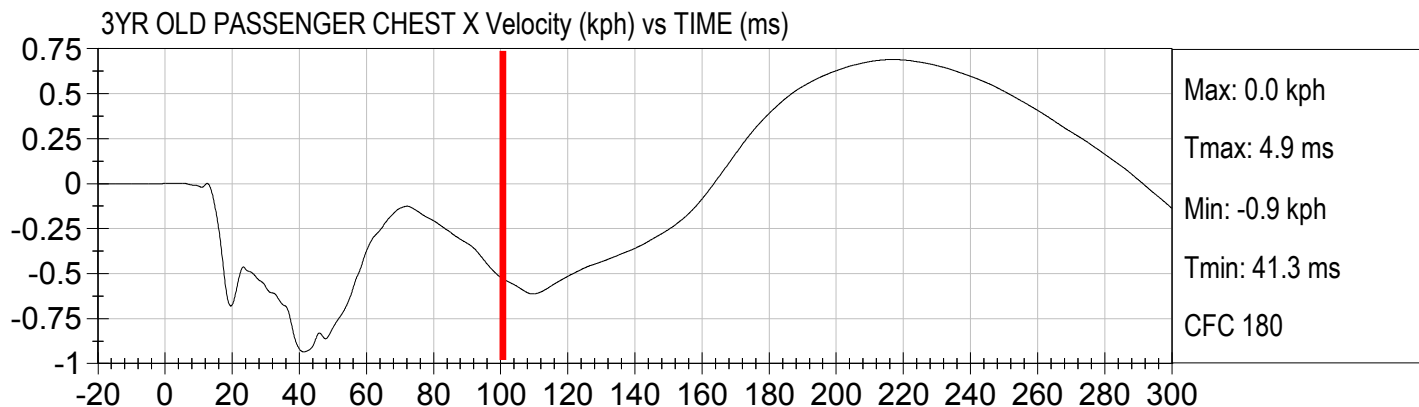


Max: 9.2 G's  
Tmax: 38.2 ms  
Min: 0.0 G's  
Tmin: 2.7 ms  
CFC 180





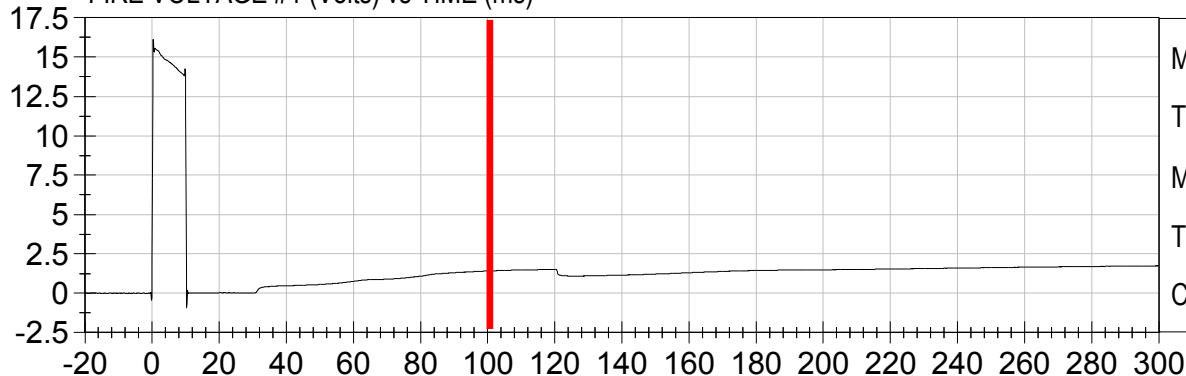
Injury Values Calculated between 0ms and 100ms





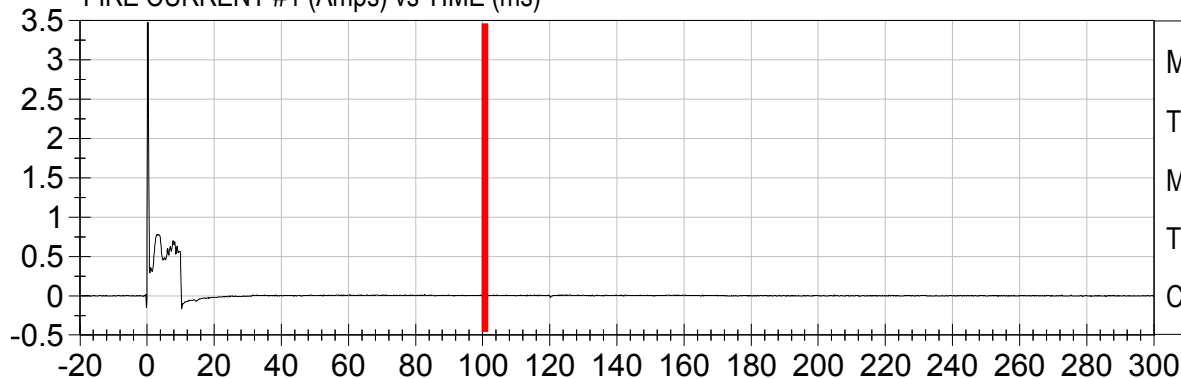
Injury Values Calculated between 0ms and 100ms

FIRE VOLTAGE #1 (Volts) vs TIME (ms)



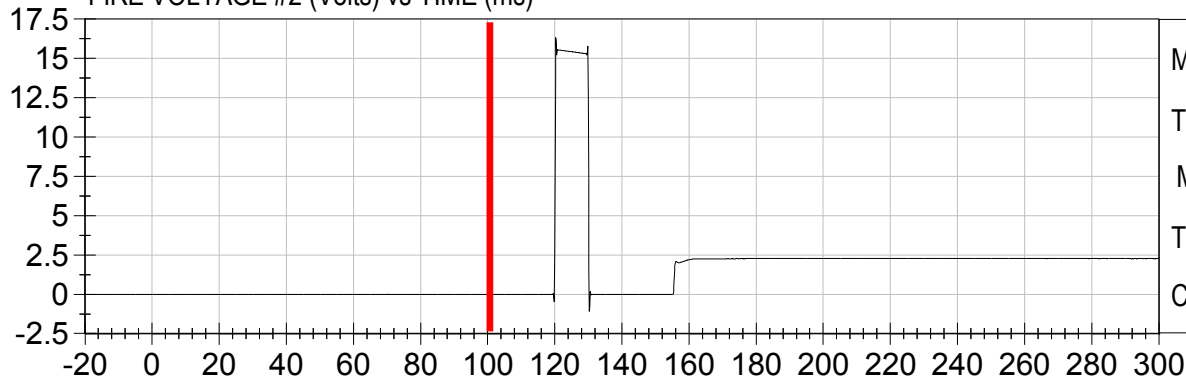
Max: 16.1 Volts  
Tmax: 0.4 ms  
Min: -0.9 Volts  
Tmin: 10.3 ms  
CFC 1000

FIRE CURRENT #1 (Amps) vs TIME (ms)



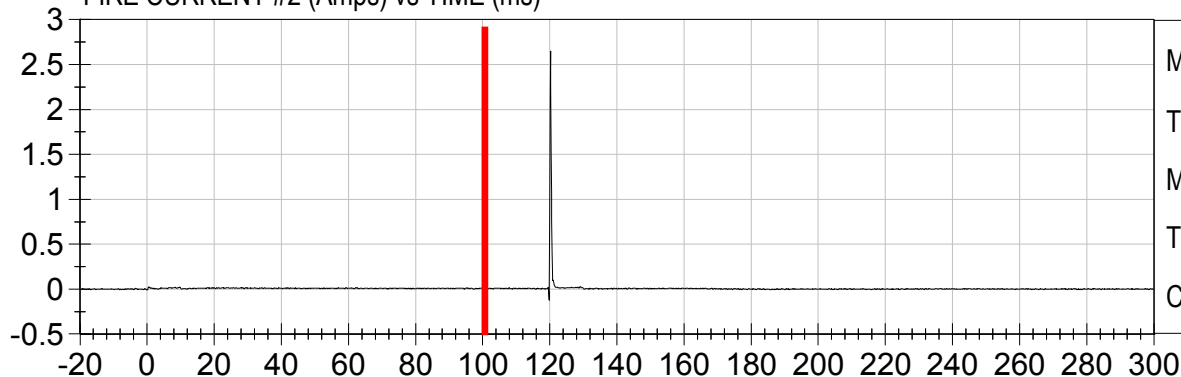
Max: 3.5 Amps  
Tmax: 0.3 ms  
Min: -0.2 Amps  
Tmin: 10.3 ms  
CFC 1000

FIRE VOLTAGE #2 (Volts) vs TIME (ms)

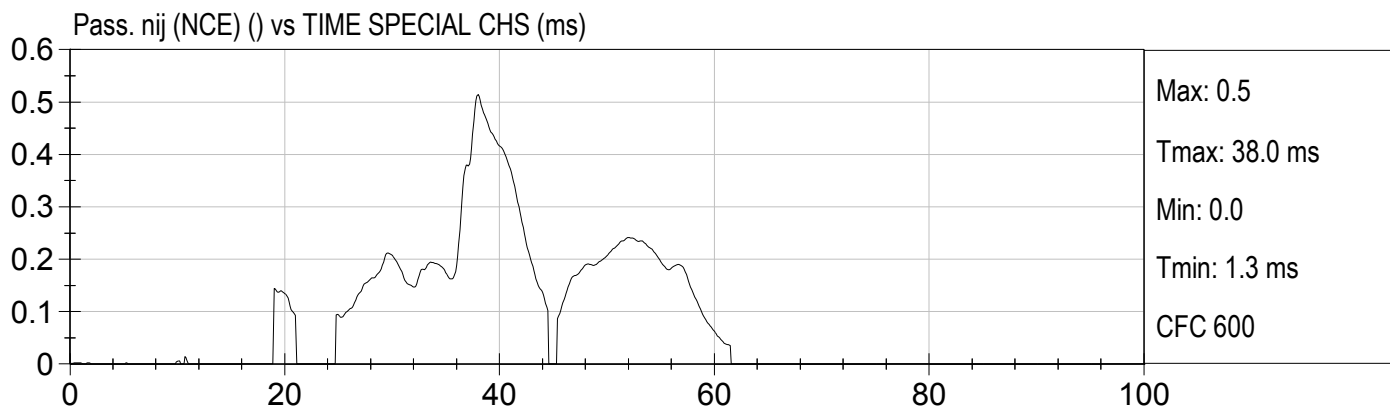
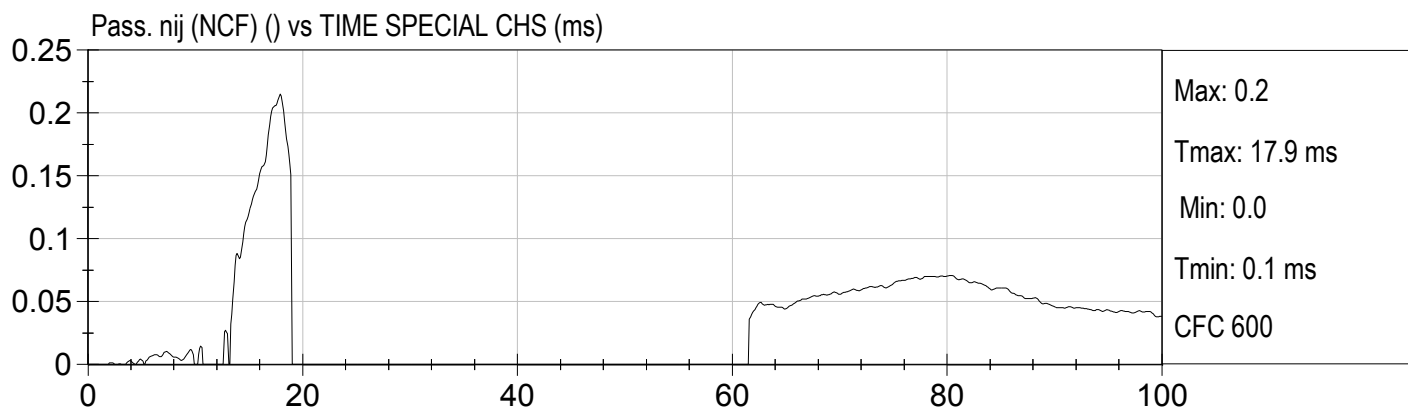
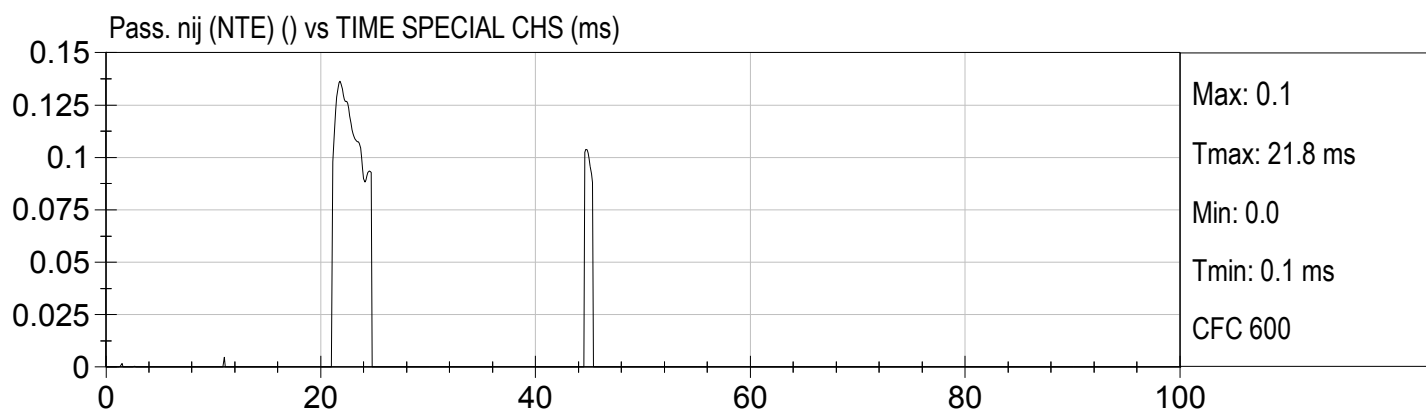
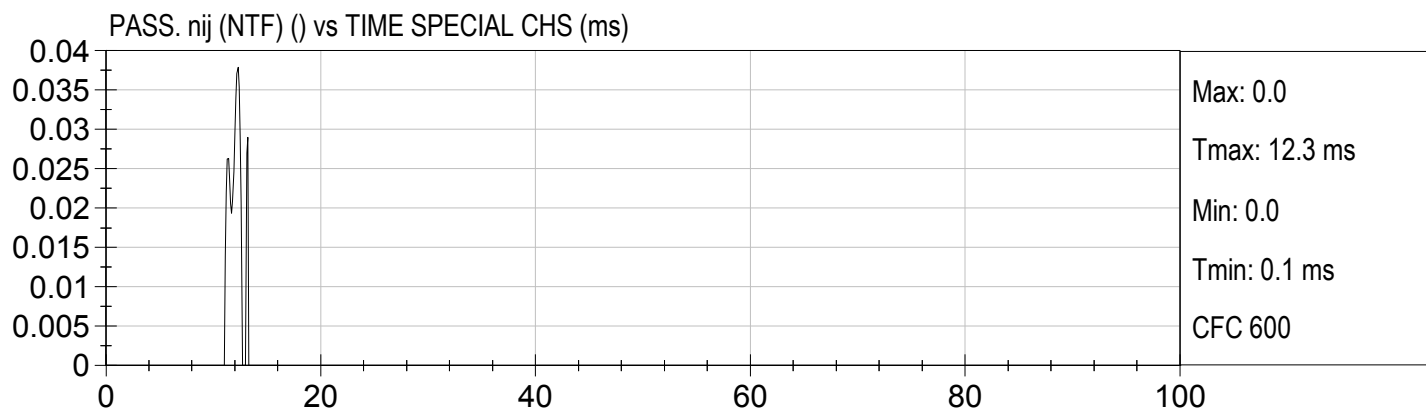


Max: 0.0 Volts  
Tmax: 70.2 ms  
Min: -0.0 Volts  
Tmin: 66.6 ms  
CFC 1000

FIRE CURRENT #2 (Amps) vs TIME (ms)

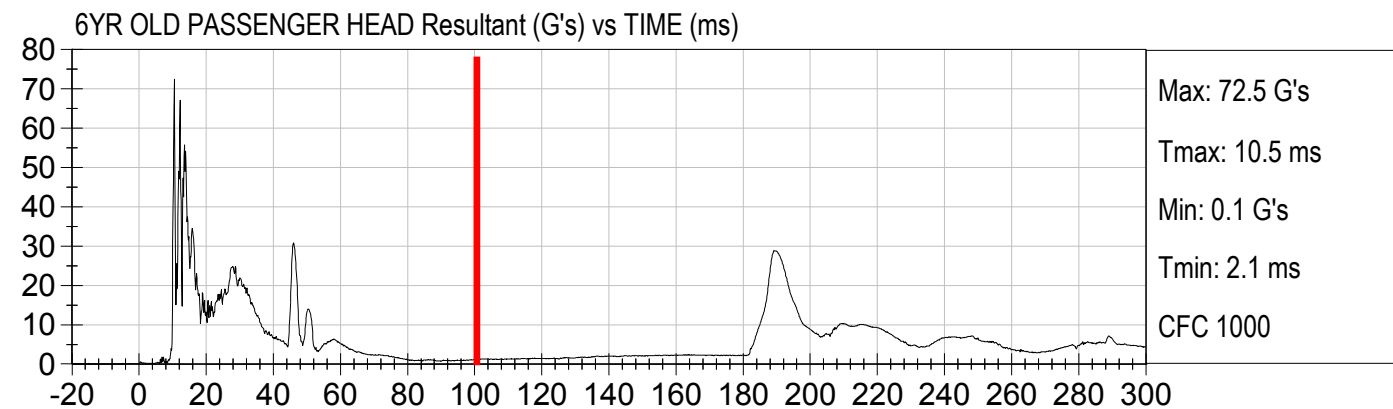
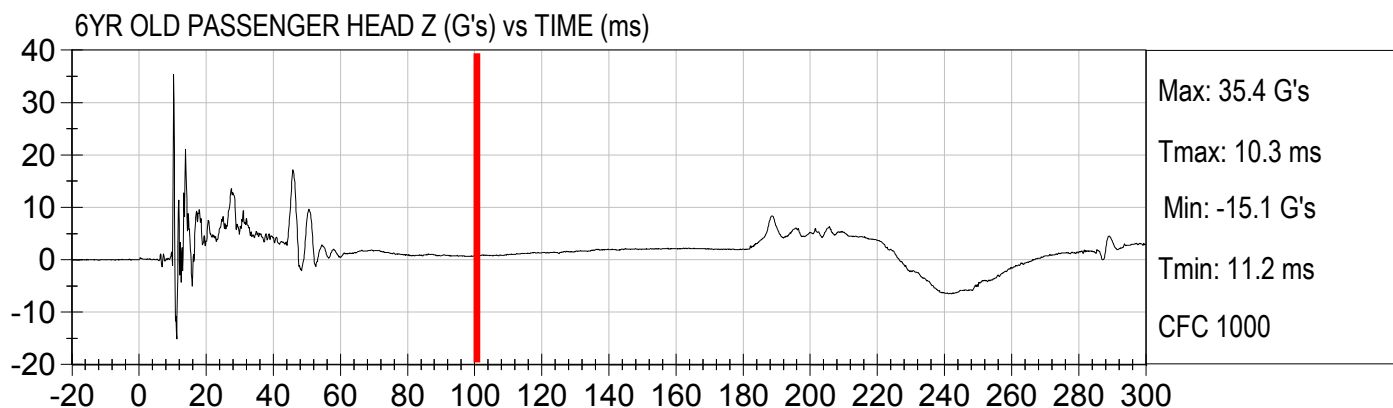
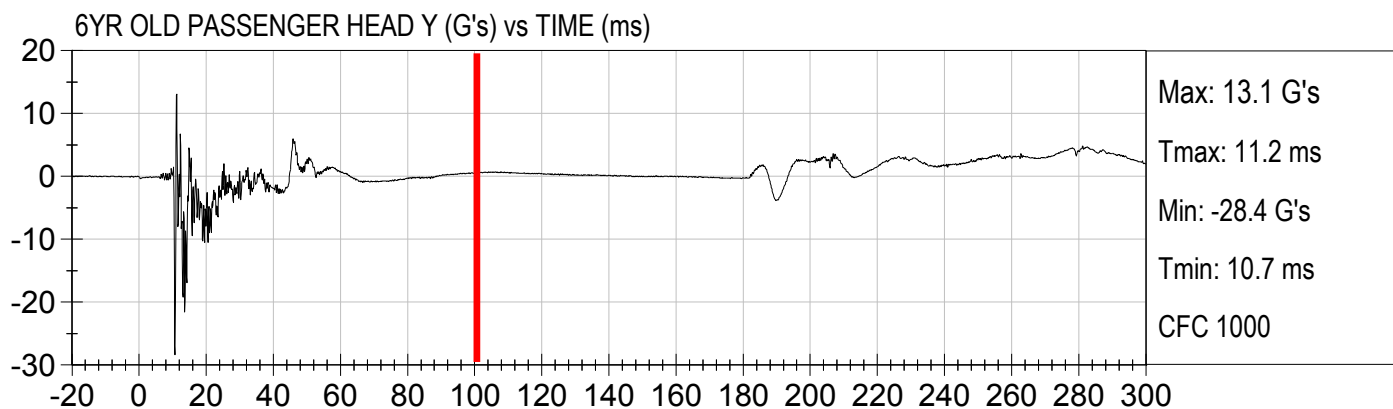
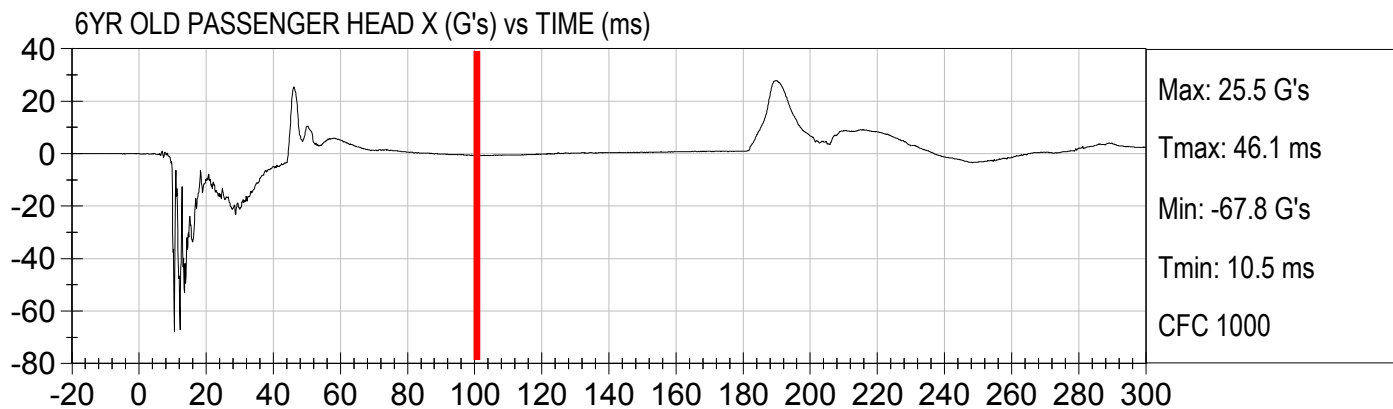


Max: 0.0 Amps  
Tmax: 0.5 ms  
Min: -0.0 Amps  
Tmin: 0.1 ms  
CFC 1000



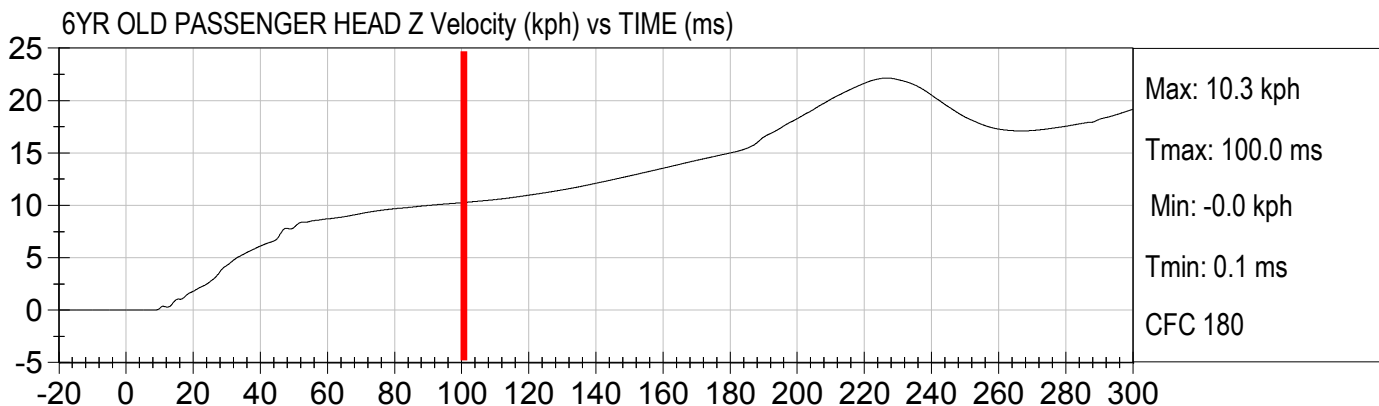
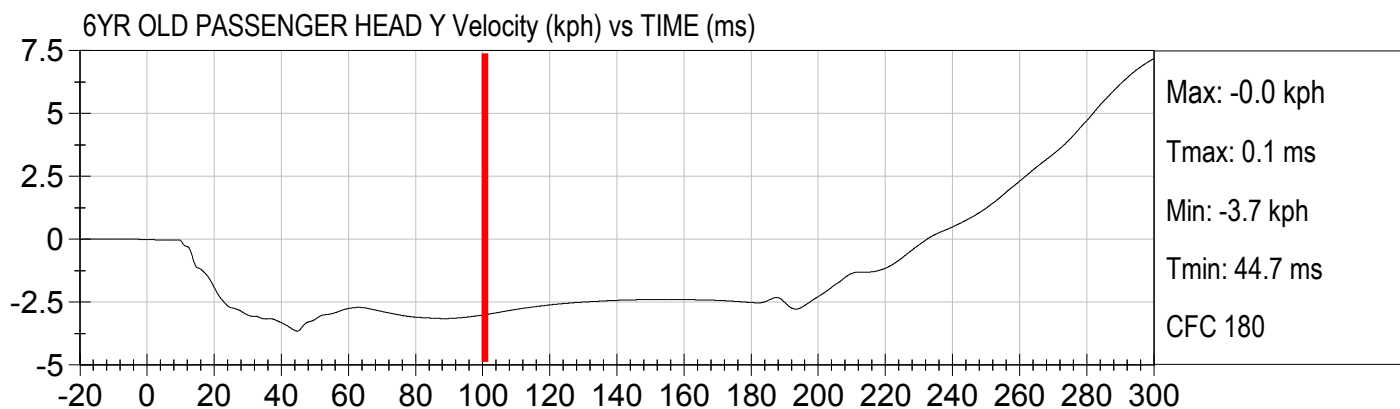
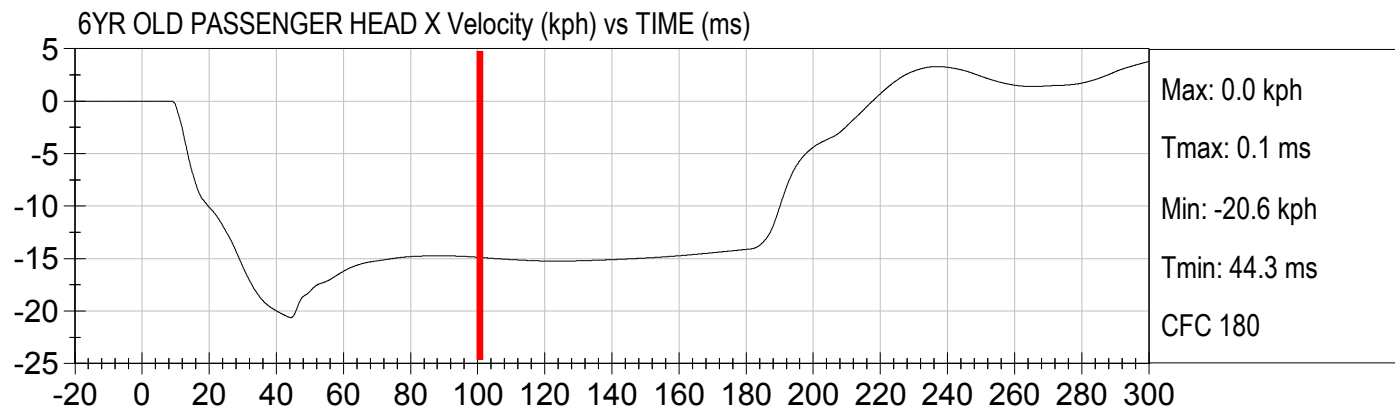


Injury Values Calculated between 0ms and 100ms



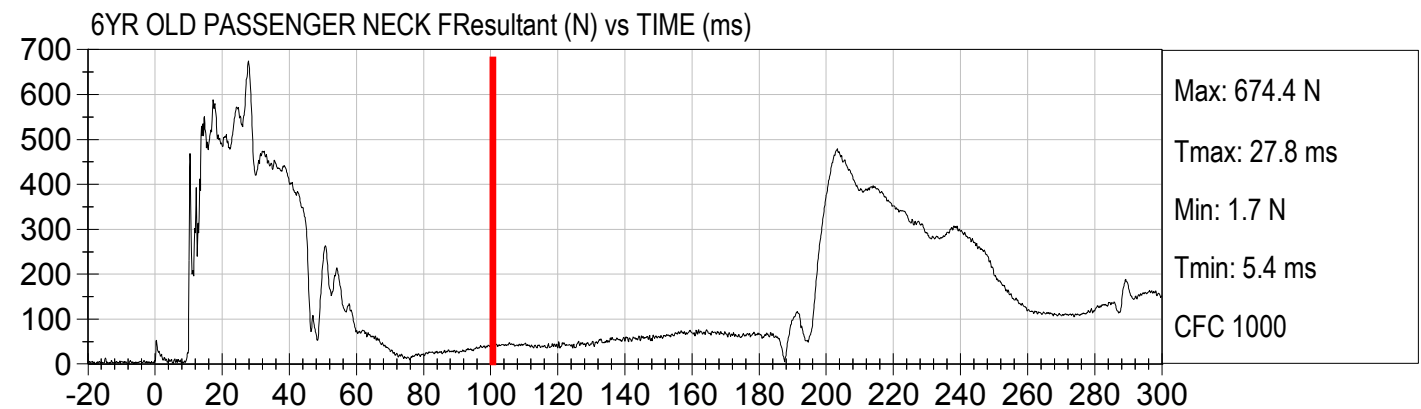
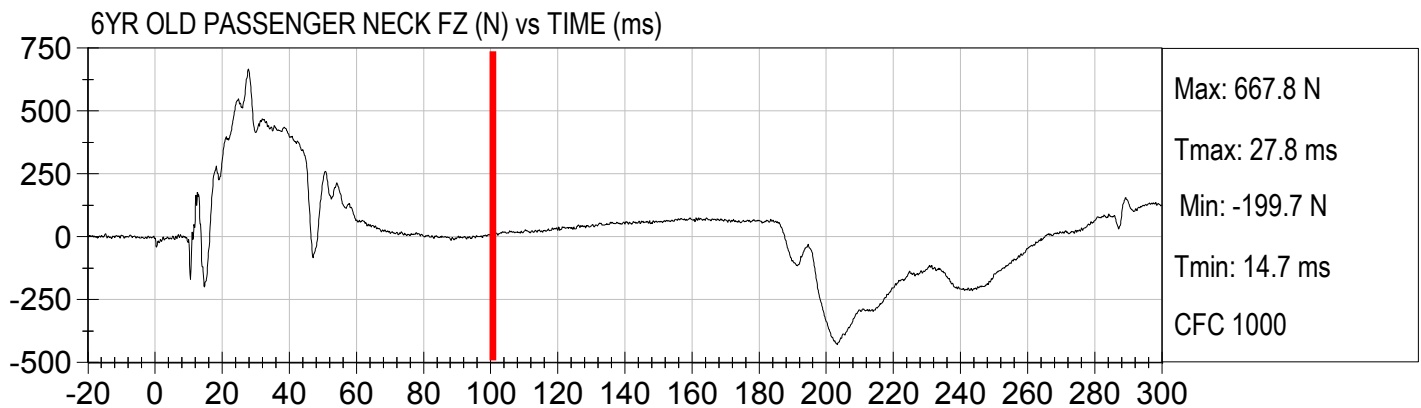
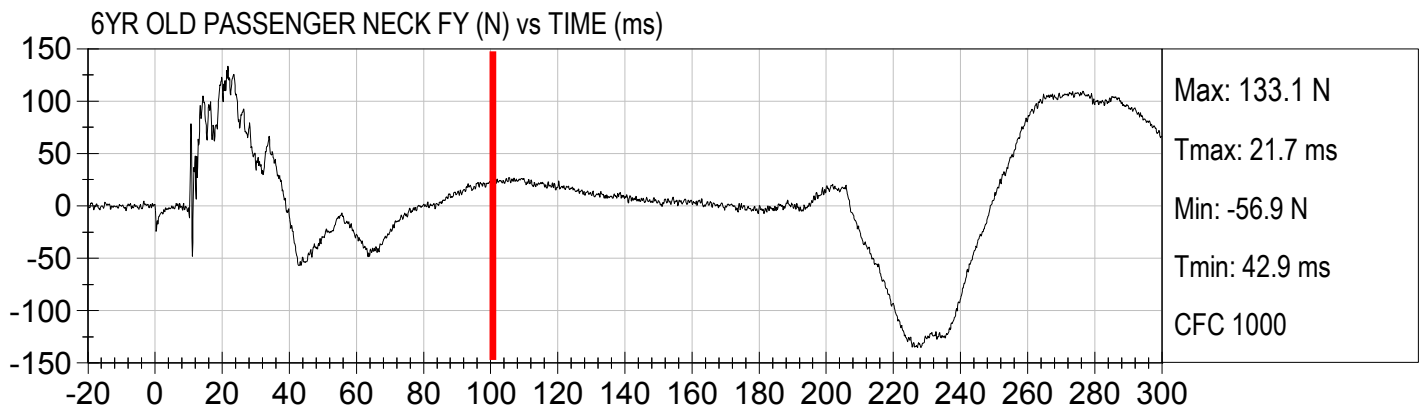
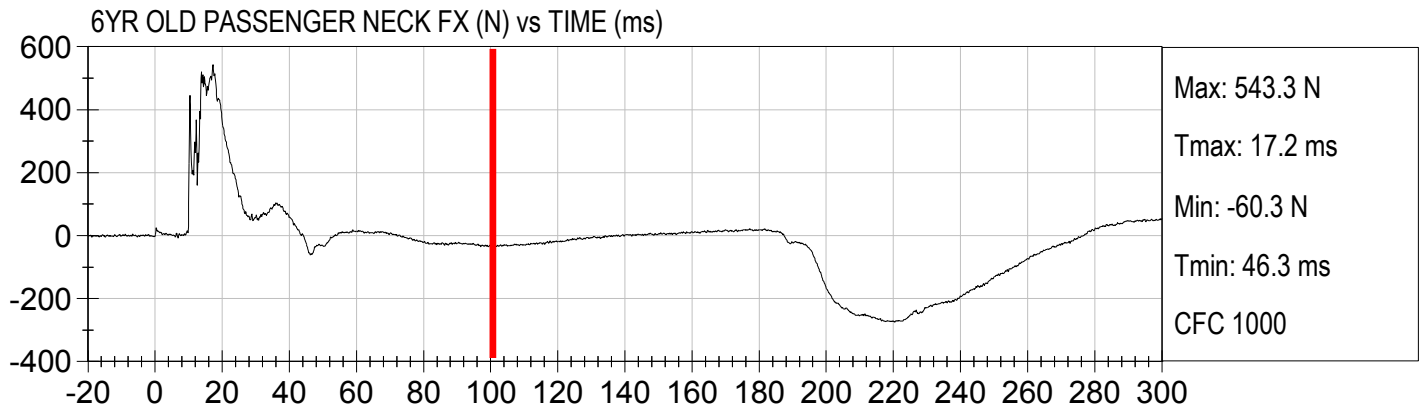


Injury Values Calculated between 0ms and 100ms





Injury Values Calculated between 0ms and 100ms

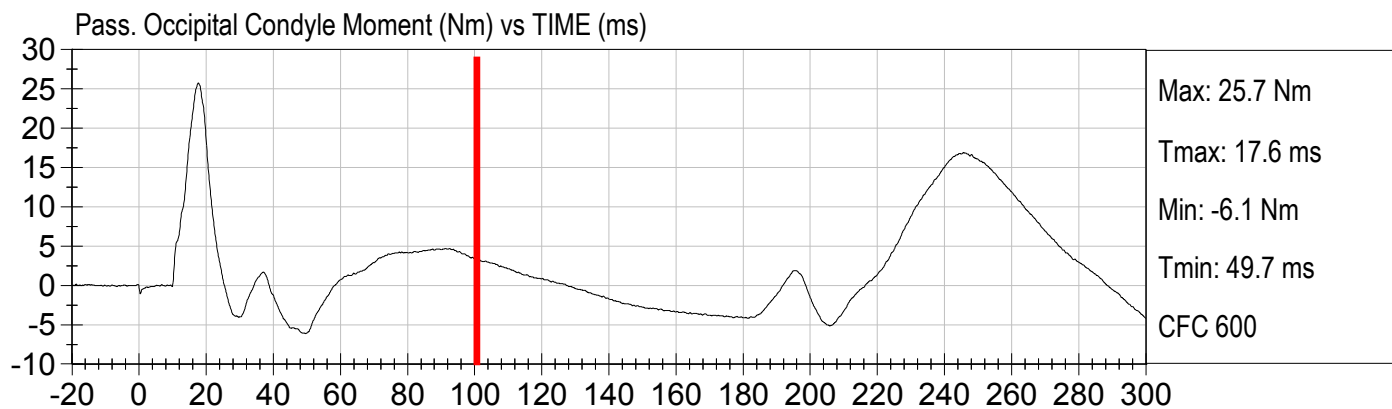
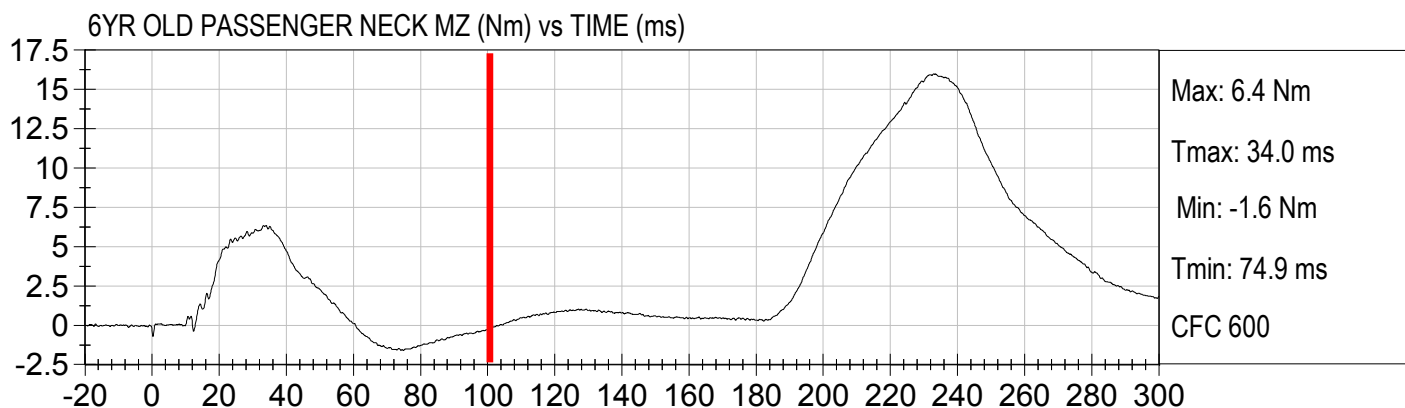
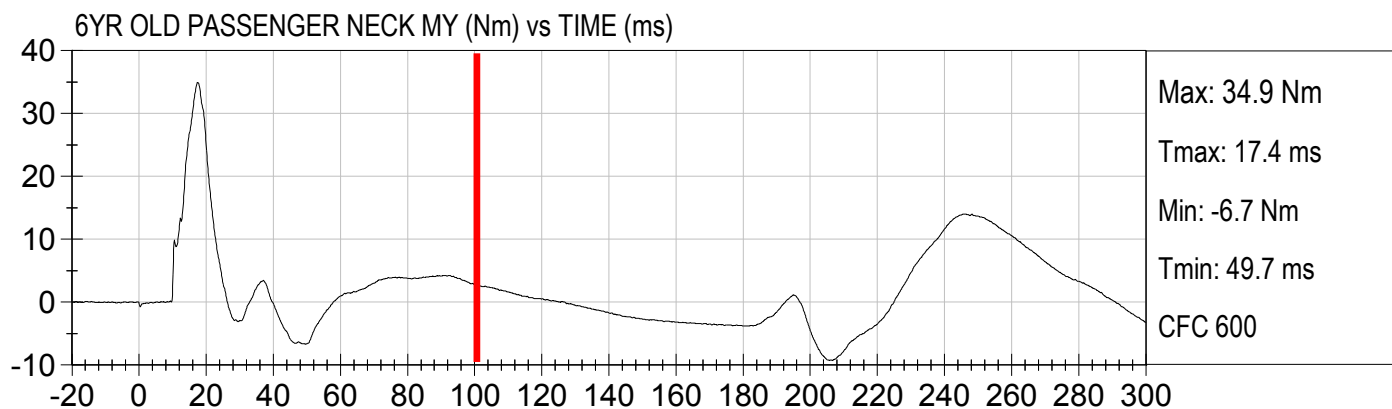
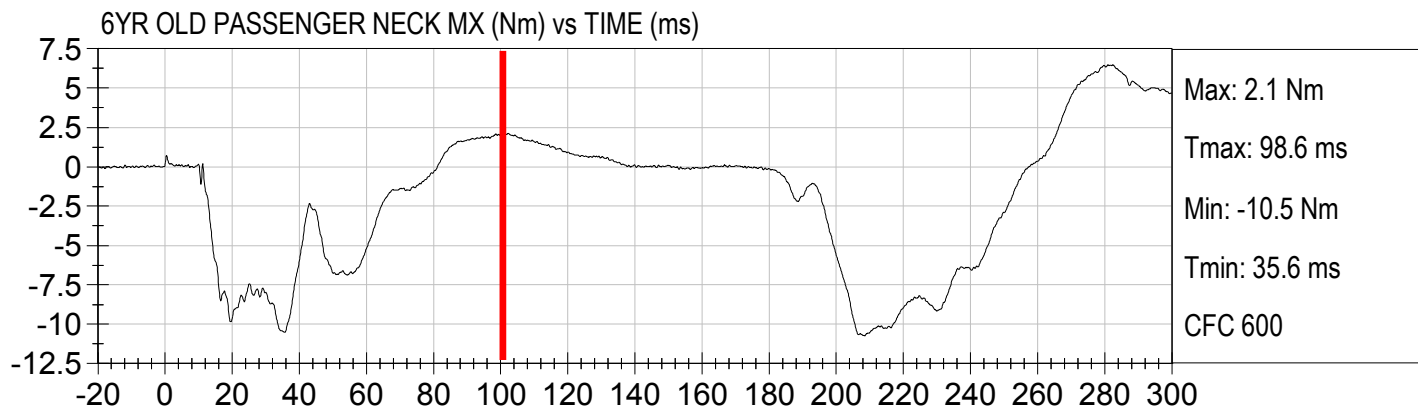




LOW RISK DEPLOYMENT  
2014 Chevrolet Silverado (C20140103) (6YO P1)

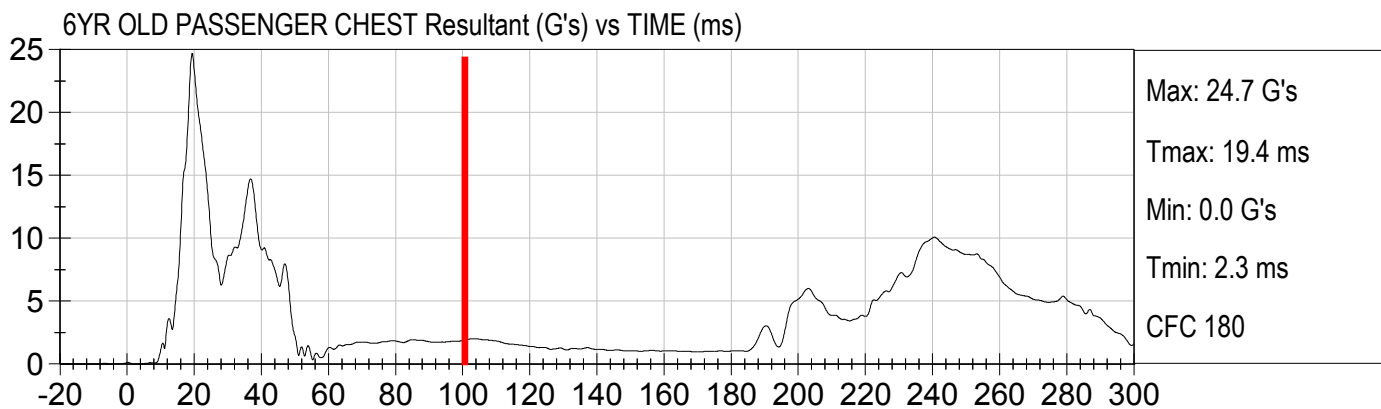
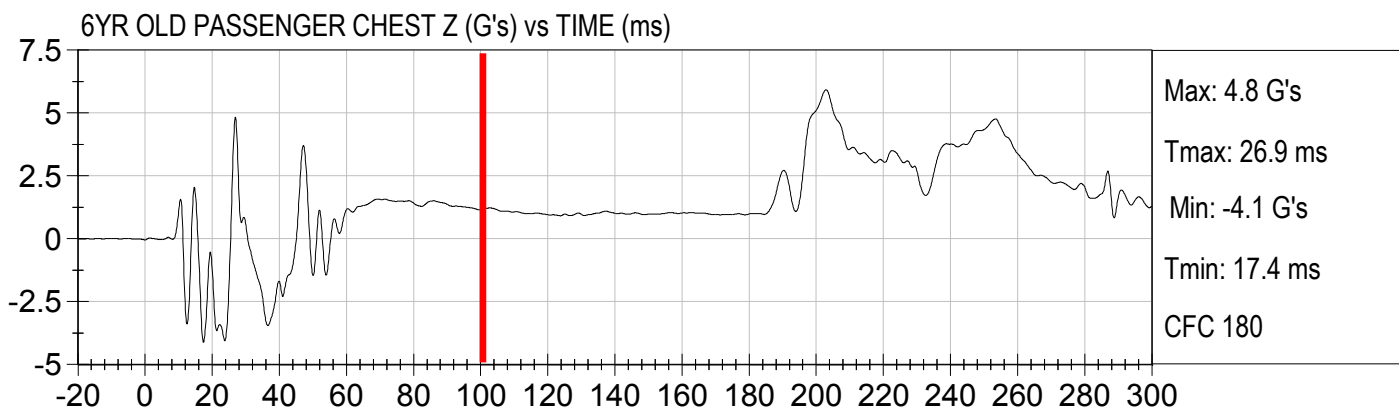
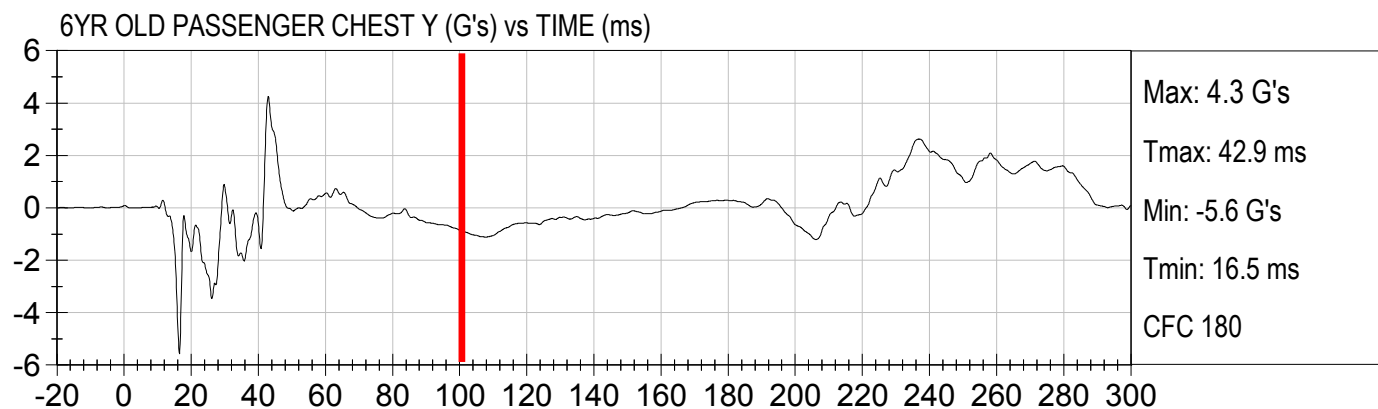
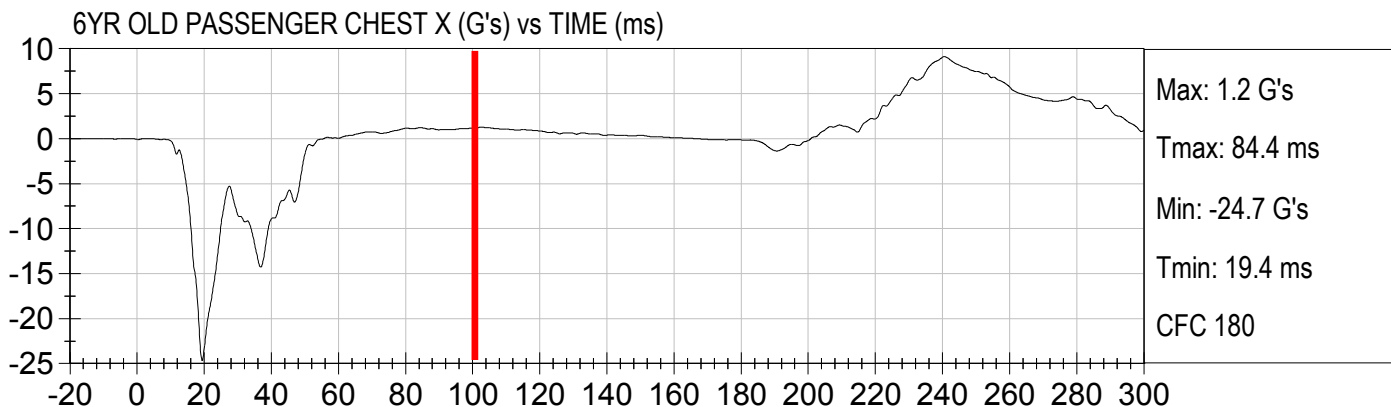
Test Date: 6/17/14  
Speed: 0.0 mph ( 0.0 km/h)

Injury Values Calculated between 0ms and 100ms





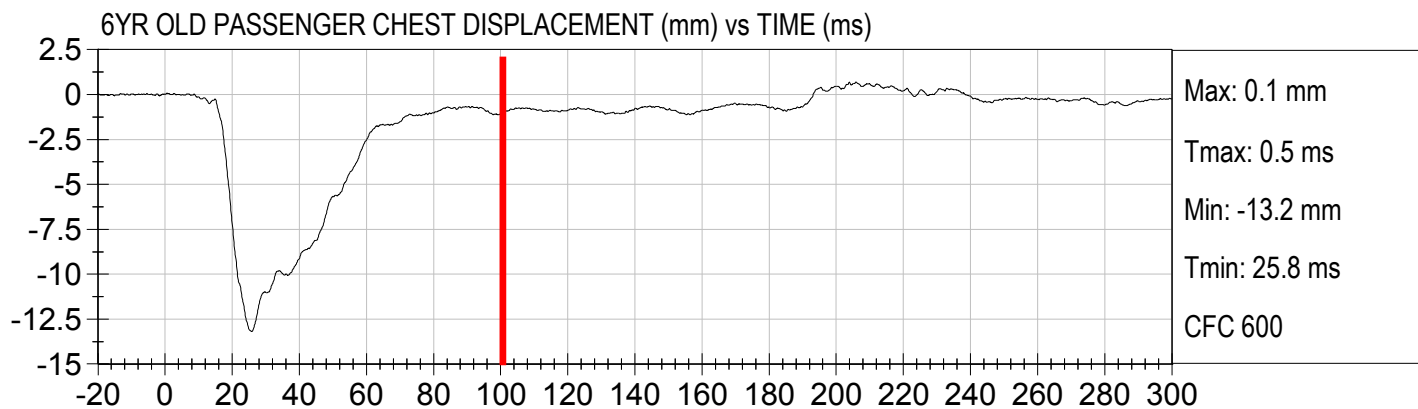
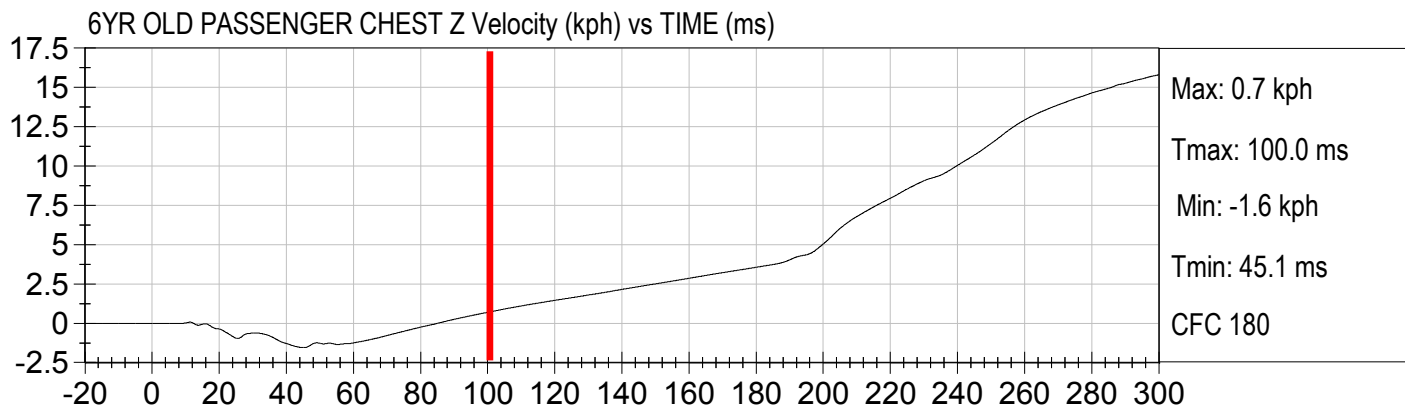
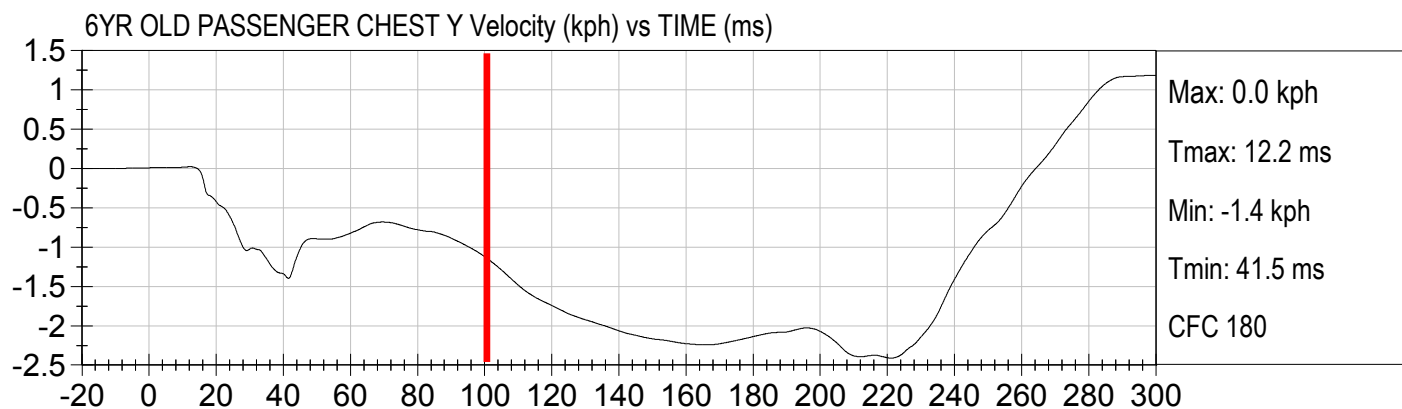
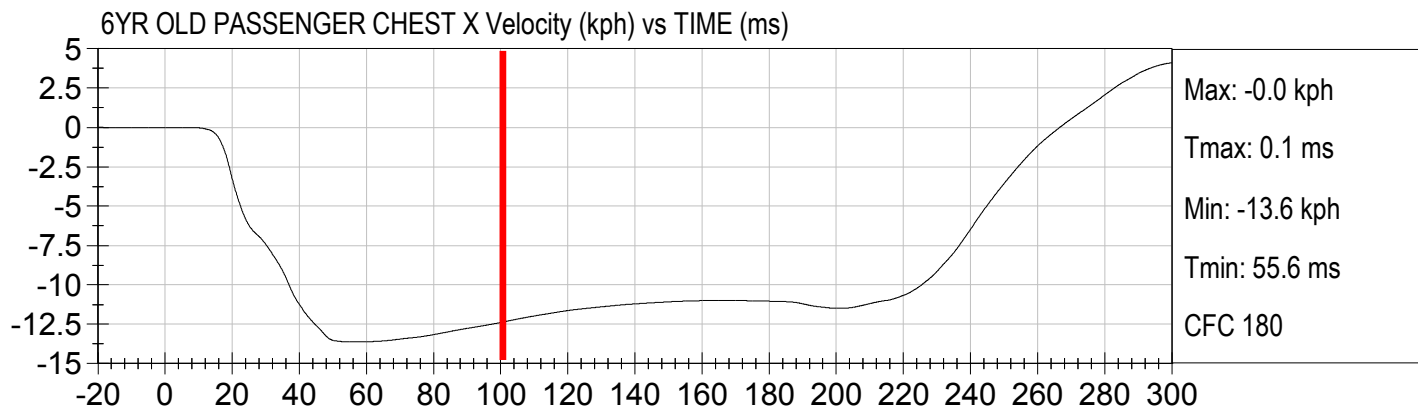
Injury Values Calculated between 0ms and 100ms





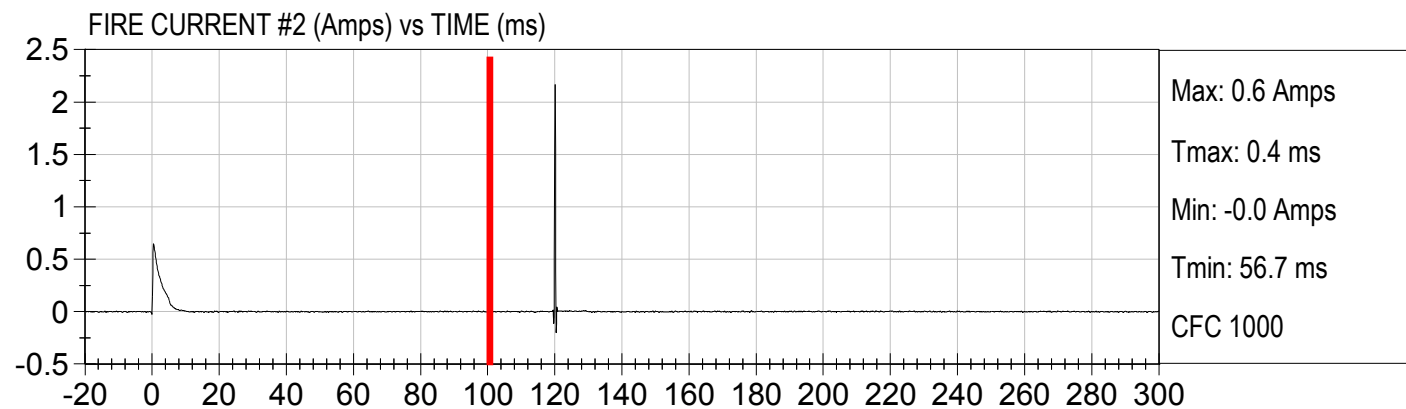
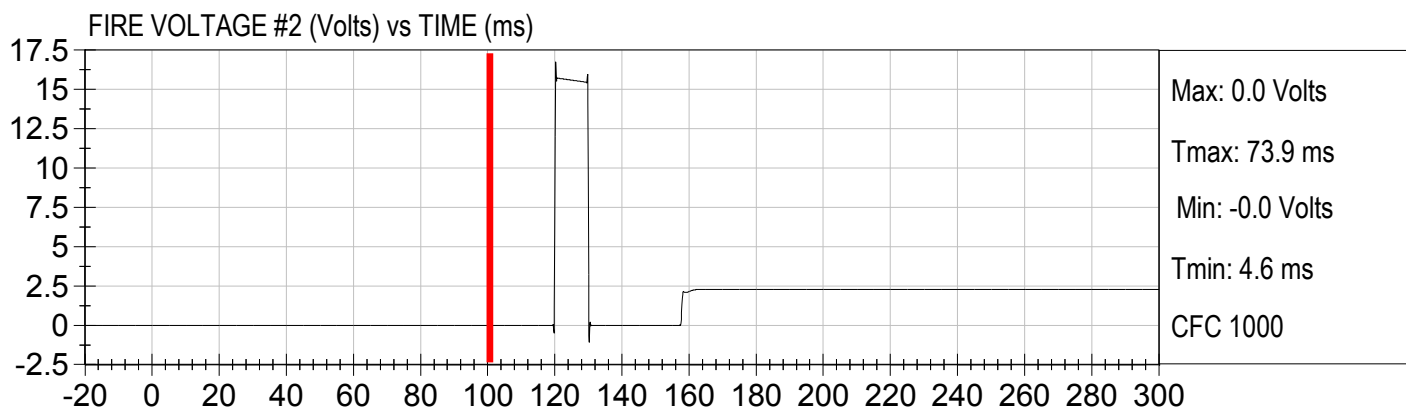
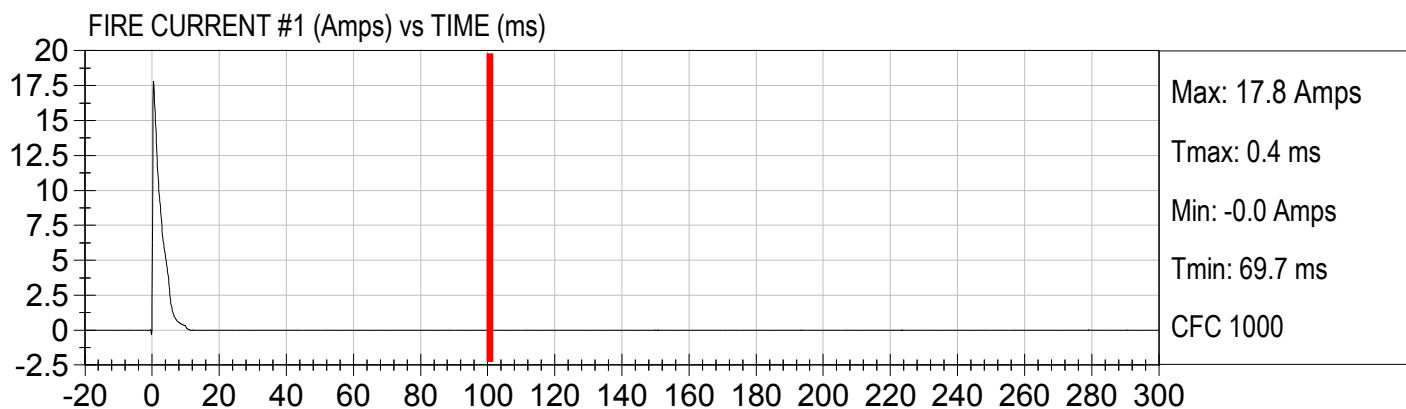
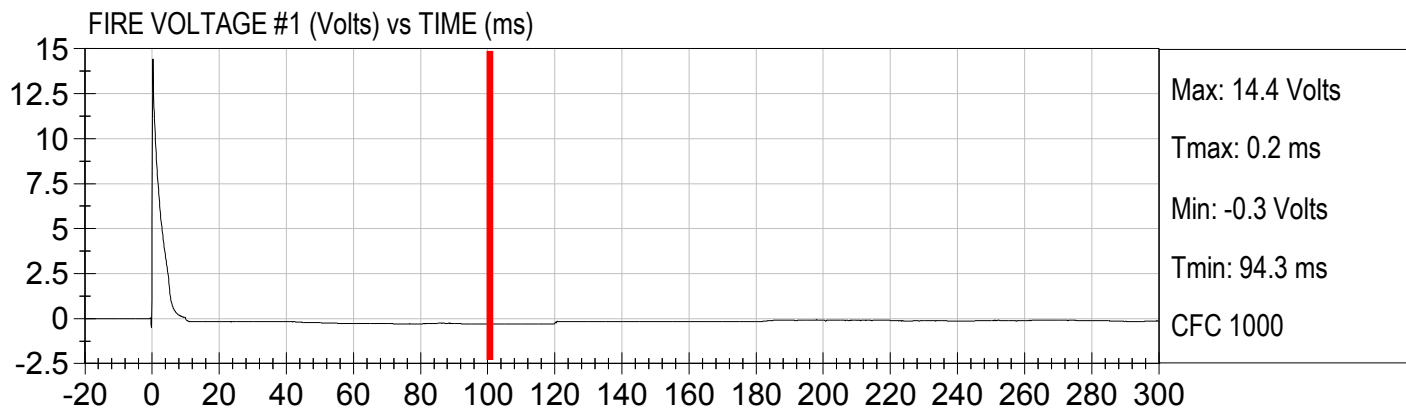


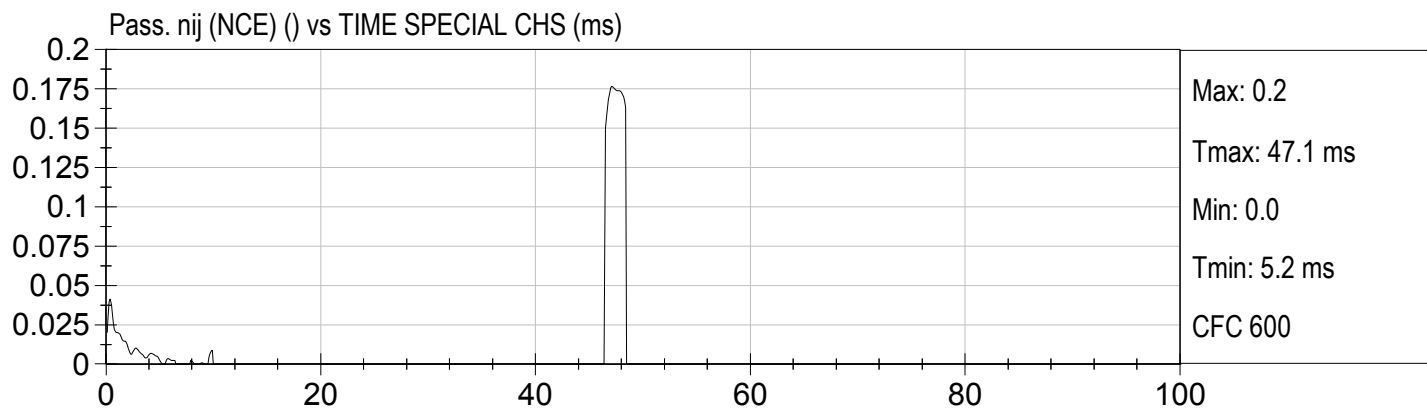
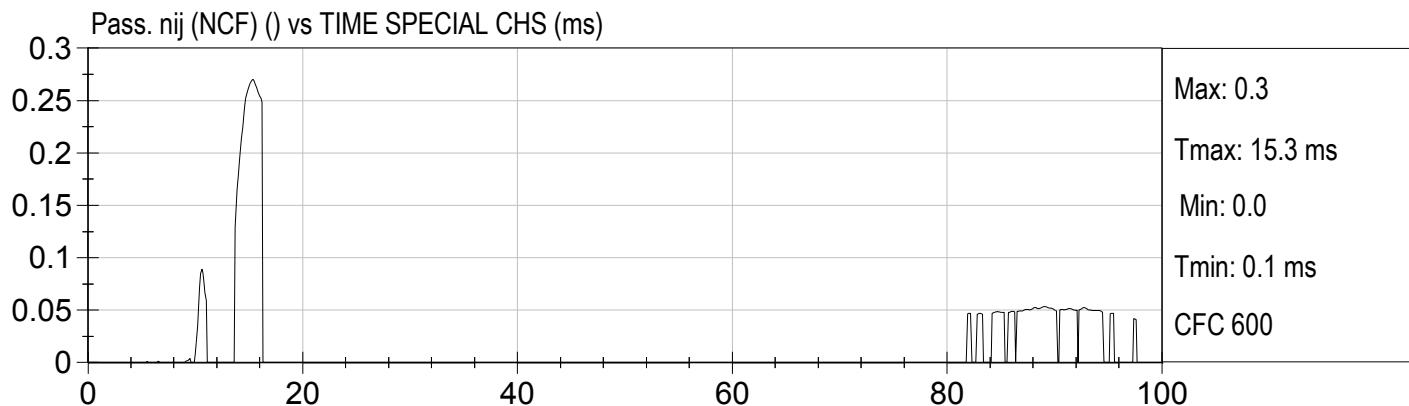
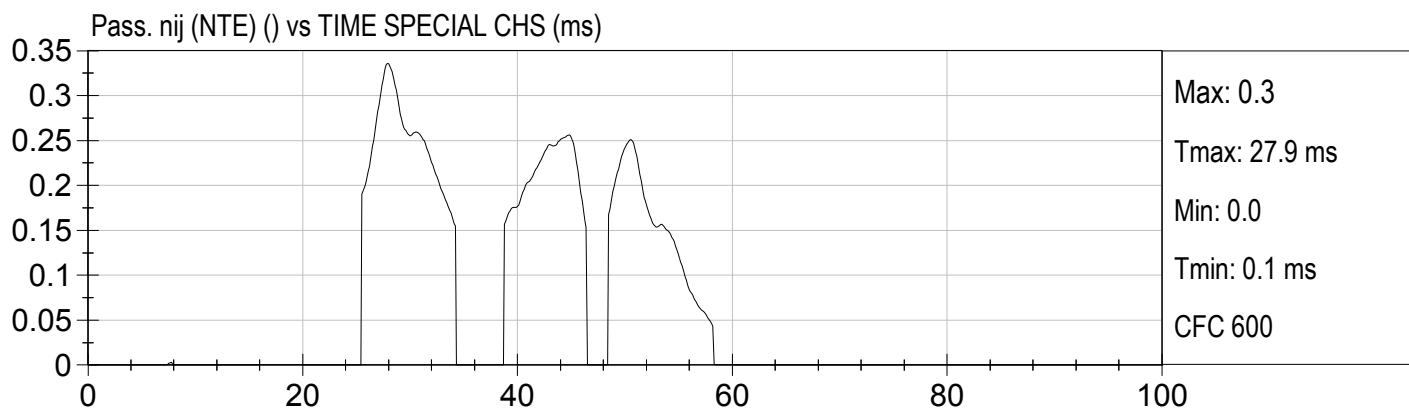
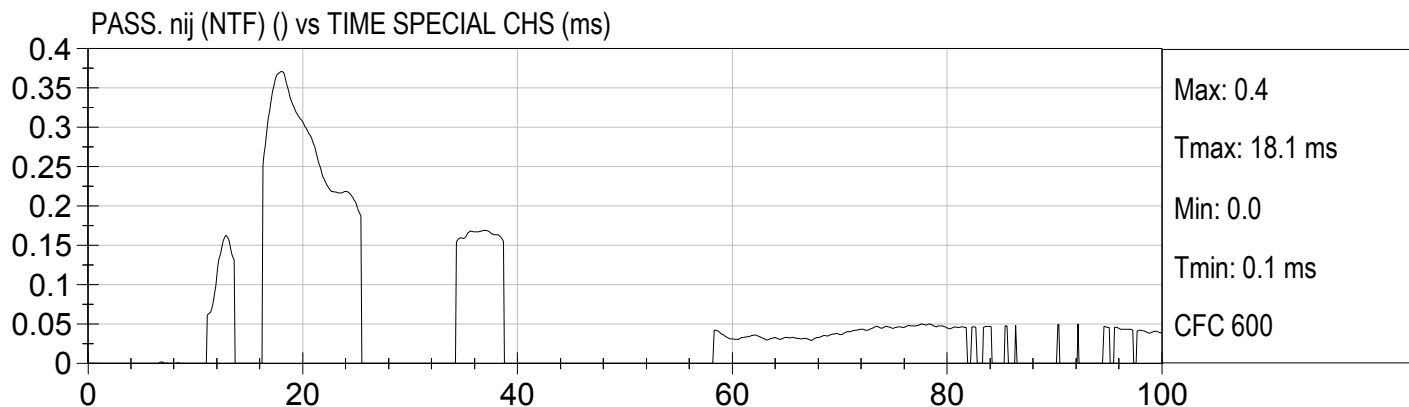
Injury Values Calculated between 0ms and 100ms





Injury Values Calculated between 0ms and 100ms



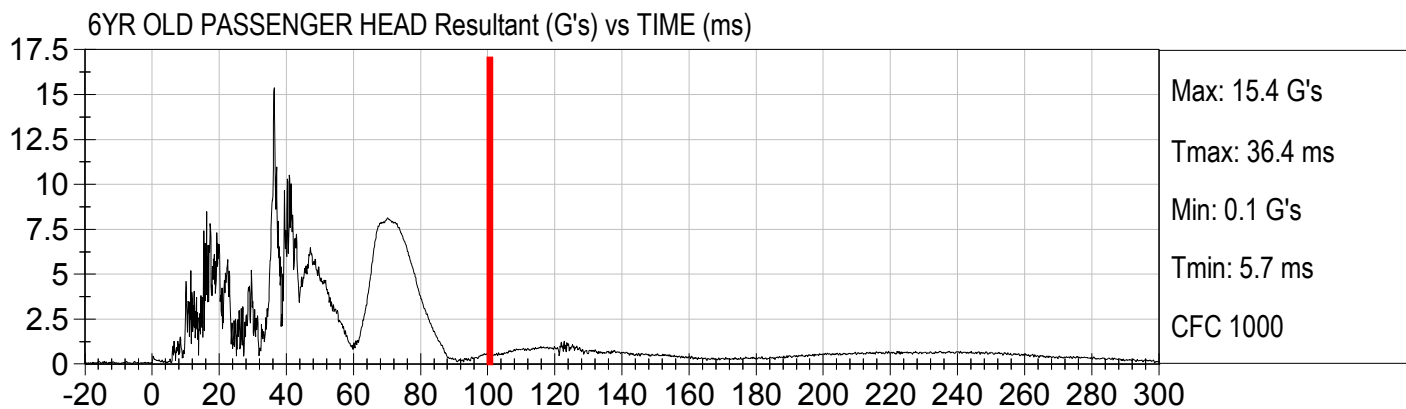
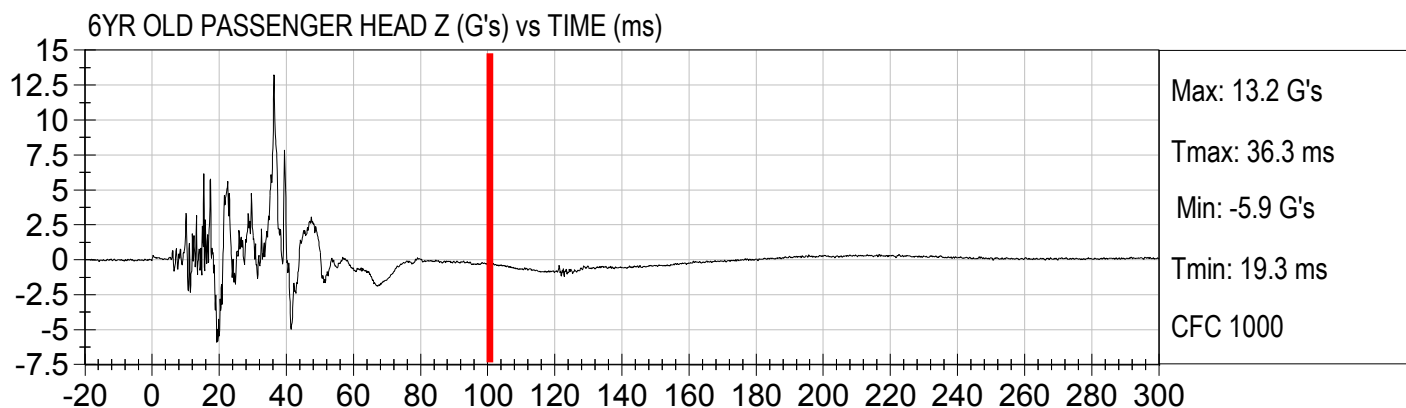
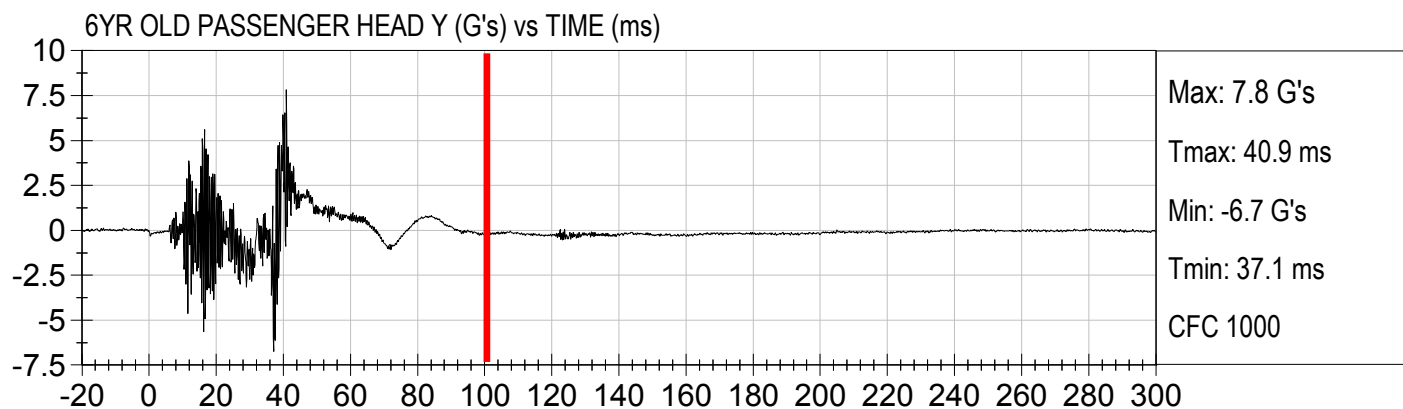
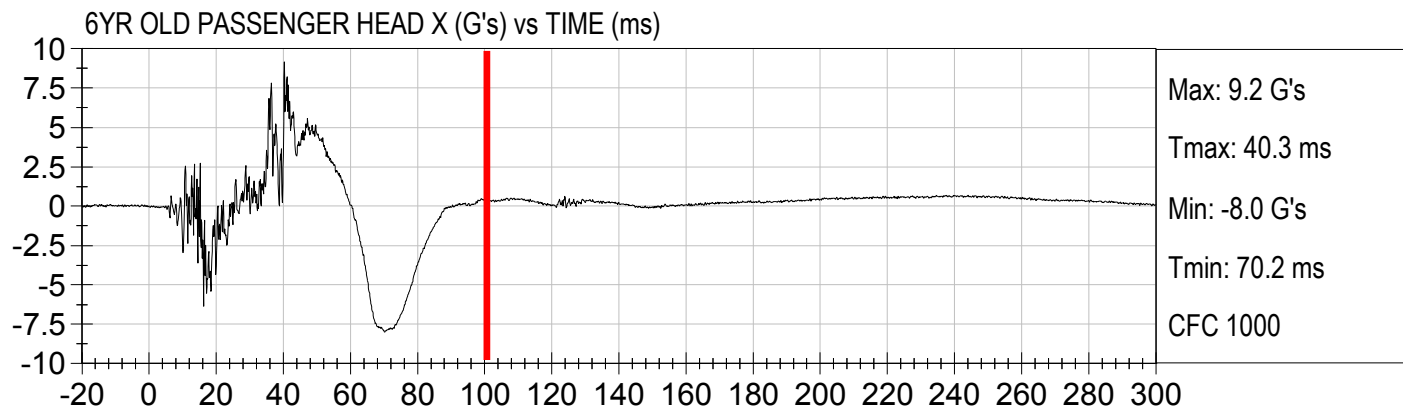




LOW RISK DEPLOYMENT  
2014 Chevrolet Silverado (C20140103) (6YO P2)

Test Date: 6/17/14  
Speed: 0.0 mph ( 0.0 km/h)

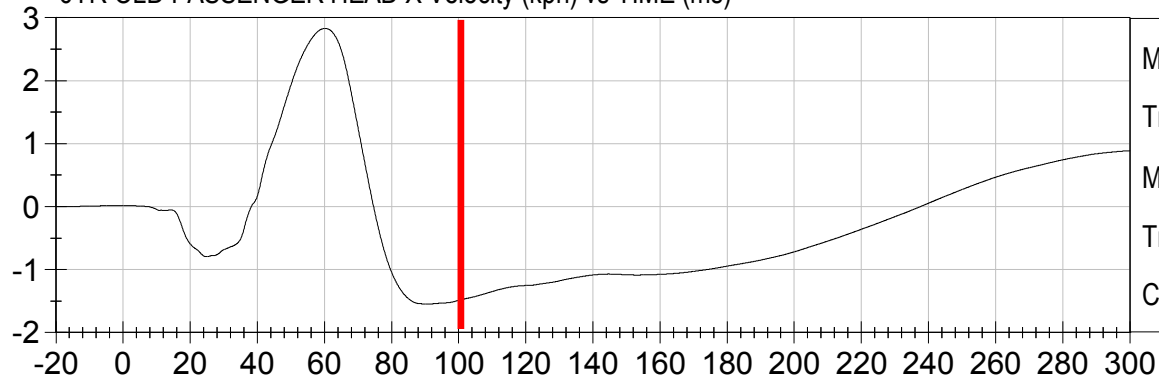
Injury Values Calculated between 0ms and 100ms



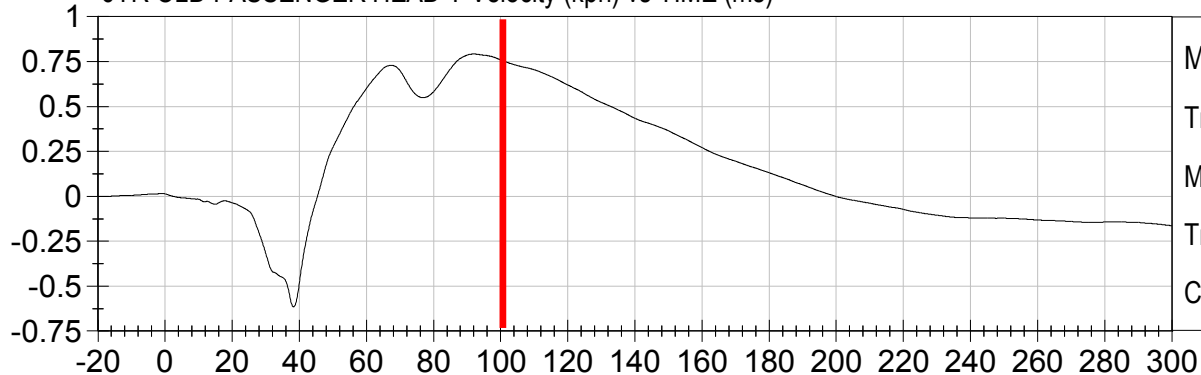


Injury Values Calculated between 0ms and 100ms

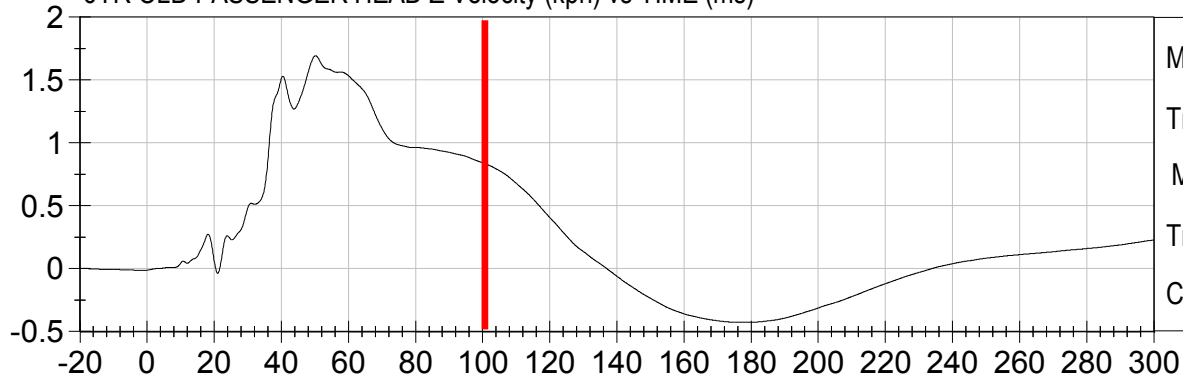
6YR OLD PASSENGER HEAD X Velocity (kph) vs TIME (ms)



6YR OLD PASSENGER HEAD Y Velocity (kph) vs TIME (ms)

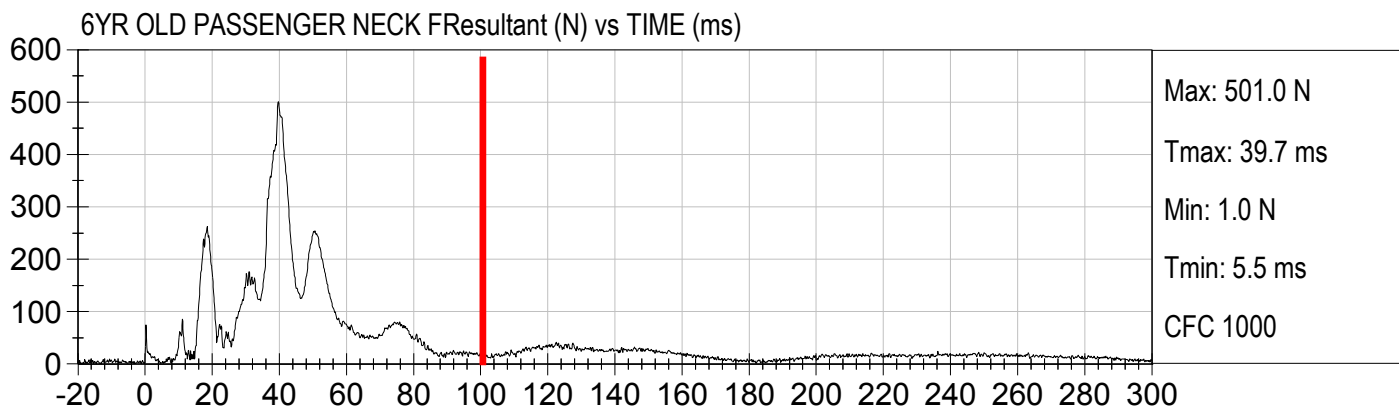
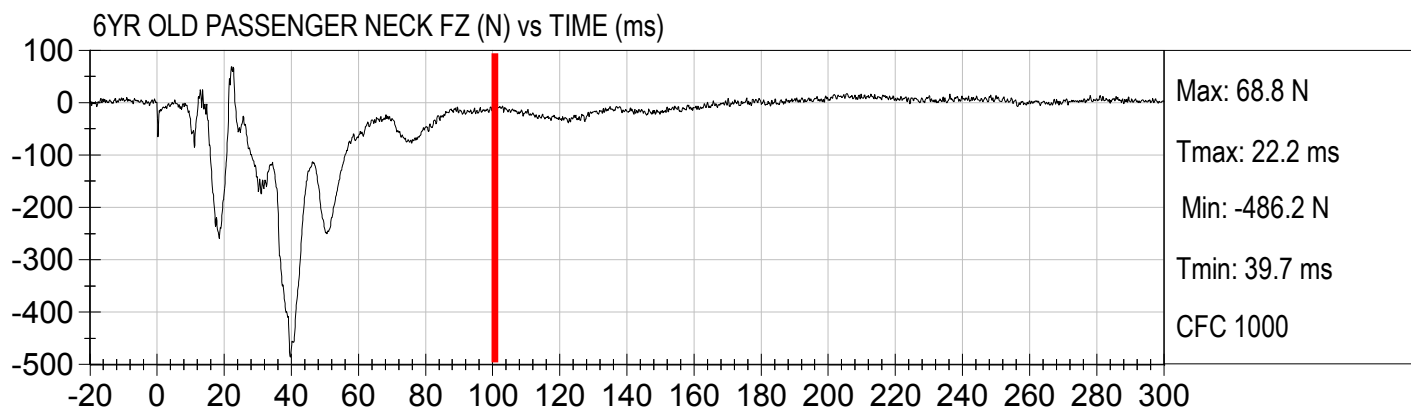
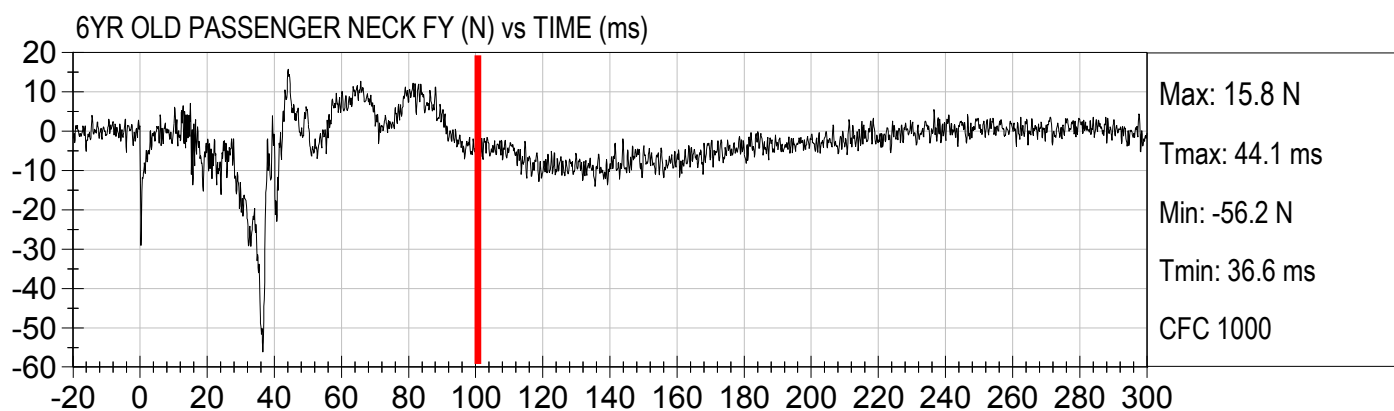
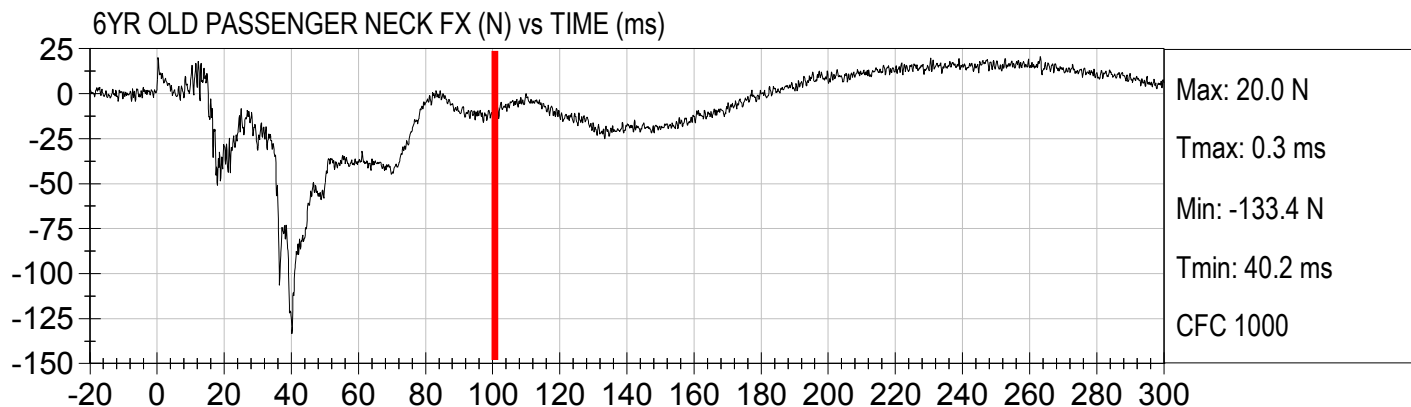


6YR OLD PASSENGER HEAD Z Velocity (kph) vs TIME (ms)





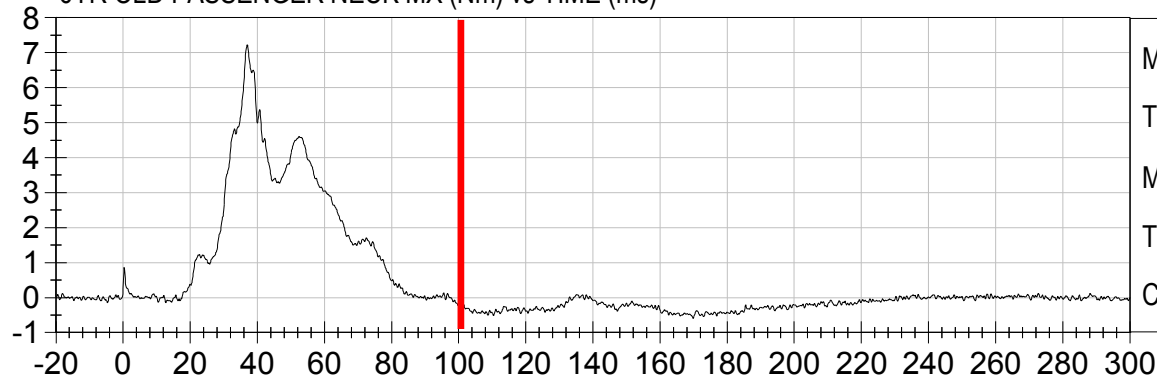
Injury Values Calculated between 0ms and 100ms



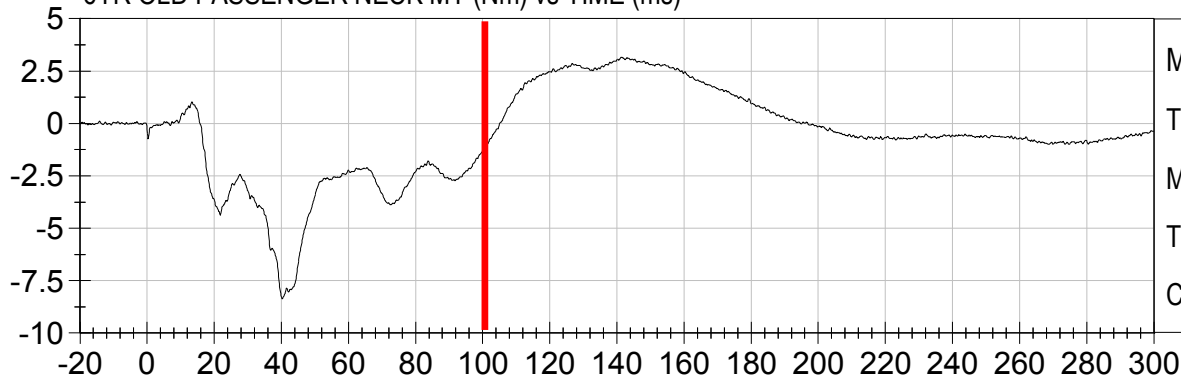


Injury Values Calculated between 0ms and 100ms

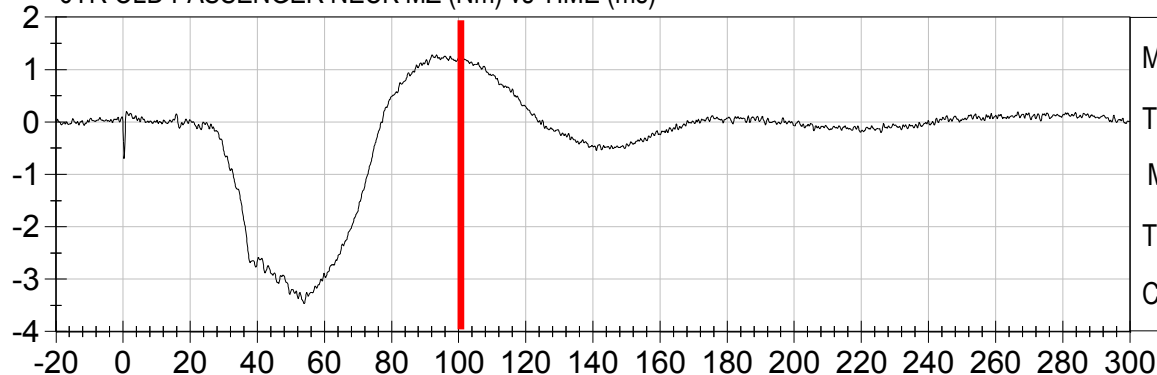
6YR OLD PASSENGER NECK MX (Nm) vs TIME (ms)



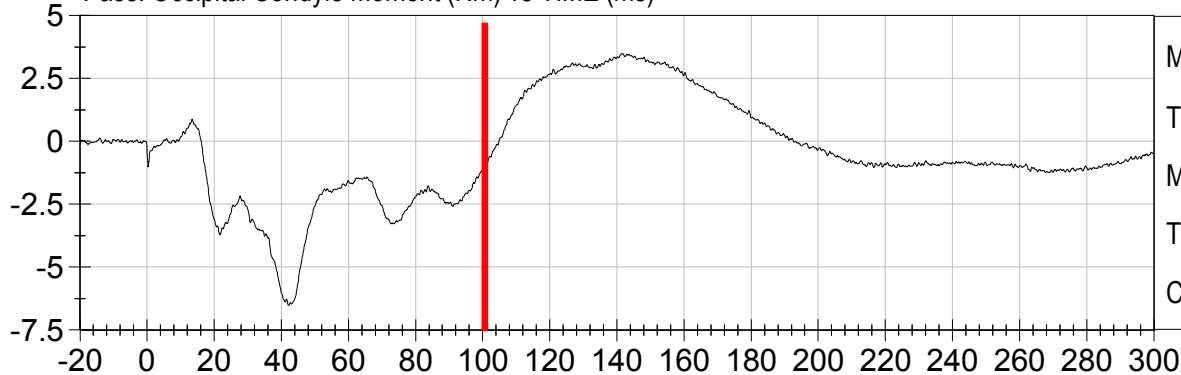
6YR OLD PASSENGER NECK MY (Nm) vs TIME (ms)



6YR OLD PASSENGER NECK MZ (Nm) vs TIME (ms)



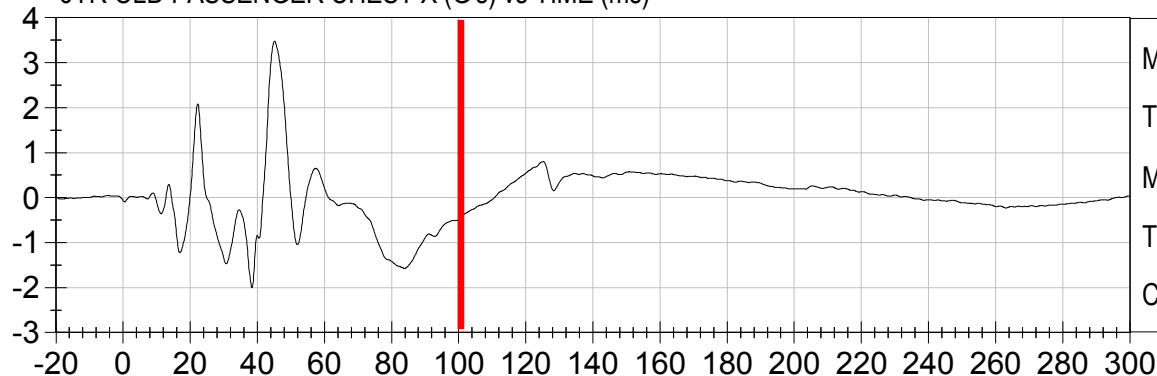
Pass. Occipital Condyle Moment (Nm) vs TIME (ms)





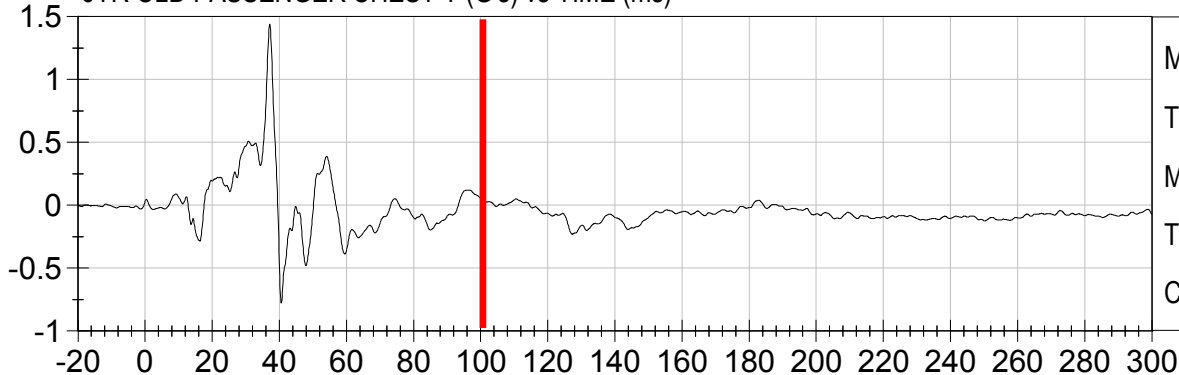
Injury Values Calculated between 0ms and 100ms

6YR OLD PASSENGER CHEST X (G's) vs TIME (ms)



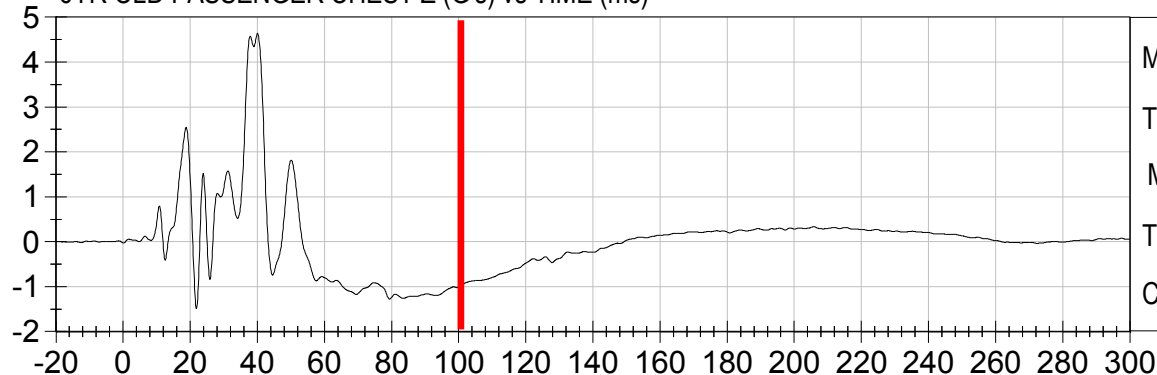
Max: 3.5 G's  
Tmax: 45.2 ms  
Min: -2.0 G's  
Tmin: 38.4 ms  
CFC 180

6YR OLD PASSENGER CHEST Y (G's) vs TIME (ms)



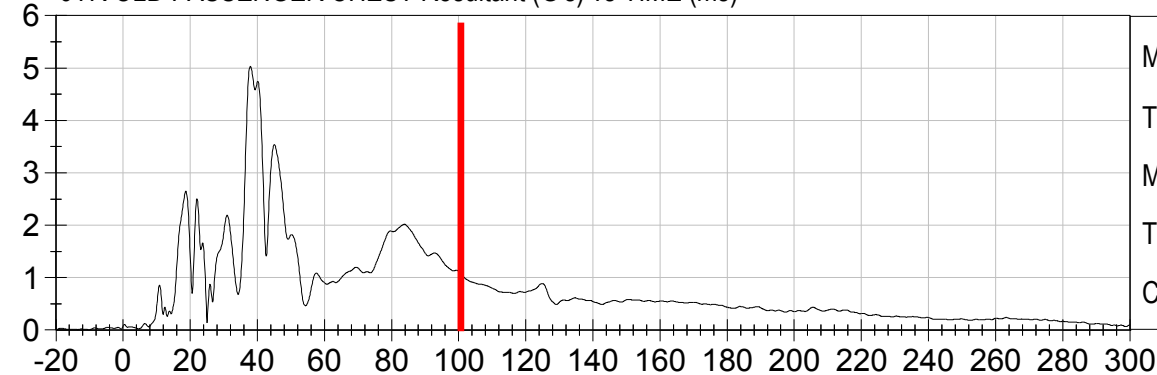
Max: 1.4 G's  
Tmax: 37.1 ms  
Min: -0.8 G's  
Tmin: 40.6 ms  
CFC 180

6YR OLD PASSENGER CHEST Z (G's) vs TIME (ms)



Max: 4.6 G's  
Tmax: 40.1 ms  
Min: -1.5 G's  
Tmin: 21.8 ms  
CFC 180

6YR OLD PASSENGER CHEST Resultant (G's) vs TIME (ms)

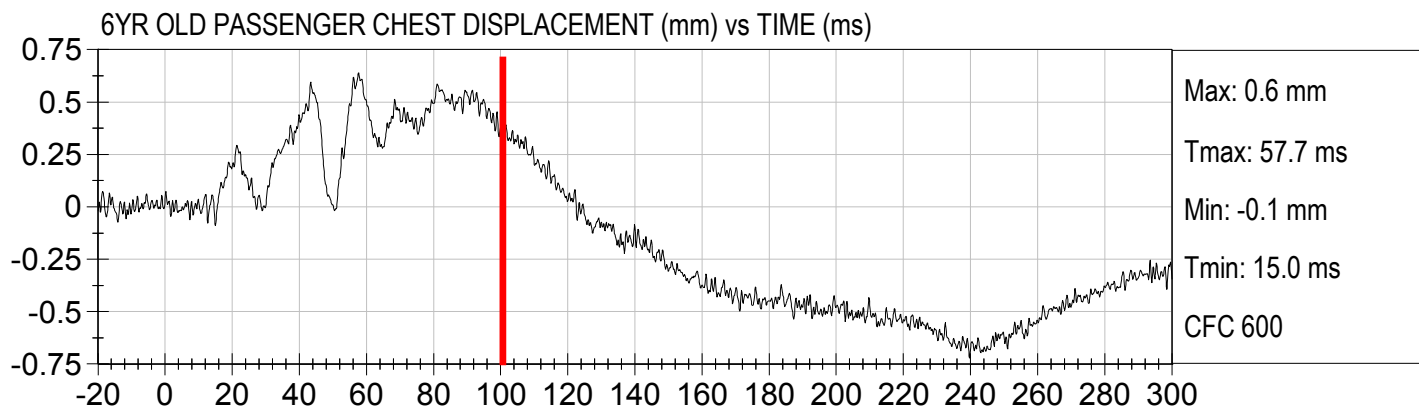
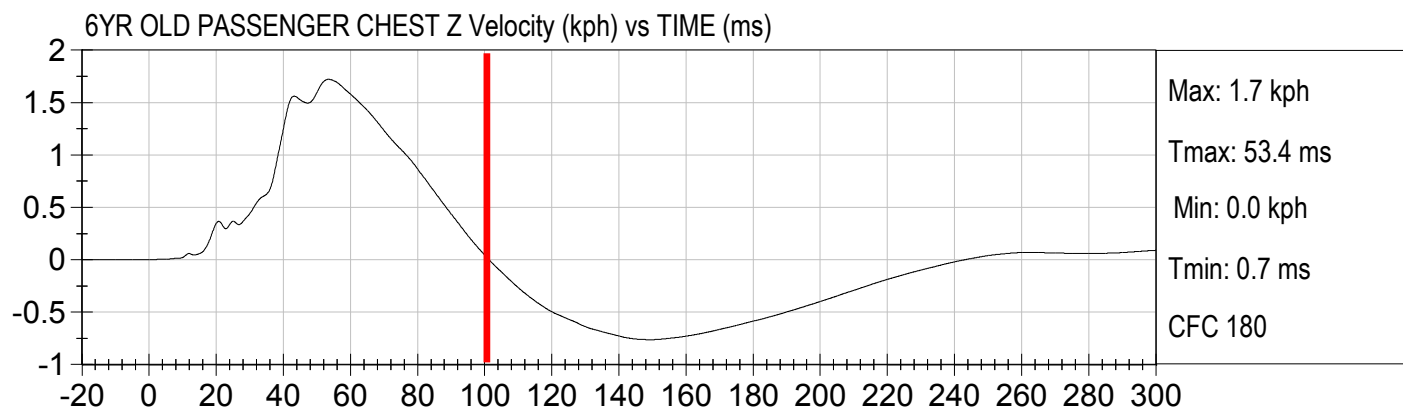
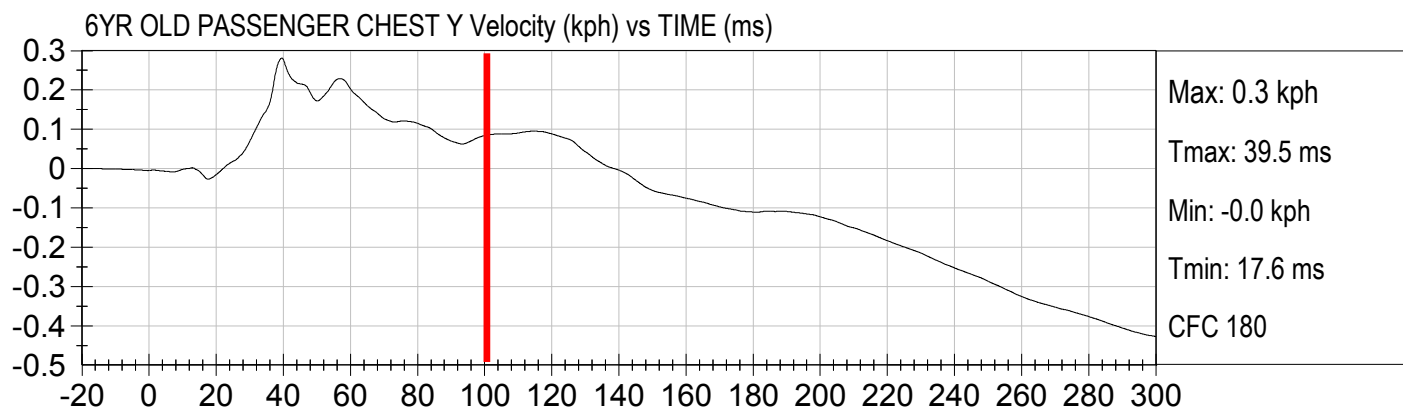
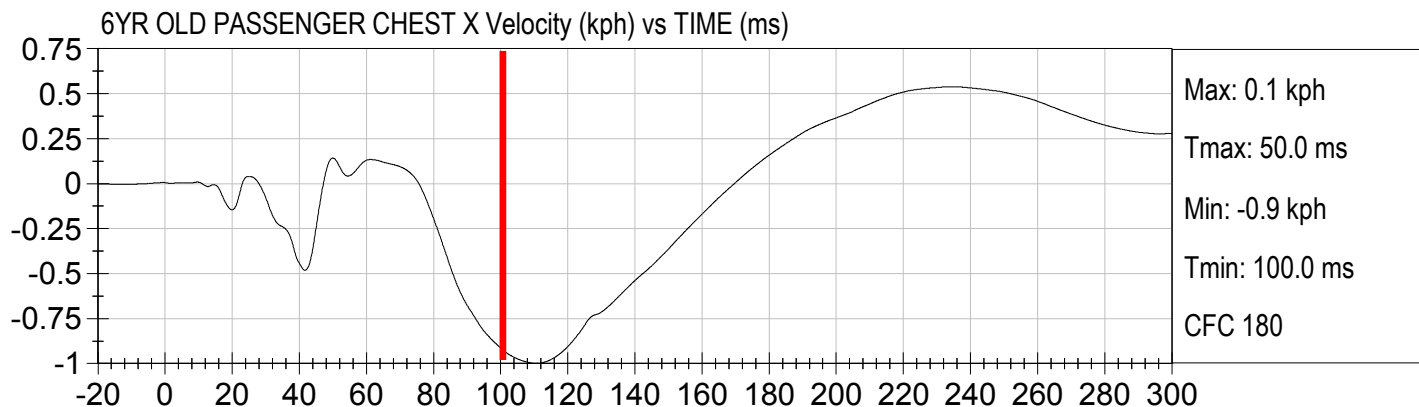


Max: 5.0 G's  
Tmax: 37.9 ms  
Min: 0.0 G's  
Tmin: 4.6 ms  
CFC 180



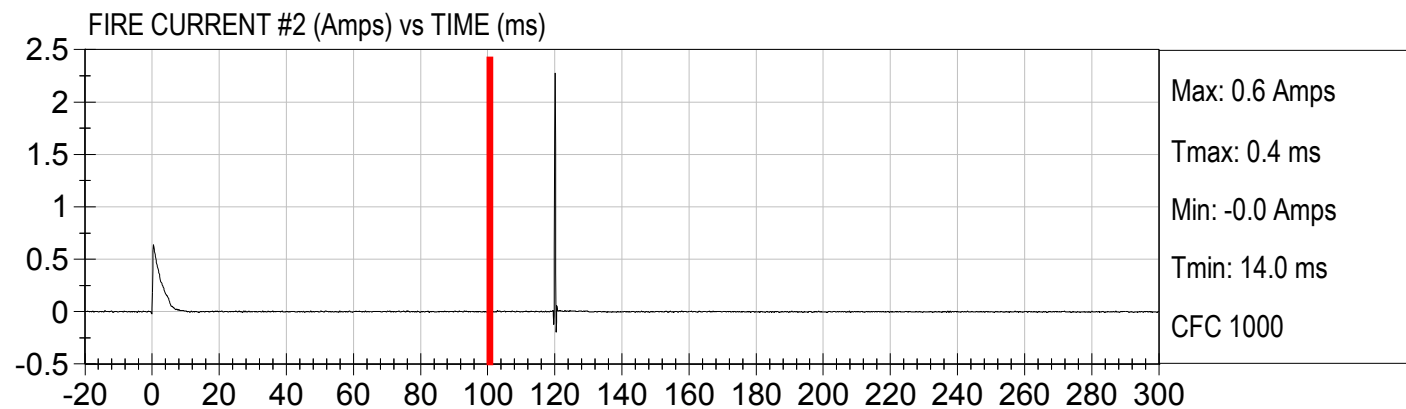
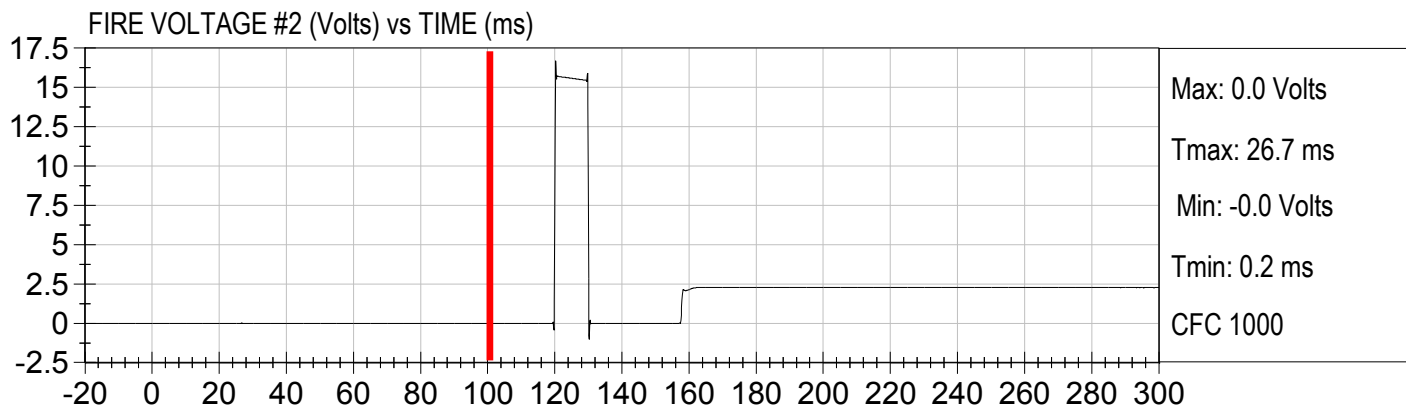
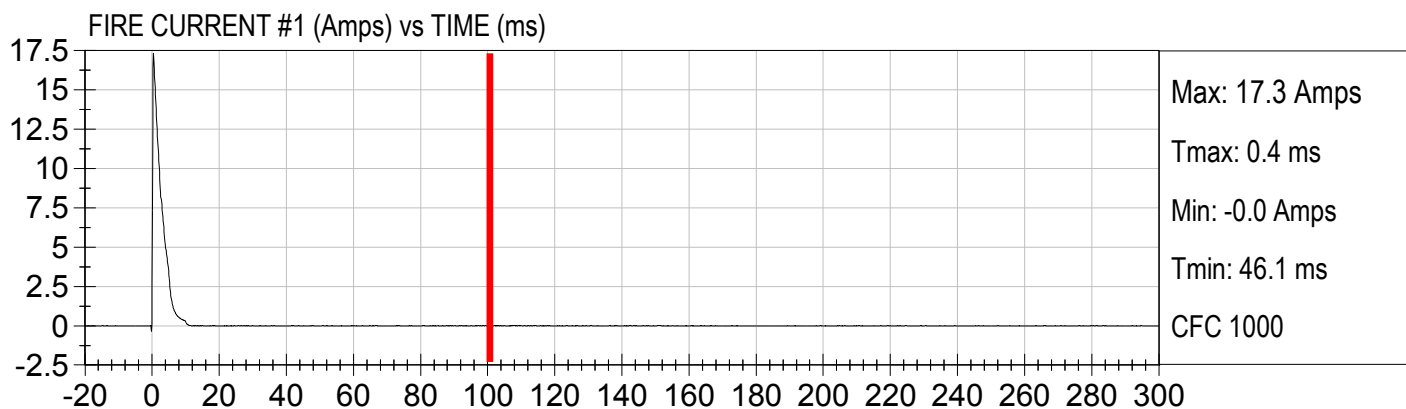
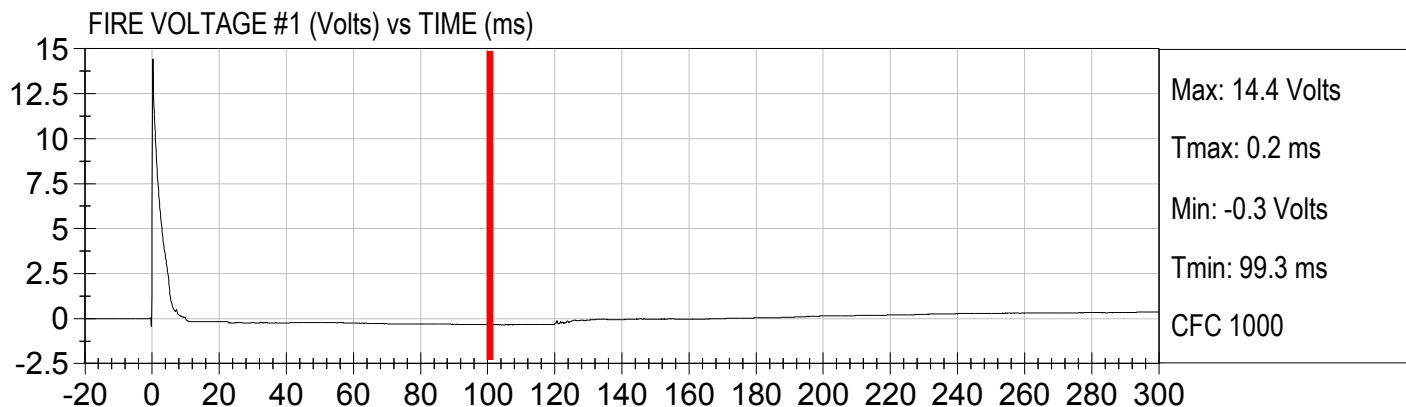


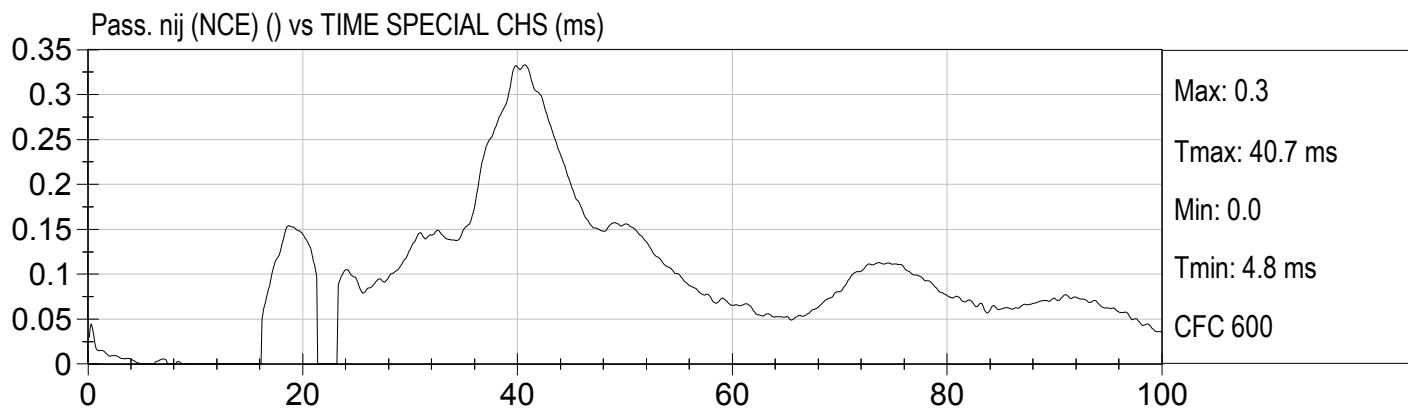
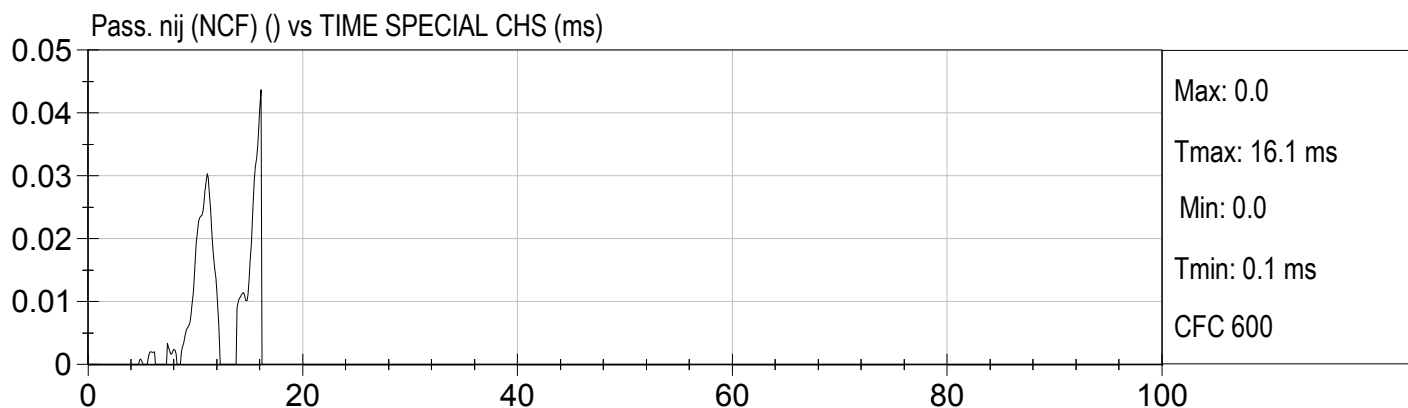
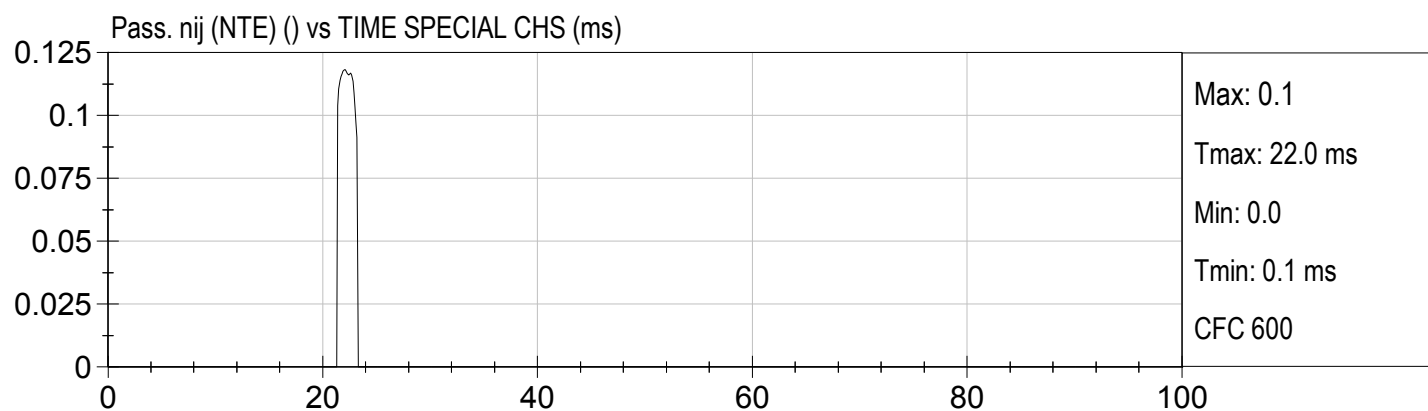
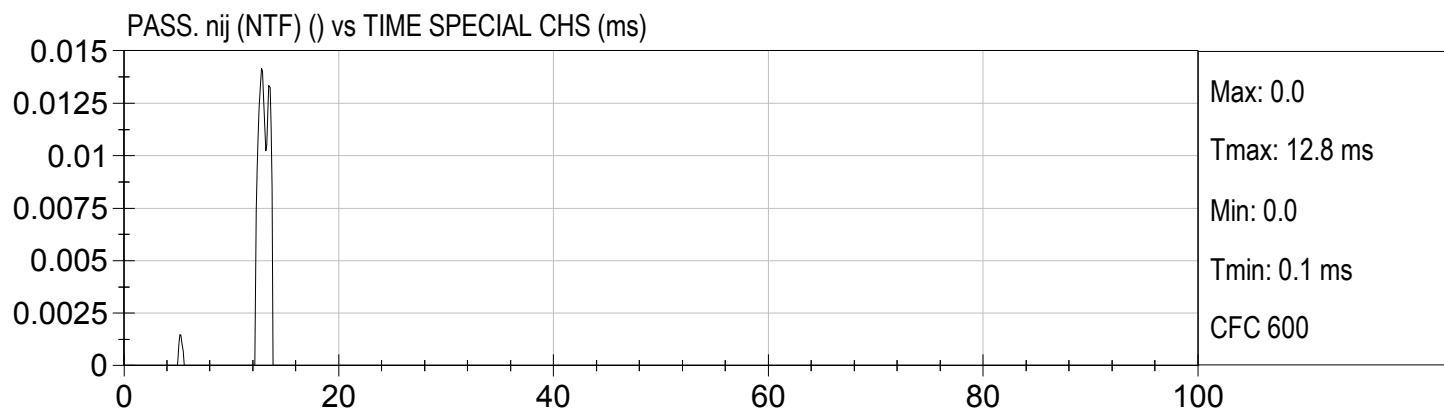
Injury Values Calculated between 0ms and 100ms





Injury Values Calculated between 0ms and 100ms





## APPENDIX C

### CRASH TEST PHOTOGRAPHS

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|               |                                                                |      |
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# C20140103



MFD BY GENERAL MOTORS DE MEXICO, S. DE R.L. DE C.V. 01/14

GVWR  
3130 KG  
6900 LB

GAWR FRT  
1656 KG  
3650 LB

GAWR RR  
1792 KG  
3950 LB



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

**3GCPCPEH5EG366679**

TYPE: TRUCK

MODEL: C15543

| CBHG | TIRE SIZE  | SPEED RTG | RIM     | COLD TIRE PRESSURE |
|------|------------|-----------|---------|--------------------|
| FRT  | P255/70R17 | S         | 17X8J   | 240KPA(35PSI)      |
| RR   | P255/70R17 | S         | 17X8J   | 240KPA(35PSI)      |
| SPA  | P255/70R17 | S         | 17X7.5J | 240KPA(35PSI)      |

SEE OWNER'S MANUAL  FOR MORE INFORMATION.



# C20140103



## TIRE AND LOADING INFORMATION

SEATING CAPACITY TOTAL 6 FRONT 3 REAR 3

The combined weight of occupants and cargo should never exceed 812 kg or 1791 lbs.

| TIRE  | ORIGINAL SIZE |   | COLD TIRE PRESSURE |
|-------|---------------|---|--------------------|
| FRONT | P255/70R17    | S | 240 kPa, 35 PSI    |
| REAR  | P255/70R17    | S | 240 kPa, 35 PSI    |
| SPARE | P255/70R17    | S | 240 kPa, 35 PSI    |

SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION

3GCPCEH5E6386679

Tire Placard





Pre-Test Front View of Test Vehicle



C-4.



Post-Test Front View of Test Vehicle



Pre-Test Left Side View of Test Vehicle





Post-Test Left Side View of Test Vehicle





Pre-Test Right Side View of Test Vehicle





Post-Test Right Side View of Test Vehicle





Pre-Test Left Front Three-Quarter View of Test Vehicle





Post-Test Left Front Three-Quarter View of Test Vehicle





Pre-Test Right Front Three-Quarter View of Test Vehicle





Post-Test Right Front Three-Quarter View of Test Vehicle





Pre-Test Right Rear Three-Quarter View of Test Vehicle





Post-Test Right Rear Three-Quarter View of Test Vehicle





Pre-Test Left Rear Three-Quarter View of Test Vehicle





Post-Test Left Rear Three-Quarter View of Test Vehicle



Pre-Test Rear View of Test Vehicle





Post-Test Rear View of Test Vehicle



Pre-Test Windshield View





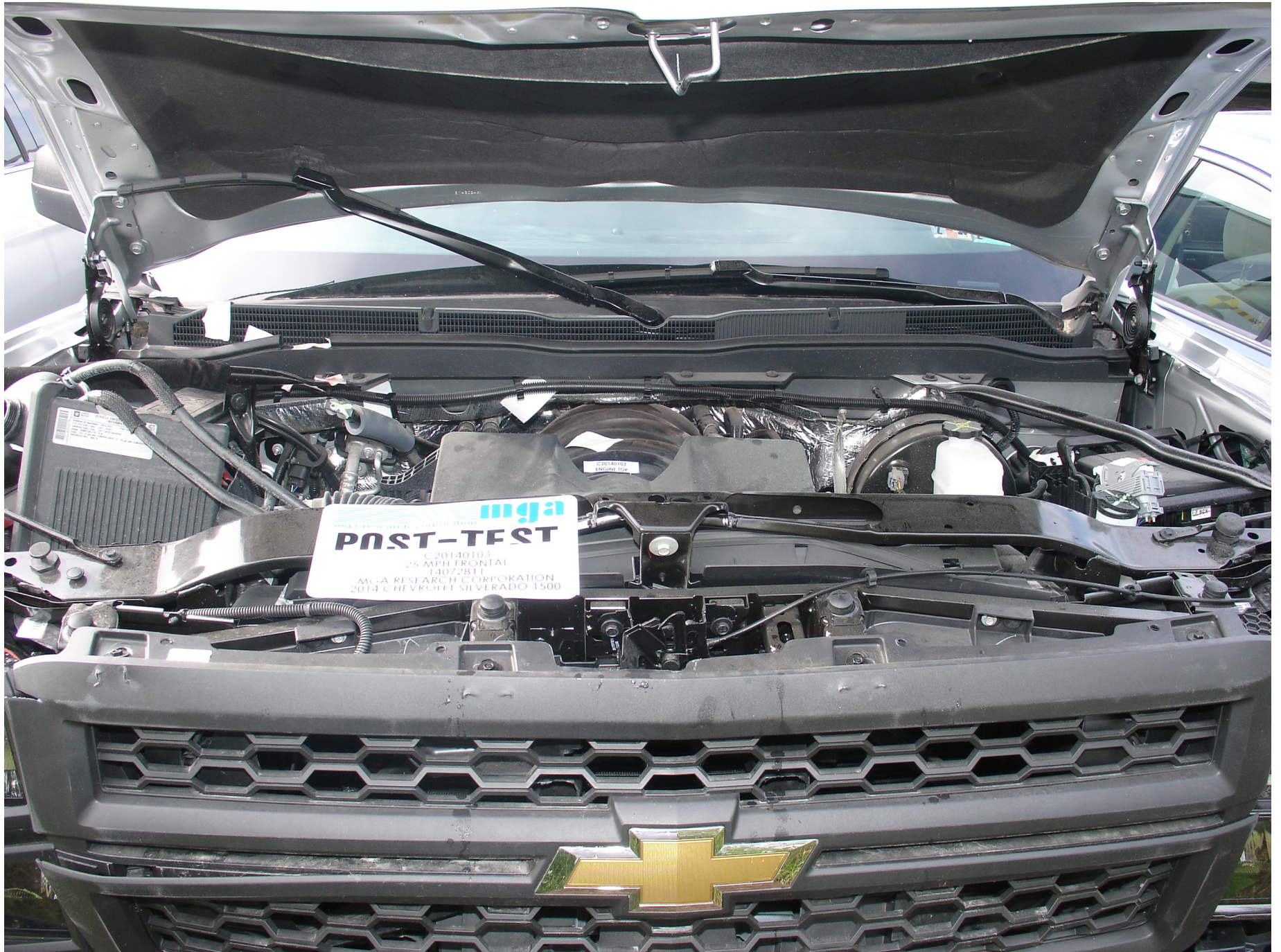
Post-Test Windshield View





Pre-Test Engine Compartment View





Post-Test Engine Compartment View



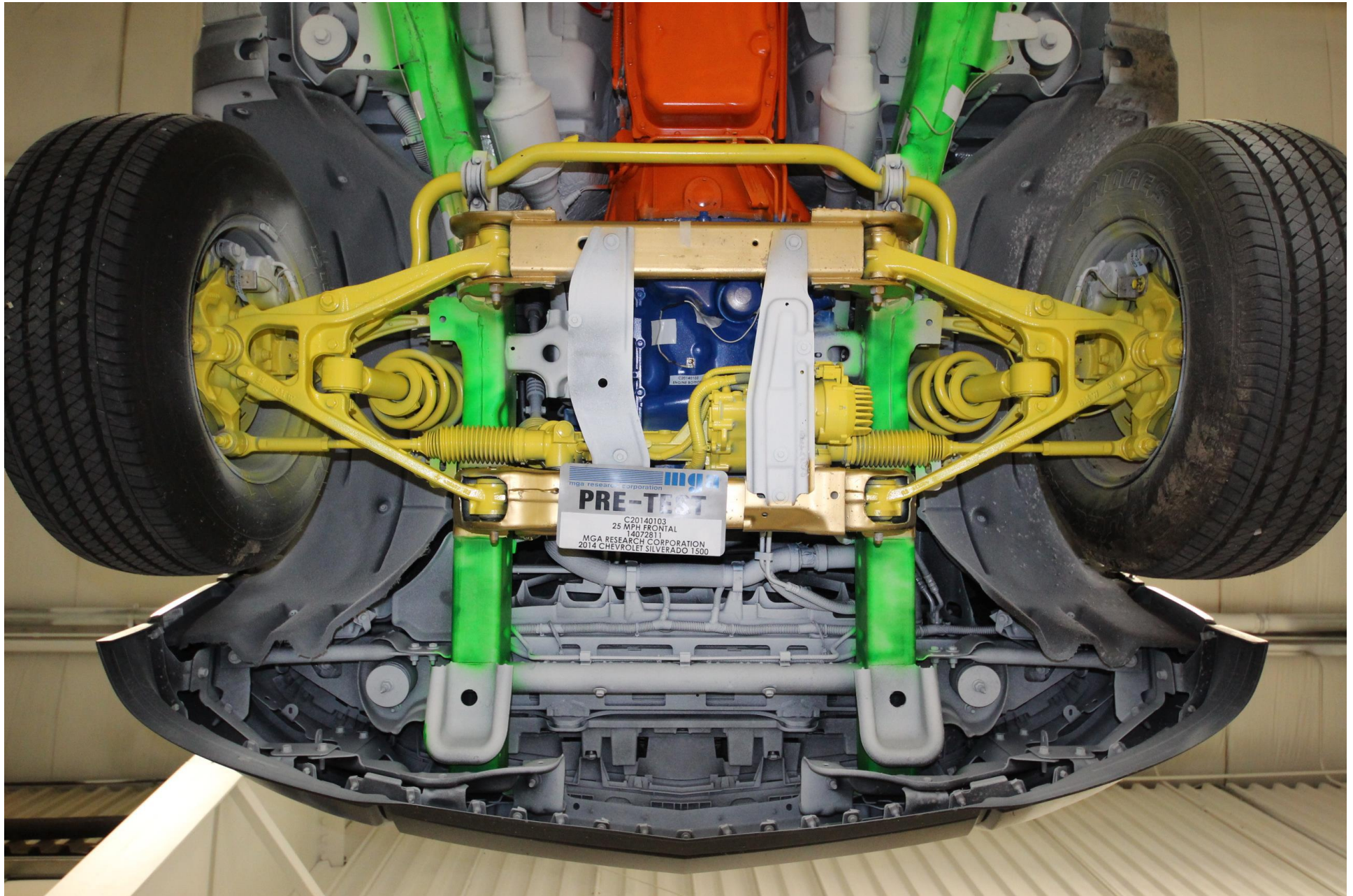


Pre-Test Fuel Filler Cap View



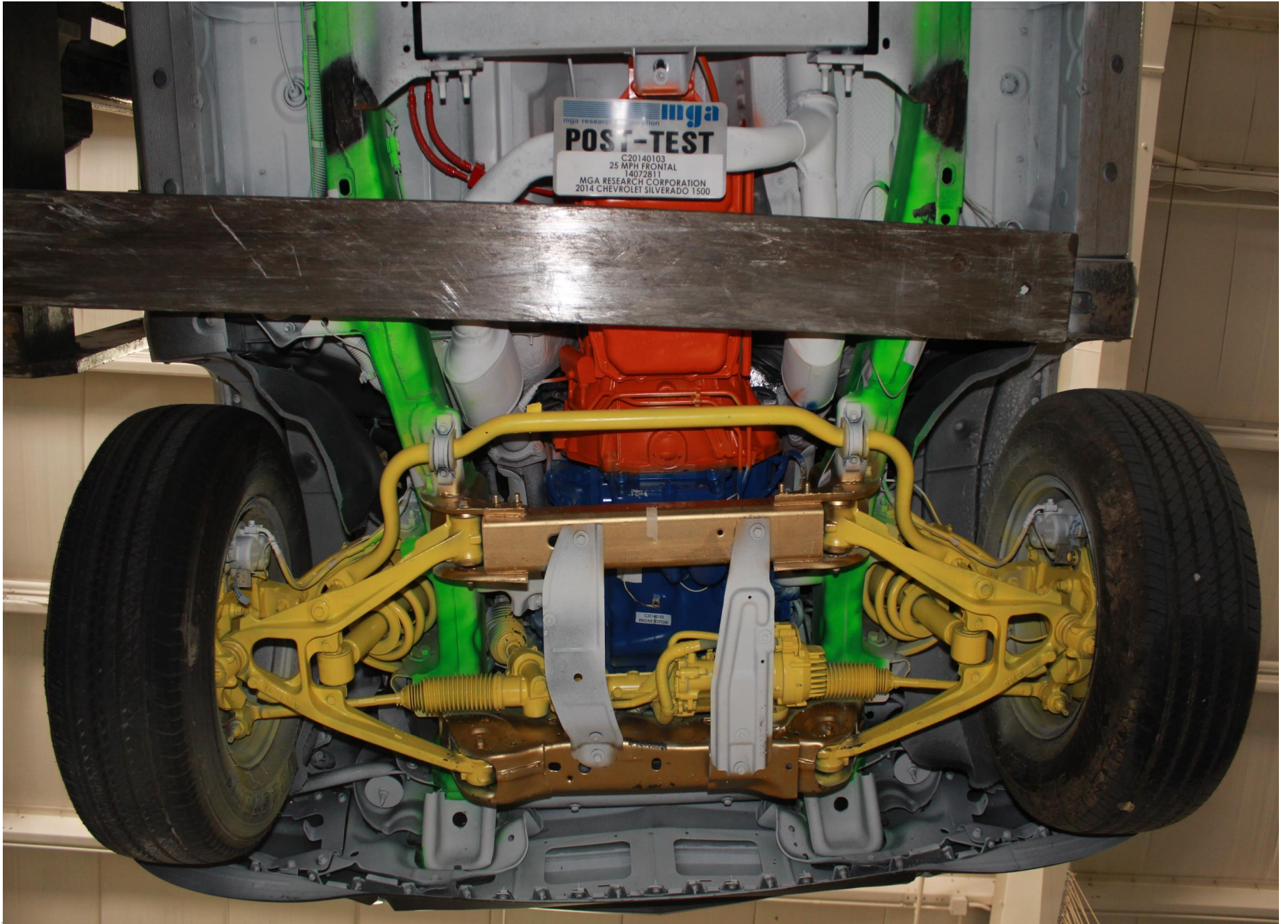
Post-Test Fuel Filler Cap View





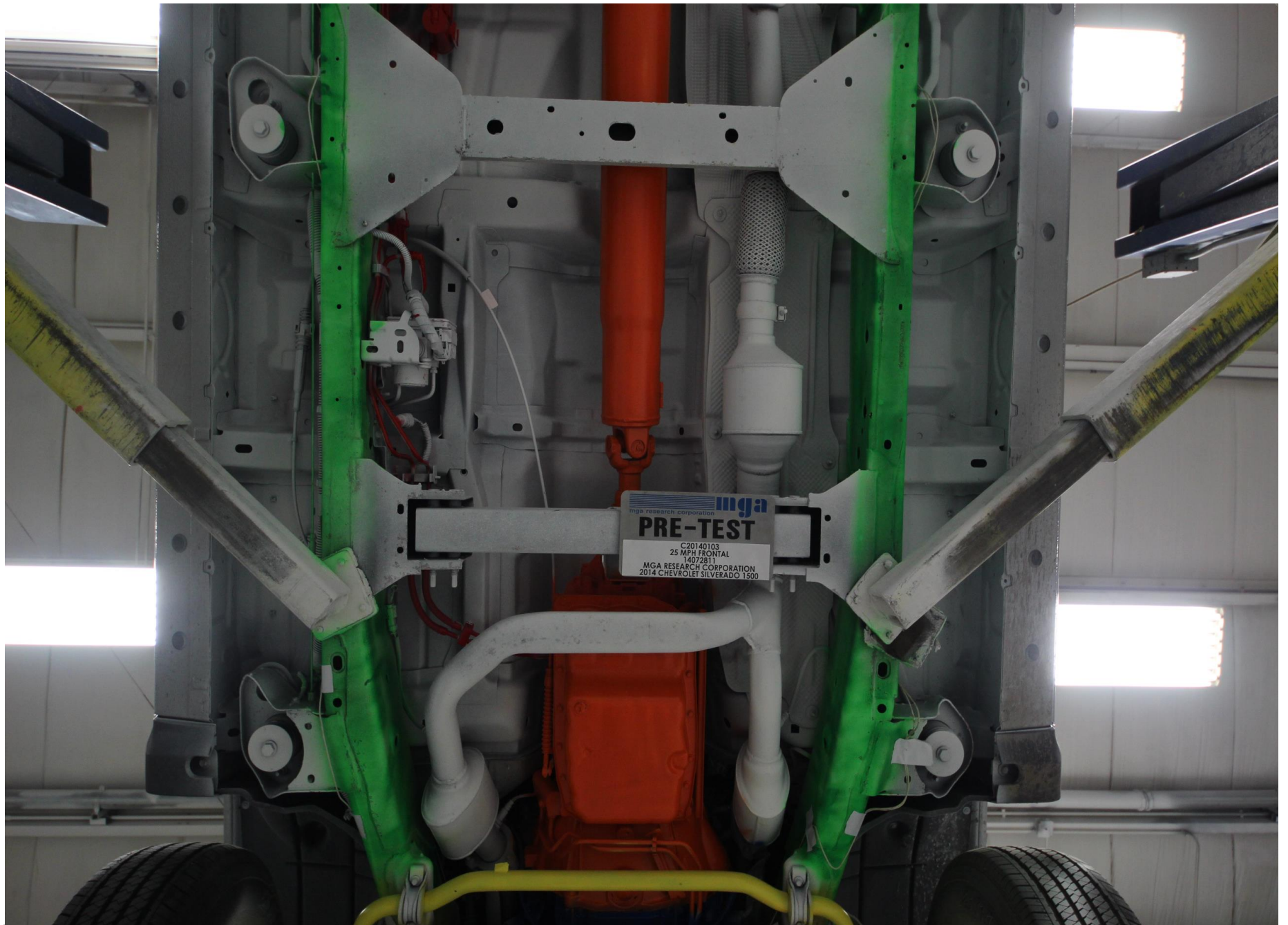
Pre-Test Front Underbody View





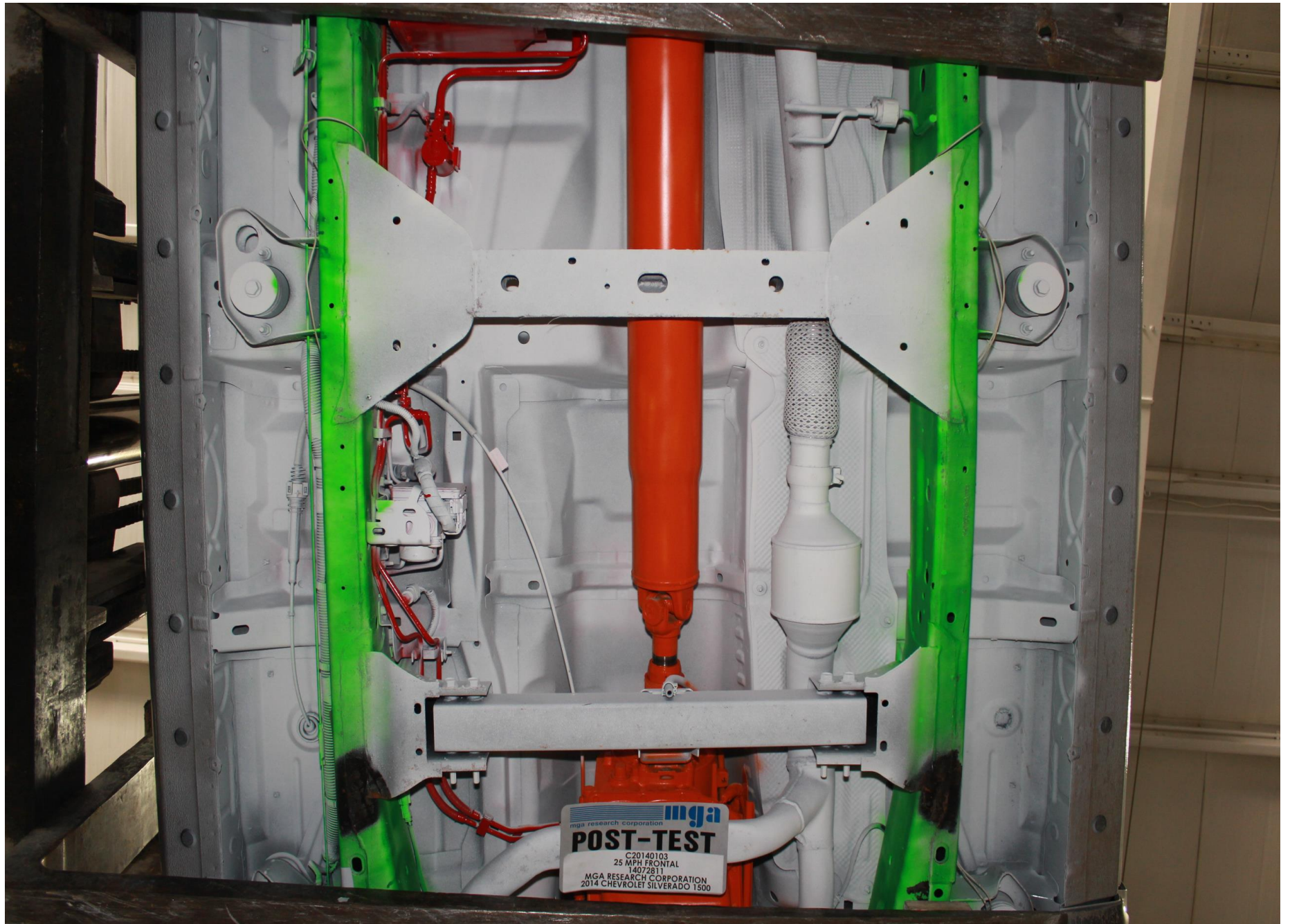
Post-Test Front Underbody View





Pre-Test Mid Underbody View





Post-Test Mid Underbody View





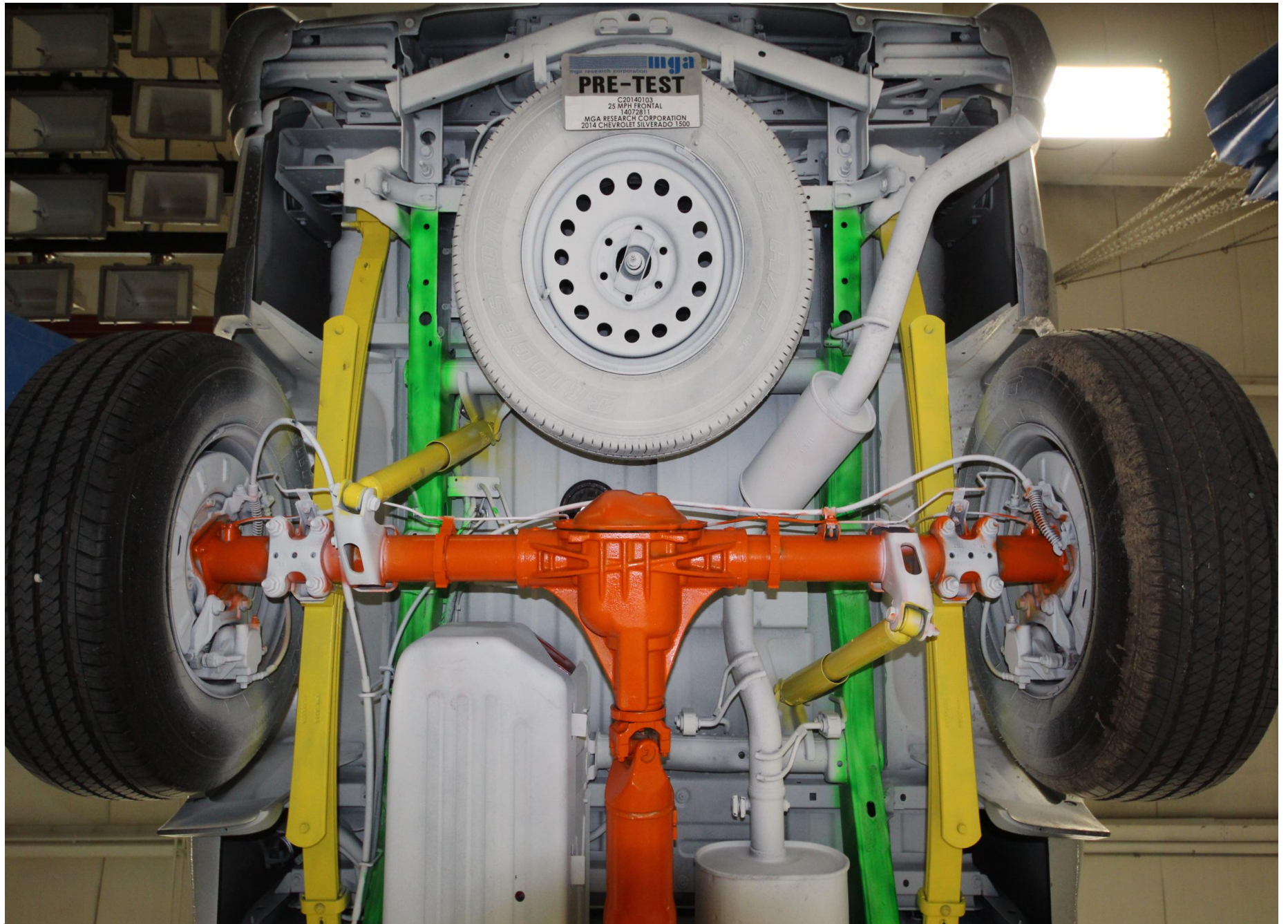
Pre-Test Mid Rear Underbody View





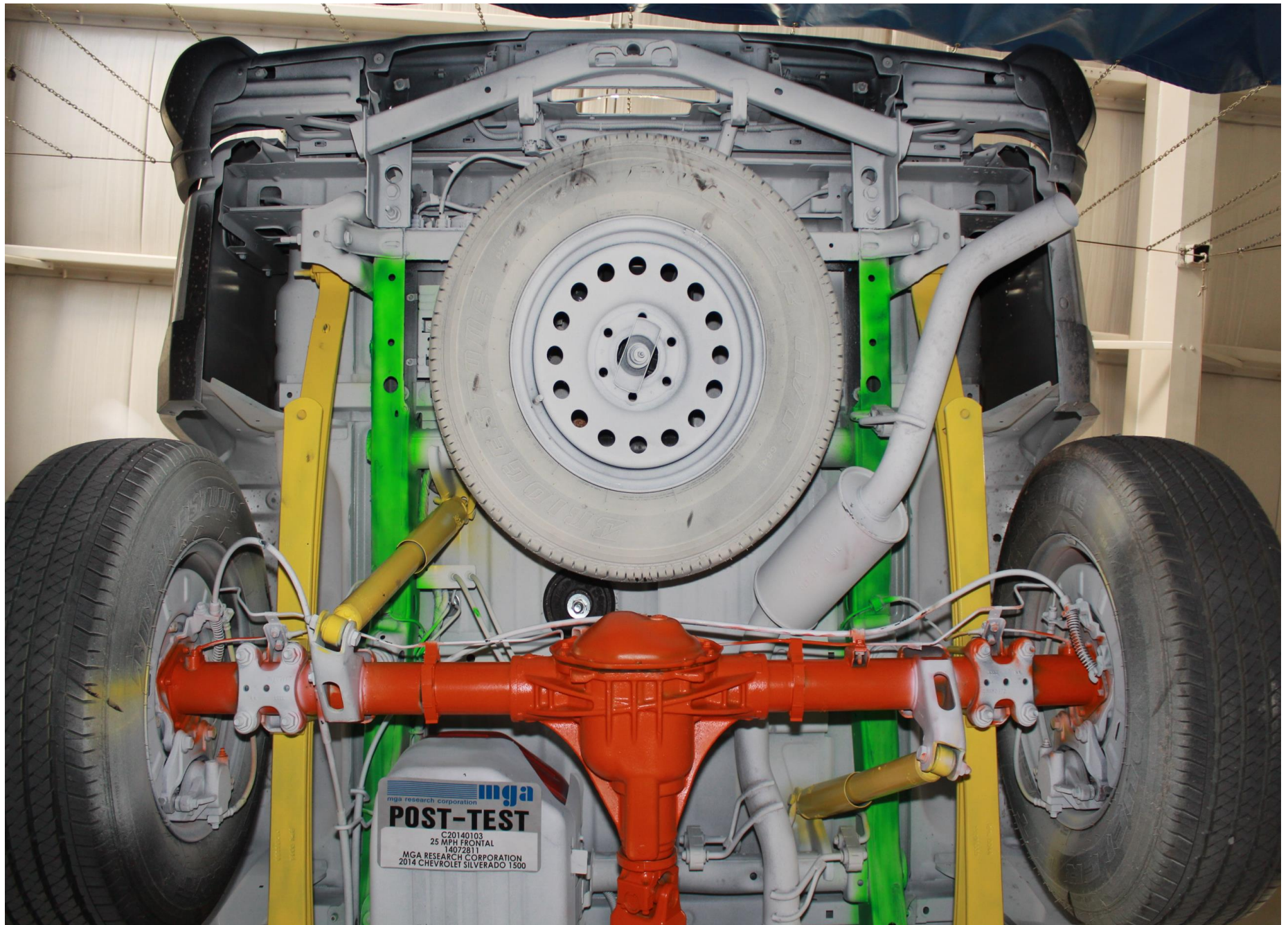
Post-Test Mid Rear Underbody View





Pre-Test Rear Underbody View





Post-Test Rear Underbody View





Pre-Test Driver Dummy Front View (head position)





Post-Test Driver Dummy Front View (head position)





Pre-Test Driver Dummy Position Left Side View





Post-Test Driver Dummy Position Left Side View





Pre-Test Driver Dummy Position Left Side View (door open)



Post-Test Driver Dummy Position Left Side View (door open)





Pre-Test Driver Dummy Seat Position



C-40.



Post-Test Driver Dummy Seat Position





Pre-Test Driver Dummy Feet Position



Post-Test Driver Dummy Feet Position





Pre-Test Driver Side Knee Bolster View





Post-Test Driver Side Knee Bolster View





Post-Test Driver Dummy Airbag Contact





Post-Test Driver Dummy Knee Contact



C-47.



Post-Test Driver Dummy Head Contact (curtain airbag)



Pre-Test Passenger Dummy Front View (head position)





Post-Test Passenger Dummy Front View (head position)



C-50.



Pre-Test Passenger Dummy Position Right Side View



  
**POST TEST**  
 C20140103  
 25 MPH FRONTAL  
 14072811  
 MGA RESEARCH CORPORATION  
 2014 CHEVROLET SILVERADO 1500

### Post-Test Passenger Dummy Position Right Side View





Pre-Test Passenger Dummy Position Right Side View (door open)



Post-Test Passenger Dummy Position Right Side View (door open)





Pre-Test Passenger Dummy Seat Position





Post-Test Passenger Dummy Seat Position



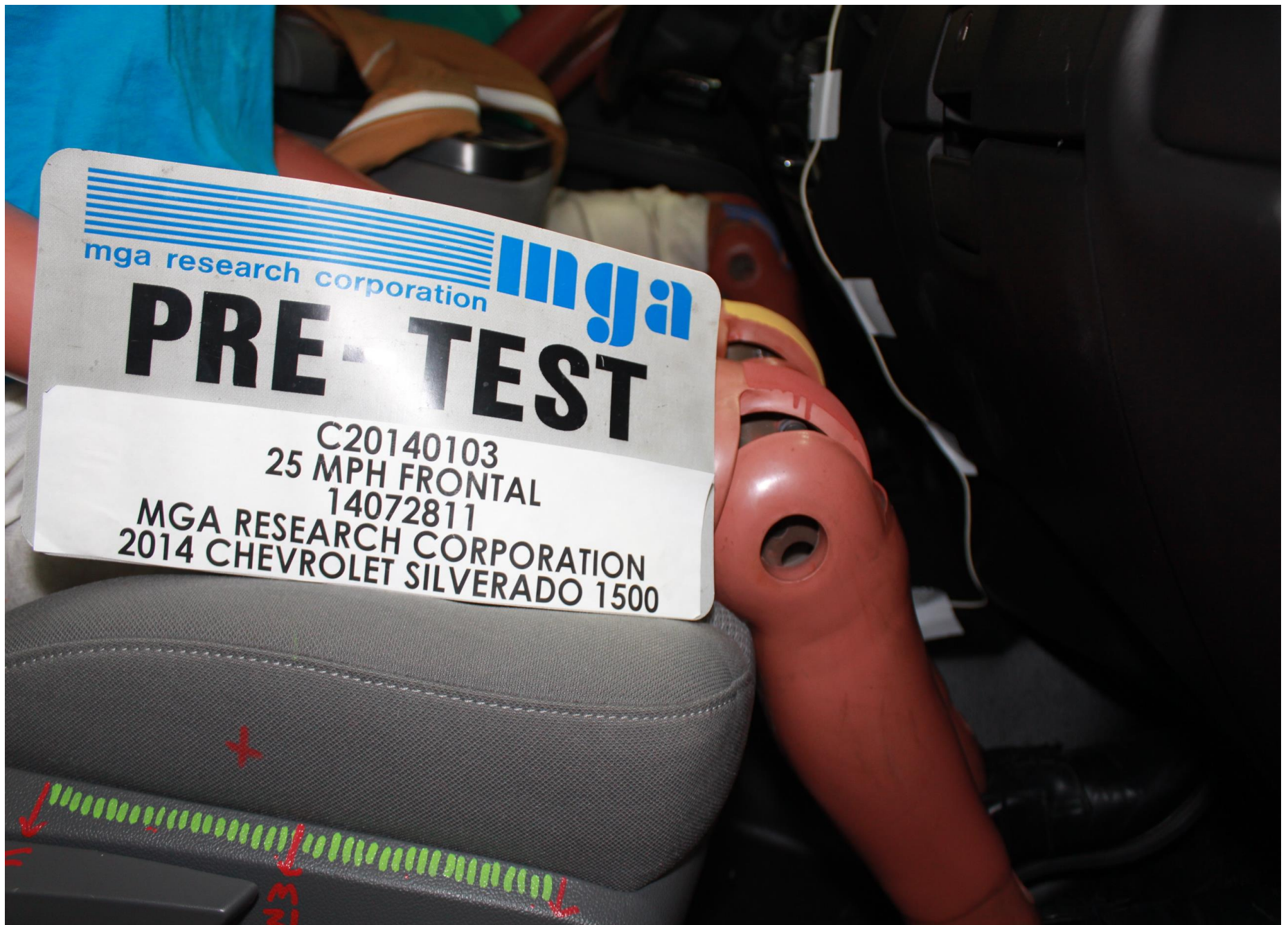


Pre-Test Passenger Dummy Feet Position





Post-Test Passenger Dummy Feet Position



Pre-Test Passenger Side Knee Bolster View



C-59.



Post-Test Passenger Side Knee Bolster View



C-60.



Post-Test Passenger Dummy Airbag Contact

C-61.



Post-Test Passenger Dummy Knee Contact





Post-Test Passenger Dummy Head Contact (headrest)





Post-Test Passenger Dummy Head Contact (curtain airbag)





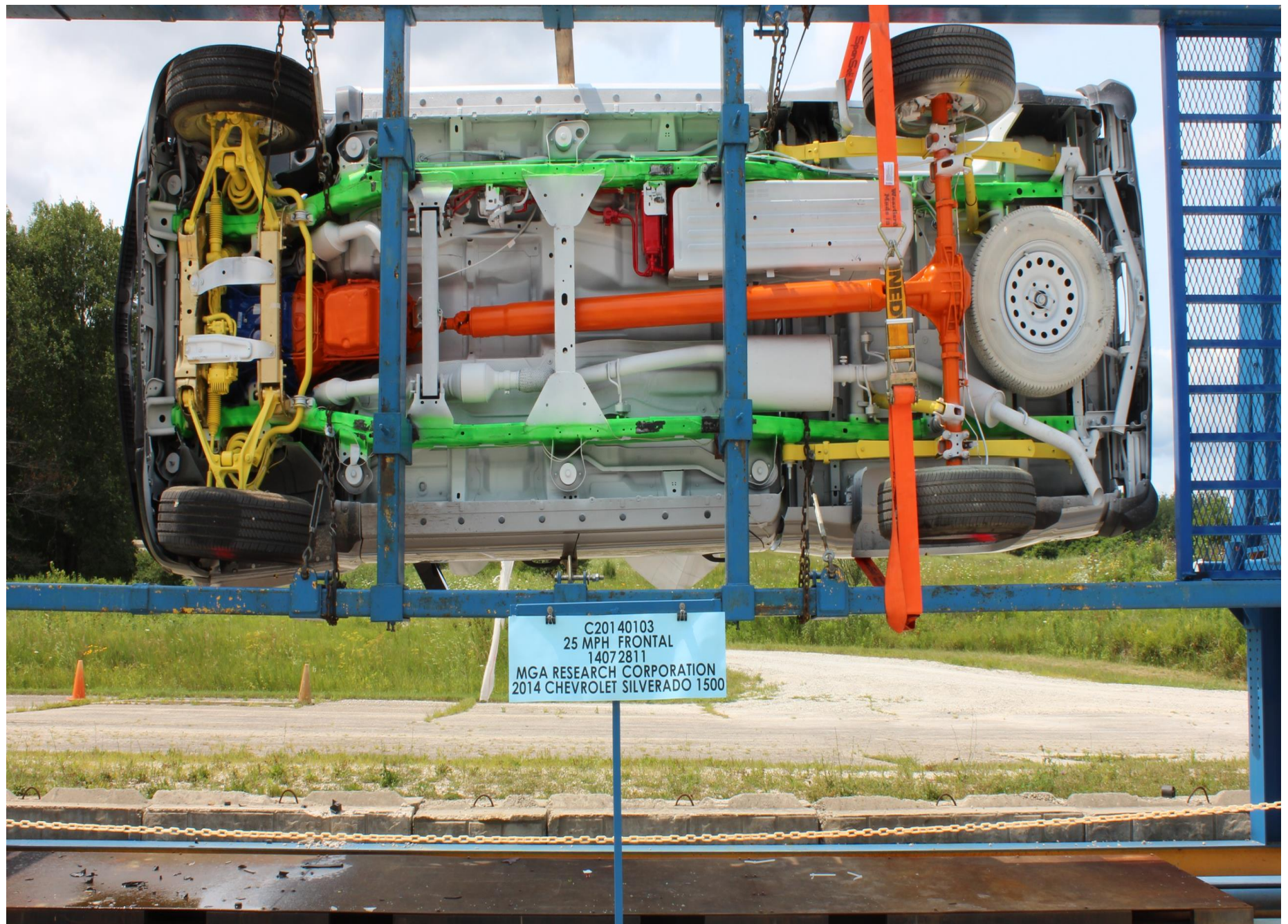
Rollover 90 Degrees





Rollover 180 Degrees





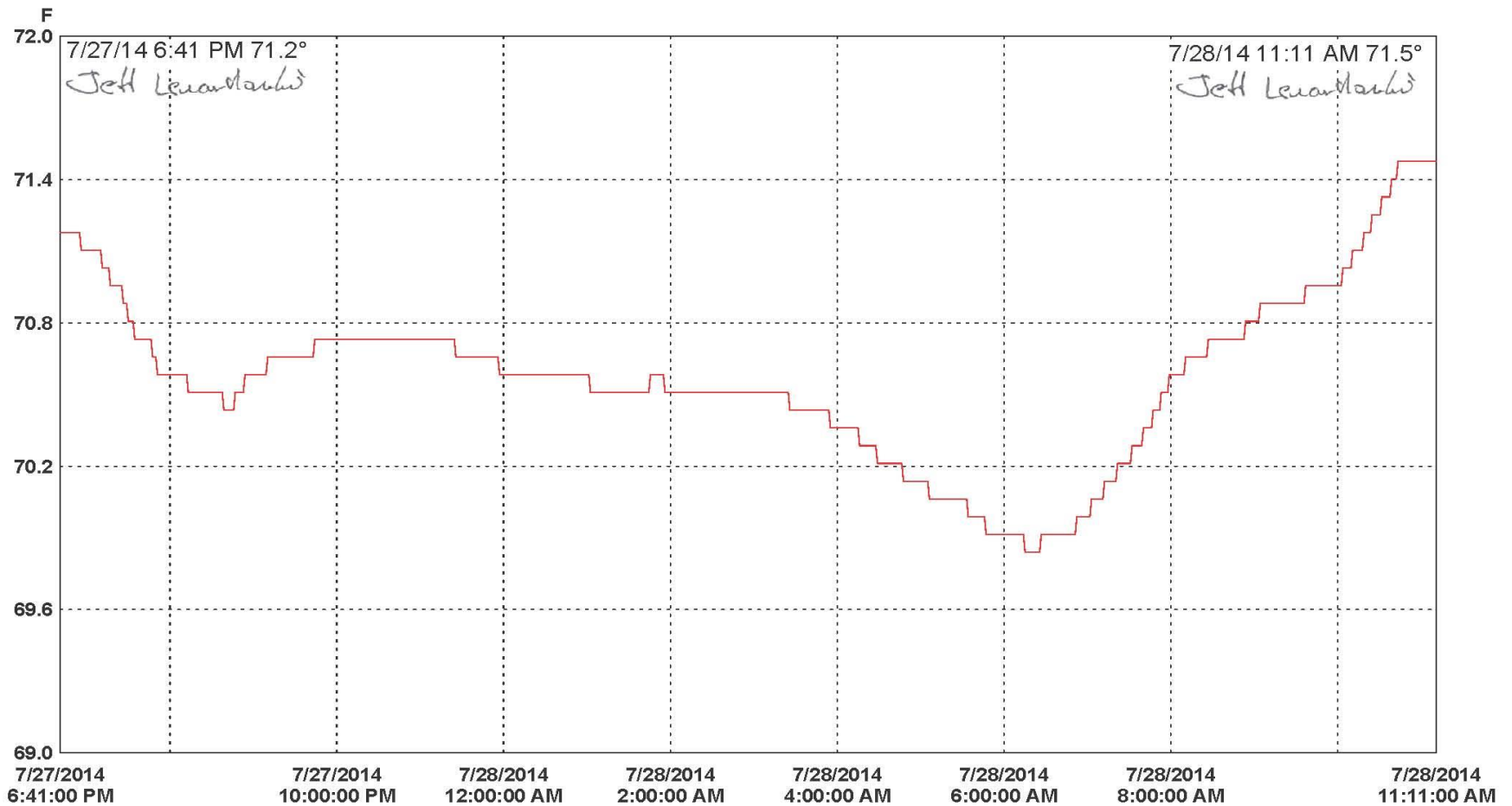
Rollover 270 Degrees





Rollover 360 Degrees

C-68.



2 hours/div 16:30:00 (M/d/yyyy h:mm:ss tt) Central Time Graph file (truncated): 2014 Chevrolet Silverado 208 7-28-14.spg

| LN | Serial # | Description      | CH | Value | Maximum | Average | Minimum | Units | CH description | Logger file                   |
|----|----------|------------------|----|-------|---------|---------|---------|-------|----------------|-------------------------------|
| 1  | 10102162 | MGATemp_10102162 | 1  |       | 71.48   | 70.57   | 69.84   | F     | Temperature    | 10102162_MGATemp_10102162.spl |

| LN | Logger file                                                                                 | ID # | Security | Created by | Creation time |
|----|---------------------------------------------------------------------------------------------|------|----------|------------|---------------|
| 1  | C:\Program Files (x86)\Veriteq Instruments\vLog 4.4\2015 NCAP\10102162_MGATemp_10102162.spl |      |          |            |               |

| LN | Serial # | Last calibrated by | Last calibration | Next calibration |
|----|----------|--------------------|------------------|------------------|
| 1  | 10102162 |                    |                  |                  |

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### LOW RISK PHOTOGRAPHS

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Pre-Test 5th Fem. P1 Driver Dummy Left Side View









Pre-Test 5th Fem. P1 Driver Dummy Right Side View



D-4.



Post-Test 5th Fem. P1 Driver Dummy Right Side View



D-5.



Post-Test 5th Fem. P1 Driver Dummy Airbag Left Side View



Post-Test 5th Fem. P1 Driver Dummy Airbag Right Side View





Post-Test 5th Fem. P1 Driver Dummy Head Contact (headrest/seat back)





Pre-Test 5th Fem. P2 Driver Dummy Left Side View





Post-Test 5th Fem. P2 Driver Dummy Left Side View





Pre-Test 5th Fem. P2 Driver Dummy Right Side View





Post-Test 5th Fem. P2 Driver Dummy Right Side View



D-12.



Post-Test 5th Fem. P2 Driver Dummy Airbag Left Side View





Post-Test 5th Fem. P2 Driver Dummy Airbag Right Side View





Post-Test 5th Fem. P2 Driver Dummy Head Contact (visor)





Pre-Test 3YO P1 Passenger Dummy Left Side View





Post-Test 3YO P1 Passenger Dummy Left Side View



D-17.



Pre-Test 3YO P1 Passenger Dummy Right Side View





Post-Test 3YO P1 Passenger Dummy Right Side View





Post-Test 3YO P1 Passenger Dummy Airbag Right Side View





Post-Test 3YO P1 Passenger Dummy Head Contact (headrest/seat back)





Pre-Test 3YO P2 Passenger Dummy Left Side View





Post-Test 3YO P2 Passenger Dummy Left Side View





Pre-Test 3YO P2 Passenger Dummy Right Side View





Post-Test 3YO P2 Passenger Dummy Right Side View





Post-Test 3YO P2 Passenger Dummy Airbag Left Side View





Pre-Test 6YO P1 Passenger Dummy Left Side View





Post-Test 6YO P1 Passenger Dummy Left Side View





Pre-Test 6YO P1 Passenger Dummy Right Side View





Post-Test 6YO P1 Passenger Dummy Right Side View





Post-Test 6YO P1 Passenger Dummy Airbag Right Side View





Post-Test 6YO P1 Passenger Dummy Head Contact (seat back)





Post-Test 6YO P1 Passenger Dummy Head Contact (visor)





Pre-Test 6YO P2 Passenger Dummy Left Side View





Post-Test 6YO P2 Passenger Dummy Left Side View





Pre-Test 6YO P2 Passenger Dummy Right Side View





Post-Test 6YO P2 Passenger Dummy Right Side View



D-37.



Post-Test 6YO P2 Passenger Dummy Airbag Right Side View



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Angel Guard Angel Ride Car Bed Belted, Forward Seat Track



Angel Guard Angel Ride Car Bed Belted, Middle Seat Track



Angel Guard Angel Ride Car Bed Belted, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Forward Seat Track





Cosco Arriva WBBase, Belted, Rear Facing, Forward Seat Track



Cosco Arriva WBBase, Belted, Rear Facing, Middle Seat Track



Cosco Arriva WBBase, Belted, Rear Facing, Rearward Seat Track



Cosco Arriva WBBase, Unbelted, Rear Facing, Forward Seat Track





Cosco Arriva WBBase, Unbelted, Rear Facing, Middle Seat Track



Cosco Arriva WBBase, Unbelted, Rear Facing, Rearward Seat Track



Cosco Arriva WBBase, Unbelted, Forward Facing, Forward Seat Track



Cosco Arriva WBBase, Unbelted, Forward Facing, Middle Seat Track



Cosco Arriva WBase, Unbelted, Forward Facing, Rearward Seat Track



Cosco Arriva WOut, Belted, Rear Facing, Forward Seat Track



Cosco Arriva WOut, Belted, Rear Facing, Middle Seat Track



Cosco Arriva WOut, Belted, Rear Facing, Rearward Seat Track





Cosco Arriva WOut, Unbelted, Rear Facing, Forward Seat Track



Cosco Arriva WOut, Unbelted, Rear Facing, Middle Seat Track



Cosco Arriva WOut, Unbelted, Rear Facing, Rearward Seat Track



Cosco Arriva WOut, Unbelted, Forward Facing, Forward Seat Track



Cosco Arriva WOut, Unbelted, Forward Facing, Middle Seat Track



Cosco Arriva WOut, Unbelted, Forward Facing, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Middle Seat Track





Graco Snuggly WBase, Belted, Rear Facing, Forward Seat Track



Graco Snuggly WBase, Belted, Rear Facing, Middle Seat Track



Graco Snuggly WBase, Belted, Rear Facing, Rearward Seat Track



Graco Snuggly WBase, Unbelted, Rear Facing, Forward Seat Track



Graco Snuggly WBBase, Unbelted, Rear Facing, Middle Seat Track



Graco Snuggly WBBase, Unbelted, Rear Facing, Rearward Seat Track



Graco Snuggly WBBase, Unbelted, Forward Facing, Forward Seat Track



Graco Snuggly WBBase, Unbelted, Forward Facing, Middle Seat Track





Graco Snuggly WBase, Unbelted, Forward Facing, Rearward Seat Track



Graco Snuggly WOut, Belted, Rear Facing, Forward Seat Track



Graco Snuggly WOut, Belted, Rear Facing, Middle Seat Track



Graco Snuggly WOut, Belted, Rear Facing, Rearward Seat Track



Graco Snuggly WOut, Unbelted, Rear Facing, Forward Seat Track



Graco Snuggly WOut, Unbelted, Rear Facing, Middle Seat Track



Graco Snuggly WOut, Unbelted, Rear Facing, Rearward Seat Track



Graco Snuggly WOut, Unbelted, Forward Facing, Forward Seat Track





Graco Snugride W/Out, Unbelted, Forward Facing, Middle Seat Track



Graco Snugride W/Out, Unbelted, Forward Facing, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Rearward Seat Track



Peg Perego Viaggio WBase, Belted, Rear Facing, Forward Seat Track



Peg Perego Viaggio WBase, Belted, Rear Facing, Middle Seat Track



Peg Perego Viaggio WBase, Belted, Rear Facing, Rearward Seat Track



Peg Perego Viaggio WBase, Unbelted, Rear Facing, Forward Seat Track





Peg Perego Viaggio WBase, Unbelted, Rear Facing, Middle Seat Track



Peg Perego Viaggio WBase, Unbelted, Rear Facing, Rearward Seat Track



Peg Perego Viaggio WBase, Unbelted, Forward Facing, Forward Seat Track



Peg Perego Viaggio WBase, Unbelted, Forward Facing, Middle Seat Track



Peg Perego Viaggio WBase, Unbelted, Forward Facing, Rearward Seat Track



Peg Perego Viaggio WOut, Belted, Rear Facing, Forward Seat Track



Peg Perego Viaggio WOut, Belted, Rear Facing, Middle Seat Track



Peg Perego Viaggio WOut, Belted, Rear Facing, Rearward Seat Track





Peg Perego Viaggio WOut, Unbelted, Rear Facing, Forward Seat Track



Peg Perego Viaggio WOut, Unbelted, Rear Facing, Middle Seat Track



Peg Perego Viaggio WOut, Unbelted, Rear Facing, Rearward Seat Track



Peg Perego Viaggio WOut, Unbelted, Forward Facing, Forward Seat Track



Peg Perego Viaggio WOut, Unbelted, Forward Facing, Middle Seat Track



Peg Perego Viaggio WOut, Unbelted, Forward Facing, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Forward Seat Track





Britax Roundabout Forward Facing, Belted, Forward Seat Track



Britax Roundabout Forward Facing, Belted, Middle Seat Track



Britax Roundabout Forward Facing, Belted, Rearward Seat Track



Britax Roundabout Forward Facing, Unbelted, Forward Seat Track



Britax Roundabout Forward Facing, Unbelted, Middle Seat Track



Britax Roundabout Forward Facing, Unbelted, Rearward Seat Track



Britax Roundabout Rear Facing, Belted, Forward Seat Track



Britax Roundabout Rear Facing, Belted, Middle Seat Track





Britax Roundabout Rear Facing, Belted, Rearward Seat Track



Britax Roundabout Rear Facing, Unbelted, Forward Seat Track



Britax Roundabout Rear Facing, Unbelted, Middle Seat Track



Britax Roundabout Rear Facing, Unbelted, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Middle Seat Track





Cosco High Back Booster Forward Facing, Belted, Forward Seat Track



Cosco High Back Booster Forward Facing, Belted, Middle Seat Track



Cosco High Back Booster Forward Facing, Belted, Rearward Seat Track



Cosco High Back Booster Forward Facing, Unbelted, Forward Seat Track





Cosco High Back Booster Forward Facing, Unbelted, Middle Seat Track



Cosco High Back Booster Forward Facing, Unbelted, Rearward Seat Track



Cosco High Back Booster Rear Facing, Unbelted, Forward Seat Track



Cosco High Back Booster Rear Facing, Unbelted, Middle Seat Track



Cosco High Back Booster Rear Facing, Unbelted, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Rearward Seat Track





Evenflo Generations Forward Facing, Belted, Forward Seat Track



Evenflo Generations Forward Facing, Belted, Middle Seat Track



Evenflo Generations Forward Facing, Belted, Rearward Seat Track



Evenflo Generations Forward Facing, Unbelted, Forward Seat Track





Evenflo Generations Forward Facing, Unbelted, Middle Seat Track



Evenflo Generations Forward Facing, Unbelted, Rearward Seat Track



Evenflo Generations Rear Facing, Unbelted, Forward Seat Track



Evenflo Generations Rear Facing, Unbelted, Middle Seat Track



Evenflo Generations Rear Facing, Unbelted, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Forward Seat Track





Graco ComfortSport Forward Facing, Belted, Forward Seat Track



Graco ComfortSport Forward Facing, Belted, Middle Seat Track



Graco ComfortSport Forward Facing, Belted, Rearward Seat Track



Graco ComfortSport Forward Facing, Unbelted, Forward Seat Track





Graco ComfortSport Forward Facing, Unbelted, Middle Seat Track



Graco ComfortSport Forward Facing, Unbelted, Rearward Seat Track



Graco ComfortSport Rear Facing, Belted, Forward Seat Track



Graco ComfortSport Rear Facing, Belted, Middle Seat Track



Graco ComfortSport Rear Facing, Belted, Rearward Seat Track



Graco ComfortSport Rear Facing, Unbelted, Forward Seat Track



Graco ComfortSport Rear Facing, Unbelted, Middle Seat Track



Graco ComfortSport Rear Facing, Unbelted, Rearward Seat Track





Unbelted 5th Percentile Female Dummy Reactivation, Middle Seat Track



## APPENDIX F

### INSTRUMENTATION CALIBRATION

#### INSTRUMENTS FOR DRIVER DUMMY NO.: 511

|                       | SERIAL NO. | MANUFACTURER | CALIBRATION DATE |
|-----------------------|------------|--------------|------------------|
| Head X                | P74604     | Endevco      | 02/18/14         |
| Head Y                | P74605     | Endevco      | 02/18/14         |
| Head Z                | P74606     | Endevco      | 02/18/14         |
| Neck Load Cell        | N1206      | Denton       | 05/27/14         |
| Chest X               | P79826     | Endevco      | 02/18/14         |
| Chest Y               | P79827     | Endevco      | 02/18/14         |
| Chest Z               | P79828     | Endevco      | 02/18/14         |
| Chest Displacement    | 511        | Servo        | 02/18/14         |
| Left Femur Load Cell  | F643       | Denton       | 07/10/14         |
| Right Femur Load Cell | F639       | Denton       | 07/11/14         |

#### INSTRUMENTS FOR PASSENGER DUMMY NO.: 510

|                       | SERIAL NO. | MANUFACTURER | CALIBRATION DATE |
|-----------------------|------------|--------------|------------------|
| Head X                | P78269     | Endevco      | 02/18/14         |
| Head Y                | P79852     | Endevco      | 02/18/14         |
| Head Z                | P79856     | Endevco      | 02/18/14         |
| Neck Load Cell        | N7489      | Denton       | 03/07/14         |
| Chest X               | P79634     | Endevco      | 02/18/14         |
| Chest Y               | P79635     | Endevco      | 02/18/14         |
| Chest Z               | P79636     | Endevco      | 02/18/14         |
| Chest Displacement    | 510        | Servo        | 02/18/14         |
| Left Femur Load Cell  | F799       | Denton       | 07/11/14         |
| Right Femur Load Cell | F737       | Denton       | 07/11/14         |

**INSTRUMENTS FOR LOW RISK 5<sup>TH</sup> FEMALE DUMMY NO.: 510 (P1 & P2)**

|                       | SERIAL NO. | MANUFACTURER | CALIBRATION DATE |
|-----------------------|------------|--------------|------------------|
| Head X                | P78269     | Endevco      | 02/18/14         |
| Head Y                | P79852     | Endevco      | 02/18/14         |
| Head Z                | P79856     | Endevco      | 02/18/14         |
| Neck Load Cell        | N7489      | Denton       | 03/07/14         |
| Chest X               | P79634     | Endevco      | 02/18/14         |
| Chest Y               | P79635     | Endevco      | 02/18/14         |
| Chest Z               | P79636     | Endevco      | 02/18/14         |
| Chest Displacement    | 510        | Servo        | 02/18/14         |
| Left Femur Load Cell  | F799       | Denton       | 12/31/13         |
| Right Femur Load Cell | F737       | Denton       | 01/02/14         |

**INSTRUMENTS FOR LOW RISK 3 YEAR OLD DUMMY NO.: 031 (P1 & P2)**

|                    | SERIAL NO. | MANUFACTURER | CALIBRATION DATE |
|--------------------|------------|--------------|------------------|
| Head X             | P79758     | Endevco      | 05/14/14         |
| Head Y             | P79759     | Endevco      | 05/14/14         |
| Head Z             | P79761     | Endevco      | 05/14/14         |
| Neck Load Cell     | N233       | Denton       | 02/13/14         |
| Chest X            | P78843     | Endevco      | 02/04/14         |
| Chest Y            | P78951     | Endevco      | 02/04/14         |
| Chest Z            | P82291     | Endevco      | 02/04/14         |
| Chest Displacement | 031        | Servo        | 02/06/14         |

**INSTRUMENTS FOR LOW RISK 6 YEAR OLD DUMMY NO.: 155 (P1 & P2)**

|                    | SERIAL NO. | MANUFACTURER | CALIBRATION DATE |
|--------------------|------------|--------------|------------------|
| Head X             | P78783     | Endevco      | 01/24/14         |
| Head Y             | P78789     | Endevco      | 01/24/14         |
| Head Z             | P78796     | Endevco      | 01/24/14         |
| Neck Load Cell     | N1145      | Denton       | 04/11/14         |
| Chest X            | P77617     | Endevco      | 01/24/14         |
| Chest Y            | P77618     | Endevco      | 01/24/14         |
| Chest Z            | P77620     | Endevco      | 01/24/14         |
| Chest Displacement | 155        | Servo        | 01/28/14         |

**VEHICLE INSTRUMENTS**

|                               | SERIAL NO. | MANUFACTURER | CALIBRATION DATE |
|-------------------------------|------------|--------------|------------------|
| Left Rear Seat Crossmember X  | P63556     | Endevco      | 03/19/14         |
| Right Rear Seat Crossmember X | P78859     | Endevco      | 05/16/14         |
| Top of Engine X               | P73981     | Endevco      | 03/14/14         |
| Bottom of Engine X            | P63889     | Endevco      | 06/06/14         |
| Left Brake Caliper X          | P79658     | Endevco      | 05/07/14         |
| Right Brake Caliper X         | P73689     | Endevco      | 05/22/14         |
| Instrument Panel X            | P73705     | Endevco      | 03/27/14         |
| Trunk Z                       | P66854     | Endevco      | 07/01/14         |