REPORT NUMBER: 208-MGA-2007-016

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

DAIMLERCHRYSLER CORPORATION
2007 DODGE CHARGER PASSENGER CAR
NHTSA NO.: C70307

PREPARED BY:
MGA RESEARCH CORPORATION
5000 WARREN ROAD
BURLINGTON, WI 53105

TEST DATES: JULY 12, 2007 - SEPTEMBER 5, 2007

FINAL REPORT DATE: NOVEMBER 28, 2007

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 DTNH22-03-D-11002.

Prepared by: Jeff Lewandowski Date: November 28, 2007
Jeff Lewandowski, Project Engineer

Reviewed by: David Winkelbauer Date: November 28, 2007
David Winkelbauer, Facility Director

FINAL REPORT ACCEPTED BY OVSC:

Accepted By: Charles R. Carr

Acceptance Date: November 28, 2007

Technical Report Documentation Page

1. Report No. 208-MGA-2007-016	*2. Government Accession No.*	*3. Recipient's Catalog No.*	
4. Title and Subtitle Final Report of FMVSS 208 Compliance Testing of a 2007 Dodge Charger NHTSA No.: C70307		*5. Report Date* November 28, 2007 *6. Performing Organization Code* MGA	
7. Author(s) Jeff Lewandowski, Project Engineer		*8. Performing Organization Report No.* 208-MGA-2007-016	
9. Performing Organization Name and Address MGA Research Corporation 5000 Warren Road Burlington, WI 53105		*10. Work Unit No.* *11. Contract or Grant No.* DTNH22-03-D-11002	
12. Sponsoring Agency Name and Address 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		*13. Type of Report and Period Covered* 7/12/07 – 11/28/07 *14. Sponsoring Agency Code* NVS-220	
15. Supplementary Notes			
16. Abstract Compliance tests were conducted on the subject 2007 Dodge Charger in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP208-13 for the determination of FMVSS 208 compliance. Test failures identified were as follows: TEST FAILURES: None			
17. Key Words Frontal Impact 40 kmph Vehicle Safety Compliance Testing FMVSS 208, “Occupant Crash Protection” FMVSS 212, “Windshield Mounting” FMVSS 219, (partial), “Windshield Zone Intrusion” FMVSS 301, “Fuel System Integrity”		*18. Distribution Statement* Copies of this report are available from the following: U.S. Department of Transportation National Highway Traffic Safety Administration Technical Information Services (TIS) 1200 New Jersey Avenue, S.E. NPO-400 Washington, D.C. 20590	
19. Security Classif. (of this report) Unclassified	*20. Security Classif. (of this page)* Unclassified	*21. No. of Pages* 321	22. Price

Form DOT F1700.7 (8-72)

TABLE OF CONTENTS

SECTION 1

PURPOSE OF COMPLIANCE TESTS

The tests performed are part of a program conducted for the National Highway Traffic Safety Administration (NHTSA) by MGA Research Corporation (MGA) under Contract No. DTNH22-03-D-11002. The purpose of this test was to determine whether the subject vehicle, a 2007 Dodge Charger, NHTSA No. C70307, 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. TP208-13 dated July 27, 2005.

SECTION 2

TESTS PERFORMED

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance

NHTSA No.: C70307
Test Dates: 7/12/07 - 9/5/07

The following checked items indicate the tests that were performed:

- [X] 1. Rear outboard seating position seat belts (S4.1.1.2(b) & (S4.2.4)
- [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 (S7.4.4)
- [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)
- [ ] 11. Suppression tests with 12-month-old CRABI dummy (Part 572, Subpart R)
- [ ] 12. Suppression tests with newborn infant (Part 572, Subpart K)
- [ ] 13. Suppression tests with 3-year-old dummy (Part 572, Subpart P)
- [ ] 14. Suppression tests with 6-year-old dummy (Part 572, Subpart N)
- [ ] 15. Test of reactivation of the passenger air bag system with an unbelted 5th percentile female dummy
- [X] 16. Low risk deployment test with 12-month-old dummy (Part 572, Subpart R)
- [X] 17. Low risk deployment test with 3-year-old dummy (Part 572, Subpart P)
- [X] 18. Low risk deployment test with 6-year-old dummy (Part 572, Subpart N)
- [X] 19. Low risk deployment test with 5th female dummy (Part 572, Subpart O)
- [X] 20. Impact Tests
  - [ ] Frontal Oblique
    - [ ] Belted 50th male dummy driver and passenger (0 to 48 kmph) (S5.1.1(a))
    - [ ] Unbelted 50th male dummy driver and passenger (0 to 48 kmph) (S5.1.2(a)(1))
    - [ ] Unbelted 50th male dummy driver and passenger (32 to 40 kmph) (S5.1.2(a) (1) or S5.1.2(b))
  - [X] Frontal 0°
    - [ ] Belted 50th male dummy driver (0 to 48 kmph) (S5.1.1.(b)(1) or S5.1.1(a))
    - [ ] Belted 50th male dummy passenger (0 to 48 kmph) (S5.1.1.(b)(1) or S5.1.1(a))
    - [ ] Belted 5th female dummy driver (0 to 48 kmph) (S16.1(a))
    - [ ] Belted 5th female dummy passenger (0 to 48 kmph) (S16.1(a))
    - [ ] Belted 50th male dummy driver and passenger (0 to 56 kmph) (S5.1.1.(b)(2))
    - [ ] Unbelted 50th male dummy driver and passenger (0 to 48 kmph) (S5.1.2(a) (1))
    - [ ] Unbelted 50th male dummy driver (32 to 40 kmph) (S5.1.2.(a)(2) or S5.1.2(b))
    - [ ] Unbelted 50th male dummy passenger (32 to 40 kmph) (S5.1.2.(a)(2) or S5.1.2(b))

X		Unbelted 5th female dummy driver (32 to 40 kmph) (S16.1(b))
X		Unbelted 5th female dummy passenger (32 to 40 kmph) (S16.1(b))
		40% Offset 0° Belted 5th female dummy driver and passenger (0 to 40 kmph) (S18.1)
	21.	Sled Test: unbelted 50th male dummy driver and passenger (S13)
	22.	FMVSS 204 Indicant Test
X	23.	FMVSS 212 Indicant Test
X	24.	FMVSS 219 Indicant Test
X	25.	FMVSS 301 Frontal Indicant Test

For the crash tests, the vehicle was instrumented with 8 accelerometers. The accelerometer 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 film and high-speed digital video.

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

SECTION 3

INJURY RESULT SUMMARY FOR FMVSS 208 TESTS

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance

NHTSA No.: C70307
Test Date: 7/25/07

5th Percentile Female Low Risk Deployments

5th Percentile Female SN 511 Position 1 (Chin On Module) 7-25-07

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	700	34
Peak Nij (Nte)	1.0	0.3
Time (ms)	NA	73.9
Peak Nij (Ntf)	1.0	0.2
Time (ms)	NA	42.8
Peak Nij (Nce)	1.0	0.0
Time (ms)	NA	10.5
Peak Nij (Ncf)	1.0	0.1
Time (ms)	NA	267.1
Neck Tension	2070 N	940
Neck Compression	2520 N	142
Chest g	60 g	13
Chest Displacement	52 mm	6
Left Femur	6805 N	65
Right Femur	6805 N	67

Second stage fire time of 150 ms; Injuries calculated on 0 ms to 275 ms

5th Percentile Female SN 511 Position 2 (Chin On Rim) 7-25-07

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	700	2
Peak Nij (Nte)	1.0	0. 2
Time (ms)	NA	18.3
Peak Nij (Ntf)	1.0	0.1
Time (ms)	NA	53.2
Peak Nij (Nce)	1.0	0.1
Time (ms)	NA	0.4
Peak Nij (Ncf)	1.0	0.1
Time (ms)	NA	62.4
Neck Tension	2070 N	424
Neck Compression	2520 N	65
Chest g	60 g	18
Chest Displacement	52 mm	10
Left Femur	6805 N	15
Right Femur	6805 N	17

Second stage fire time of 150 ms; Injuries calculated on 0 ms to 275 ms

SECTION 3

INJURY RESULT SUMMARY FOR FMVSS 208 TESTS

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance

NHTSA No.: C70307
Test Dates: 7/25/07 & 8/7/07

12-Month-Old Low Risk Deployments

12-Month-Old SN 083 / Century Encore / 7-25-07

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	390	157
Peak Nij (Nte)	1.0	0.1
Time (ms)	NA	56.4
Peak Nij (Ntf)	1.0	0.3
Time (ms)	NA	26.5
Peak Nij (Nce)	1.0	0.1
Time (ms)	NA	54.0
Peak Nij (Ncf)	1.0	0.2
Time (ms)	NA	30.0
Neck Tension	780 N	182
Neck Compression	960 N	137
Chest g	50 g	29

Second stage fire time of 10 ms; Injuries calculated on 0 ms to 135 ms

12-Month-Old SN 082 / Britax Handle With Care / 8-7-07

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	390	2
Peak Nij (Nte)	1.0	0.0
Time (ms)	NA	135.0
Peak Nij (Ntf)	1.0	0.0
Time (ms)	NA	119.9
Peak Nij (Nce)	1.0	0.0
Time (ms)	NA	12.2
Peak Nij (Ncf)	1.0	0.2
Time (ms)	NA	37.4
Neck Tension	780 N	29
Neck Compression	960 N	277
Chest g	50 g	6

Second stage fire time of 10 ms; Injuries calculated on 0 ms to 135 ms

SECTION 3

INJURY RESULT SUMMARY FOR FMVSS 208 TESTS

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance

NHTSA No.: C70307
Test Dates: 8/20/07 & 8/23/07

3-Year-Old and 6-Year-Old Low Risk Deployments

3-Year-Old SN 032 Position 2 (Head On Instrument Panel) 8-20-07

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	570	5
Peak Nij (Nte)	1.0	0.2
Time (ms)	NA	87.9
Peak Nij (Ntf)	1.0	0.0
Time (ms)	NA	12.5
Peak Nij (Nce)	1.0	0. 2
Time (ms)	NA	35.5
Peak Nij (Ncf)	1.0	0.0
Time (ms)	NA	17.4
Neck Tension	1130 N	170
Neck Compression	1380 N	175
Chest g	55 g	4
Chest Displacement	34 mm	1

Second stage fire time of 60 ms; Injuries calculated on 0 ms to 100 ms

6-Year-Old SN 159 Position 1 (Chest On Instrument Panel) 8-23-07

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	700	1
Peak Nij (Nte)	1.0	0.0
Time (ms)	NA	12.3
Peak Nij (Ntf)	1.0	0.0
Time (ms)	NA	12.8
Peak Nij (Nce)	1.0	0.0
Time (ms)	NA	15.3
Peak Nij (Ncf)	1.0	0.2
Time (ms)	NA	28.9
Neck Tension	1490 N	70
Neck Compression	1820 N	172
Chest g	60 g	4
Chest Displacement	40 mm	0

Second stage fire time of 60 ms; Injuries calculated on 0 ms to 100 ms

SECTION 3

INJURY RESULT SUMMARY FOR FMVSS 208 TESTS

Test Vehicle: 2007 Dodge Charger NHTSA No.: C70307
Test Program: FMVSS 208 Compliance Test Date: 9/5/07

40 kmph Frontal Crash

Impact Angle: Zero degrees

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: 39.8 kmph Test Weight: 1833.5 kg

Driver Dummy: _X_ 5th female ___ 50th male
Passenger Dummy: _X_ 5th female ___ 50th male

5th Percentile Female Frontal Crash Test
Vehicles certified to S16.1(a), S16.1(b), or S18.1

Injury Criteria	Max. Allowable Injury Assessment Values	Driver	Passenger
HIC15	700	56	148
N_{te}	1.0	0.2	0.2
N_{tf}	1.0	0.2	0.4
N_{ce}	1.0	0.0	0.1
N_{cf}	1.0	0.1	0.2
Neck Tension	2620 N	774	767
Neck Compression	2520 N	115	171
Chest g	60 g	40	59
Chest Displacement	52 mm	26	13
Left Femur	6805 N	2912	4463
Right Femur	6805 N	3335	3243

SECTION 4

DISCUSSION OF TESTS

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance

NHTSA No.: C70307
Test Dates: 7/12/07 - 9/5/07

The signage used for the Low Risk Deployment test with the 12-month-old in the Britax Handle With Care Child Restraint System incorrectly identified the NHTSA number as C60304 instead of C70307.

SECTION 5

TEST DATA SHEETS

Test Vehicle:	2007 Dodge Charger	NHTSA No.:	C70307
Test Program:	FMVSS 208 Compliance	Test Dates:	7/12/07 - 9/5/07

DATA SHEET 1

COTR VEHICLE WORK ORDER

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance

NHTSA No.: C70307
Test Dates: 7/12/07 - 9/5/07

COTR Signature: Charles R. Case

Test to be performed for this vehicle are checked below:

X	1.	Rear Outboard Seating Position Seat Belts (S4.1.2(b)) & (S4.2.4)
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 (S7.4.4)
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)
	11.	Suppression tests with 12-month-old CRABI dummy (Part 572, Subpart R) using the following indicated child restraints.

Section B

	Britax Handle with Care 191		Full Rearward		Mid Position		Full Forward
	Century Assura 4553		Full Rearward		Mid Position		Full Forward
	Century Avanta SE 41530		Full Rearward		Mid Position		Full Forward
	Century Smart Fit 4543		Full Rearward		Mid Position		Full Forward
	Cosco Arriva 02727		Full Rearward		Mid Position		Full Forward
	Cosco Opus 35 02603		Full Rearward		Mid Position		Full Forward
	Evenflo Discovery Adjust Right 212		Full Rearward		Mid Position		Full Forward
	Evenflo First Choice 204		Full Rearward		Mid Position		Full Forward
	Evenflo On My Way Position Right V 282		Full Rearward		Mid Position		Full Forward
	Graco Infant 8457		Full Rearward		Mid Position		Full Forward

Section C

	Britax Roundabout 161		Full Rearward		Mid Position		Full Forward
	Century Encore 4612		Full Rearward		Mid Position		Full Forward
	Century STE 1000 4416		Full Rearward		Mid Position		Full Forward
	Cosco Olympian 02803		Full Rearward		Mid Position		Full Forward
	Cosco Touriva 02519		Full Rearward		Mid Position		Full Forward
	Evenflo Horizon V 425		Full Rearward		Mid Position		Full Forward
	Evenflo Medallion 254		Full Rearward		Mid Position		Full Forward

	12.	Suppression tests with newborn infant (Part 572, Subpart K) using the following indicated child restraints.

Section A

	Cosco Dream Ride 02-719		Full Rearward		Mid Position		Full Forward

	13.	Suppression tests with 3-year-old dummy (Part 572, Subpart P) using the following indicated child restraints where a child restraint is required.

Section C

Britax Roundabout 161	Full Rearward	Mid Position	Full Forward
Century Encore 4612	Full Rearward	Mid Position	Full Forward
Century STE 1000 4416	Full Rearward	Mid Position	Full Forward
Cosco Olympian 02803	Full Rearward	Mid Position	Full Forward
Cosco Touriva 02519	Full Rearward	Mid Position	Full Forward
Evenflo Horizon V 425	Full Rearward	Mid Position	Full Forward
Evenflo Medallion 254	Full Rearward	Mid Position	Full Forward

Section D

Britax Roadster 9004	Full Rearward	Mid Position	Full Forward
Century Next Step 4920	Full Rearward	Mid Position	Full Forward
Cosco High Back Booster 02-442	Full Rearward	Mid Position	Full Forward
Evenflo Right Fit 245	Full Rearward	Mid Position	Full Forward

14. Suppression tests with representative 3-year-old child using the following indicated child restraints where a child restraint is required. (Appendix H, Data Sheet 16H and 17H)

Section C

Britax Roundabout 161	Full Rearward	Mid Position	Full Forward
Century Encore 4612	Full Rearward	Mid Position	Full Forward
Century STE 1000 4416	Full Rearward	Mid Position	Full Forward
Cosco Olympian 02803	Full Rearward	Mid Position	Full Forward
Cosco Touriva 02519	Full Rearward	Mid Position	Full Forward
Evenflo Horizon V 425	Full Rearward	Mid Position	Full Forward
Evenflo Medallion 254	Full Rearward	Mid Position	Full Forward

Section D

Britax Roadster 9004	Full Rearward	Mid Position	Full Forward
Century Next Step 4920	Full Rearward	Mid Position	Full Forward
Cosco High Back Booster 02-442	Full Rearward	Mid Position	Full Forward
Evenflo Right Fit 245	Full Rearward	Mid Position	Full Forward

15. Suppression tests with 3-year-old dummy (Part 572, Subpart P) in the following Forward, Middle, and Rearward seat track positions

- Sitting on seat with back against seat back (S22.2.2.1)
- Sitting on seat with back against reclined seat back (S22.2.2.2)
- Sitting on seat with back not against seat back (S22.2.2.3)
- Sitting on seat edge, spine vertical, hands by the child's side (S22.2.2.4)
- Standing on seat, facing forward (S22.2.2.5)
- Kneeling on seat facing forward (S22.2.2.6)
- Kneeling on seat facing rearward (S22.2.2.7)
- Lying on seat (S22.2.2.8)

16. Suppression tests with representative 3-year-old child in the following positions

- Sitting on seat with back against seat back (S22.2.2.1)
- Sitting on seat with back against reclined seat back (S22.2.2.2)
- Sitting on seat with back not against seat back (S22.2.2.3)
- Sitting on seat edge, spine vertical, hands by the child's side (S22.2.2.4)
- Standing on seat, facing forward (S22.2.2.5)
- Kneeling on seat facing forward (S22.2.2.6)
- Kneeling on seat facing rearward (S22.2.2.7)
- Lying on seat (S22.2.2.8)

17. Suppression tests with 6-year-old dummy (Part 572, Subpart N) using the following indicated child restraints where a child restraint is required.

Section D

Britax Roadster 9004	Full Rearward	Mid Position	Full Forward
Century Next Step 4920	Full Rearward	Mid Position	Full Forward
Cosco High Back Booster 02-442	Full Rearward	Mid Position	Full Forward
Evenflo Right Fit 245	Full Rearward	Mid Position	Full Forward

18. Suppression tests with representative 6-year-old child using the following indicated child restraints where a child restraint is required.

Section D

Britax Roadster 9004	Full Rearward	Mid Position	Full Forward
Century Next Step 4920	Full Rearward	Mid Position	Full Forward
Cosco High Back Booster 02-442	Full Rearward	Mid Position	Full Forward
Evenflo Right Fit 245	Full Rearward	Mid Position	Full Forward

19. Suppression tests with 6-year-old dummy (Part 572, Subpart N) in the following Forward, Middle, and Rearward seat track positions

- Sitting on seat with back against seat back (S22.2.2.1)
- Sitting on seat with back against reclined seat back (S22.2.2.2)
- Sitting on seat edge, spine vertical, hands by the child's side (S22.2.2.4)
- Sitting back in the seat and leaning on the right front passenger door (S24.2.3)

20. Suppression tests with representative 6-year-old child in the following positions

- Sitting on seat with back against seat back (S22.2.2.1)
- Sitting on seat with back against reclined seat back (S22.2.2.2)
- Sitting on seat edge, spine vertical, hands by the child's side (S22.2.2.4)
- Sitting back in the seat and leaning on the right front passenger door (S24.2.3)

21. Test of Reactivation of the Passenger Air Bag System with an Unbelted 5th percentile female dummy (S20.3, 22.3, S24.3). Perform this test after the following suppression tests: After each restraint.

22. Test of Reactivation of the passenger air bag system with a representative 5th percentile female (S20.3, 22.3, S24.3). Perform this test after the following suppression tests:

X 23. Low risk deployment test with 12-month-old dummy (Part 572, Subpart R) using the following indicated child restraints.

Section B

Britax Handle with Care 191	Full Rearward	Mid Position	X	Full Forward
Century Assura 4553	Full Rearward	Mid Position		Full Forward
Century Avanta SE 41530	Full Rearward	Mid Position		Full Forward
Century Smart Fit 4543	Full Rearward	Mid Position		Full Forward
Cosco Arriva 02727	Full Rearward	Mid Position		Full Forward
Cosco Opus 35 02603	Full Rearward	Mid Position		Full Forward
Evenflo Discovery Adjust Right 212	Full Rearward	Mid Position		Full Forward
Evenflo First Choice 204	Full Rearward	Mid Position		Full Forward
Evenflo On My Way Position Right V 282	Full Rearward	Mid Position		Full Forward
Graco Infant 8457	Full Rearward	Mid Position		Full Forward

Section C

Britax Roundabout 161	Full Rearward	Mid Position		Full Forward
Century Encore 4612	Full Rearward	Mid Position	X	Full Forward
Century STE 1000 4416	Full Rearward	Mid Position		Full Forward
Cosco Olympian 02803	Full Rearward	Mid Position		Full Forward
Cosco Touriva 02519	Full Rearward	Mid Position		Full Forward
Evenflo Horizon V 425	Full Rearward	Mid Position		Full Forward
Evenflo Medallion 254	Full Rearward	Mid Position		Full Forward

- [X] 24. Low risk deployment test with 3-year-old dummy (Part 572, Subpart P) in the following positions
  - [ ] Position 1
  - [X] Position 2
- [X] 25. Low risk deployment test with 6-year-old dummy (Part 572, Subpart N) in the following positions
  - [X] Position 1
  - [ ] Position 2
- [X] 26. Low risk deployment test with 5th percentile female dummy (Part 572, Subpart O) in the following positions
  - [X] Position 1
  - [X] Position 2
- [X] 27. Impact Tests
  - [ ] Frontal Oblique - Test Speed:
    - [ ] Belted 50th male dummy driver and passenger (0 to 48 kmph) (S5.1.1(a))
    - [ ] Unbelted 50th male dummy driver and passenger (0 to 48 kmph) (S5.1.2(a)(1))
    - [ ] Unbelted 50th male dummy driver and passenger (32 to 40 kmph) (S5.1.2(a) (1) or S5.1.2(b))
  - [X] Frontal 0° - Test Speed: 39.8 kmph
    - [ ] Belted 50th male dummy driver (0 to 48 kmph) (S5.1.1.(b)(1) or S5.1.1(a))
    - [ ] Belted 50th male dummy passenger (0 to 48 kmph) (S5.1.1.(b)(1) or S5.1.1(a))
    - [ ] Belted 5th female dummy driver (0 to 48 kmph) (S16.1(a))
    - [ ] Belted 5th female dummy passenger (0 to 48 kmph) (S16.1(a))
    - [ ] Belted 50th male dummy driver and passenger (0 to 56 kmph) (S5.1.1.(b)(2))
    - [ ] Unbelted 50th male dummy driver and passenger (0 to 48 kmph) (S5.1.2(a) (1))
    - [ ] Unbelted 50th male dummy driver (32 to 40 kmph) (S5.1.2.(a)(2) or S5.1.2(b))
    - [ ] Unbelted 50th male dummy passenger (32 to 40 kmph) (S5.1.2.(a)(2) or S5.1.2(b))
    - [X] Unbelted 5th female dummy driver (32 to 40 kmph) (S16.1(b))
    - [X] Unbelted 5th female dummy passenger (32 to 40 kmph) (S16.1(b))
  - [ ] 40% Offset 0° Belted 5th female dummy driver and passenger (0 to 40 kmph) (S18.1) - Test Speed:
- [ ] 28. Sled Test: Unbelted 50th male dummy driver and passenger (S13)
- [ ] 29. FMVSS 204 Indicant Test
- [X] 30. FMVSS 212 Indicant Test
- [X] 31. FMVSS 219 Indicant Test
- [X] 32. FMVSS 301 Frontal Indicant Test

DATA SHEET 2

REPORT OF VEHICLE CONDITION

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
NHTSA No.: C70307
Test Dates: 7/12/07 - 9/5/07

CONTRACT NO.: DTNH22-03-D-11002 Date: 9/12/07
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:	2007 Dodge Charger 4 Door		
MANUFACTURE DATE:	5/07		
NHTSA NO.	C70307	GVWR:	2225 kg (4905 lbs)
BODY COLOR:	Blue	GAWR (Fr):	1275 kg (2810 lbs)
VIN:	2B3KA43R07H808492	GAWR (Rr):	1275 kg (2810 lbs)

ODOMETER READINGS:	ARRIVAL (miles):	66	DATE:	7/9/07
	COMPLETION (miles):	75	DATE:	9/5/07
PURCHASE PRICE: ($)	18,923			
DEALER'S NAME:	Dodge City, 4640 S 27th, Milwaukee, WI 53221			

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

REPORT OF VEHICLE CONDITION AT THE COMPLETION OF TESTING

LIST OF FMVSS TESTS PERFORMED BY THIS LAB: FMVSS 208, 212, 219, 301

VEHICLE: 2007 Dodge Charger NHTSA NO. C70307

REMARKS:

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

Spare tire, jack and tools, rear seat bottom, and trunk interior

Explanation for equipment removal:

Components removed for instrumentation installation and to meet target weight.

Test Vehicle Condition:

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

RECORDED BY: Jeff Lewandowski DATE: 9/12/2007

APPROVED BY: David Winkelbauer DATE: 9/12/2007

########## ##########

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: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Jamie Aide

NHTSA No.: C70307
Test Date: 9/5/07

Certification Label	
Manufacturer:	DaimlerChrysler Corporation
Date of Manufacture:	5/07
VIN:	2B3KA43R07H808492
Vehicle Certified As (Pass. Car/MPV/Truck/Bus):	Passenger Car
Front Axle GVWR:	1275 kg (2810 lbs)
Rear Axle GVWR:	1275 kg (2810 lbs)
Total GVWR:	2225 kg (4905 lbs)

Tire Placard	
Not applicable, vehicle is not a passenger car and does not have a tire placard.	Passenger Car
This is not a passenger car, but all or part of this information is still contained on a vehicle label and is reported here.	Passenger Car
Vehicle Capacity Weight:	392 kg (865 lbs)
Designated Seating Capacity Front:	2
Designated Seating Capacity Rear:	3
Total Designated Seating Capacity:	5
Recommended Cold Tire Inflation Pressure Front:	210 kpa (30 psi)
Recommended Cold Tire Inflation Pressure Rear:	210 kpa (30 psi)
Recommended Tire Size:	P215/65R17

Signature: 

Date: 9/5/07

DATA SHEET 4

REAR OUTBOARD SEATING POSITION SEAT BELTS

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Chris Novak

NHTSA No.: C70307
Test Date: 7/12/07

	Yes	No
Do all rear outboard 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: 

Date: 7/12/07

DATA SHEET 5

AIR BAG LABELS (S4.5.1)

Test Vehicle: 2007 Dodge Charger NHTSA No.: C70307
Test Program: FMVSS 208 Compliance Test Date: 7/12/07
Test Technician: Chris Novak

[X] 1. Air bag maintenance label and owner's manual instructions: (S4.5.1(a))

[X] 1.1 Does the manufacturer recommend periodic maintenance or replacement of the air bag?

[ ] Yes, go to 1.2
[X] No - go to 2

[ ] 1.2 Does the vehicle have a label specifying air bag maintenance or replacement?

[ ] Yes - Pass
[ ] No - Fail

[ ] 1.3 Does the label contain one of the following?

[ ] Yes - Pass
[ ] No - Fail

Check applicable schedule:

__ Schedule on label specifies month and year (Record date_____)

__ Schedule on label specified vehicle mileage (Record mileage_____)

__ Schedule on label specifies interval measured from date on certification label (Record interval_____)

[ ] 1.4 Is the label permanently affixed within the passenger compartment such that it cannot be removed without destroying or defacing the label or the sunvisor? (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?

[X] 2. Does the owner's manual: (S4.5.1(f))

[X] 2.1 Include a description of the vehicle's air bag system in an easily understandable format?

[X] Yes - Pass
[ ] No - Fail

[X] 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?

[X] Yes - Pass
[ ] No - Fail

X 2.3 Include a statement that the air bag is a supplemental restraint at the front outboard seating position?

X Yes - Pass
No - Fail

X 2.4 Emphasize that all occupants, including the driver, should always wear their seat belts whether or not an air bag is also provided at their seating positions to minimize the risk of severe injury or death in the event of a crash?

X Yes - Pass
No - Fail

X 2.5 Provide any necessary precautions regarding the proper positioning of occupants, including children, at seating positions equipped with air bags to ensure maximum safety protection for those occupants?

X Yes - Pass
No - Fail

X 2.6 Explain that no objects should be placed over or near the air bag on the steering wheel or on the instrument panel, because any such objects could cause harm if the vehicle is in a crash severe enough to cause the air bag to inflate?

X Yes - Pass
No - Fail

X 2.7 Is the vehicle certified to meet the requirements of S14.5, S15, S17, S19, S21, S23, and S25? (Obtain answer from COTR) (S4.5.1(f)(2))

X Yes - (Go to 2.7.1)
No - (Go to 3.)

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

X Yes - Pass
No - Fail

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

X Yes - Pass
No - Fail

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

X Yes - Pass
No - Fail

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

X Yes - Pass
No - Fail

X 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))

X Yes - Pass
No - Fail

X 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
X 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

[X] 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))

- [X] Yes - Pass
- [ ] No - Fail

[X] 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))

- [X] Yes - Pass
- [ ] No - Fail

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

- [X] Yes - Pass
- [ ] No - Fail

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

- [ ] The vehicle is not certified to meet the requirements of S19, S21, and S23 (Obtain answer from COTR) (S4.5.1(b)(1)) Go to 3.1 and skip 3.2
- [X] The vehicle is certified to meet the requirements of S19, S21, and S23 on 9/1/03 or later. (Obtain answer from COTR) (S4.5.1(b)(3)) Go to 3.2 and skip 3.1

[ ] 3.1 Vehicles not certified to meet the requirements of S19, S21, and S23.

[ ] 3.1.1 Is the label permanently affixed (including permanent marking on the visor material or molding into the visor material) to either side of the sun visor at each front outboard seating position such that it cannot be removed without destroying or defacing the label or sun visor? (S4.5.1(b)(1)) (3/19/01 legal interpretation to Todd Mitchell)

- [ ] Driver Side, Yes - Pass
- [ ] Driver Side, No - Fail
- [ ] Passenger Side, Yes - Pass
- [ ] Passenger Side, No - Fail

☐ 3.1.2 Does the label conform in content to the label shown in either Figure 6A or 6B (Figure 6b is for vehicles with passenger air bag on-off switches), as appropriate, at each front outboard seating position? (S4.5.1(b)(1)) (Vehicles without back seats may omit the statement: "The back seat is the safest place for children." (S4.5.1(b)(1)(iv))

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

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

- ☐ Driver Side, Yes - Pass
- ☐ Driver Side, No - Fail
- ☐ Passenger Side, Yes - Pass
- ☐ Passenger Side, No - Fail

☐ 3.1.3 Is the label heading area yellow with the word "WARNING" and the alert symbol in black? (S4.5.1(b)(1)(i))

- ☐ Driver Side, Yes - Pass
- ☐ Driver Side, No - Fail
- ☐ Passenger Side, Yes - Pass
- ☐ Passenger Side, No - Fail

☐ 3.1.4 Is the message area white with black text? (S4.5.1(b)(1)(ii))

- ☐ Driver Side, Yes - Pass
- ☐ Driver Side, No - Fail
- ☐ Passenger Side, Yes - Pass
- ☐ Passenger Side, No - Fail

[ ] 3.1.5 Is the message area at least 30 cm^2? (S4.5.1(b)(1)(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 and on the top by line that borders the yellow heading area. 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_____, Width_____

Passenger Side: Length_____, Width_____

Actual message area _____ cm^2

[ ] Driver Side, Yes - Pass
[ ] Driver Side, No - Fail
[ ] Passenger Side, Yes - Pass
[ ] Passenger Side, No - Fail

[ ] 3.1.6 Is the pictogram black with a red circle and slash on a white background? (S4.5.1(b)(2)(iii))

[ ] Driver Side, Yes - Pass
[ ] Driver Side, No - Fail
[ ] Passenger Side, Yes - Pass
[ ] Passenger Side, No - Fail

[ ] 3.1.7 Is the pictogram at least 30 mm in diameter? (S4.5.1(b)(2)(iii))

Actual diameter_____mm

[ ] Driver Side, Yes - Pass
[ ] Driver Side, No - Fail
[ ] Passenger Side, Yes - Pass
[ ] Passenger Side, No - Fail

[X] 3.2 Vehicles certified to meet the requirements of S19, S21, and S23 on 9/1/03 and later. (S4.5.1(b)(3))

[X] 3.2.1 Is the label permanently affixed (including permanent marking on the visor material or molding into the visor material) to either side of the sun visor at each front outboard seating position such that it cannot be removed without destroying or defacing the label or the sun visor? (S4.5.1(b)(3)) (3/19/01 legal interpretation to Todd Mitchell)

[X] Driver Side, Yes - Pass
[ ] Driver Side, No - Fail
[X] Passenger Side, Yes - Pass
[ ] Passenger Side, No - Fail

X 3.2.2 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 may omit the statement: “The back seat is the safest place for children.” (S4.5.1(b)(3)(iv)) Vehicles without back seats or the back seat is too small to accommodate a rear-facing child restraint may omit the statement “Never put a rear-facing child seat in the front.”(S4.5.1(b)(3)(v))

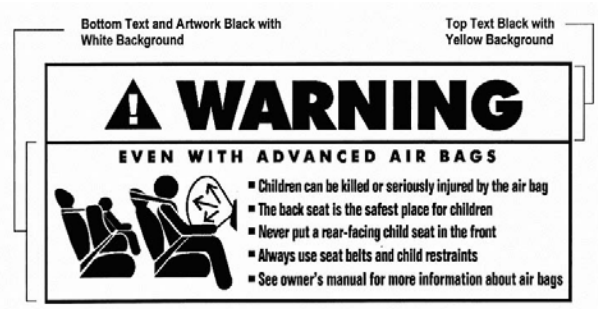


Figure 11. Sun Visor Label Visible when Visor is in Down Position.

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

X 3.2.3 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 3.2.4 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

X 3.2.5 Is the message area at least 30 cm^2? (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 5 cm, Width 7 cm

Passenger Side: Length 5 cm, Width 7 cm

Actual message area: 35 cm^2

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

X 3.2.6 Is the pictogram black on a white background? (S4.5.1(b)(3)(iii))

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

X 3.2.7 Is the pictogram at least 30 mm (1.2 inches) in length? (S4.5.1(b)(3)(iii))

Driver Side: Length 45 mm

Passenger Side: Length 45 mm

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

X 3.3 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))

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

X 3.4 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))

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

[X] 3.5 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 3.5.1

X No, go to 4 (skipping 3.5.1 through 3.5 3)

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

__ Yes, go to 3.5.2 and skip 3.5.3

__ No, go to 3.5.3 and skip 3.5.2

[ ] 3.5.2 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

[ ] 3.5.3 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

[X] 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))

[X] 4.1 Is the sun visor warning label visible when the sun visor is in the stowed position?

- [X] If yes for driver and passenger, go to 5.
- [X] Driver Side, Yes
- [ ] Driver Side, No
- [X] 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^2? (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 _____

- 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 _____

Passenger Side Diameter _____

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

X 5. Label on the Dashboard

X 5.1 Is the vehicle certified to meet the requirements of S19, S21, and S23? (Obtain answer from COTR) (S4.5.1(e)(3))

X Yes, go to 5.1.1 and skip 5.2

No, go to 5.2, skipping 5.1.1 through 5.1.6

X 5.1.1 Does the vehicle have a label on the dash or steering wheel hub? (S4.5.1(e)(3))

X Yes - Pass

No - Fail

X 5.1.2 Is the label clearly visible from all front seating positions? (S4.5.1(e)(3))

X Yes - Pass

No - Fail

X 5.1.3 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)))

X Yes - Pass

No - Fail

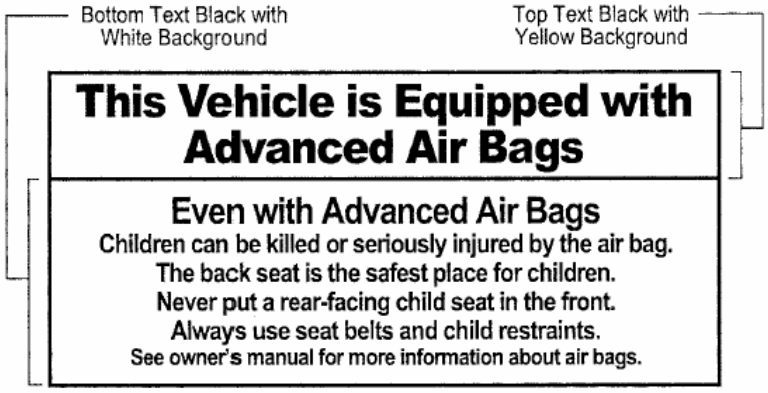


Figure 12. Removable Label on Dash.

X 5.1.4 Is the heading area yellow with black text? (S4.5.1(e)(3)(i))

X Yes - Pass

No - Fail

X 5.1.5 Is the message white with black text? (S4.5.1(e)(3)(ii))

X Yes - Pass

No - Fail

X 5.1.6 Is the message area at least 30 cm^2? (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: 9.5 cm Width: 3.5 cm

Actual message area: 33.25 cm^2

X Yes - Pass

No - Fail

5.2 Does the vehicle have a label on the dash or steering wheel hub? (S4.5.1(e)(1))

Yes - Pass

No - Fail

5.2.1 Is the label clearly visible from all front seating positions? (S4.5.1(e)(1))

Yes - Pass

No - Fail

5.2.2 Does the label conform in content to the label shown in Figure 7? (S4.5.1(e)(1)(iii)) Vehicles without back seats may omit the statement: "The back seat is the safest place for children." (S4.5.1(e)(1)(iii))

Yes - Pass

No - Fail

Figure 7. Removable Label on Dash.

5.2.3 Is the heading area yellow with the word "WARNING" and the alert symbol in black? (S4.5.1(e)(1)(i)

Yes - Pass

No - Fail

5.2.4 Is the message white with black text? (S4.5.1(e)(1)(ii))

Yes - Pass

No - Fail

5.2.5 Is the message area at least 30 cm^2? (S4.5.1(e)(1)(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_____, Width_____

Actual message area _____ cm^2

Yes - Pass

No - Fail

REMARKS:

I certify that I have read and performed each instruction.

Signature: 

Date: 7/12/07

DATA SHEET 6

FMVSS 208 READINESS INDICATOR (S4.5.2)

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Chris Novak

NHTSA No.: C70307
Test Date: 7/12/07

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)

X 1. Is the system totally mechanical? If Yes, this data sheet is complete.
- [ ] Yes
- [X] No

X 2. Describe the location of the readiness indicator: *Lower right of temperature gauge*

X 3. Is the readiness indicator clearly visible to the driver?
- [X] Yes – Pass
- [ ] No – Fail

X 4. Is a list of the elements in the occupant restraint system, being monitored by the readiness indicator, provided on a label or in the owner's manual?
- [X] Yes – Pass
- [ ] No – Fail

X 5. Does the vehicle have an on-off switch for the passenger air bag?
- [ ] If Yes, go to 6
- [X] 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: Chris Novak

Date: 7/12/07

DATA SHEET 7

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

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Chris Novak

NHTSA No.: C70307
Test Date: 7/12/07

[X] 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
- [X] 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

3.2 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? (S4.5.4.3c)) (Leave the air bag off for 5 minutes.)

- Yes - Pass
- No - Fail

7.4 Is the telltale illuminated while the air bag is turned on? (S4.5.4.3(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))

	there is no back seat
Infants:	the rear seat is too small to accommodate a child restraint
	there is a medical condition that must be monitored constantly
Children	there is no back seat
aged	space is not always available in the rear seat
1 to 12:	there is a medical condition that must be monitored constantly
Medical	medical risk causes special risk for passenger
condition:	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: 

Date: 7/12/07

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: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Chris Novak
NHTSA No.: C70307
Test Date: 7/12/07

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

		N/A - no retractor is at this position
		N/A - the retractor is an automatic locking retractor ONLY
X	1.	Record test fore-aft seat position: MID (S7.1.1.5(c)(1)) (Any position is acceptable)
X	2.	Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT have to be attached by the vehicle user to the seat belt webbing, retractor, or any other part of the vehicle. (S7.1.1.5 (a))
		X Yes - Pass
		No - Fail
X	3.	Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT require inverting, twisting or deforming of the belt webbing. (S7.1.1.5 (a))
		X Yes - Pass
		No - Fail
X	4.	Place any adjustable seat belt anchorage in the lowest adjustment position.
		N/A The anchorage is not adjustable.
X	5.	Buckle the seat belt. (S7.1.1.5(c)(1))
X	6.	Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))
X	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))
X	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?
		X Yes, go to 8.1
		No, go to 9.
X	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))
		X Yes - Pass
		No - Fail

X 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))

X 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))

X Measured distance between A and B (inches): 65 ¼ inches

X 11. Readjust the belt system so that the webbing between points A and B is at 1/2 the maximum length of the webbing. (S7.1.1.5(c)(3))

X 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))

X Measured force application angle (Spec. 5-15 degrees): 10°

X 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))

X Measured distance between A and B (inches): 28 ¾ inches

X 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))

X Record onset rate (lb/sec) (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5)): 15lbs./sec

X Measured distance between A and B (inches) (S7.1.1.5(c)(6)): 28 ¾ inches

X 15. Let the seat belt webbing retract to its minimum length with the seat belt still buckled

X 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 15° spec. 5 - 15 degrees)

X 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 15 ¾ inches

X 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 15lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))

Measured distance between A and B 15 ¾ inches (S7.1.1.5(c)(6))

X 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))

X 14-13 = 28 ¾ – 28 ¾ = 0 inches

X 18-17 = 15 ¾ - 15 ¾ = 0 inches

X Yes - Pass

No - Fail

X 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))

X 10-14 = 65 ¼ - 28 ¾ = 36 ½ inches

X 10-18 = 65 ¼ - 15 ¾ = 49 ½ inches

X Yes - Pass

No - Fail

REMARKS:

I certify that I have read and performed each instruction.

Signature: Chris Novak

Date: 7/12/07

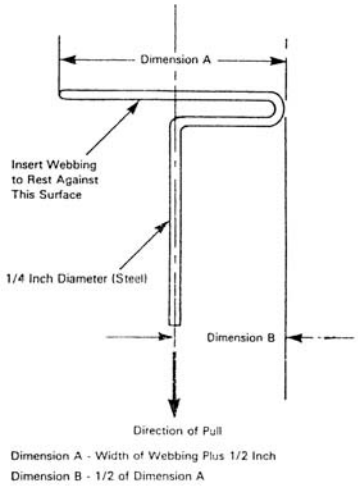


Figure 5. - Webbing Tension Pull Device

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: 2007 Dodge Charger NHTSA No.: C70307
Test Program: FMVSS 208 Compliance Test Date: 7/12/07
Test Technician: Chris Novak

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

		N/A - no retractor is at this position
		N/A - the retractor is an automatic locking retractor ONLY
X	1.	Record test fore-aft seat position: (S7.1.1.5(c)(1)) (Any position is acceptable) FIXED
X	2.	Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT have to be attached by the vehicle user to the seat belt webbing, retractor, or any other part of the vehicle. (S7.1.1.5 (a))
		X Yes - Pass
		No - Fail
X	3.	Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT require inverting, twisting or deforming of the belt webbing. (S7.1.1.5 (a))
		X Yes - Pass
		No - Fail
X	4.	Place any adjustable seat belt anchorage in the lowest adjustment position.
		X N/A The anchorage is not adjustable.
X	5.	Buckle the seat belt. (S7.1.1.5(c)(1))
X	6.	Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))
X	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))
X	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?
		X Yes, go to 8.1
		No, go to 9.
X	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))
		X Yes - Pass
		No - Fail

X 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))

X 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))

X Measured distance between A and B (inches): 60 ½ inches

X 11. Readjust the belt system so that the webbing between points A and B is at 1/2 the maximum length of the webbing. (S7.1.1.5(c)(3))

X 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))

X Measured force application angle (Spec. 5-15 degrees): 10°

X 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))

X Measured distance between A and B (inches): 31 ¼ inches

X 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))

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

X Measured distance between A and B (inches) (S7.1.1.5(c)(6)): 31 3/8 inches

X 15. Let the seat belt webbing retract to its minimum length with the seat belt still buckled

X 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)

X 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 14 ¼ inches

X 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 25lbs/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))

Measured distance between A and B 14 3/8 inches (S7.1.1.5(c)(6))

X 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))

X 14-13 = 31 3/8 - 31 ¼ = 1/8 inch

X 18-17 = 14 3/8 – 14 ¼ = 1/8 inch

X Yes - Pass

No - Fail

X 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))

X 10-14 = 60 ½ – 31 3/8 = 29 1/8 inches

X 10-18 = 60 ½ - 14 3/8 = 46 1/8 inches

X Yes - Pass

No - Fail

REMARKS:

I certify that I have read and performed each instruction.

Signature: Chris Nord

Date: 7/12/07

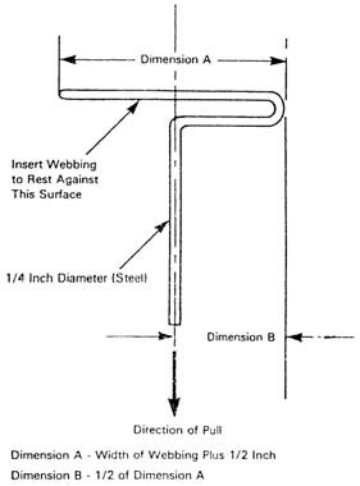


Figure 5. - Webbing Tension Pull Device

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: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Chris Novak
NHTSA No.: C70307
Test Date: 7/12/07

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

		N/A - no retractor is at this position
		N/A - the retractor is an automatic locking retractor ONLY
X	1.	Record test fore-aft seat position: FIXED (S7.1.1.5(c)(1)) (Any position is acceptable)
X	2.	Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT have to be attached by the vehicle user to the seat belt webbing, retractor, or any other part of the vehicle. (S7.1.1.5 (a))
		X Yes - Pass
		No - Fail
X	3.	Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT require inverting, twisting or deforming of the belt webbing. (S7.1.1.5 (a))
		X Yes - Pass
		No - Fail
X	4.	Place any adjustable seat belt anchorage in the lowest adjustment position.
		X N/A The anchorage is not adjustable.
X	5.	Buckle the seat belt. (S7.1.1.5(c)(1))
X	6.	Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))
X	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))
X	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?
		X Yes, go to 8.1
		No, go to 9
X	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))
		X Yes - Pass
		No - Fail

X 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))

X 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))

X Measured distance between A and B (inches): 60 inches

X 11. Readjust the belt system so that the webbing between points A and B is at 1/2 the maximum length of the webbing. (S7.1.1.5(c)(3))

X 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))

X Measured force application angle (Spec. 5-15 degrees): 10°

X 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))

X Measured distance between A and B (inches): 25 inches

X 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))

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

X Measured distance between A and B (inches) (S7.1.1.5(c)(6)): 25 inches

X 15. Let the seat belt webbing retract to its minimum length with the seat belt still buckled

X 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)

X 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 9 ½ inches

X

X

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 25lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))

Measured distance between A and B 9 ½ inches (S7.1.1.5(c)(6))

X

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))

X

14-13 = 25 - 25 = 0 inches

X

18-17 = 9 ½ - 9 ½ = 0 inches

X Yes - Pass

No - Fail

X

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))

X

10-14 = 60 - 25 = 35 inches

X

10-18 = 60 - 9 ½ = 50 ½ inches

X Yes - Pass

No - Fail

I certify that I have read and performed each instruction.

Signature: Chris Ward

Date: 7/12/07

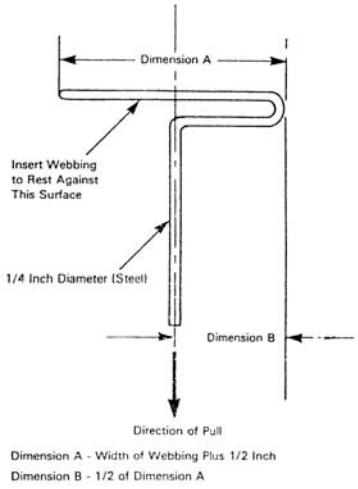


Figure 5. - Webbing Tension Pull Device

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: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Chris Novak
NHTSA No.: C70307
Test Date: 7/12/07

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:	Right Rear Passenger

		N/A - no retractor is at this position
		N/A - the retractor is an automatic locking retractor ONLY
X	1.	Record test fore-aft seat position: FIXED (S7.1.1.5(c)(1)) (Any position is acceptable)
X	2.	Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT have to be attached by the vehicle user to the seat belt webbing, retractor, or any other part of the vehicle. (S7.1.1.5 (a))
		X Yes - Pass
		No - Fail
X	3.	Does the lap belt portion of the seat belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT require inverting, twisting or deforming of the belt webbing. (S7.1.1.5 (a))
		X Yes - Pass
		No - Fail
X	4.	Place any adjustable seat belt anchorage in the lowest adjustment position.
		X N/A The anchorage is not adjustable.
X	5.	Buckle the seat belt. (S7.1.1.5(c)(1))
X	6.	Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))
X	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))
X	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?
		X Yes, go to 8.1
		No, go to 9.
X	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))
		X Yes - Pass
		No - Fail

X 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))

X 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))

X Measured distance between A and B (inches): 60 ¾ inches

X 11. Readjust the belt system so that the webbing between points A and B is at 1/2 the maximum length of the webbing. (S7.1.1.5(c)(3))

X 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))

X Measured force application angle (Spec. 5-15 degrees): 10°

X 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))

X Measured distance between A and B (inches): 33 ¾ inches

X 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))

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

X Measured distance between A and B (inches) (S7.1.1.5(c)(6)): 34 inches

X 15. Let the seat belt webbing retract to its minimum length with the seat belt still buckled

X 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)

X 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 14 ½ inches

X 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 25lbs/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))

Measured distance between A and B 14 ½ inches (S7.1.1.5(c)(6))

X 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))

X 14-13 = 34 - 33 ¾ = ¼ inch

X 18-17 = 14 ½ - 14 ½ = 0 inches

X Yes - Pass

No - Fail

X 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))

X 10-14 = 60 ¾ - 34 = 26 ¾ inches

X 10-18 = 60 ¾ - 14 ½ = 46 ¼ inches

X Yes - Pass

No - Fail

REMARKS:

I certify that I have read and performed each instruction.

Signature: Chris Hood

Date: 7/12/07

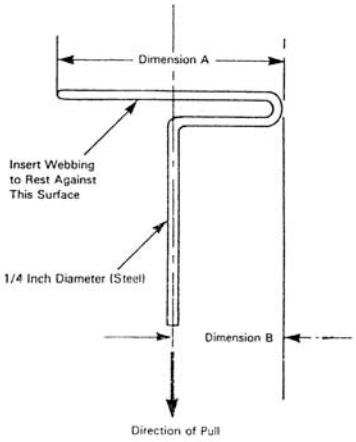


Figure 5. - Webbing Tension Pull Device

DATA SHEET 9

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

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Chris Novak

NHTSA No.: C70307
Test Date: 7/12/07

X	1.	The occupant is in the driver's seat.
X	2.	The seat belt is in the stowed position.
X	3.	The key is in the "on" or "start" position.
X	4.	The time duration of the audible signal beginning with key "on" or "start" is
X		Seconds: 7
X	5.	The occupant is in the driver's seat.
X	6.	The seat belt is in the stowed position.
X	7.	The key is in the "on" or "start" position.
X	8.	The time duration of the warning light beginning with key "on" or "start" is
X		Seconds: Stays On
X	9.	The occupant is in the driver's seat.
X	10.	The seat belt is in the latched position and with at least 4 inches of belt webbing extended.
X	11.	The key is in the "on" or "start" position.
X	12.	The time duration of the warning light beginning with key "on" or "start" is
X		Seconds: 6
X	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: Stays On	60 seconds minimum	Item 4: 7	4 to 8 seconds
S7.3 (a)(2)	Belt latched & key on or start	Item 12: 6	4 to 8 seconds		
	Belt stowed & key on or start	Item 8: Stays On	4 to 8 seconds	Item 4: 7	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).

[X] 14. The seat belt warning system meets the requirements of (manufacturers may comply with either section)

- [X] S7.3 (a)(1)
- [ ] S7.3 (a)(2)
- [ ] FAIL - does not meet the requirements of either option

[X] 15. Note wording of visual warning: (S7.3(a)(1) and S7.3(a)(2))

- [ ] Fasten seat belts
- [ ] Fasten belts
- [X] Symbol 101 - 
- [ ] FAIL - does not use any of the above wording or symbol

REMARKS:

I certify that I have read and performed each instruction.

Signature: 

Date: 7/12/07

DATA SHEET 10

BELT CONTACT FORCE (S7.4.3)

Test Vehicle: 2007 Dodge Charger NHTSA No.: C70307
Test Program: FMVSS 208 Compliance Test Date: 7/12/07
Test Technician: Chris Novak

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

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

- [ ] Yes, this form is complete
- [X] No, continue with this check sheet

X 2. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)

- [X] N/A, no lumbar adjustment

X 3. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)

- [X] N/A, no additional support adjustment

X 4. Is the fore-aft position of the seat adjustable?

- [X] No- go to 5
- [ ] Yes - Put the seat in the mid fore-aft and full down height position determined in Data Sheet 14.2

X 5. Is the seat back angle adjustable?

- [X] No- go to 6
- [ ] Yes-Use the seat back angle determined in Data Sheet 14.2

X 6. 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.**

X 7. Fasten the seat belt latch.

X 8. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest.

X 9. 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.

X Contact Force (lb):

- [X] 0.0 to 0.7 pounds - Pass 0.5 lbs.
- [ ] Greater than 0.7 pounds - Fail

REMARKS:

I certify that I have read and performed each instruction.

Signature: 

Date: 7/12/07

DATA SHEET 10

BELT CONTACT FORCE (S7.4.3)

Test Vehicle: 2007 Dodge Charger NHTSA No.: C70307
Test Program: FMVSS 208 Compliance Test Date: 7/12/07
Test Technician: Chris Novak

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

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

- [ ] Yes, this form is complete
- [X] No, continue with this check sheet

X 2. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)

- [X] N/A, no lumbar adjustment

X 3. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)

- [X] N/A, no additional support adjustment

X 4. Is the fore-aft position of the seat adjustable?

- [X] No- go to 5
- [ ] Yes - Put the seat in the mid fore-aft and full down height position determined in Data Sheet 14.2

X 5. Is the seat back angle adjustable?

- [X] No- go to 6
- [ ] Yes-Use the seat back angle determined in Data Sheet 14.2

X 6. 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.**

X 7. Fasten the seat belt latch.

X 8. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest.

X 9. 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.

X Contact Force (lb):

- [X] 0.0 to 0.7 pounds - Pass 0.6 lbs.
- [ ] Greater than 0.7 pounds - Fail

REMARKS:

I certify that I have read and performed each instruction.

Signature: 

Date: 7/12/07

DATA SHEET 10

BELT CONTACT FORCE (S7.4.3)

Test Vehicle: 2007 Dodge Charger NHTSA No.: C70307
Test Program: FMVSS 208 Compliance Test Date: 7/12/07
Test Technician: Chris Novak

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

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

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

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

X 4. Is the fore-aft position of the seat adjustable?
- [X] No- go to 5
- [ ] Yes – Put the seat in the mid fore-aft and full down height position determined in Data Sheet 14.2

X 5. Is the seat back angle adjustable?
- [X] No- go to 6
- [ ] Yes-Use the seat back angle determined in Data Sheet 14.2

X 6. 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.**

X 7. Fasten the seat belt latch.

X 8. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest.

X 9. 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.

X Contact Force (lb):
- [X] 0.0 to 0.7 pounds – Pass 0.6 lbs.
- [ ] Greater than 0.7 pounds - Fail

REMARKS:

I certify that I have read and performed each instruction.

Signature: 

Date: 7/12/07

DATA SHEET 11

LATCH PLATE ACCESS (S7.4.4)

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Chris Novak

NHTSA No.: C70307
Test Date: 7/12/07

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:	Not Applicable For Any Position - Passenger Car

1. Put the seat in the forwardmost fore-aft and full down height position determined in Data Sheet 14.2. (S10.7)
2. Put the seat back angle in the position determined in Data Sheet 14.2.
3. 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 its 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.**
4. Position the adjustable seat belt anchorage in the manufacturer's nominal design position for a 50th percentile adult male occupant.
5. Attach the inboard reach string to the base of the head following the instructions on Figure 3.
6. Attach the outboard reach string to the torso sheath following the instructions on Figure 3.
7. Place the latch plate in the stowed position.
8. Extend inboard reach string in front of the dummy and then backward and outboard to the latch plate to generate an arc of the reach envelope of the test dummy's arms. Is the latch plate within the reach envelope?
   - Yes - Pass
   - No
9. Extend 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
10. Is the latch plate within the inboard (item 10) or outboard (item 11) reach envelope?
    - Yes - Pass
    - No - Fail
11. 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

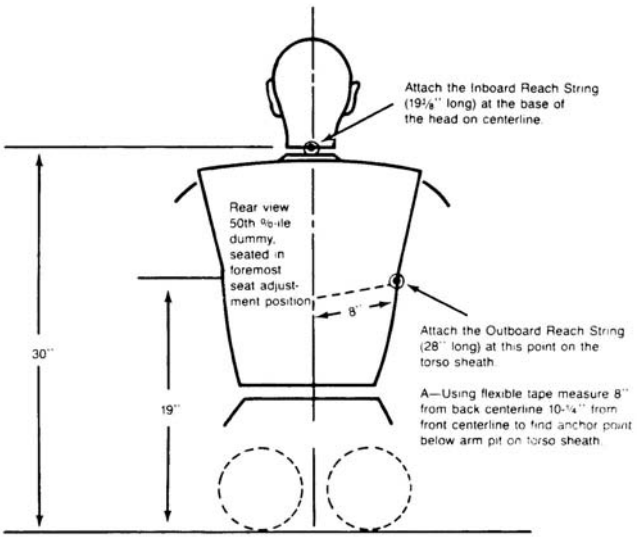


Figure 3. Location of Anchoring Points for Latchplate Reach Limiting Chains or Strings to Test for Latchplate Accessibility Using Subpart E Test Device

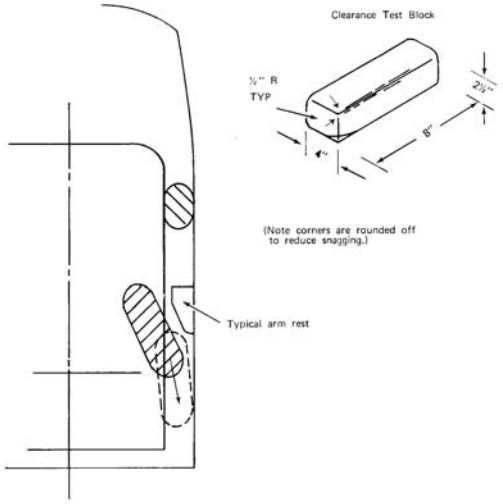


Figure 4—USE OF CLEARANCE TEST BLOCK TO DETERMINE HAND/ARM ACCESS

REMARKS:

I certify that I have read and performed each instruction.

Signature: _____

Date: 7/12/07

DATA SHEET 12

SEAT BELT RETRACTION (S7.4.5)

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Chris Novak

NHTSA No.: C70307
Test Date: 7/12/07

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:	Not Applicable For Any Position - Passenger Car

X 1. Is the vehicle a passenger car or walk-in van-type vehicle?

- X Yes, this form is complete
- ___ No

___ 2. Put the seat in the mid fore-aft and full down height position determined in Data Sheet 14.2. (S8.1.2)

___ 3. Put the seat back angle in the position determined in Data Sheet 14.2. (8.1.3)

___ 4. 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.**

___ 5. Fasten the seat belt around the dummy.

___ 6. Remove all slack from the lap belt portion. (S10.9)

- ___ N/A, the seat does not have a fore-aft adjustment

___ 7. Pull the upper torso webbing out of the retractor and allow it to retract; repeat this four times. (S10.9)

___ 8. Apply a 2 to 4 pound tension load to the lap belt. (S10.9)

Pound load applied: 4

___ 9. Is the belt system equipped with a tension relieving device?

- ___ __Yes, continue
- ___ **__No, go to 12**

___ 10. 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).

___ 11. Check the statement that applies to this test vehicle:

___ 11.1 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 12
- ___ No - go to 11.2

11.2 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 12
- ___ No - go to 11.3

11.3

- ___ Neither 11.1 nor 11.2 apply.
- ___ Fail

☐ 12. 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

☐ 13. 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:

I certify that I have read and performed each instruction.

Signature: 

Date: 7/12/07

DATA SHEET 13

SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Chris Novak

NHTSA No.: C70307
Test Date: 7/12/07

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

X 1. Is the seat cushion movable so that the seat back serves a function other than seating? (S7.4.6.1 (b))

- [ ] Yes, this form is complete
- [X] No, go to 2

X 2. Is the seat removable? (S7.4.6.1(b))

- [ ] Yes, this form is complete
- [X] No, go to 3

X 3. Is the seat movable so that the space formerly occupied by the seat can be used for a secondary function? (S7.4.6.1(b))

- [ ] Yes, this form is complete
- [X] No, go to 4

X 4. Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back? (S7.4.6.1(a))

- [X] Yes, go to 5
- [ ] No, this form is complete

X 5. Does one of the following three parts, the seat belt latch plate, the buckle, or the seat belt webbing, stay on top of or above the seat cushion under normal conditions (i.e., conditions other than when belt hardware is intentionally pushed behind the seat by a vehicle occupant)? (S7.4.6.1(a))

- [X] Yes - Pass
- [ ] No - Fail

Identify the part(s) on top or above the seat.

- [X] Seat belt latch plate
- [X] Buckle
- [X] Seat belt webbing

X 6. Are the remaining two seat belt parts accessible under normal conditions?

- [X] Yes - Pass
- [ ] No - Fail

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

- [X] Yes - Pass
- [ ] No - Fail

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

- X Yes - Pass
- ☐ No - Fail

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

- X Yes - Pass
- ☐ No - Fail

X 10. Is the inboard receptacle end of the seat belt assembly, installed in the front outboard designated seating position, accessible with the center armrest in any position to which it can be adjusted (without moving the armrest)? (S7.4.6.2)

- ☐ Yes - Pass
- ☐ No - Fail
- X N/A - Rear seat

REMARKS:

I certify that I have read and performed each instruction.

Signature: 

Date: 7/12/07

DATA SHEET 13

SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle: 2007 Dodge Charger NHTSA No.: C70307
Test Program: FMVSS 208 Compliance Test Date: 7/12/07
Test Technician: Chris Novak

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

X 1. Is the seat cushion movable so that the seat back serves a function other than seating? (S7.4.6.1 (b))

- [ ] Yes, this form is complete
- [X] No, go to 2

X 2. Is the seat removable? (S7.4.6.1(b))

- [ ] Yes, this form is complete
- [X] No, go to 3

X 3. Is the seat movable so that the space formerly occupied by the seat can be used for a secondary function? (S7.4.6.1(b))

- [ ] Yes, this form is complete
- [X] No, go to 4

X 4. Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back? (S7.4.6.1(a))

- [X] Yes, go to 5
- [ ] No, this form is complete

X 5. Does one of the following three parts, the seat belt latch plate, the buckle, or the seat belt webbing, stay on top of or above the seat cushion under normal conditions (i.e., conditions other than when belt hardware is intentionally pushed behind the seat by a vehicle occupant)? (S7.4.6.1(a))

- [X] Yes - Pass
- [ ] No - Fail

Identify the part(s) on top or above the seat.

- [X] Seat belt latch plate
- [X] Buckle
- [X] Seat belt webbing

X 6. Are the remaining two seat belt parts accessible under normal conditions?

- [X] Yes - Pass
- [ ] No - Fail

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

- [X] Yes - Pass
- [ ] No - Fail

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

- [X] Yes - Pass
- [ ] No - Fail

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

- [X] Yes - Pass
- [ ] No - Fail

X 10. Is the inboard receptacle end of the seat belt assembly, installed in the front outboard designated seating position, accessible with the center armrest in any position to which it can be adjusted (without moving the armrest)? (S7.4.6.2)

- [ ] Yes - Pass
- [ ] No - Fail
- [X] N/A - Rear seat

REMARKS:

I certify that I have read and performed each instruction.

Signature: 

Date: 7/12/07

DATA SHEET 13

SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Chris Novak

NHTSA No.: C70307
Test Date: 7/12/07

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

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

[X] 2. Is the seat removable? (S7.4.6.1(b))
- [ ] Yes, this form is complete
- [X] No, go to 3

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

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

[X] 5. Does one of the following three parts, the seat belt latch plate, the buckle, or the seat belt webbing, stay on top of or above the seat cushion under normal conditions (i.e., conditions other than when belt hardware is intentionally pushed behind the seat by a vehicle occupant)? (S7.4.6.1(a))
- [X] Yes - Pass
- [ ] No - Fail

Identify the part(s) on top or above the seat.
- [X] Seat belt latch plate
- [X] Buckle
- [X] Seat belt webbing

[X] 6. Are the remaining two seat belt parts accessible under normal conditions?
- [X] Yes - Pass
- [ ] No - Fail

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

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

- X Yes - Pass
- ☐ No - Fail

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

- X Yes - Pass
- ☐ No - Fail

X 10. Is the inboard receptacle end of the seat belt assembly, installed in the front outboard designated seating position, accessible with the center armrest in any position to which it can be adjusted (without moving the armrest)? (S7.4.6.2)

- ☐ Yes - Pass
- ☐ No - Fail
- X N/A - Rear seat

REMARKS:

I certify that I have read and performed each instruction.

Signature: 

Date: 7/12/07

DATA SHEET 14

MARKING OF REFERENCE POINTS FOR VARIOUS TEST POSITIONS AND POINTS

Test Vehicle: 2007 Dodge Charger NHTSA No.: C70307
Test Program: FMVSS 208 Compliance Test Date: 7/25/07
Test Technician: Wayne Dahlke

DATA SHEET 14.1

MARKING OF REFERENCE POINTS FOR 5th FEMALE

X Driver Seat __Passenger Seat

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 0°
Minimum angle 0°
Mid-angle 0°

X 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)
X N/A - No seat height adjustment

X 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.

X 1.11 Use only the controls that primarily move the seat in the fore-aft direction to **mark** for future reference 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.

X 1.12 Use only the controls that primarily move the seat in the fore-aft direction to place the seat in the rearmost position.

X 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** for future reference 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)

X 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** for future reference 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** for future reference 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)

X 1.18. Visually **mark** for future reference the seat back angle at the manufacturer's nominal design riding position for a **50th percentile adult male** in the manner specified by the manufacturer for the rearmost, mid, and foremost seat positions. (S20.1.9.5, S22.1.7.5, S22.4.2.1, S22.4.3.1, S24.1.2, S24.4.2.1, S26.2.3, S26.3.1)

__ N/A - No seat back angle adjustment

Manufacturer's design seat back angle 14.0° On Seat Back Frame

X 1.19. Is the seat a bucket seat?

X Yes, go to 1.20 and skip 1.21

__No, go to 1.21 and skip 1.20

X 1.20 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)

__1.21 Bench seats (complete ONLY the one that is applicable to the seat being marked):

__1.21.1 Driver Seat

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.

__1.21.2 Passenger Seat

Locate and **mark** for future reference 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. (S20.2.1.3, 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

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 200 mm

Mid-point height 100 mm

Wayne Dahlen _____ 7/25/07_____

I certify that I have read and performed each instruction. Date

DATA SHEET 14.1

MARKING OF REFERENCE POINTS FOR 5th FEMALE

__Driver Seat X Passenger Seat

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) NO ADJUSTMENT
Maximum angle Zero
Minimum angle Zero
Mid-angle Zero

X 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)
X N/A - No seat height adjustment

X 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.

X 1.11 Use only the controls that primarily move the seat in the fore-aft direction to **mark** for future reference 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.

X 1.12 Use only the controls that primarily move the seat in the fore-aft direction to place the seat in the rearmost position.

X 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** for future reference 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)
X 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** for future reference 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** for future reference 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)

X 1.18. Visually **mark** for future reference the seat back angle at the manufacturer's nominal design riding position for a **50th percentile adult male** in the manner specified by the manufacturer for the rearmost, mid, and foremost seat positions. (S20.1.9.5, S22.1.7.5, S22.4.2.1, S22.4.3.1, S24.1.2, S24.4.2.1, S26.2.3, S26.3.1)

__ N/A - No seat back angle adjustment
Manufacturer's design seat back angle 14.0° On Seat Back Frame

X 1.19. Is the seat a bucket seat?
X Yes, go to 1.20 and skip 1.21
__No, go to 1.21 and skip 1.20

X 1.20 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)

__1.21 Bench seats (complete ONLY the one that is applicable to the seat being marked):

__1.21.1 Driver Seat
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.

__1.21.2 Passenger Seat
Locate and **mark** for future reference 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. (S20.2.1.3, 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

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 200 mm

Mid-point height 100 mm

Wayne Gahl 7/25/07

I certify that I have read and performed each instruction. Date

DATA SHEET 14.3

MARKING OF REFERENCE POINTS FOR STEERING WHEEL

X 1. Is the steering wheel adjustable up and down and/or in and out?
X Yes - go to 2
__No - this form is complete

X 2. Find and **mark** for future reference each up and down position. Label three of the positions with the following: H for Top of 4, 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

X 3. 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.

Wayne Dahl _____ 7/25/07_____

I certify that I have read and performed each instruction. Date

DATA SHEET 14.4

MARKING OF REFERENCE POINTS FOR DRIVER LOW RISK DEPLOYMENT

X Position 1 X Position 2

X 1. Position the steering wheel so the front wheels are in the straight-ahead position. (S26.2.1)

X 2. Position any adjustable parts of the steering controls to the mid-position as determined in Data Sheet 14.3 above. If a mid-position adjustment is not achievable, position the controls to the next lowest detent position. (S26.2.1)

X 3. Locate and **mark** the point that is defined by the intersection of the steering wheel cover and a line between the volumetric center of the smallest volume that can encompass the folded undeployed air bag and the volumetric center of the static fully inflated air bag. The vertical plane parallel to the vehicle longitudinal centerline through this point is referred to as "Plane E." (Check determination method below.) (S26.2.2)
Measurements with respect to measurement reference points:

The longitudinal centerline of the air bag was used.

__Point determined using manufacturer's information supplied by the COTR .
(Include manufacturer's information in the test report.)
OR
X Point determined by test lab personnel and approved by the COTR.
(Include supporting documentation in the test report.)

X 4. Locate the Top of 4 point of the air bag module cover. The horizontal plane through this point is referred to as "Plane F." (Check determination method below.) (S26.2.6)
Measurements with respect to measurement reference points:

The top of the air bag module cover was used.

__Point determined using manufacturer's information supplied by the COTR .
(Include manufacturer's information in the test report.)
OR
X Point determined by test lab personnel and approved by the COTR.
(Include manufacturer's information in the test report.)

Wayne Gahl 7/25/07

I certify that I have read and performed each instruction. Date

DATA SHEET 14.5

MARKING OF REFERENCE POINTS FOR PASSENGER LOW RISK DEPLOYMENT

X Position 1 X Position 2

X Locate and **mark** the point that is defined by the intersection of the instrument panel and a line between the volumetric center of the smallest volume that can encompass the folded undeployed air bag and the volumetric center of the static fully inflated air bag. (S22.4.1.2, S24.4.1.2) The horizontal plane thru this point is referred to as “Plane C” (S22.4.1.4 and S24.4.1.4). The vertical plane parallel to the vehicle longitudinal centerline and through this point is referred to as “Plane D" (S22.4.1.3 and S24.4.1.3). (Check determination method below.) Measurements with respect to measurement reference points:

_____

_____

_____

X Point determined using manufacturer’s information supplied by the COTR . (Include manufacturer’s information in the test report.) See Appendix D-78

OR

__ Point determined by test lab personnel and approved by the COTR. (Include supporting documentation in the test report.)

Wayne Gahl 7/25/07

I certify that I have read and performed each instruction. Date

DATA SHEET 24 SUMMARY

Low Risk Deployment Test Using 12-month-old CRABI Dummy (Part 572, Subpart N)(S20.4)

NHTSA NO.:	C70307	TEST DATE:	7-25-07
LABORATORY:	MGA	TECHNICIANS:	BR/WD
DUMMY TYPE:	12 Month Old	DUMMY SERIAL NO.:	083

Child Restraint Name and Model: Century Encore
Separate Base? No
Base Used? (S20.1.7) N/A
Handle Position? (S20.1.3) N/A
Sunshade? (S20.1.4) N/A
Blanket Position 1? (S20.1.5(a)) No
Blanket Position 2? (S20.1.5(b)) No

Tested seat back angle: 14° On Seat Back Frame
Seat cushion angle: Zero (No Adjustment)
Manufacturer's specified anchorage position: 3rd of 5 (Mid)
Tested anchorage position: 3rd of 5 (Mid)
Tested seat position: Full forward
Seat belt tension: 8 N

Air Bag Deployment Timing

Stage No.	Firing time (ms)	Recorded firing time (ms)
1	0.0	0.0
2	10.0	10.0

12-Month-Old CRABI In CRS (Century Encore) 7-25-07

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	390	157
Peak Nij (Nte)	1.0	0.1
Time (ms)	NA	56.4
Peak Nij (Ntf)	1.0	0.3
Time (ms)	NA	26.5
Peak Nij (Nce)	1.0	0.1
Time (ms)	NA	54.0
Peak Nij (Ncf)	1.0	0.2
Time (ms)	NA	30.0
Neck Tension	780 N	182
Neck Compression	960 N	137
Chest g	50 g	29

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 10 ms; Injuries calculated on 0 ms to 135 ms

DATA SHEET 24 SUMMARY

Low Risk Deployment Test Using 12-month-old CRABI Dummy (Part 572, Subpart N)(S20.4)

NHTSA NO.:	C60304	TEST DATE:	8-7-07
LABORATORY:	MGA	TECHNICIANS:	BR/WD
DUMMY TYPE:	12 Month Old	DUMMY SERIAL NO.:	082

Child Restraint Name and Model: Britax Handle With Care
Separate Base? No
Base Used? (S20.1.7) N/A
Handle Position? (S20.1.3) Down
Sunshade? (S20.1.4) N/A- Removed per COTR
Blanket Position 1? (S20.1.5(a)) No
Blanket Position 2? (S20.1.5(b)) No

Tested seat back angle: 14° On Seat Back Frame
Seat cushion angle: Zero (No Adjustment)
Manufacturer's specified anchorage position: 3rd of 5 (Mid)
Tested anchorage position: 3rd of 5 (Mid)
Tested seat position: Full forward
Seat belt tension: 3 N

Air Bag Deployment Timing

Stage No.	Firing time (ms)	Recorded firing time (ms)
1	0.0	0.0
2	10.0	10.0

12-Month-Old CRABI In CRS (Britax Handle With Care) 8-7-07

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	390	2
Peak Nij (Nte)	1.0	0.0
Time (ms)	NA	135.0
Peak Nij (Ntf)	1.0	0.0
Time (ms)	NA	119.9
Peak Nij (Nce)	1.0	0.0
Time (ms)	NA	12.2
Peak Nij (Ncf)	1.0	0.2
Time (ms)	NA	37.4
Neck Tension	780 N	29
Neck Compression	960 N	277
Chest g	50 g	6

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 10 ms; Injuries calculated on 0 ms to 135 ms

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.:	C70307	TEST DATE:	8/20/07
LABORATORY:	MGA	TECHNICIANS:	BR/WD
DUMMY TYPE:	3-Year-Old	DUMMY SERIAL NO.:	032

Manufacturer's design seat back angle: 14° On Seat Back Frame
Tested seat back angle: 14° On Seat Back Frame
Tested seat position: Full Forward

Thorax cavity angle: 0.2°
Thigh angle: 9.3°

Air Bag Deployment Timing

Stage No.	Firing time (ms)	Recorded firing time (ms)
1	0.0	0.0
2	60.0	60.3

3-Year-Old SN 032 Position 2 (Head on Instrument Panel) 8-20-07

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	570	5
Peak Nij (Nte)	1.0	0.2
Time (ms)	NA	87.9
Peak Nij (Ntf)	1.0	0.0
Time (ms)	NA	12.5
Peak Nij (Nce)	1.0	0. 2
Time (ms)	NA	35.5
Peak Nij (Ncf)	1.0	0.0
Time (ms)	NA	17.4
Neck Tension	1130 N	170
Neck Compression	1380 N	175
Chest g	55 g	4
Chest Displacement	34 mm	1

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

DATA SHEET 27 SUMMARY

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

NHTSA NO.:	C70307	TEST DATE:	8/23/07
LABORATORY:	MGA	TECHNICIANS:	BR/WD
DUMMY TYPE:	6-Year-Old	DUMMY SERIAL NO.:	159

Manufacturer's design seat back angle: 14° On Seat Back Frame
Tested seat back angle: 14° On Seat Back Frame
Tested seat position: Full Aft

Thorax cavity angle: 6.0°
Point 1 height: 18 mm Below AB Module

Air Bag Deployment Timing

Stage No.	Firing time (ms)	Recorded firing time (ms)
1	0.0	0.0
2	60.0	60.2

6-Year-Old SN 159 Position 1 (Chest on Instrument Panel) 8-23-07

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	700	1
Peak Nij (Nte)	1.0	0.0
Time (ms)	NA	12.3
Peak Nij (Ntf)	1.0	0.0
Time (ms)	NA	12.8
Peak Nij (Nce)	1.0	0.0
Time (ms)	NA	15.3
Peak Nij (Ncf)	1.0	0.2
Time (ms)	NA	28.9
Neck Tension	1490 N	70
Neck Compression	1820 N	172
Chest g	60 g	4
Chest Displacement	40 mm	0

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

DATA SHEET 29 SUMMARY

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

NHTSA NO.:	C70307	TEST DATE:	7/25/07
LABORATORY:	MGA	TECHNICIANS:	WD/BR
DUMMY TYPE:	5th Percentile Female	DUMMY SERIAL NO.:	511

Manufacturer's design seat back angle: 14° On Seat Back Frame
Tested seat back angle: 14° On Seat Back Frame
Tested seat position: Full Aft

Tested steering wheel angle: 20.7°
Thorax cavity angle: 26.8°
Bottom of chin height: 0 mm - At Module

Air Bag Deployment Timing

Stage No.	Firing time (ms)	Recorded firing time (ms)
1	0.0	0.0
2	150.0	150.3

5th Percentile Female SN 511 Position 1 (Chin On Module) 7-25-07

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	700	34
Peak Nij (Nte)	1.0	0.3
Time (ms)	NA	73.9
Peak Nij (Ntf)	1.0	0.2
Time (ms)	NA	42.8
Peak Nij (Nce)	1.0	0.0
Time (ms)	NA	10.5
Peak Nij (Ncf)	1.0	0.1
Time (ms)	NA	267.1
Neck Tension	2070 N	940
Neck Compression	2520 N	142
Chest g	60 g	13
Chest Displacement	52 mm	6
Left Femur	6805 N	65
Right Femur	6805 N	67

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 150 ms; Injuries calculated on 0 ms to 275 ms

DATA SHEET 30 SUMMARY

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

NHTSA NO.:	C70307	TEST DATE:	7/25/07
LABORATORY:	MGA	TECHNICIANS:	WD/BR
DUMMY TYPE:	5th Percentile Female	DUMMY SERIAL NO.:	511

Manufacturer's design seat back angle: 14° On Seat Back Frame
Tested seat back angle: 14° On Seat Back Frame
Tested seat position: Full Aft

Tested steering wheel angle: 18.3° *
Thorax cavity angle: 24.5°
Chin Point height: 10 mm Below Steering Wheel Target
Note: The chin on rim steering wheel target is 10 mm below the highest point on the steering wheel

*The dummy contacted the windshield with the steering wheel at mid position. The steering controls were adjusted to lower the upper steering wheel rim the necessary amount to bring the Chin Point coincident with the upper steering wheel rim. The rear thorax cavity was adjusted along with the steering wheel angle.

Air Bag Deployment Timing

Stage No.	Firing time (ms)	Recorded firing time (ms)
1	0.0	0.0
2	150.0	150.1

5th Percentile Female SN 511 Position 2 (Chin On Rim) 7-25-07

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	700	2
Peak Nij (Nte)	1.0	0. 2
Time (ms)	NA	18.3
Peak Nij (Ntf)	1.0	0.1
Time (ms)	NA	53.2
Peak Nij (Nce)	1.0	0.1
Time (ms)	NA	0.4
Peak Nij (Ncf)	1.0	0.1
Time (ms)	NA	62.4
Neck Tension	2070 N	424
Neck Compression	2520 N	65
Chest g	60 g	18
Chest Displacement	52 mm	10
Left Femur	6805 N	15
Right Femur	6805 N	17

Calculated on data recorded for 125ms 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 150 ms; Injuries calculated on 0 ms to 275 ms

DATA SHEET 32

VEHICLE WEIGHT, FUEL TANK, AND ATTITUDE DATA

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Jamie Aide

NHTSA No.: C70307
Test Date: 9/5/07

IMPACT ANGLE:	Zero Degrees		
BELTED DUMMIES (YES/NO):	No		
TEST SPEED:	_X_ 32 to 40 kmph	__ 0 to 48 kmph	__ 0 to 56 kmph
DRIVER DUMMY:	_X_ 5th female	__ 50th male	
PASSENGER DUMMY:	_X_ 5th female	__ 50th 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: 68.1 liters (18.0 gallons)
X	5.	Record the fuel tank capacity supplied in the owner's manual.
X		Useable Fuel Tank Capacity in owner's manual: 68.1 liters (18.0 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: 68.1 liters (18.0 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:	30 psi	LF:	30 psi	RR:	30 psi	LR:	30 psi
Owner's manual pressure:	RF:	30 psi	LF:	30 psi	RR:	30 psi	LR:	30 psi
Actual inflated pressure:	RF:	30 psi	LF:	30 psi	RR:	30 psi	LR:	30 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):	453.6	Right Rear (kg):	401.9
Left Front (kg):	445.0	Left Rear (kg):	390.5
Total Front (kg):	898.6	Total Rear (kg):	792.4
% Total Weight:	53.1	% Total Weight:	46.9
UVW = TOTAL FRONT PLUS TOTAL REAR (KG):			1691.0

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:	787	LF:	789	RR:	795	LR:	800

X 14. Calculate the Rated Cargo and Luggage Weight (RCLW): 52 kg

X 14.1 Does the vehicle have the vehicle capacity weight (VCW) on the certification label or tire placard?

X X Yes, go to 14.3

No, go to 14.2

14.2 VCW = Gross Vehicle Weight - UVW

VCW = _____ - _____ = _____

X 14.3 VCW = 392 kg (865 lbs)

X 14.4 Does the certification or tire placard contain the Designated Seating Capacity (DSC)?

X Yes, go to 14.6

No, go to 14.5 and skip 14.6

14.5 DSC = Total number of seat belt assemblies = _____

X 14.6 DSC = 5

X 14.7 RCLW = VCW - (68 kg x DSC) = 392 kg - (68 kg x 5) = 52 kg

X 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)

X No, use the RCLW calculated in 14.7

X 15. Fully Loaded Weight (100% fuel fill): 1838.5 kg

X 15.1 Place the appropriate test dummy in both front outboard seating positions.

Driver: X 5th female __ 50th male
Passenger: X 5th female __ 50th male

X 15.2 Load the vehicle with the RCLW from 14.7 or 14.8 whichever is applicable.

X 15.3 Place the RCLW in the cargo area. Center the load over the longitudinal centerline of the vehicle. (S8.1.1 (d))

X 15.4 Record the vehicle weight at each wheel to determine the Fully Loaded Weight.

Right Front (kg):	473.6	Right Rear (kg):	455.0
Left Front (kg):	465.8	Left Rear (kg):	444.1
Total Front (kg):	939.4	Total Rear (kg):	899.1
% Total Weight:	51.1	% Total Weight:	48.9
% GVW	57.3	% GVW	57.3
(% GVW = Axle GVW divided by Vehicle GVW)			
Fully Loaded Weight = Total Front Plus Total Rear (kg):			1838.5

X 16. Fully Loaded Test Vehicle Attitude: (All dimensions in millimeters)

X 16.1 Place the vehicle on a level surface.

X 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:	776	LF:	779	RR:	775	LR:	781

X 17. Drain the fuel system

X 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.

X Fuel tank capacity x .94 = 68.1 liters (18.0 gallons) x .94 = 64.0 liters (16.9 gallons)

X Amount added 62.7 liters (16.58 gallons) 92.1%

X 19. Crank the engine to fill the fuel delivery system with Stoddard solvent

X 20. Calculate the test weight range.

X 20.1 Calculated Weight = UVW (see 12 above) + RCLW (see 14 above) + 2x(dummy weight)

1841.0 kg = 1691.0 kg + 52.0 kg + 98.0 kg

X 20.2 Test Weight Range = Calculated Weight (- 4.5 kg, - 9 kg.)
Max. Test Weight = Calculated Test Weight - 4.5 kg = 1836.5 kg
Min. Test Weight = Calculated Test Weight - 9 kg = 1832.0 kg

X 21. Remove the RCLW from the cargo area.

X 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.

X 23. Vehicle Components Removed For Weight Reduction:
Spare tire, jack and tools, rear seat bottom, and trunk interior

X 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.

X 25. If necessary, add ballast to achieve the actual test weight.

N/A

X Weight of Ballast: 52.2 kg

X 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.

X 27. Record the vehicle weight at each wheel to determine the actual test weight.

Right Front (kg):	469.5	Right Rear (kg):	452.7
Left Front (kg):	469.0	Left Rear (kg):	442.3
Total Front (kg):	938.5	Total Rear (kg):	895.0
% Total Weight:	51.2	% Total Weight:	48.8
% GVW	57.3	% GVW	57.3
(% GVW = Axle GVW divided by Vehicle GVW)			
TOTAL FRONT PLUS TOTAL REAR (kg):			1833.5

X 28. Is the test weight between the Max. Weight and the Min. Weight (See 20.2)?

X Yes

No, explain why not.

X 29. Test Weight Vehicle Attitude: (all dimensions in millimeters)

X 29.1 Place the vehicle on a level surface

X 29.2 Measure perpendicular to the level surface to the 4 points marked on the body (see 13 above) and record the measurements

RF:	778	LF:	780	RR:	778	LR:	783

X 30. Summary of test attitude

X 30.1 AS DELIVERED:

RF:	787	LF:	789	RR:	795	LR:	800

AS TESTED:

RF:	778	LF:	780	RR:	778	LR:	783

FULLY LOADED:

RF:	776	LF:	779	RR:	775	LR:	781

X 30.2 Is the “as tested” test attitude equal to or between the “fully loaded” and “as delivered” attitude?

X Yes

No, explain why not.

REMARKS:

I certify that I have read and performed each instruction.

Signature: 

Date: 9/5/07

DATA SHEET 33

VEHICLE ACCELEROMETER LOCATION AND MEASUREMENT

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Jamie Aide

NHTSA No.: C70307
Test Date: 9/5/07

IMPACT ANGLE:	Zero Degrees		
BELTED DUMMIES (YES/NO):	No		
TEST SPEED:	_X_ 32 to 40 kmph	__ 0 to 48 kmph	__ 0 to 56 kmph
DRIVER DUMMY:	_X_ 5th female	__ 50th male	
PASSENGER DUMMY:	_X_ 5th female	__ 50th male	

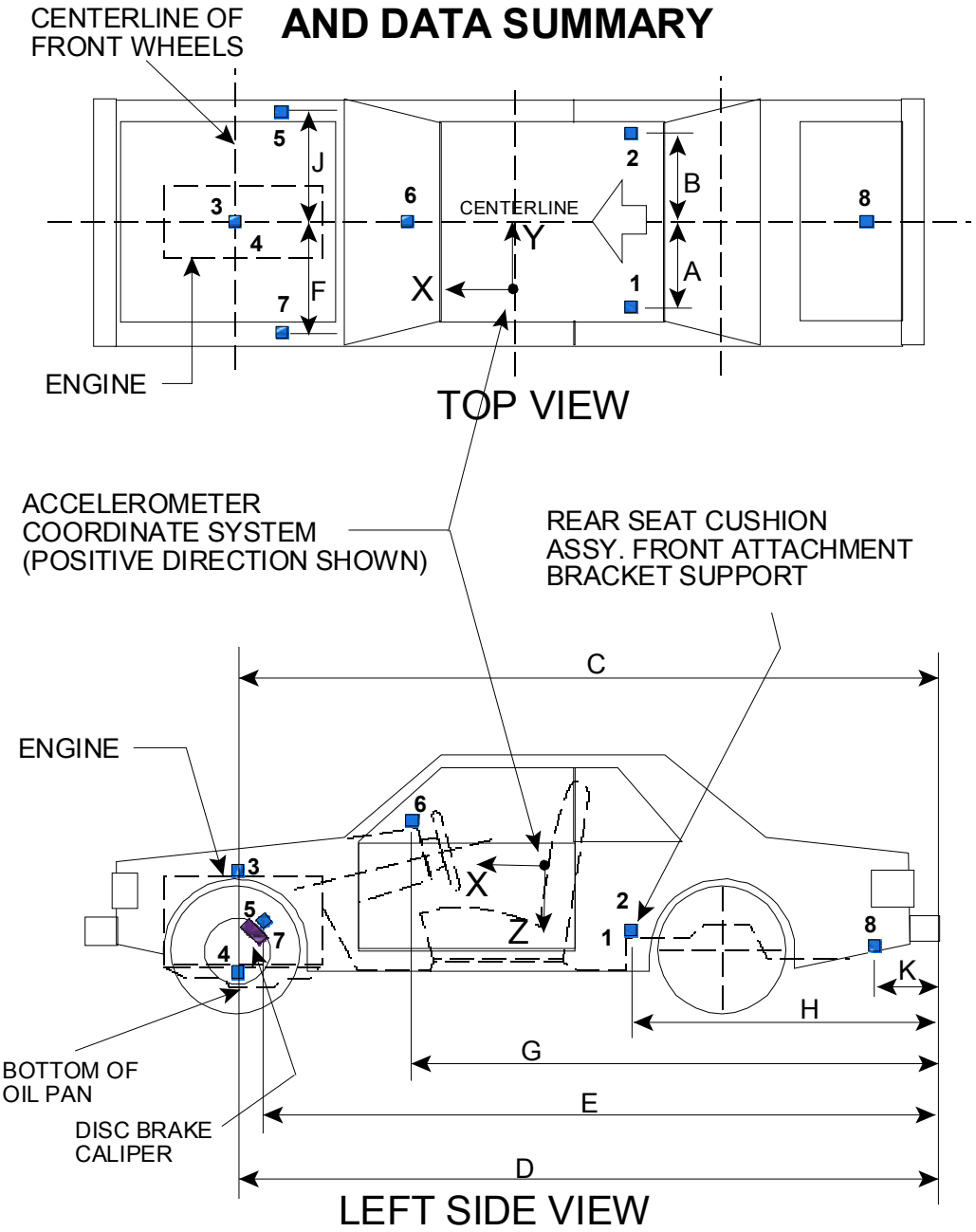
X	1.	Find the location where the vertical plane parallel to the longitudinal centerline of the vehicle and through the center of the left front outboard seating position intersects the left rear seat cross member. Install an accelerometer at this intersection on the rear seat cross member to record x-direction accelerations. Record the location on the following chart.
X	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.
X	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.
X	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
X	5.	Install an accelerometer on the right front brake caliper to record x-direction accelerations. Record the location on the following chart
X	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
X	7.	Install an accelerometer on the left front brake caliper to record x-direction accelerations. Record the location on the following chart
X	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: Jamie Aide Date: 9/5/07

VEHICLE ACCELEROMETER LOCATION AND DATA SUMMARY



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.

DATA SHEET 33

VEHICLE ACCELEROMETER LOCATION AND MEASUREMENTS

DIMENSION	LENGTH (mm)	
PRETEST VALUES		
A (LH Rear Seat Xmbr)	397	
B (RH Rear Seat Xmbr)	397	
C (Engine Top)	4252	
D (Engine Bottom)	4367	
E (Caliper)	Right Side: 3961	Left Side: 3989
F (Left Caliper)	776	
G (IP)	3330	
H (Seat)	1885	
J (Right Caliper)	776	
K (Trunk)	830	
POST TEST VALUES		
A (LH Rear Seat Xmbr)	396	
B (RH Rear Seat Xmbr)	396	
C (Engine Top)	4241	
D (Engine Bottom)	4338	
E (Caliper)	Right Side: 3941	Left Side: 3991
F (Left Caliper)	658	
G (IP)	3326	
H (Seat)	1896	
J (Right Caliper)	680	
K (Trunk)	1885	

DATA SHEET 34

PHOTOGRAPHIC TARGETS

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Jamie Aide

NHTSA No.: C70307
Test Date: 9/5/07

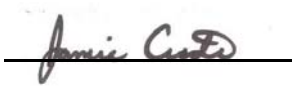
IMPACT ANGLE:	Zero Degrees		
BELTED DUMMIES (YES/NO):	No		
TEST SPEED:	_X_ 32 to 40 kmph	__ 0 to 48 kmph	__ 0 to 56 kmph
DRIVER DUMMY:	_X_ 5th female	__ 50th male	
PASSENGER DUMMY:	_X_ 5th female	__ 50th male	

X	1.	FMVSS 208 vehicle targeting requirements (See Figures 28A and 28B)
X	1.1	Targets A1 and A2 are on flat rectangular panels.
X	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.
X		Distance between targets (mm): 100 mm
X	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.
X		Distance between targets (mm): 100 mm
X	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.
X		Distance between the first and last circular targets (mm): 915 mm
X	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.
X	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.
X	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.
X		Distance between targets (mm): 610 mm
X	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.
X		Distance between targets (mm): 613 mm
X	1.9	Place tape with squares having alternating colors on the top portion of the steering wheel.
X	1.10	Chalk the bottom portion of the steering wheel
X	1.11	Is this an offset test?
		Yes, continue with this section
X		No, go to 2.

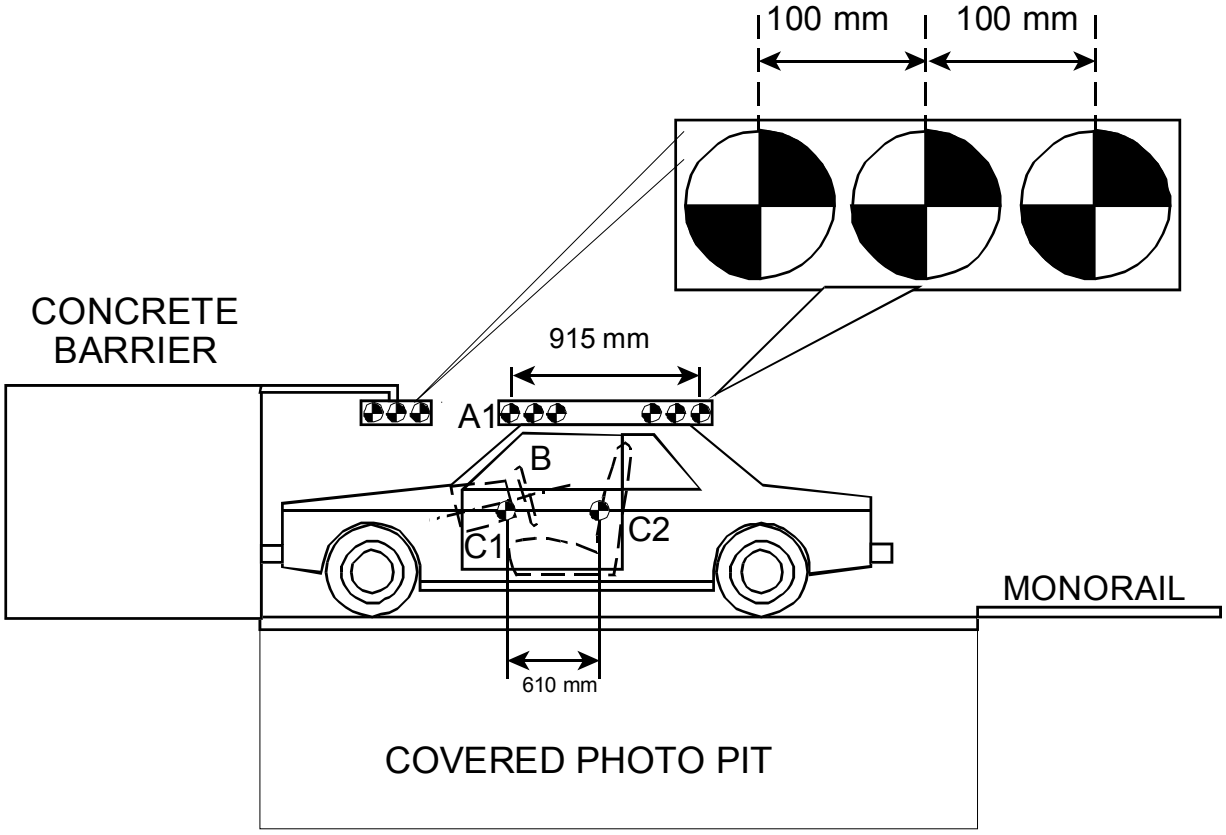
	1.12	Measure the width of the vehicle.
		Vehicle width (mm):
	1.13	Find the centerline of the vehicle. (½ of the vehicle width)
	1.14	Find the line parallel to the centerline of the vehicle and 0.1 x vehicle width from the centerline of the vehicle.
	1.15	Apply 25 mm wide tape with alternating black 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
X	2.	Barrier Targeting
X	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
X	2.2	Targets D1 and D2 are on a rectangular panel.
X	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.
X		Distance between circular targets on D1 (mm): 100 mm
X		Distance between circular targets on D2 (mm): 100 mm
X	3.	FMVSS 208 Dummy Targeting Requirements
X	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).
X	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).
X	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.
X	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.
X	4.	FMVSS 204 Targeting Requirements
X	4.1	Is an FMVSS 204 indicant test ordered on the “COTR Vehicle Work Order?”
		Yes, continue with this form.
X		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

I certify that I have read and performed each instruction.

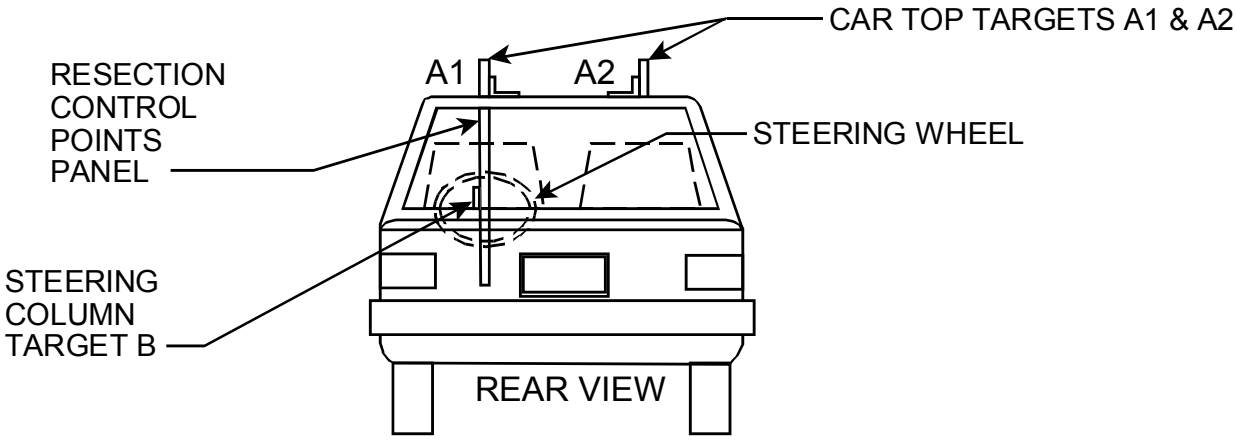
Signature:  Date: 9/5/07

REFERENCE PHOTO TARGETS

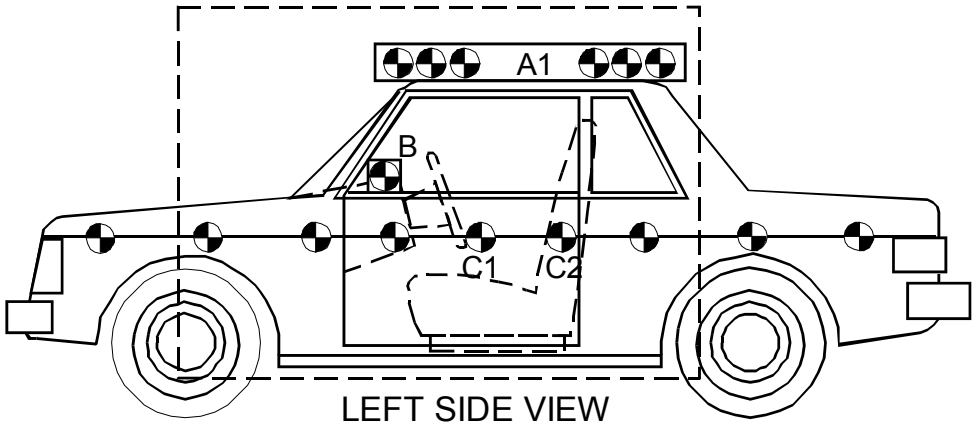


LEFT SIDE VIEW

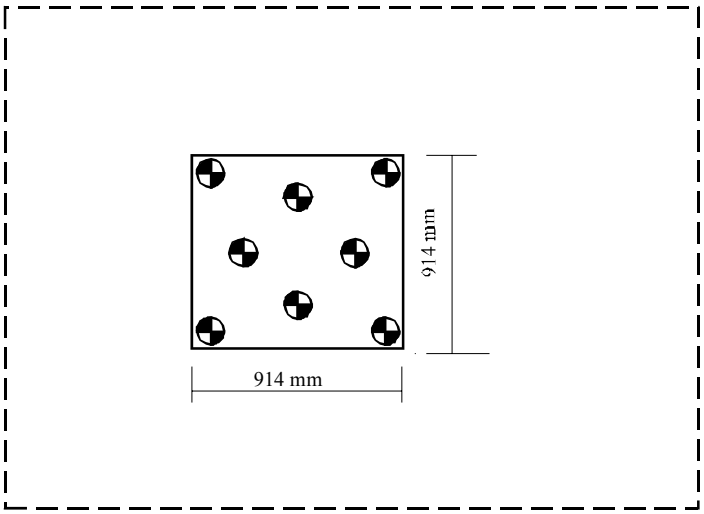
RESECTION PANEL TARGETING ALIGNMENT



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

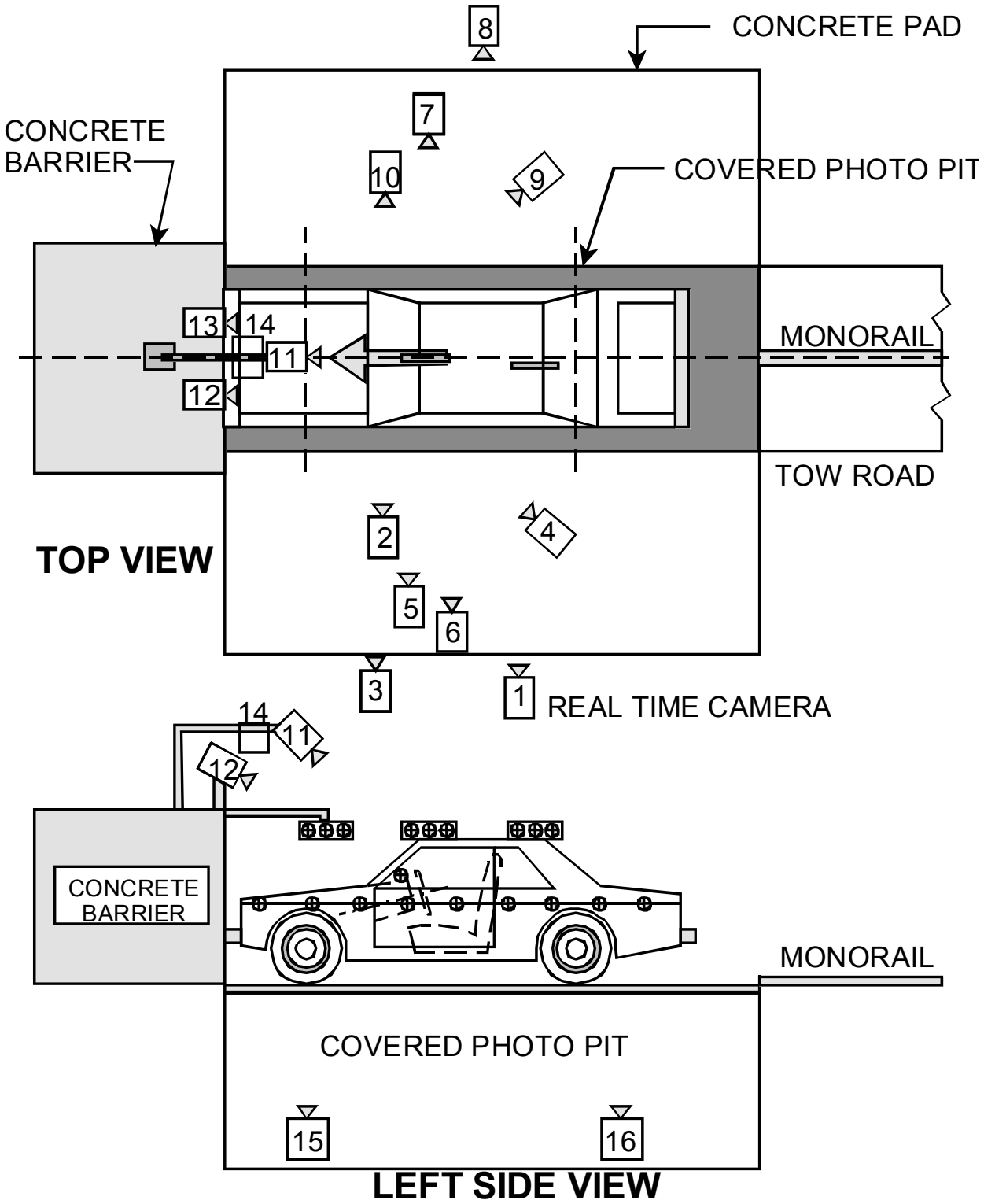
Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance

NHTSA No.: C70307
Test Date: 9/5/07
Time: 10:45 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)	1300	4400	1210	24	1000
3	Left Side View (Driver)	1410	5850	1180	35	1000
4	Left Side View (B-post aimed toward center of steering wheel)	6950	5120	2200	50	1000
5	Left Side View (Steering Column)	1220	5050	1290	25	1000
6	Left Side View (Steering Column)	1230	5060	900	25	1000
7	Right Side View (Overall)	2150	-7015	1380	24	1000
8	Right Side View (Passenger)	1450	-6000	1410	35	1000
9	Right Side View (Angle)	6920	-5020	2290	50	1000
10	Right Side View (Front door)	1340	-5300	1200	24	1000
11	Front View Windshield	-285	0	3000	12.5	1000
12	Front View Driver	-135	-470	2510	24	1000
13	Front View Passenger	-110	420	2490	24	1000
14	Overhead Barrier Impact View	0	0	0	16	1000
15	Pit Camera Engine View	1350	0	-3150	24	1000
16	Pit Camera Fuel Tank View	3415	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 5th% DRIVER TEST DUMMY CONFORMING TO SUBPART O OF PART 572

Test Vehicle: 2007 Dodge Charger NHTSA No.: C70307
Test Program: FMVSS 208 Compliance Test Date: 9/5/07
Test Technician: Tim Bratz

IMPACT ANGLE:	Zero Degrees		
BELTED DUMMIES (YES/NO):	No		
TEST SPEED:	_X_ 32 to 40 kmph	__ 0 to 48 kmph	__ 0 to 56 kmph
DRIVER DUMMY:	_X_ 5th female	__ 50th male	
PASSENGER DUMMY:	_X_ 5th female	__ 50th male	

X 1. Using the markings made from data sheet 14.3 (If not done previously or steering repairs have been made, complete data sheet 14.3 at this time.) to position the steering controls in the mid-position or if applicable next lowest detent position. (S16.2.9)

X 2. Place the SCRP in the full rearward, mid-height position, and mid-seat cushion angle, determined during the completion of Data Sheet 14.1. (S16.3.2.1.1)

X 3. If the vehicle has an adjustable accelerator pedal, place it in the full forward position. (S16.3.2.2.1)
X N/A accelerator pedal not adjustable

X 4. Fully recline the seat back. (S16.3.2.1.2)
__ 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. (S16.3.2.1.2)

X 6. Position the dummy in the seat such that the midsagittal plane is coincident with the longitudinal seat cushion markings as determined in Data Sheet 14.1. (S16.3.2.1.3 and S16.3.2.1.4)

X 7. Hold down the dummy's thighs and push rearward on the upper torso to maximize the pelvic angle. (S16.3.2.1.5)

X 8. Set the angle between the legs and the thighs to 120 degrees. (S16.3.2.1.6)

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 as determined Data Sheet 14.1. (S16.3.2.1.6)
Record Knee Separation ___165__

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. (S16.3.2.1.6)
__Pelvis contacted seat back.
X Calves contacted seat cushion.

X 11. Gently rock the upper torso ± 5 degrees (approximately 51 mm (2 inches)) side-to-side three time. (S16.3.2.1.7)

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. (S16.3.2.1.8)

X 13. 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)

X 14. Rotate the left leg and thigh laterally to equalize the distance between each knee and the longitudinal seat cushion marking as determined in Data Sheet 14.1. (S16.3.2.1.8)

X 15. Attempt to return the seat to the foremost fore-aft position, mid-height, and seat cushion mid-angle as determined in Data Sheet 14.2. 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)
X Foremost position achieved. Proceed to step 20.
__Foremost not achieved because of foot interference. Proceed to step 17.
__Foremost not achieved because of steering wheel contact.

__16. 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

__17. 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.

__18. Continue to move the seat. Use seat controls to line up the seat markings determined during the completion of Data Sheet 14.1 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 5mm
Measured Clearance_____
__Dummy Contact. Seat set at nearest detent position.
Seat position ___ detent positions rearward of foremost
(foremost is position zero)

__19. If the steering wheel was repositioned in step 16, 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 5mm (.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 5mm

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)

X 20. 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 ± 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)

X Head Level Achieved. (Check all that apply)

X 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

X 21. Verify the pelvis is not interfering with the seat bight. (S16.3.2.1.9)

X No interference

__Pelvis moved forward the minimum amount so that it is not caught in the seat bight.

X 22. Verify the dummy abdomen is properly installed. (S16.3.2.1.9)

X Abdomen still seated properly into dummy

__Abdomen was adjusted because it was not seated properly into dummy

X 23. Head Angle

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

X 23.1 Head still level (Go to 24)

__23.2 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 24. If the dummy torso contacts the steering wheel while performing step 20, 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.

__24.1 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.

__24.2 Adjust tilt mechanism.
__N/A No tilt adjustment.
__No adjustment performed.
__Adjustment performed.
Steering wheel moved ____ detent positions Upward/Downward.
(circle one)
Steering wheel moved ____ degrees Upward/Downward

__24.3 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 25. Measure and set the pelvic angle using the pelvic angle gage TE-2504. The pelvic angle should be 20.0 degrees ± 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 ± 2.5 degrees.
__Pelvic angle of 20.0 degrees not achieved, the angular difference was minimized.
X Record the pelvic angle. ____20.9___ degrees

X 26. 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.

X 27. Check the dummy to see if additional interior clearance is obtained, allowing the seat to be moved forward. (S16.3.2.1.12)
X 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.

X 28. 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 29 otherwise, proceed to step 30. (S16.3.2.2.1)

X 29. Perform the following steps until either all steps are completed, or the foot contacts the accelerator pedal. Step 29.6 shall be completed in all cases. (S16.3.2.2.1(a))

X 29.1 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.

__29.2 If the vehicle has an adjustable accelerator pedal, move the pedals rearward until pedal contact occurs or the pedals reach the full rearward position.

__29.3 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)

__29.4 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)

__29.5 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)

X 29.6 Record foot position

X Pedal Contact achieved. Contact occurred at step __29.1___.

X Heel contacts floor pan

__Heel set _____ mm from floor pan.

__ Pedal Contact not achieved. Heel set _____ mm from the floor pan.

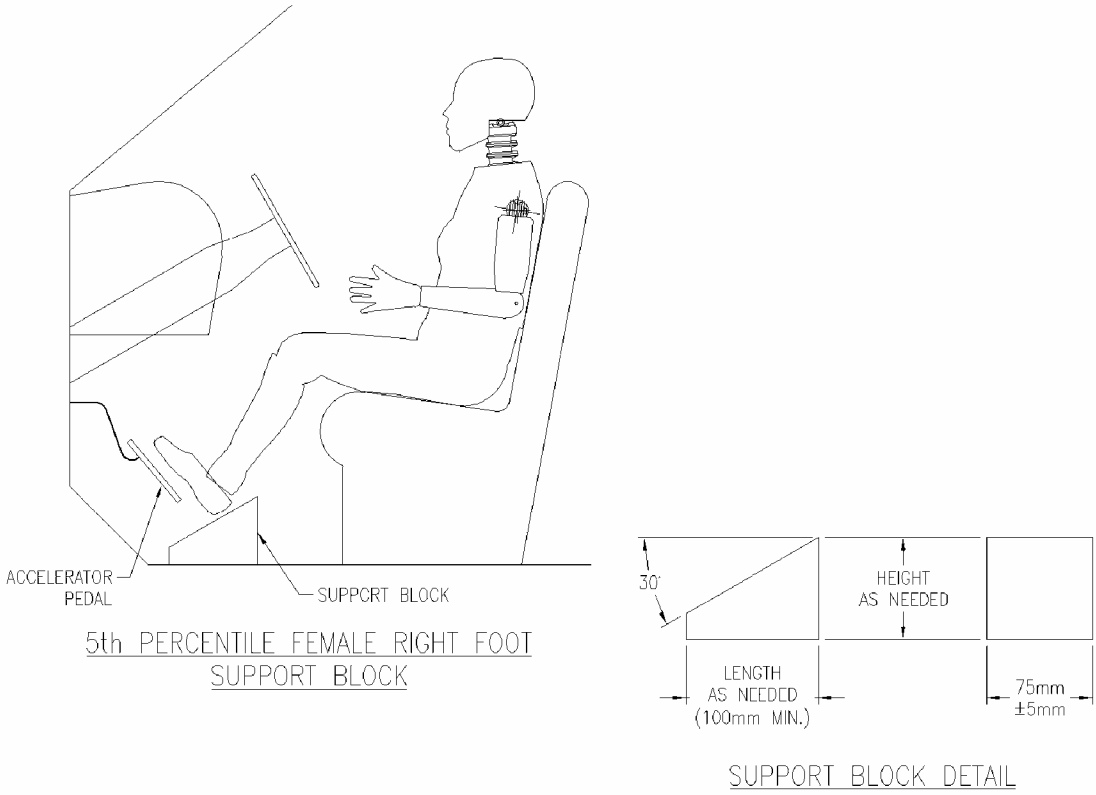


FIGURE G1

__30. 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.

__30.1 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)

__30.2 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

__30.3 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)

__30.4 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)

__30.5 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 31. Driver's foot positioning, left foot.

X 31.1 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 31.2, otherwise position the leg as perpendicular to the thigh as possible with the foot parallel to the floor pan. (S16.2.2.6)

X 31.2 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 31.3 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 32. Driver arm/hand positioning.

X 32.1 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 32.2 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 32.3 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 32.4 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 33. Adjustable head restraints

__N/A, there is no head restraint adjustment

__33.1 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 34.

__33.2 Adjust each head restraint vertically so that the mid-horizontal plane determined in Data Sheet 14.1 is aligned with the center of gravity (CG) of the dummy head. (S16.3.4.3)

X 33.3 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

X Headrest set at nearest detent below the head CG

__33.4 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)

__34. Driver and passenger manual belt adjustment (for tests conducted with a belted dummy). (S16.3.5) UNBELTED TEST

__34.1 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_____

__34.2 Place the Type 2 manual belt around the test dummy and fasten the latch. (S16.3.5.2)

__34.3 Ensure that the dummy's head remains as level as possible. (S16.3.5.3)

__34.4 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)

REMARKS:

I certify that I have read and performed each instruction.

Signature: _____ Date: 9/5/07

APPENDIX G

DUMMY POSITIONING PROCEDURES
FOR 5th% PASSENGER TEST DUMMY CONFORMING TO SUBPART O OF PART 572

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Joe Fleck

NHTSA No.: C70307
Test Date: 9/5/07

IMPACT ANGLE:	Zero Degrees		
BELTED DUMMIES (YES/NO):	No		
TEST SPEED:	_X_ 32 to 40 kmph	__ 0 to 48 kmph	__ 0 to 56 kmph
DRIVER DUMMY:	_X_ 5th female	__ 50th male	
PASSENGER DUMMY:	_X_ 5th female	__ 50th 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)

X 1. Place the SCRP in the full rearward, mid-height position, and mid-seat cushion angle, determined during the completion of Data Sheet 14.1. (S16.3.3.1.1)

X 2. Fully recline the seat back. (S16.3.3.1.2)
__ N/A seat back not adjustable.

X 3. 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 4. Position the dummy in the seat such that the midsagittal plane is coincident with the longitudinal seat cushion marking that was determined in Data Sheet 14.1. (S16.3.3.1.3 and S16.3.3.1.4)

X 5. Hold down the dummy's thighs and push rearward on the upper torso to maximize the pelvic angle. (S16.3.3.1.5)

X 6. Set the angle between the legs and the thighs to 120 degrees. (S16.3.3.1.6)

X 7. 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 Data Sheet 14.1. (S16.3.3.1.6)
Record Knee Separation ____165___

X 8. 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 9. Gently rock the upper torso ± 5 degrees (approximately 51 mm (2 inches)) side-to-side three times. (S16.3.3.1.7)

X 10. 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 11. Use seat controls to line up the seat markings determined during the completion of Data Sheet 14.1 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 5mm
Measured Clearance_____
__Dummy Contact. Seat set at nearest detent position.
Seat position ___ detent positions rearward of foremost
(foremost is position zero)

X 12. 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 ± 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 ± 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)
X Head leveled using the adjustable seat back
__Head leveled using the neck bracket.
Head Angle ____0.1____ 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 13. 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 14. 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 15. Head Angle
X N/A, neither the pelvis nor the abdomen were adjusted.

X 15.1 Head still level (Go to 16)

__15.2 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

_X_ 16. Measure and set the pelvic angle using the pelvic angle gage TE-2504. The pelvic angle should be 20.0 degrees ± 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.

X Pelvic angle set to 20.0 degrees ± 2.5 degrees.

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

X Record the pelvic angle. ____20.0____ degrees

_X_ 17. Check the dummy for contact with the interior after completing adjustments.

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.

_X_ 18. Verify the transverse instrument platform of the dummy head is level +/- 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)

X Head Level Achieved

Head Angle ____0.1_____ degrees

__Head Level NOT Achieved.

Head Angle _____ degrees

_X_ 19. 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

X 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.

_X_ 20. Passenger foot positioning. (Indicate final position achieved) (S16.3.3.2)

__20.1 Place feet flat on the toe board; OR (S16.3.3.2.1)

_X_ 20.2 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)

__20.3 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)

X 21. Passenger arm/hand positioning. (S16.3.3.3)

X 21.1 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)

X 21.2 Place the palms of the dummy in contact with the outer part of the thighs (S16.3.3.3.2)

X 21.3 Place the little fingers in contact with the seat cushion. (S16.3.3.3.3)

X 22. Adjustable head restraints (S16.3.4)
__N/A, there is no head restraint adjustment

__22.1 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 23.

__22.2 Adjust each head restraint vertically so that the horizontal plane determined in Data Sheet 14.1 is aligned with the center of gravity (CG) of the dummy head. (S16.3.4.3)

__22.3 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

__22.4 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)

X 23. Manual belt adjustment (for tests conducted with a belted dummy) S16.3.5
X N/A UNBELTED TEST

__23.1 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_____

__23.2 Place the Type 2 manual belt around the test dummy and fasten the latch. (S16.3.5.2)

__23.3 Ensure that the dummy's head remains as level as possible. (S16.3.5.3)

__23.4 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)

REMARKS:
I certify that I have read and performed each instruction.

Signature: Joe Fleck Date: 9/5/07

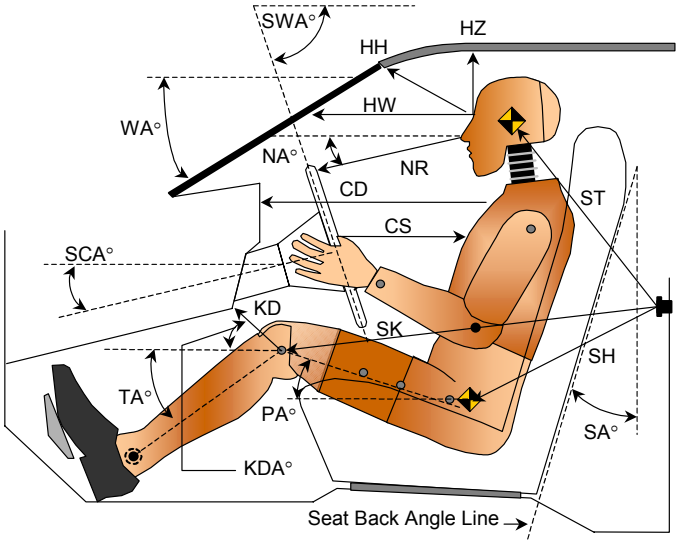
DATA SHEET 37

DUMMY MEASUREMENTS

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Joe Fleck

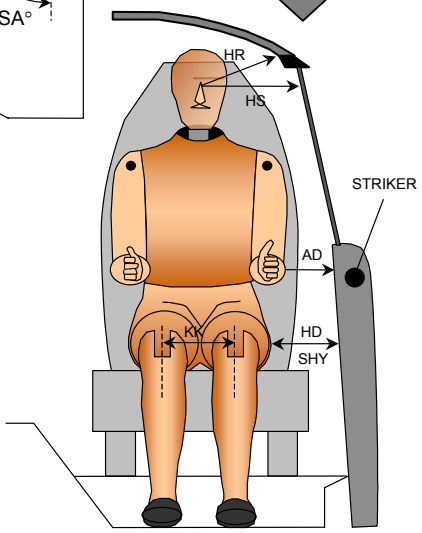
NHTSA No.: C70307
Test Date: 9/5/07

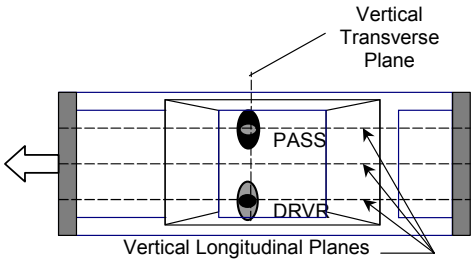
DUMMY MEASUREMENTS FOR FRONT SEAT OCCUPANTS



CD	Chest to Dash
CS	Chest to Steering Wheel Hub
HH	Head to Header
HW	Head to Windshield
HZ	Head to Roof
KDA	Knee to Dash Angle
KDL	Left Knee to Dash
KDR	Right Knee to Dash
NA	Nose to Rim Angle
NR	Nose to Rim
PA	Pelvic Angle
RA	Rim to Abdomen
SA	Seat Back Angle
SCA	Steering Column Angle
SH	Striker to H-Point
SK	Striker to Knee
ST	Striker to Head
SWA	Steering Wheel Angle
TA	Tibial Angle
WA	Windshield Angle

AD	Arm to Door
HD	H-Point to Door
HR	Head to Side Header
HS	Head to Side Window
KK	Knee to Knee
SHY	Striker to H-Point (Y Axis)





DATA SHEET 37

DUMMY MEASUREMENTS

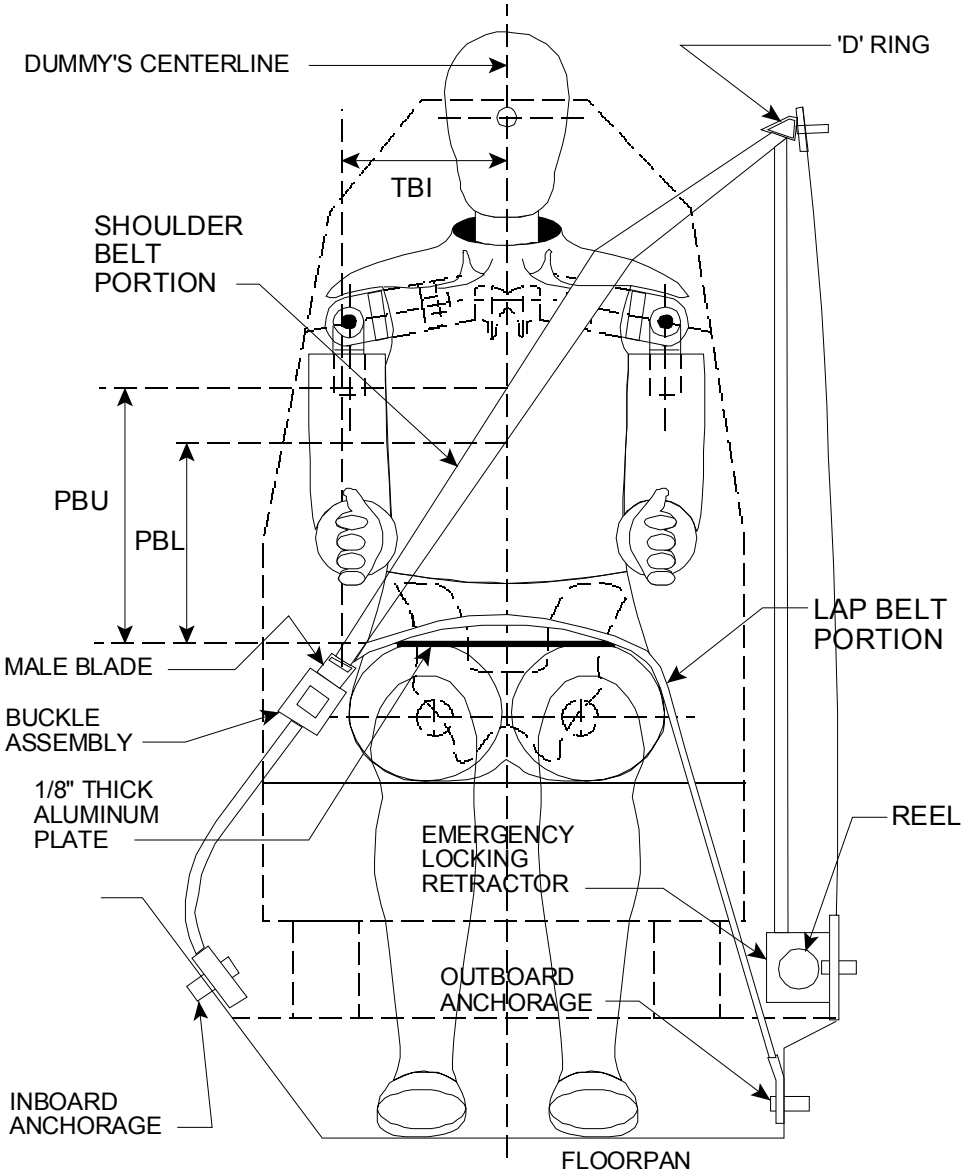
Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Joe Fleck

NHTSA No.: C70307
Test Date: 9/5/07

TEST DUMMY POSITION MEASUREMENTS

Code	Measurement Description	Driver SN 510		Passenger SN 511	
		Length (mm)	Angle (°)	Length (mm)	Angle (°)
WA	Windshield Angle		30.0		
SWA	Steering Wheel Angle		69.0		
SCA	Steering Column Angle		21.0		
SA	Seat Back Angle (On Headrest Post)		2.7		1.6
HZ	Head to Roof (Z)	238		211	
HH	Head to Header	370	26.8	383	22.8
HW	Head to Windshield	756	0.0	693	0.0
HR	Head to Side Header (Y)	231		210	
NR	Nose to Rim	239	3.8		
CD	Chest to Dash	440		386	
CS	Chest to Steering Hub	192	12.9		
RA	Rim to Abdomen	71	0.0		
KDL	Left Knee to Dash	91	36.4	95	
KDR	Right Knee to Dash	82		103	29.1
PA	Pelvic Angle		20.9		20.0
TA	Tibia Angle		55.2		54.3
KK	Knee to Knee (Y)	260		219	
SK	Striker to Knee	656	92.0	664	93.3
ST	Striker to Head	489	21.7	506	20.7
SH	Striker to H-Point	330	103.5	357	104.1
SHY	Striker to H-Point (Y)	337		332	
HS	Head to Side Window	386		343	
HD	H-Point to Door (Y)	245		235	
AD	Arm to Door (Y)	192		187	
AA	Ankle to Ankle	258		183	

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

DATA SHEET 38

CRASH TEST

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Joe Fleck

NHTSA No.: C70307
Test Date: 9/5/07

IMPACT ANGLE:	Zero Degrees		
BELTED DUMMIES (YES/NO):	No		
TEST SPEED:	_X_ 32 to 40 kmph	__ 0 to 48 kmph	__ 0 to 56 kmph
DRIVER DUMMY:	_X_ 5th female	__ 50th male	
PASSENGER DUMMY:	_X_ 5th female	__ 50th male	

X 1. Vehicle underbody painted
X 2. The speed measuring devices are in place and functioning.
X 3. The speed measuring devices are 1.0 m from the barrier (spec. 1.5m) and 30 cm from the barrier (spec. is 30 cm)
X 4. Convertible top is in the closed position.
   X N/A, not a convertible
X 5. Instrumentation and wires are placed so the motion of the dummies during impact is not affected.
X 6. Tires inflated to pressure on tire placard or if it does not have a tire placard because it is not a passenger car, then inflated to the tire pressure specified in the owner information.

210 kpa front left tire	210 kpa specified on tire placard or in owner information
210 kpa front right tire	210 kpa specified on tire placard or in owner information
210 kpa rear left tire	210 kpa specified on tire placard or in owner information
210 kpa rear right tire	210 kpa specified on tire placard or in owner information

X 7. Time zero contacts on barrier in place.
X 8. Pre test zero and shunt calibration adjustments performed and recorded
X 9. Dummy temperature meets requirements of section 12.2 of the test procedure.
X 10. Vehicle hood closed and latched
X 11. Transmission placed in neutral
X 12. Parking brake off
X 13. Ignition in the ON position
X 14. Doors closed and latched but not locked
X 15. Posttest zero and shunt calibration checks performed and recorded
X 16. Actual test speed 39.8 kmph
X 17. Vehicle rebound from the barrier 338 cm
X 18. Describe whether the doors open after the test and what method is used to open the doors.
   X Left Front Door: Door remained closed and latched; Door opened without tools
   X Right Front Door: Door remained closed and latched; Door opened without tools
   X Left Rear Door: Door remained closed and latched; Door opened without tools
   X Right Rear Door: Door remained closed and latched; Door opened without tools

X 19. Describe the contact points of the dummy with the interior of the vehicle.

X Driver Dummy: Head to Air Bag, Visor, and Headrest; Chest to Air Bag; Knees to Knee Bolster

X Passenger Dummy: Head to Air Bag, Visor, Header, Windshield, and Headrest; Chest to Air Bag; Knees to Glove Box

REMARKS:

I certify that I have read and performed each instruction.

Signature:  Date: 9/5/07

DATA SHEET NO. 40

ACCIDENT INVESTIGATION MEASUREMENTS

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Jamie Aide

NHTSA No.: C70307
Test Date: 9/5/07

IMPACT ANGLE:	Zero Degrees		
BELTED DUMMIES (YES/NO):	No		
TEST SPEED:	_X_ 32 to 40 kmph	__ 0 to 48 kmph	__ 0 to 56 kmph
DRIVER DUMMY:	_X_ 5th female	__ 50th male	
PASSENGER DUMMY:	_X_ 5th female	__ 50th male	

Vehicle Year/Make/Model/Body Style:	2007 Dodge Charger Passenger Car
VIN:	2B3KA43R07H808492
Wheelbase:	3038 mm
Build Date:	5/07
Vehicle Size Category:	5
Test Weight:	1833.5 kg
Front Overhang:	919 mm
Overall Width:	1872 mm
Overall Length Center:	5056 mm

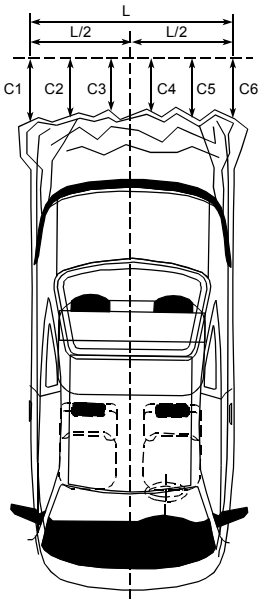
Accelerometer Data	
Location:	As per measurements on Data Sheet 33
Linearity:	>99.9%

Integration Algorithm:	Trapezoidal
Vehicle Impact Speed:	39.8 kmph
Time of Separation:	115.3 ms
Velocity Change:	45.1 kmph

CRUSH PROFILE

Collision Deformation Classification: 12FDEW6
Midpoint of Damage: Vehicle Longitudinal Centerline
Damage Region Length (mm): 1450
Impact Mode: Frontal Barrier

No.	Measurement Description	Units	Pre-Test	Post-Test	Difference
C1	Crush zone 1 at left side	mm	4864	4553	311
C2	Crush zone 2 at left side	mm	4962	4655	307
C3	Crush zone 3 at left side	mm	5018	4631	387
C4	Crush zone 4 at right side	mm	5018	4610	408
C5	Crush zone 5 at right side	mm	4962	4641	321
C6	Crush zone 6 at right side	mm	4864	4561	303



REMARKS:

I certify that I have read and performed each instruction.

Signature: _____ Date: 9/5/07

DATA SHEET 41

WINDSHIELD MOUNTING (FMVSS 212)

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Jamie Aide

NHTSA No.: C70307
Test Date: 9/5/07

IMPACT ANGLE:	Zero Degrees		
BELTED DUMMIES (YES/NO):	No		
TEST SPEED:	_X_ 32 to 40 kmph	__ 0 to 48 kmph	__ 0 to 56 kmph
DRIVER DUMMY:	_X_ 5th female	__ 50th male	
PASSENGER DUMMY:	_X_ 5th female	__ 50th male	

1. Pre-Crash

[X] 1.1 Describe from visual inspection how the windshield is mounted and describe any trim material.

Retained with glue
Plastic trim

[X] 1.2 Mark the longitudinal centerline of the windshield

[X] 1.3 Measure pre-crash A, B, and C for the left side and record in the chart below.

[X] 1.4 Measure pre-crash C, D, and E for the right side and record in the chart below.

[X] 1.5 Measure from the edge of the retainer or molding to the edge of the windshield.

[X] Dimension G (mm): 7 mm

2. Post Crash

[X] 2.1 Can a single thickness of copier type paper (as small a piece as necessary) slide between the windshield and the vehicle body?

[X] 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 75%?

[ ] Yes, Fail

[ ] No, Pass

[ ] 2.6 Is total left side percent retention less than 75%?

[ ] Yes, Fail

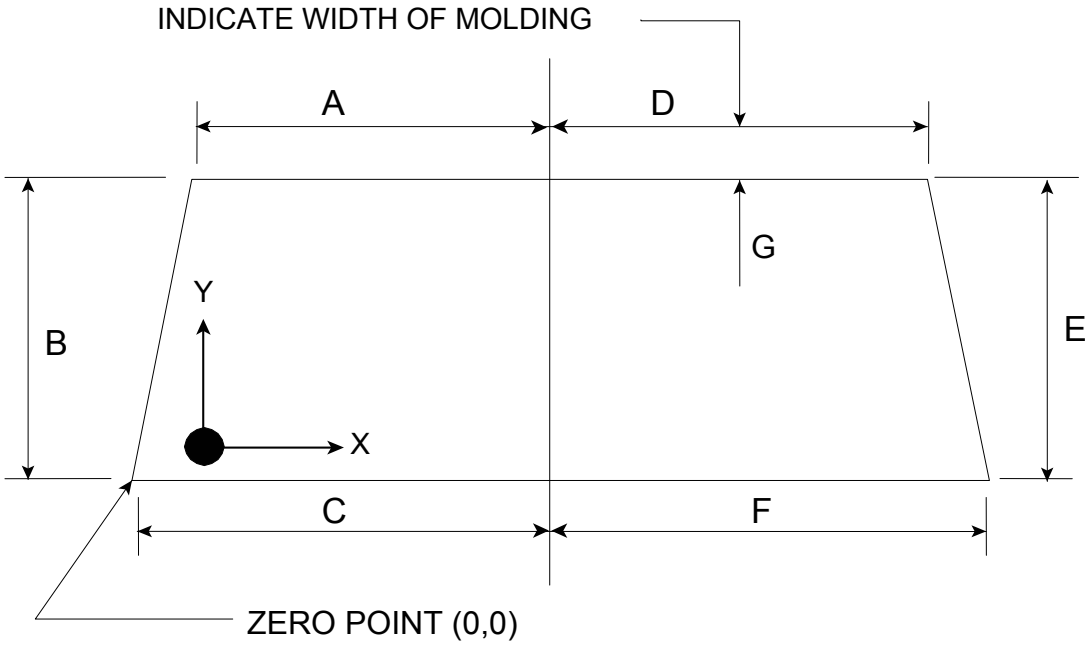
[ ] No, Pass

WINDSHIELD RETENTION MEASUREMENTS

	Dimension	Pre-Crash (mm)	Post-Crash (mm)	Percent Retention (Post-Test ÷ Pre-Crash)
Left Side	A	650	650	100%
	B	723	723	100%
	C	830	830	100%
	Total	2203	2203	100%
Right Side	D	650	650	100%
	E	727	727	100%
	F	830	830	100%
	Total	2207	2207	100%

Indicate area of mounting failure. NONE

FRONT VIEW OF WINDSHIELD



REMARKS:

I certify that I have read and performed each instruction.

Signature: Jamie Costa Date: 9/5/07

DATA SHEET 42

WINDSHIELD ZONE INTRUSION (FMVSS 219)

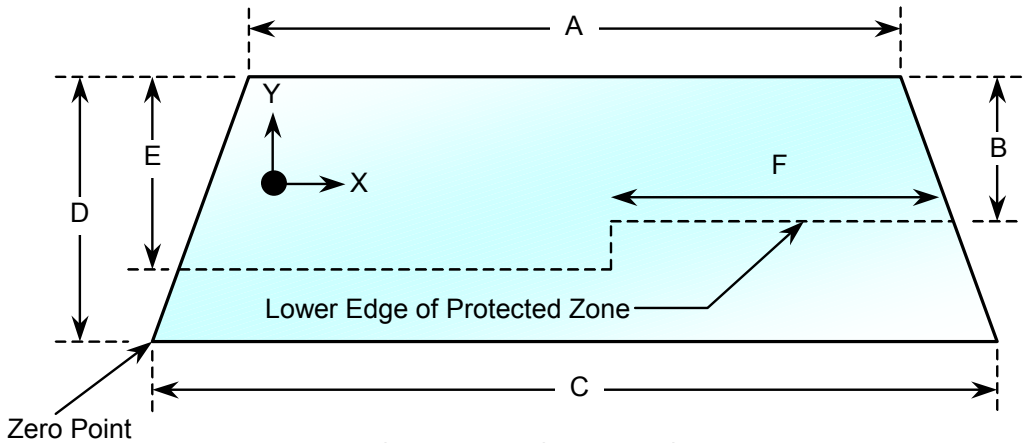
Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Jamie Aide

NHTSA No.: C70307
Test Date: 9/5/07

IMPACT ANGLE:	Zero Degrees		
BELTED DUMMIES (YES/NO):	No		
TEST SPEED:	_X_ 32 to 40 kmph	__ 0 to 48 kmph	__ 0 to 56 kmph
DRIVER DUMMY:	_X_ 5th female	__ 50th male	
PASSENGER DUMMY:	_X_ 5th female	__ 50th male	

X	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))
X	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))
X	3.	From the outermost contactable points on the windshield draw a horizontal line to the edges of the windshield. (571.219 S6.1(b))
X	4.	Draw a line on the inner surface of the windshield that is 13 mm below the line determined in items 2 and 3
X	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.



FRONT VIEW OF WINDSHIELD

WINDSHIELD DIMENSIONS

Item	Units	Value
A	mm	1300
B	mm	411
C	mm	1659
D	mm	723
E	mm	417
F	mm	536

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.

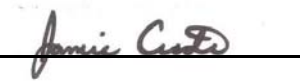
X	Y
NONE	

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: 9/5/07

DATA SHEET 43

FUEL SYSTEM INTEGRITY (FMVSS 301)

Test Vehicle: 2007 Dodge Charger
Test Program: FMVSS 208 Compliance
Test Technician: Daniel Sienko

NHTSA No.: C70307
Test Date: 9/5/07

TYPE OF IMPACT:	25 mph Unbelted Flat Frontal

Stoddard Solvent Spillage Measurements

A. From impact until vehicle motion ceases: 0.0 grams
(Maximum Allowable = 28 grams)

B. For the 5 minute period after motion ceases: 0.0 grams
(Maximum Allowable = 142 grams)

C. For the following 25 minutes: 0.0 grams
(Maximum Allowable = 28 grams/minute)

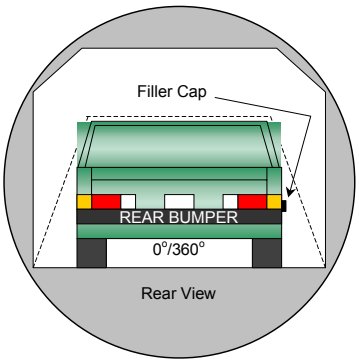
D. Spillage: NONE

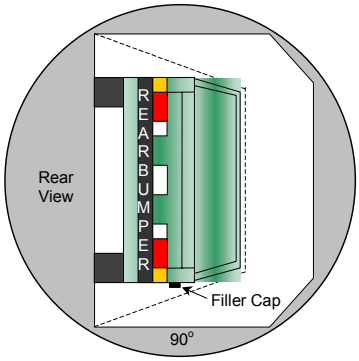
REMARKS: NO SPILLAGE

DATA SHEET NO. 43

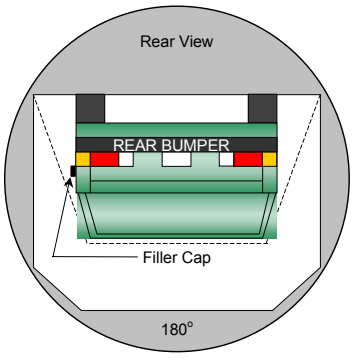
FMVSS 301 STATIC ROLLOVER DATA

Test Vehicle: 2007 Dodge Charger NHTSA No.: C70307
Test Program: FMVSS 208 Compliance Test Date: 9/5/07

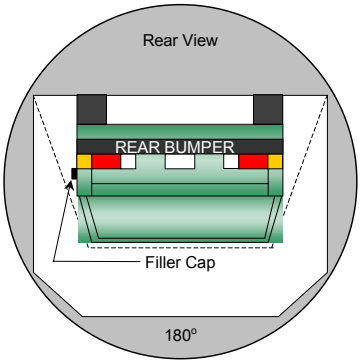




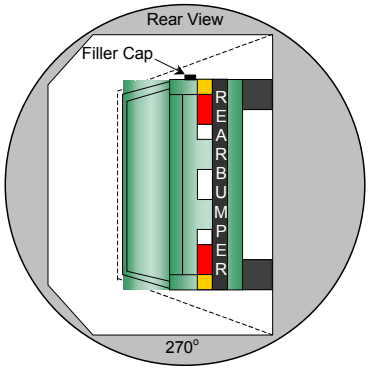
0° to 90°

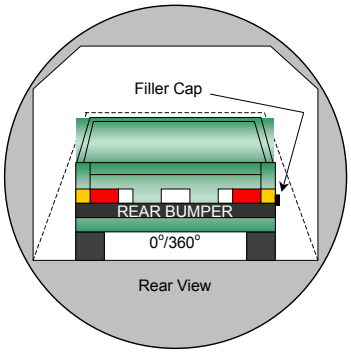


90° to 180°



180° to 270°





270° to 360°

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°	121	300	0.0
90° to 180°	119	300	0.0
180° to 270°	116	300	0.0
270° to 360°	122	300	0.0

APPENDIX A

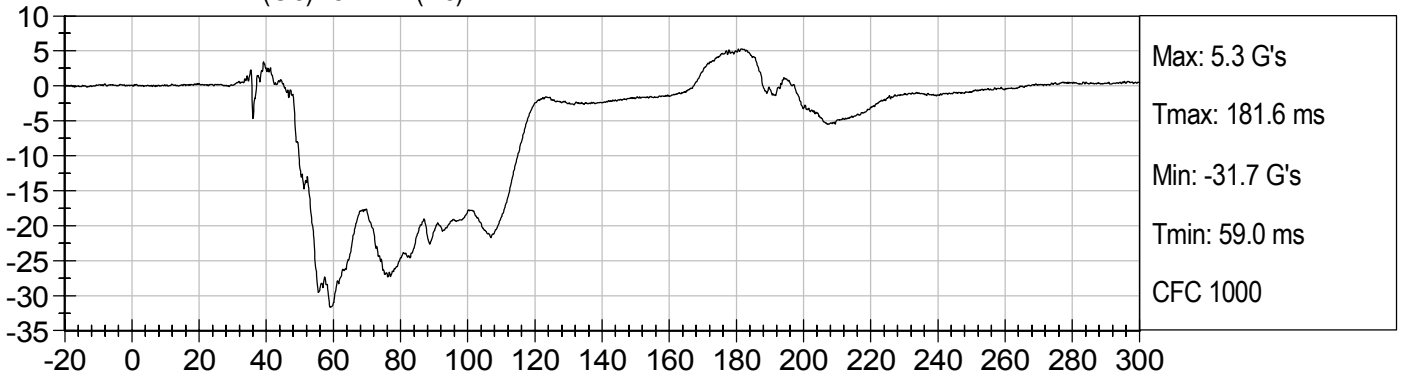
CRASH TEST DATA

TABLE OF DATA PLOTS

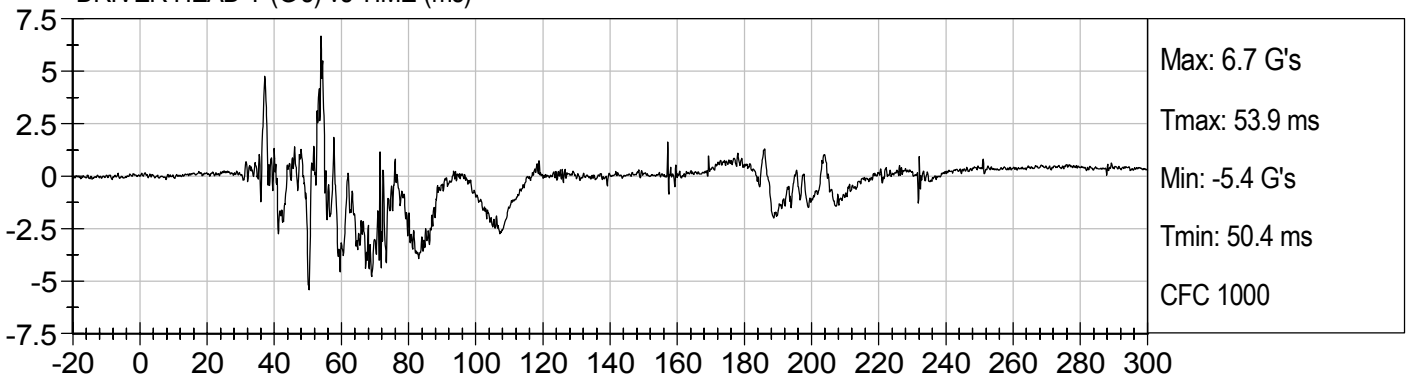
25 MPH FRONTAL UNBELTED
2007 DODGE CHARGER (C70307)

Test Date: 09/05/2007
Speed: 24.7 mph (39.8 km/h)

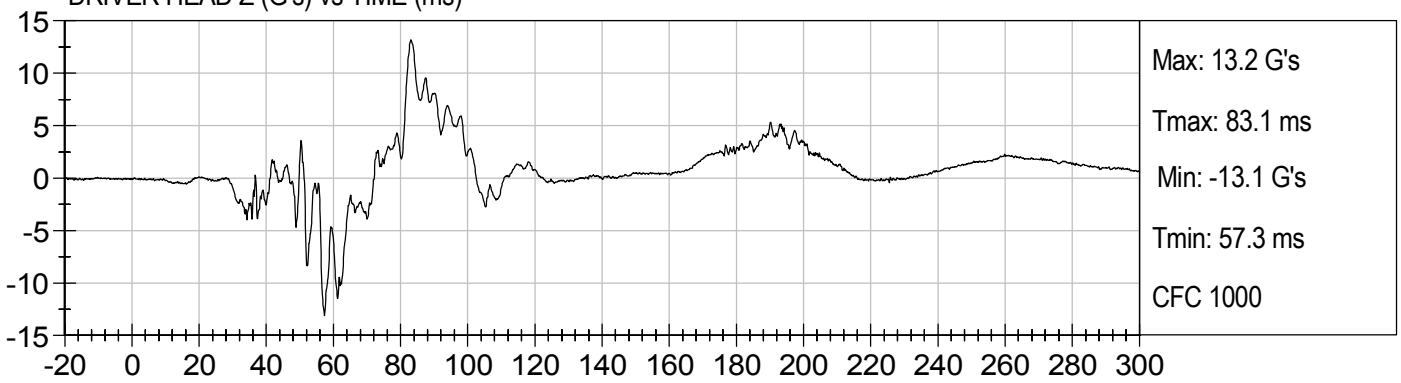
DRIVER HEAD X (G's) vs TIME (ms)



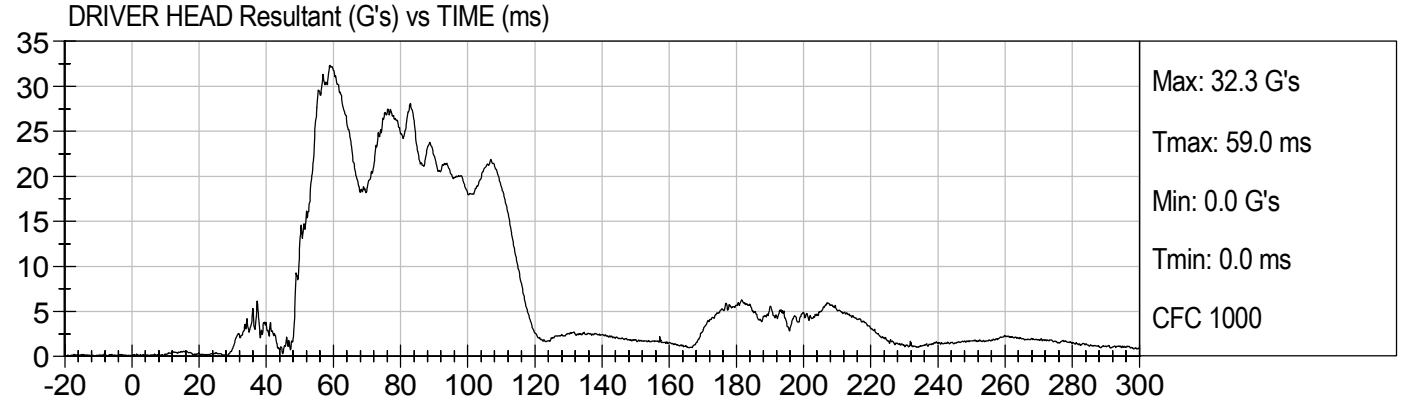
DRIVER HEAD Y (G's) vs TIME (ms)



DRIVER HEAD Z (G's) vs TIME (ms)



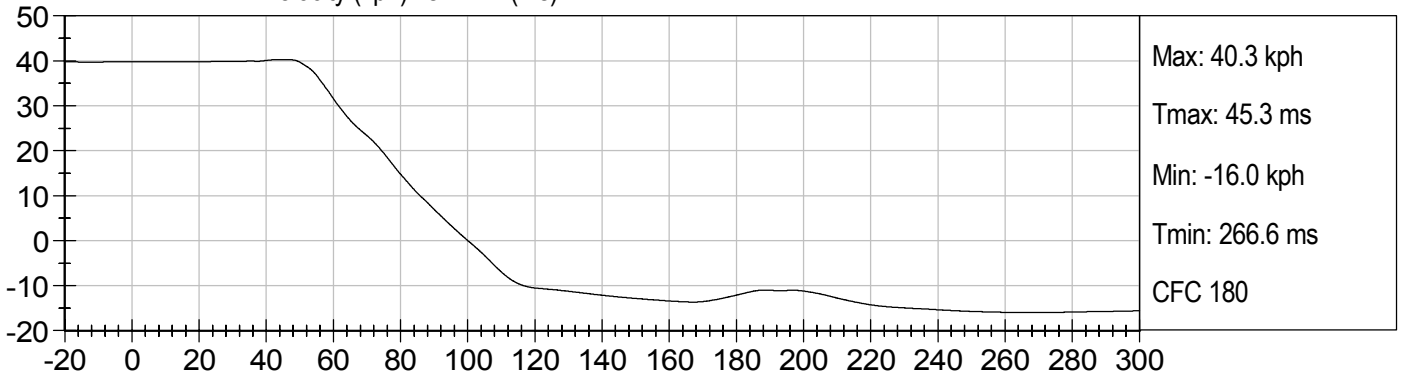
DRIVER HEAD Resultant (G's) vs TIME (ms)



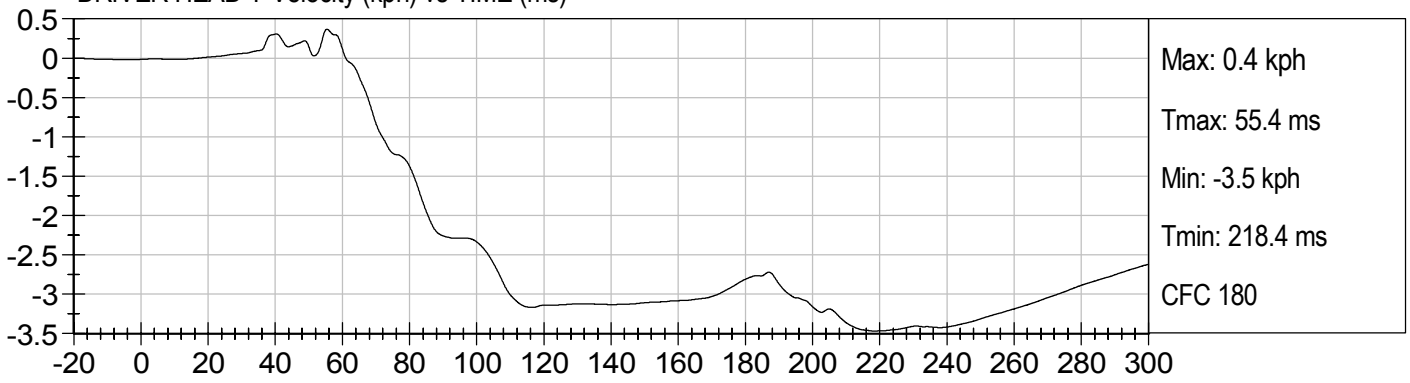
25 MPH FRONTAL UNBELTED
2007 DODGE CHARGER (C70307)

Test Date: 09/05/2007
Speed: 24.7 mph (39.8 km/h)

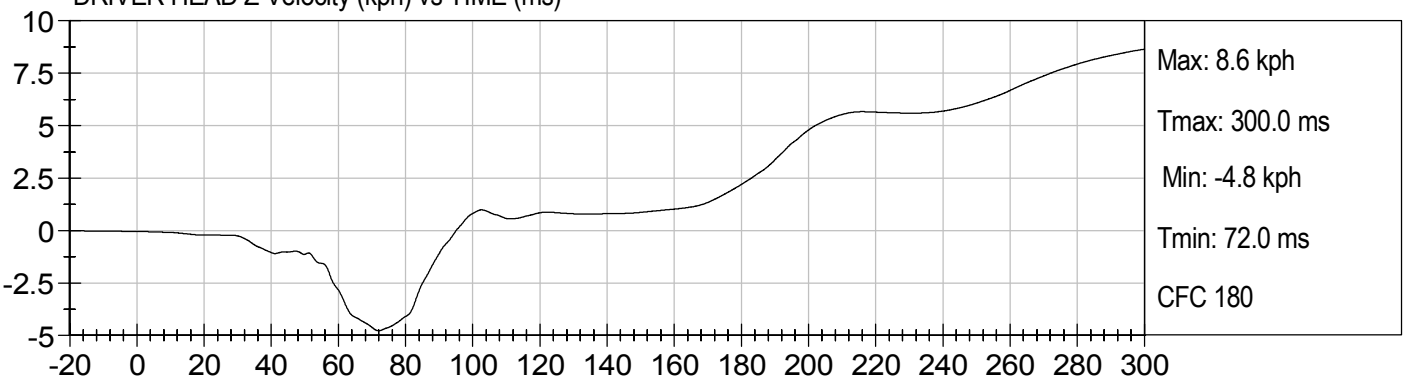
DRIVER HEAD X Velocity (kph) vs TIME (ms)



DRIVER HEAD Y Velocity (kph) vs TIME (ms)



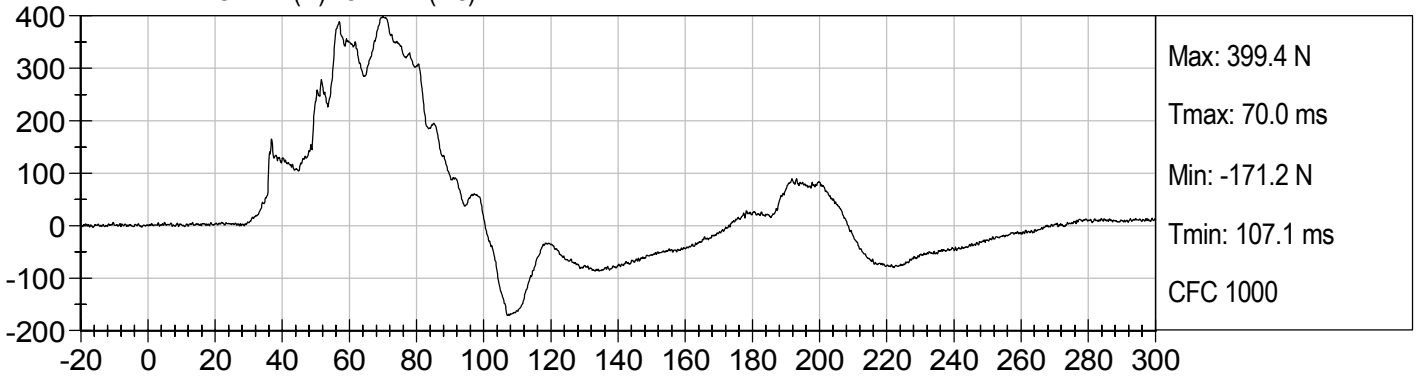
DRIVER HEAD Z Velocity (kph) vs TIME (ms)



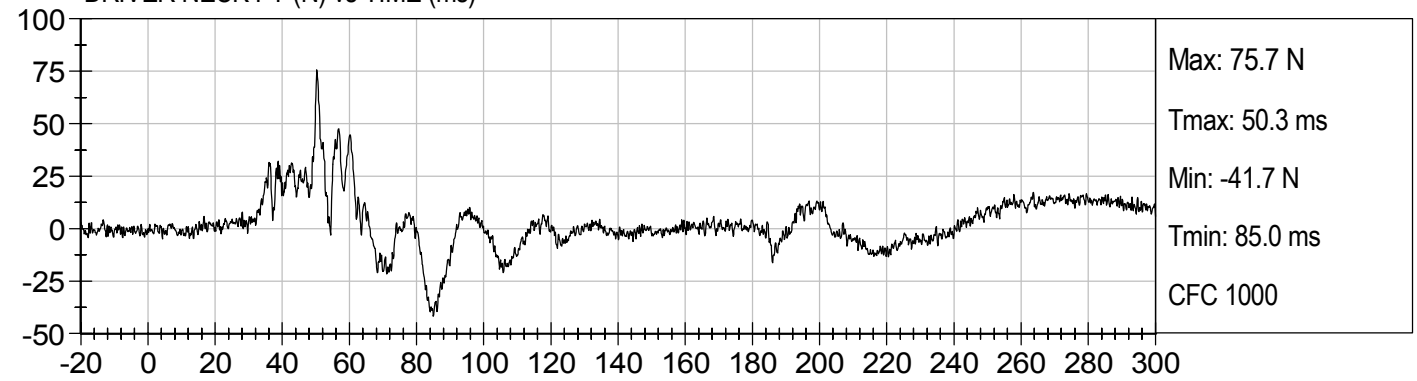
25 MPH FRONTAL UNBELTED
2007 DODGE CHARGER (C70307)

Test Date: 09/05/2007
Speed: 24.7 mph (39.8 km/h)

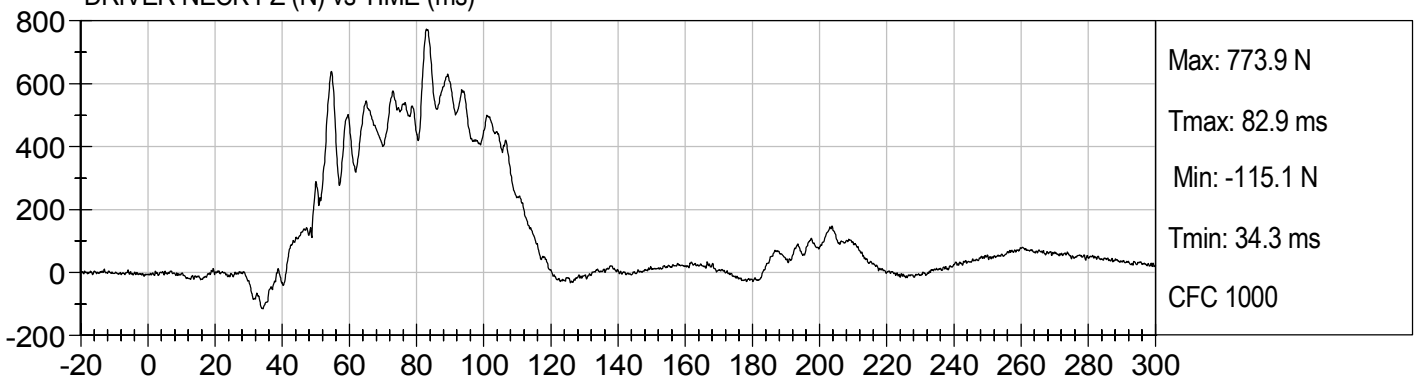
DRIVER NECK FX (N) vs TIME (ms)



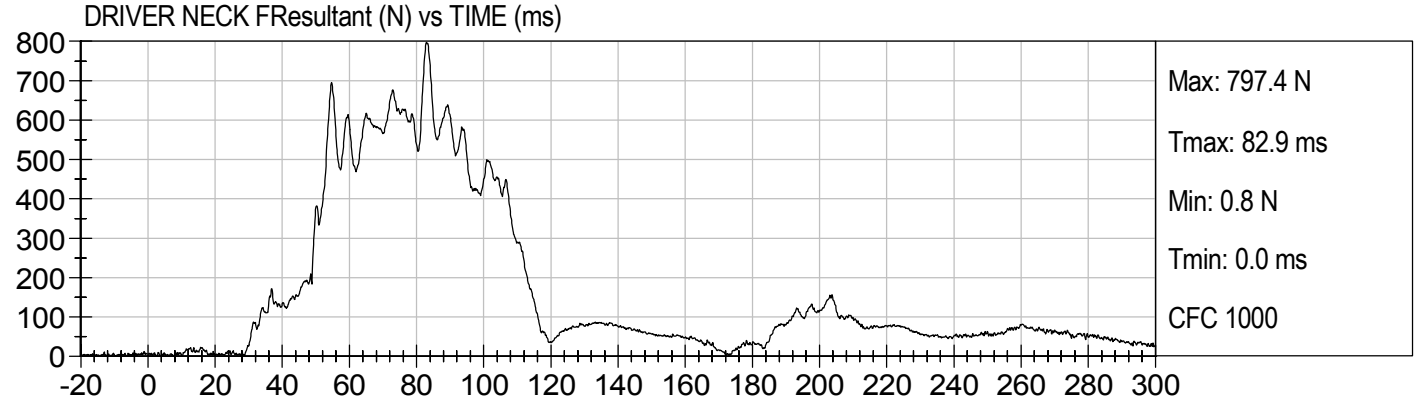
DRIVER NECK FY (N) vs TIME (ms)



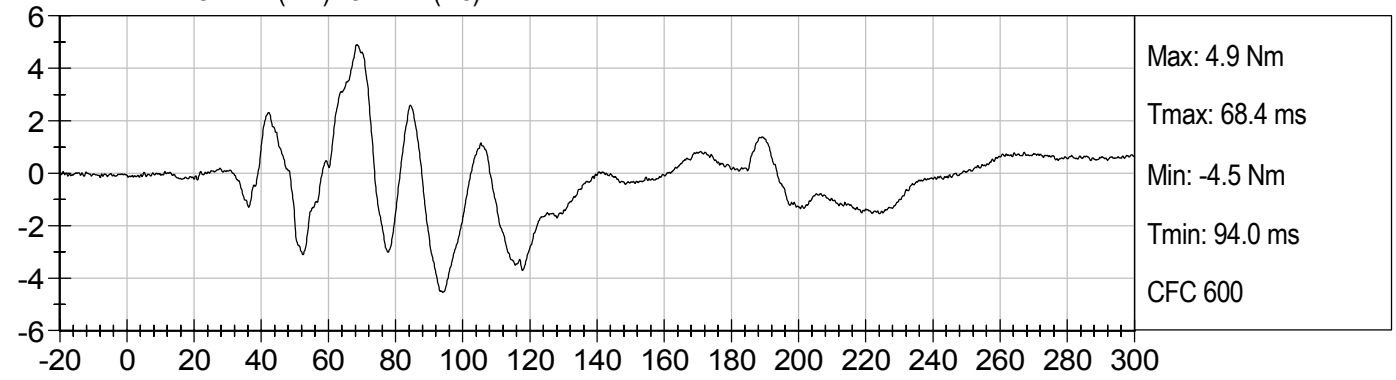
DRIVER NECK FZ (N) vs TIME (ms)



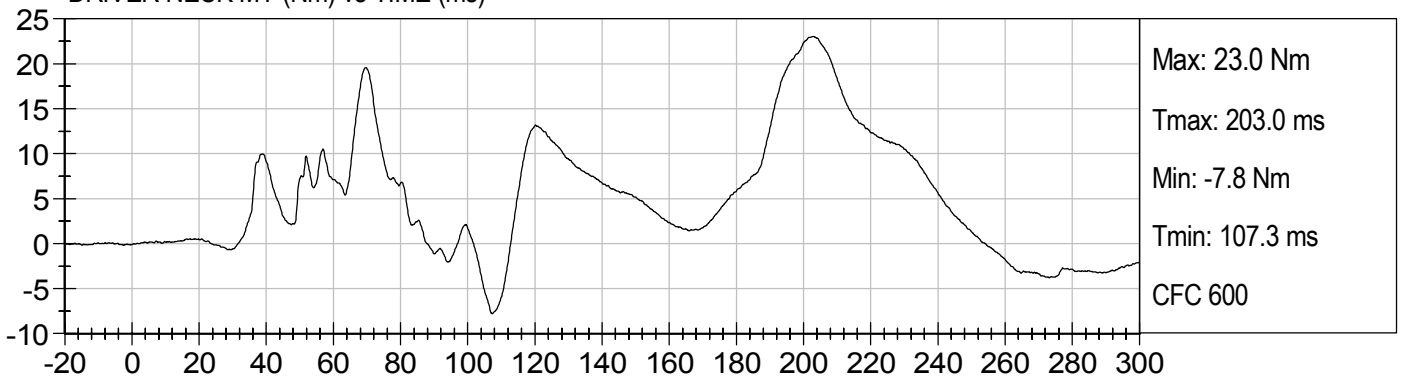
DRIVER NECK FResultant (N) vs TIME (ms)



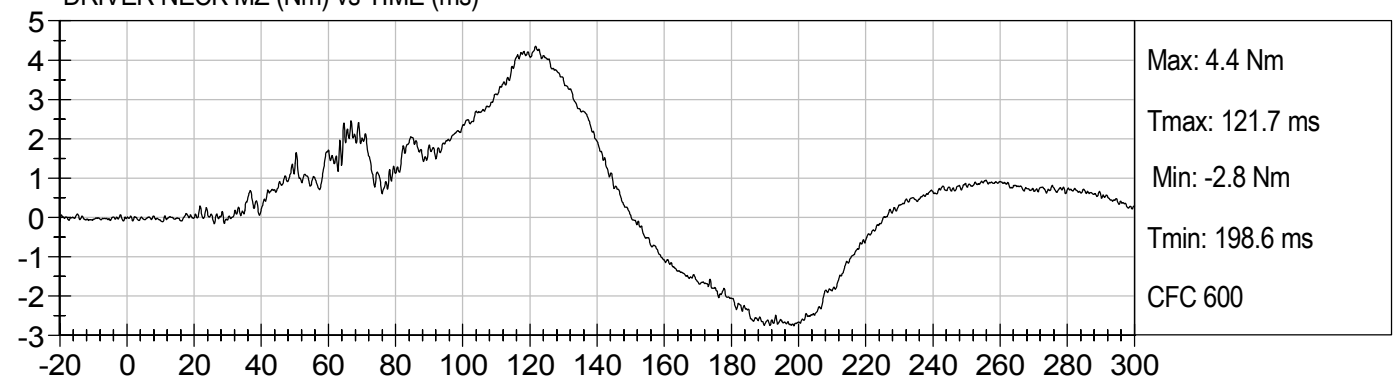
DRIVER NECK MX (Nm) vs TIME (ms)



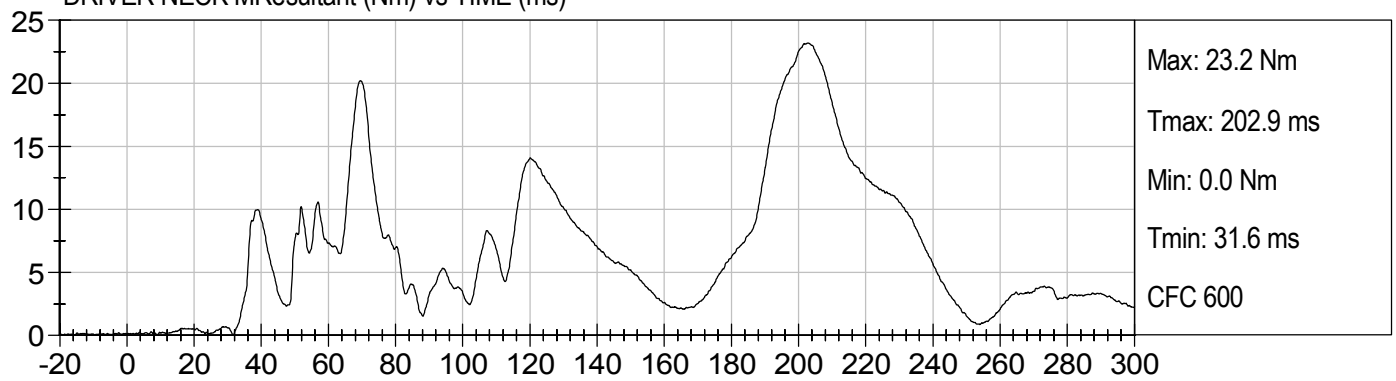
DRIVER NECK MY (Nm) vs TIME (ms)



DRIVER NECK MZ (Nm) vs TIME (ms)



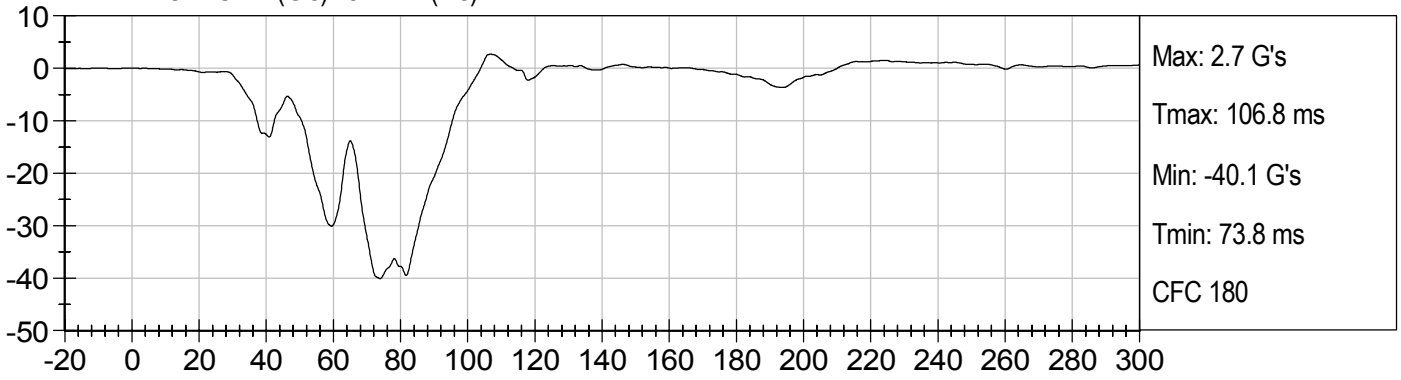
DRIVER NECK MResultant (Nm) vs TIME (ms)



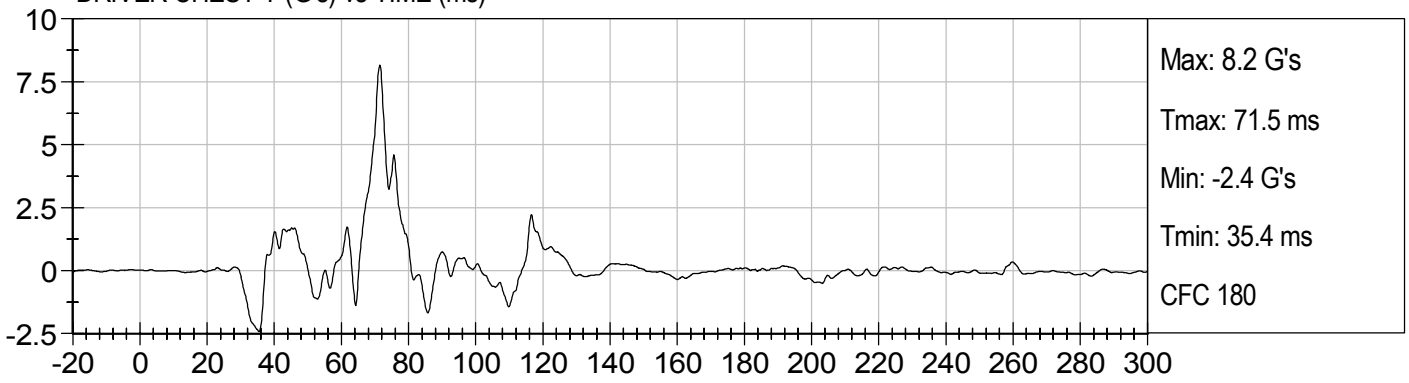
25 MPH FRONTAL UNBELTED
2007 DODGE CHARGER (C70307)

Test Date: 09/05/2007
Speed: 24.7 mph (39.8 km/h)

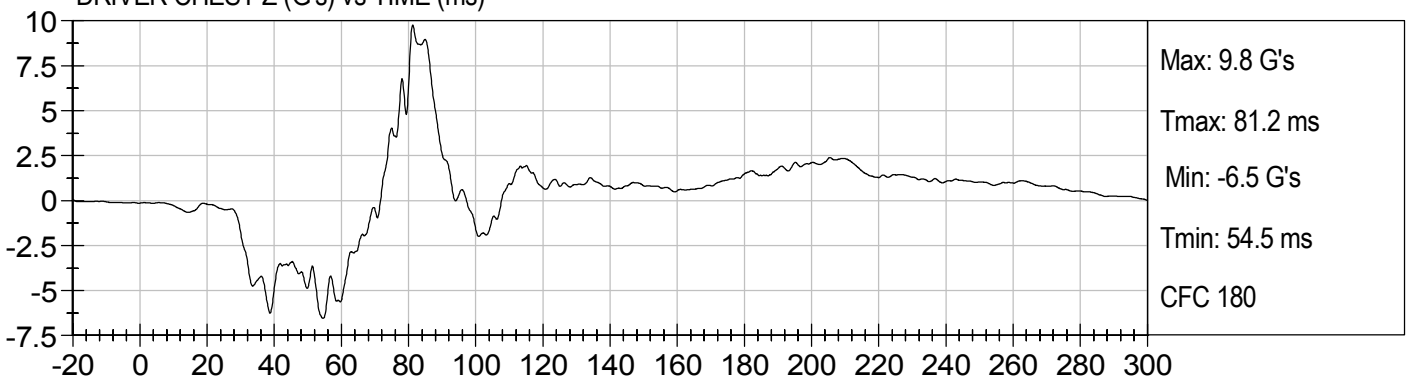
DRIVER CHEST X (G's) vs TIME (ms)



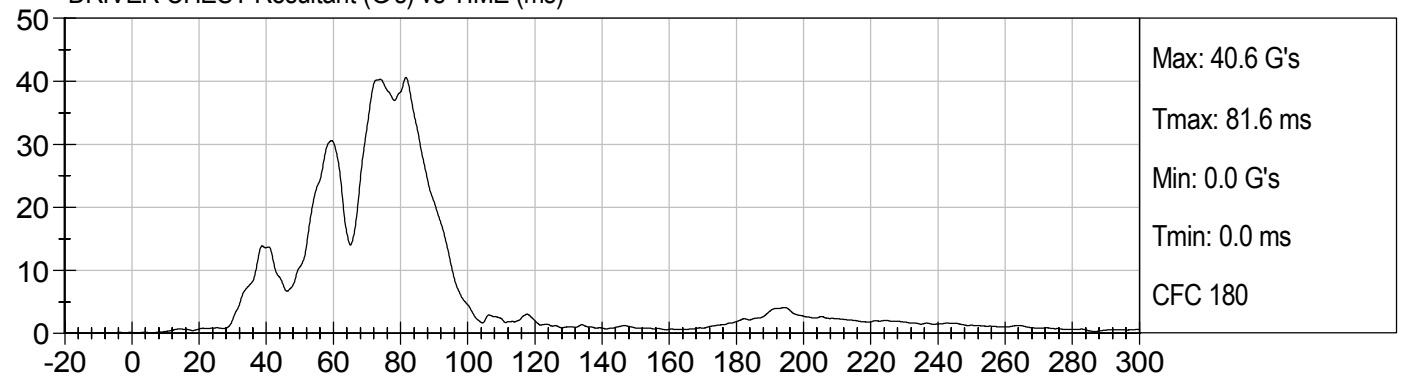
DRIVER CHEST Y (G's) vs TIME (ms)



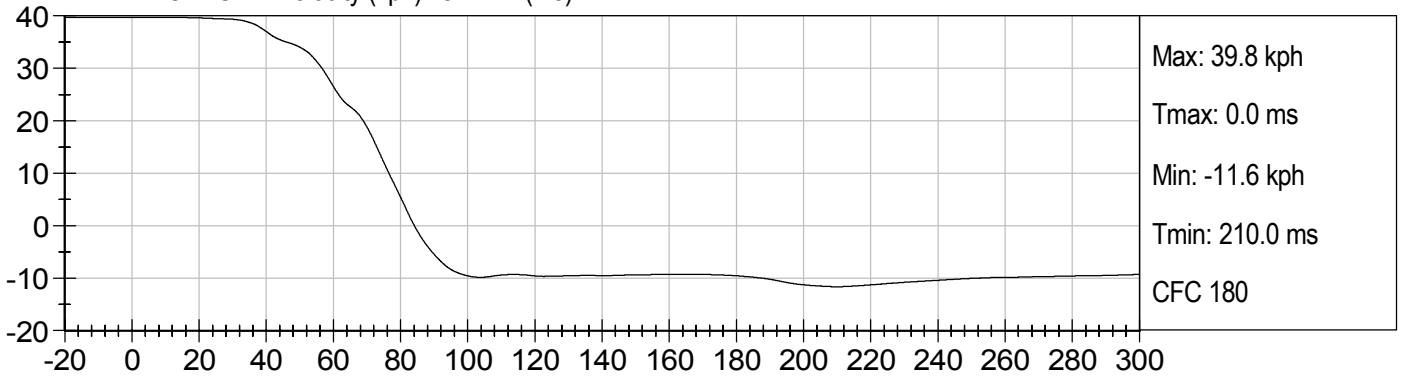
DRIVER CHEST Z (G's) vs TIME (ms)



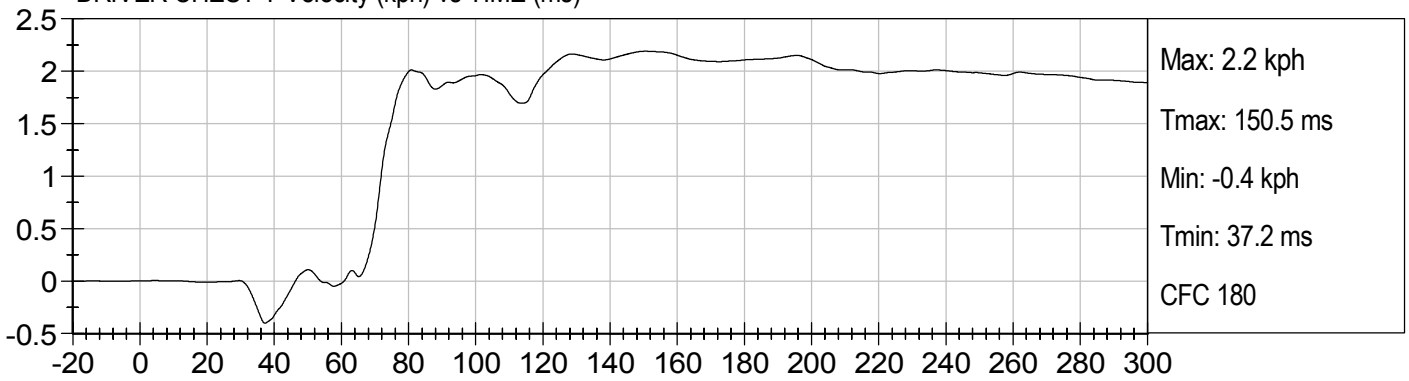
DRIVER CHEST Resultant (G's) vs TIME (ms)



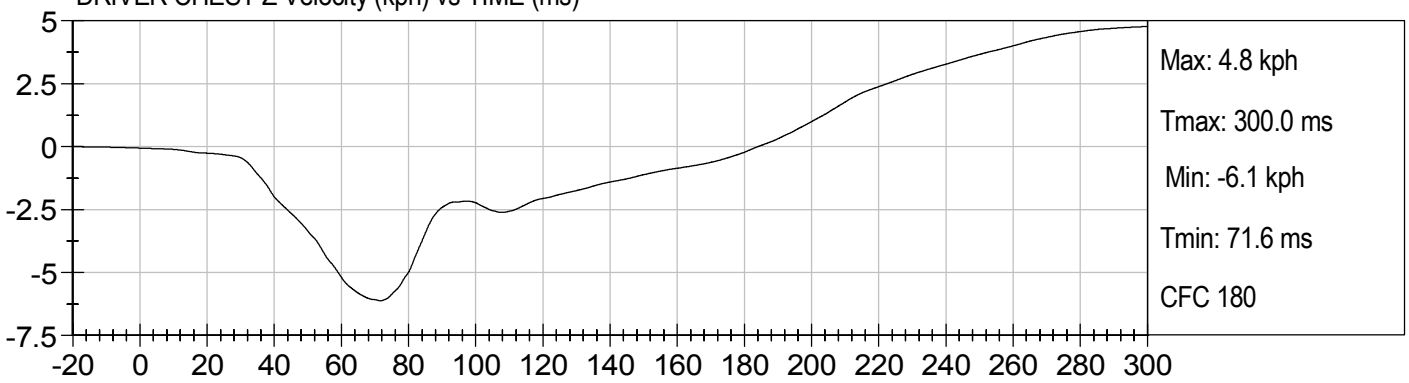
DRIVER CHEST X Velocity (kph) vs TIME (ms)



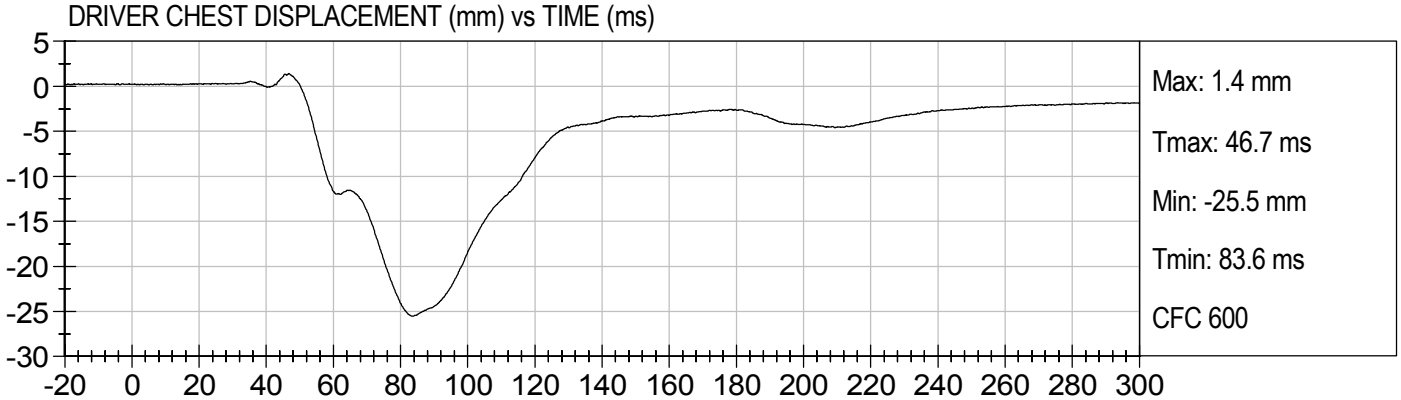
DRIVER CHEST Y Velocity (kph) vs TIME (ms)



DRIVER CHEST Z Velocity (kph) vs TIME (ms)



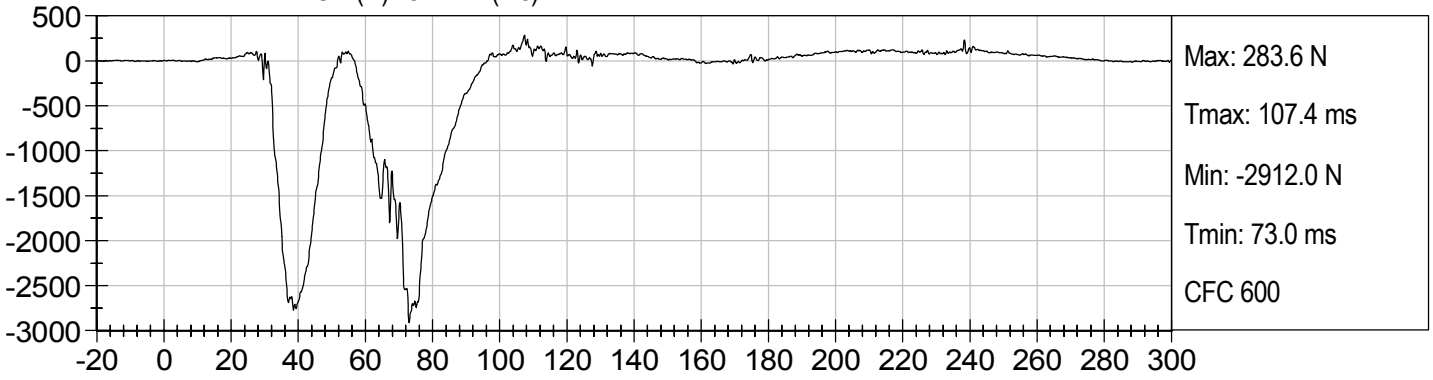
DRIVER CHEST DISPLACEMENT (mm) vs TIME (ms)



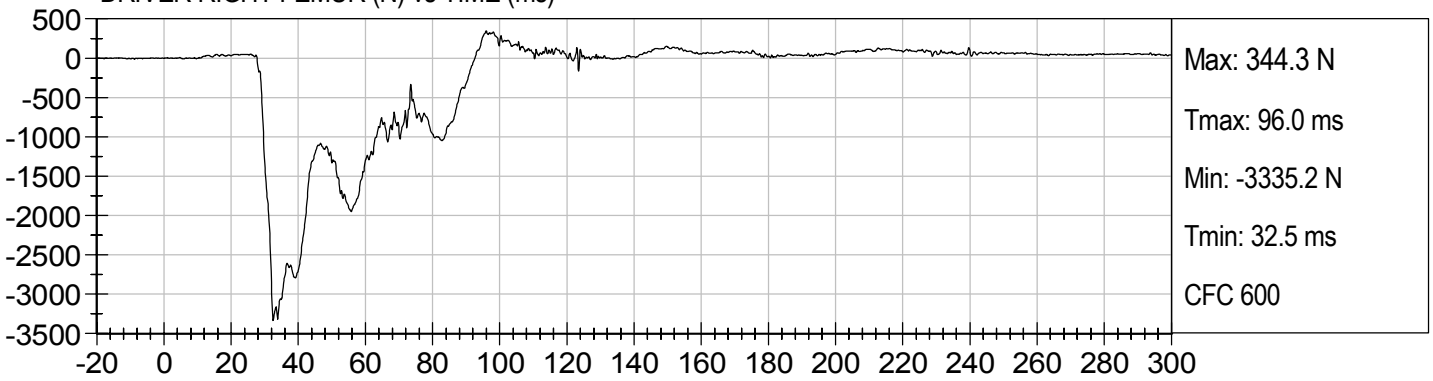
25 MPH FRONTAL UNBELTED
2007 DODGE CHARGER (C70307)

Test Date: 09/05/2007
Speed: 24.7 mph (39.8 km/h)

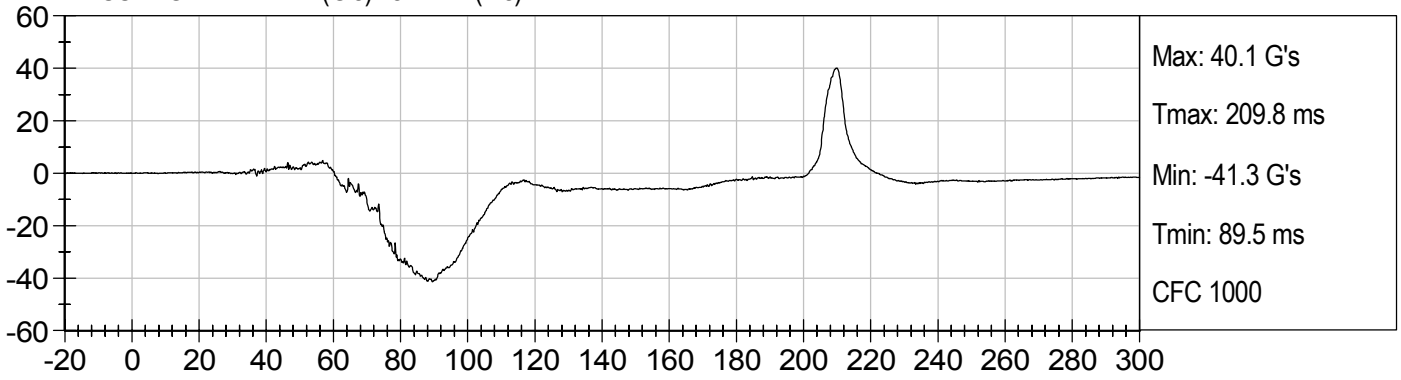
DRIVER LEFT FEMUR (N) vs TIME (ms)



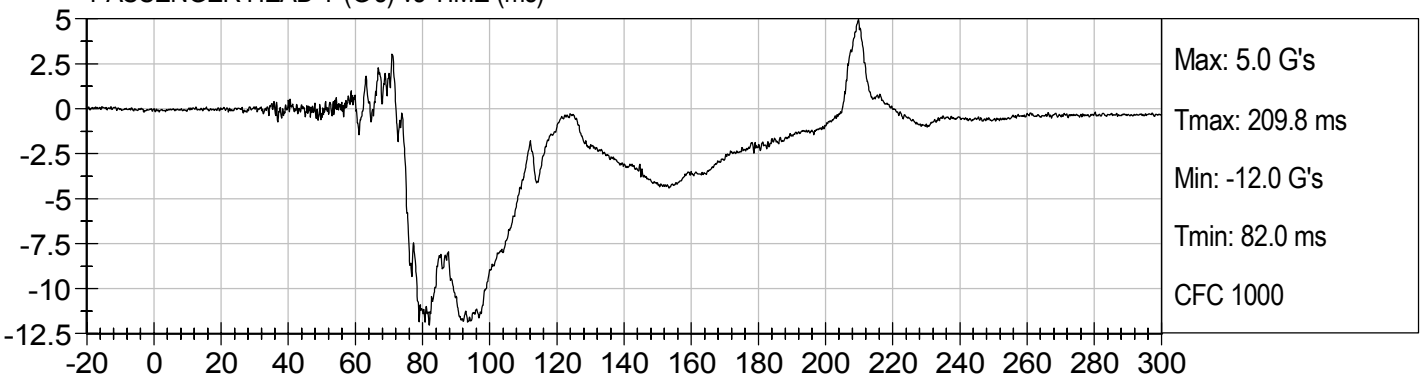
DRIVER RIGHT FEMUR (N) vs TIME (ms)



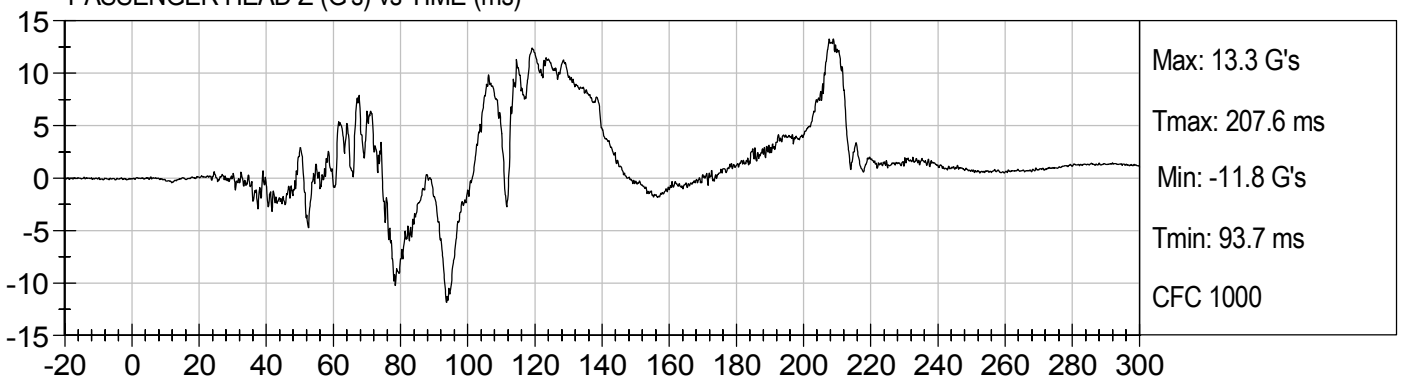
PASSENGER HEAD X (G's) vs TIME (ms)



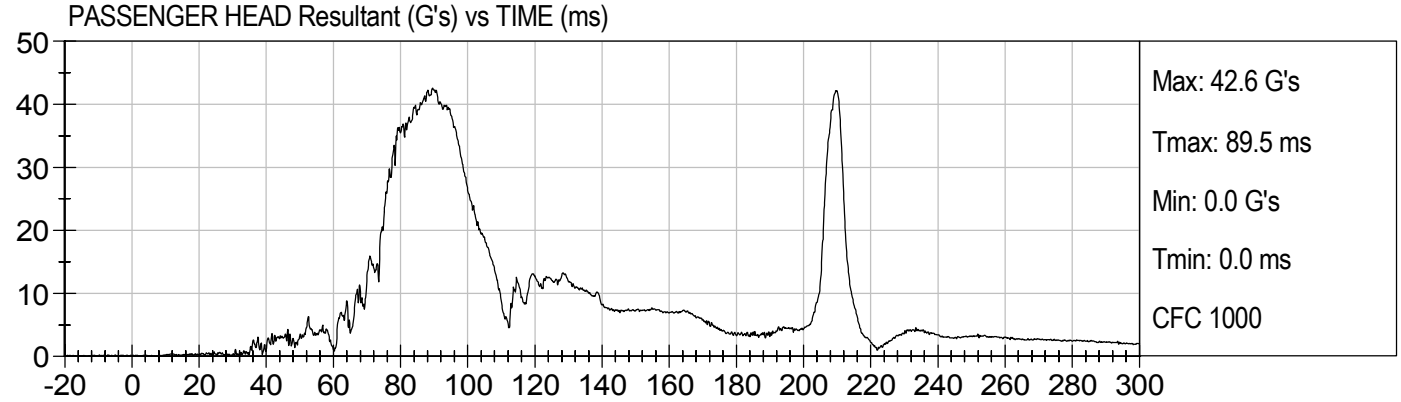
PASSENGER HEAD Y (G's) vs TIME (ms)



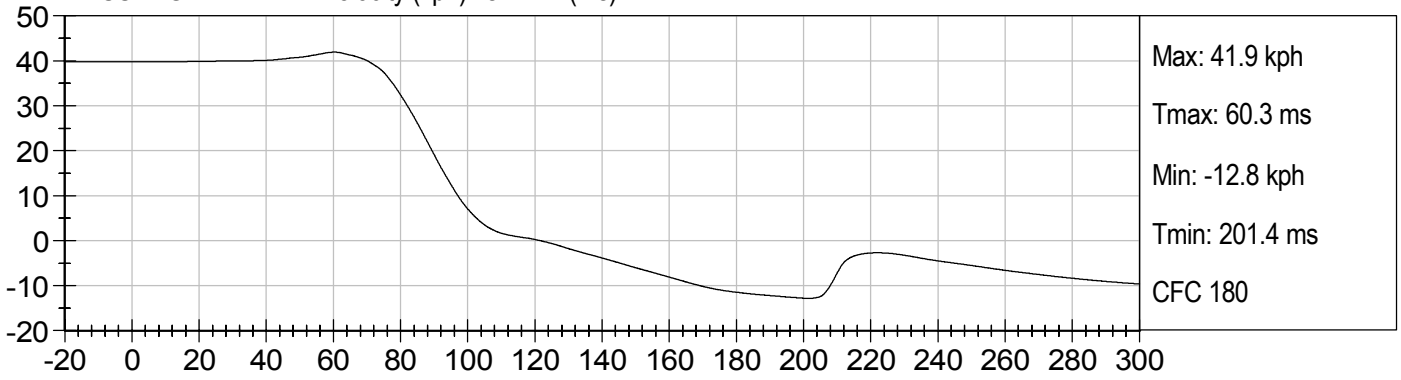
PASSENGER HEAD Z (G's) vs TIME (ms)



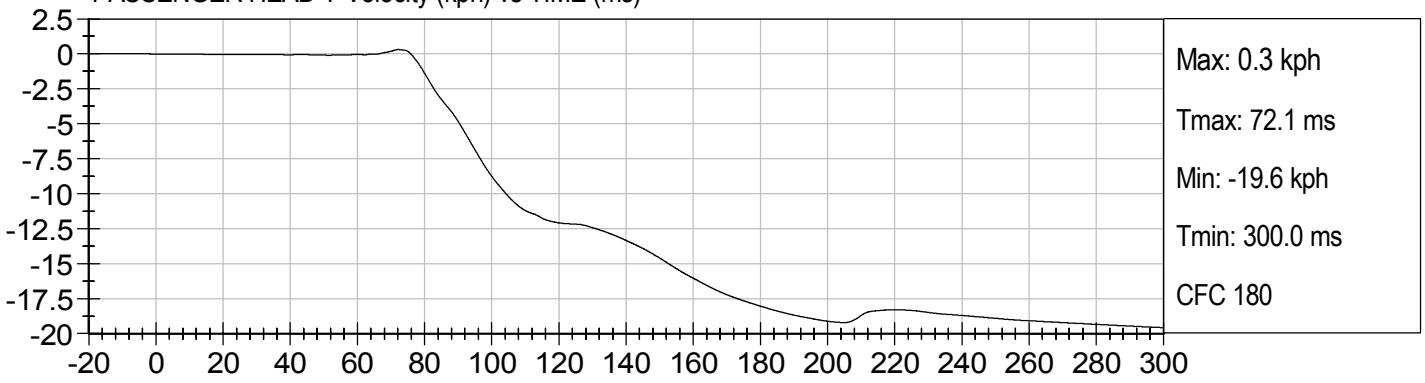
PASSENGER HEAD Resultant (G's) vs TIME (ms)



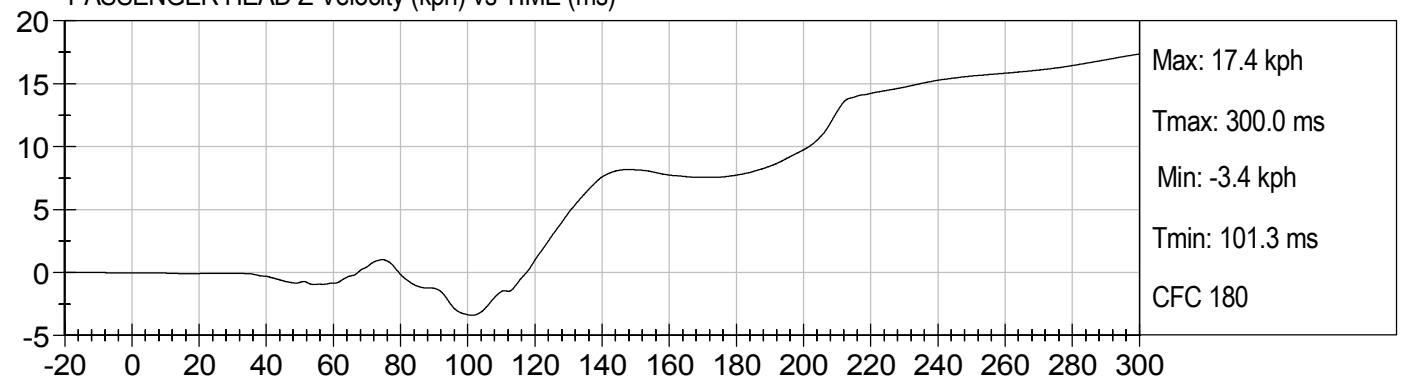
PASSENGER HEAD X Velocity (kph) vs TIME (ms)



PASSENGER HEAD Y Velocity (kph) vs TIME (ms)



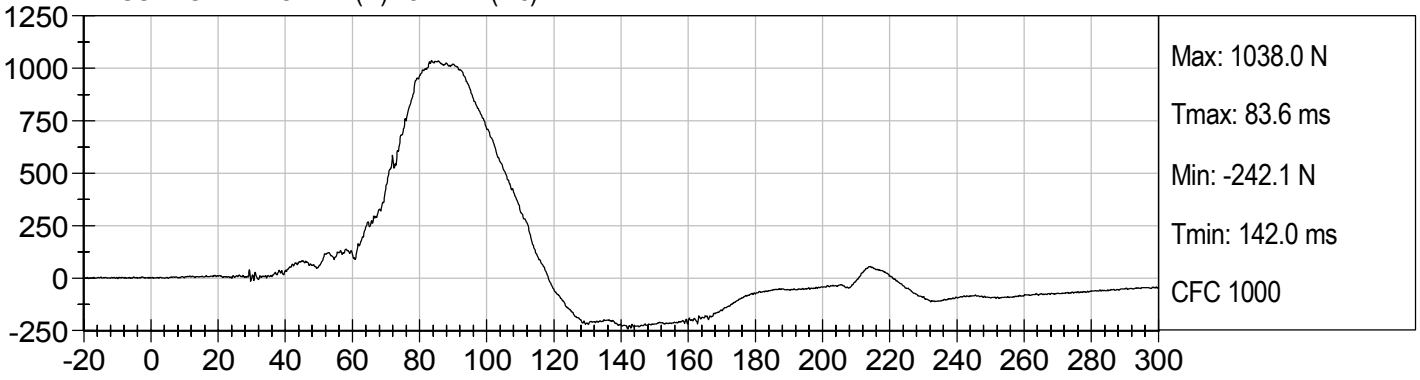
PASSENGER HEAD Z Velocity (kph) vs TIME (ms)



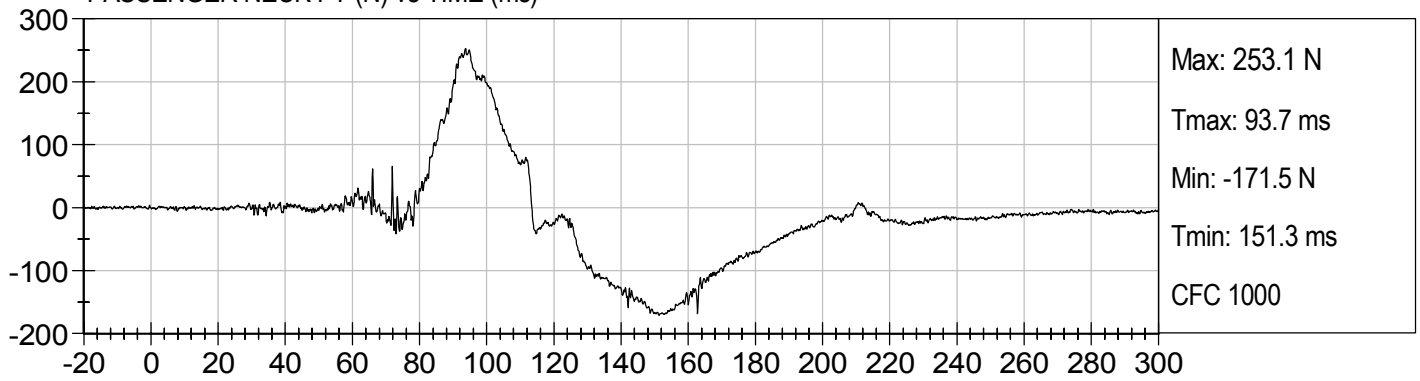
25 MPH FRONTAL UNBELTED
2007 DODGE CHARGER (C70307)

Test Date: 09/05/2007
Speed: 24.7 mph (39.8 km/h)

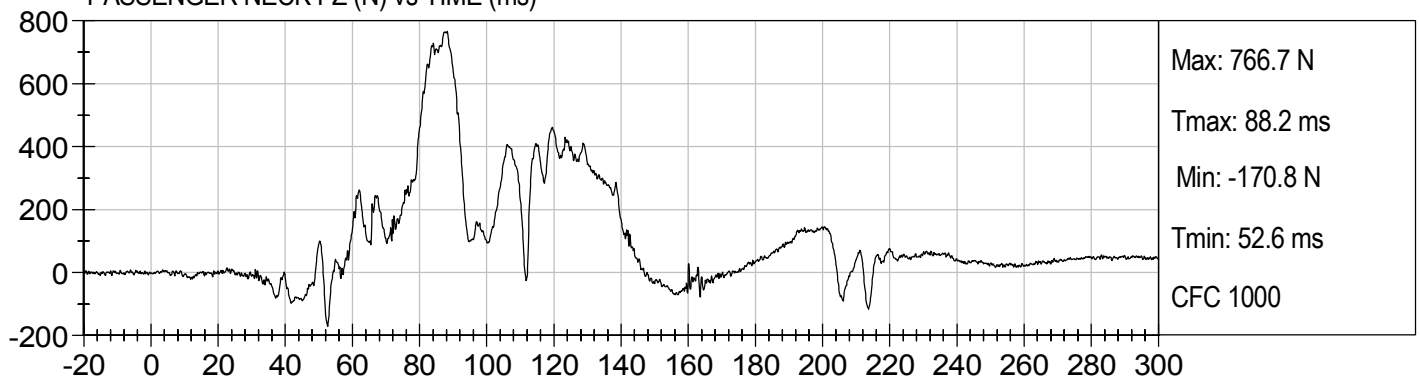
PASSENGER NECK FX (N) vs TIME (ms)



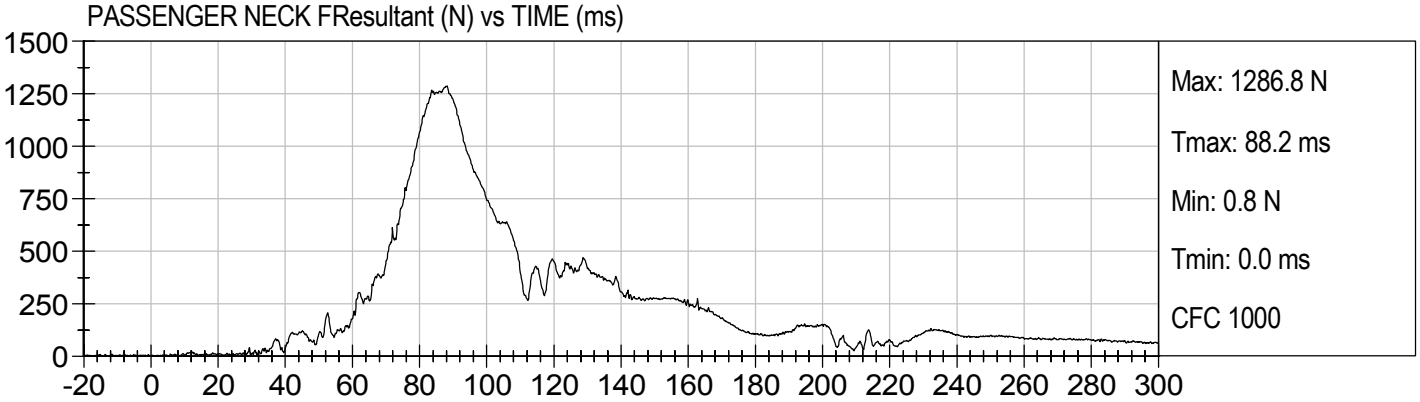
PASSENGER NECK FY (N) vs TIME (ms)



PASSENGER NECK FZ (N) vs TIME (ms)



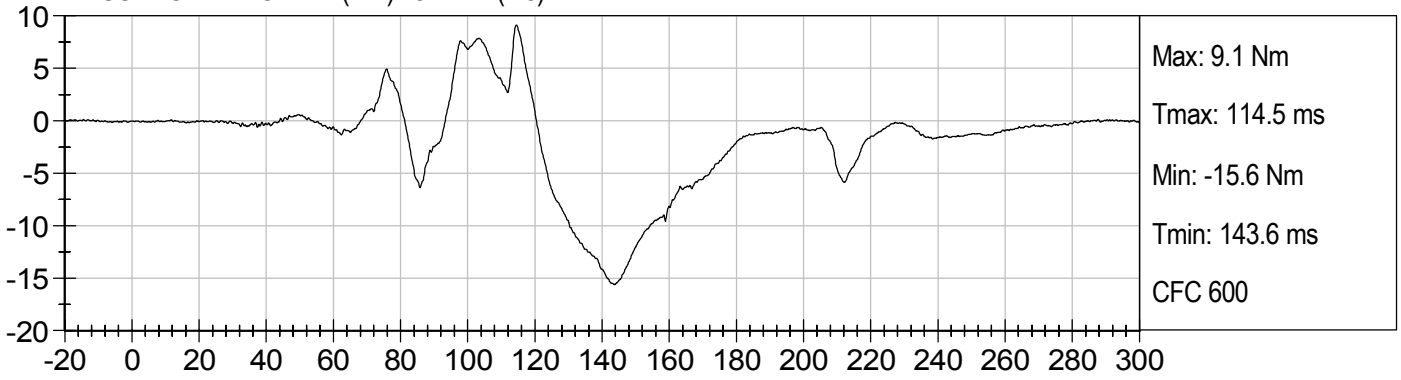
PASSENGER NECK FResultant (N) vs TIME (ms)



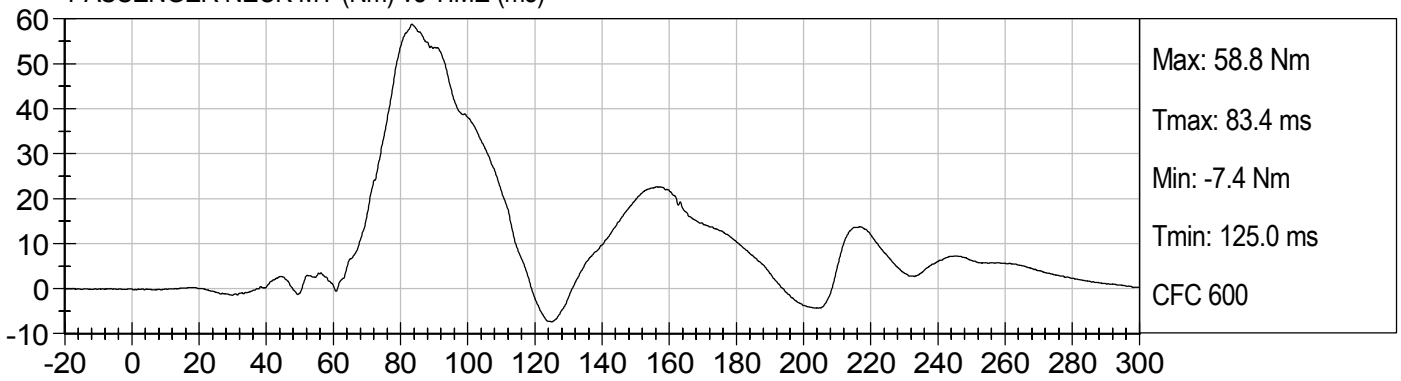
25 MPH FRONTAL UNBELTED
2007 DODGE CHARGER (C70307)

Test Date: 09/05/2007
Speed: 24.7 mph (39.8 km/h)

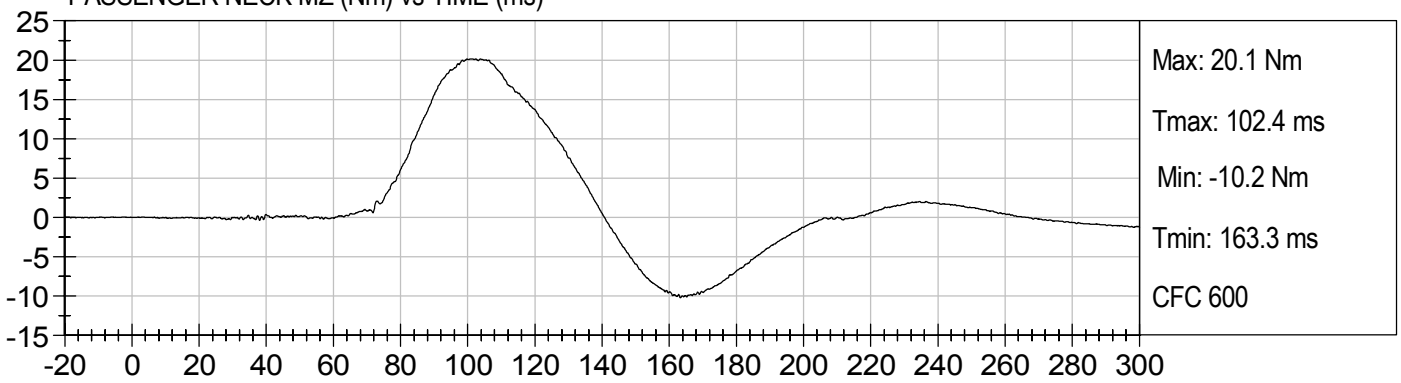
PASSENGER NECK MX (Nm) vs TIME (ms)



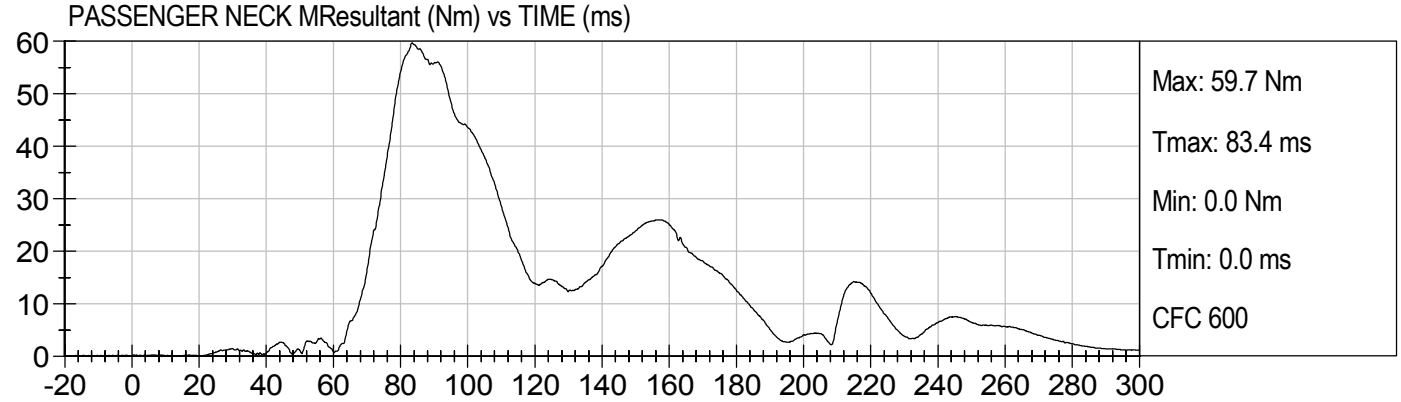
PASSENGER NECK MY (Nm) vs TIME (ms)



PASSENGER NECK MZ (Nm) vs TIME (ms)



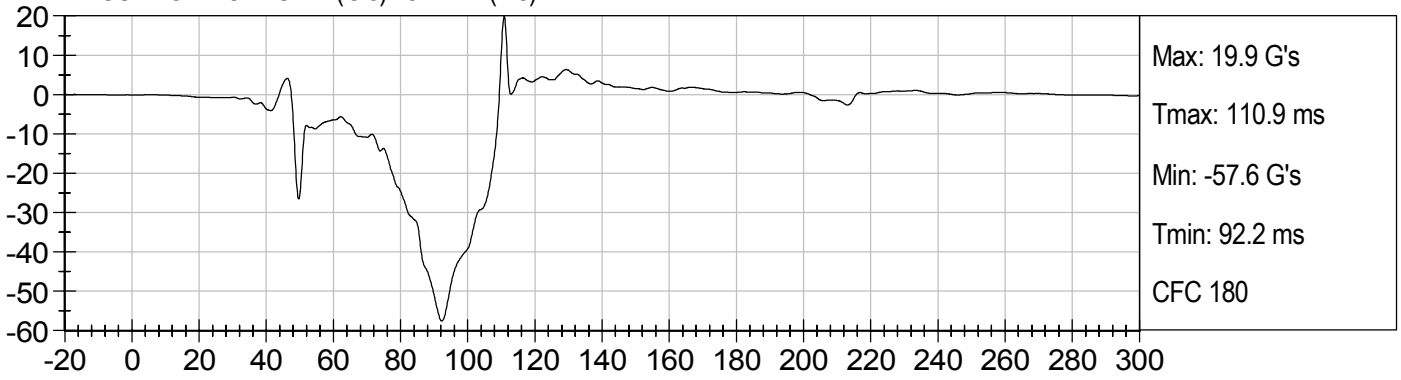
PASSENGER NECK MResultant (Nm) vs TIME (ms)



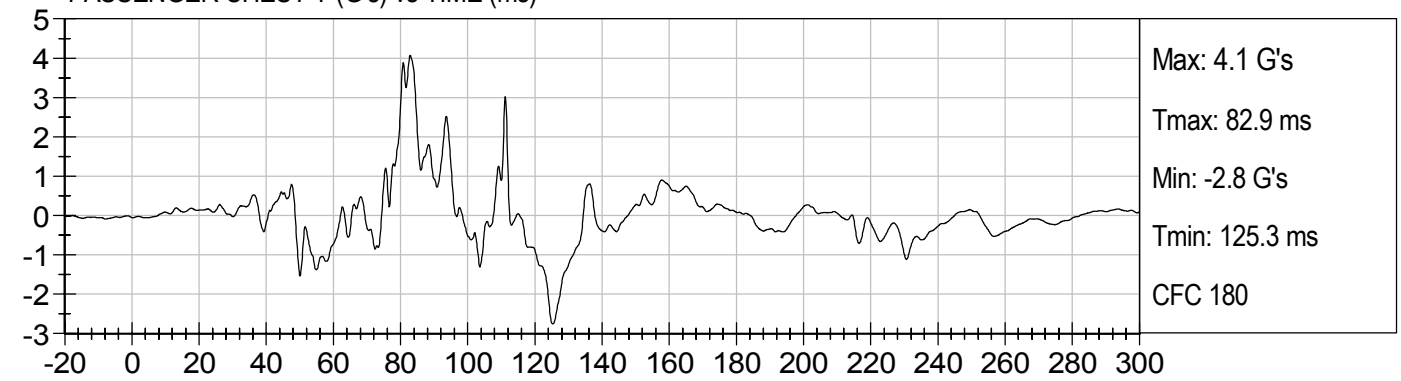
25 MPH FRONTAL UNBELTED
2007 DODGE CHARGER (C70307)

Test Date: 09/05/2007
Speed: 24.7 mph (39.8 km/h)

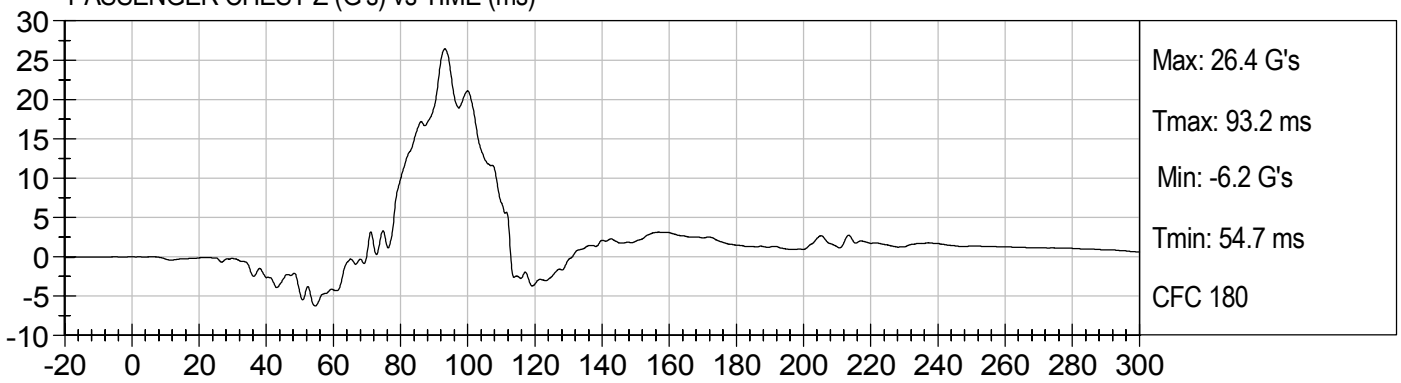
PASSENGER CHEST X (G's) vs TIME (ms)



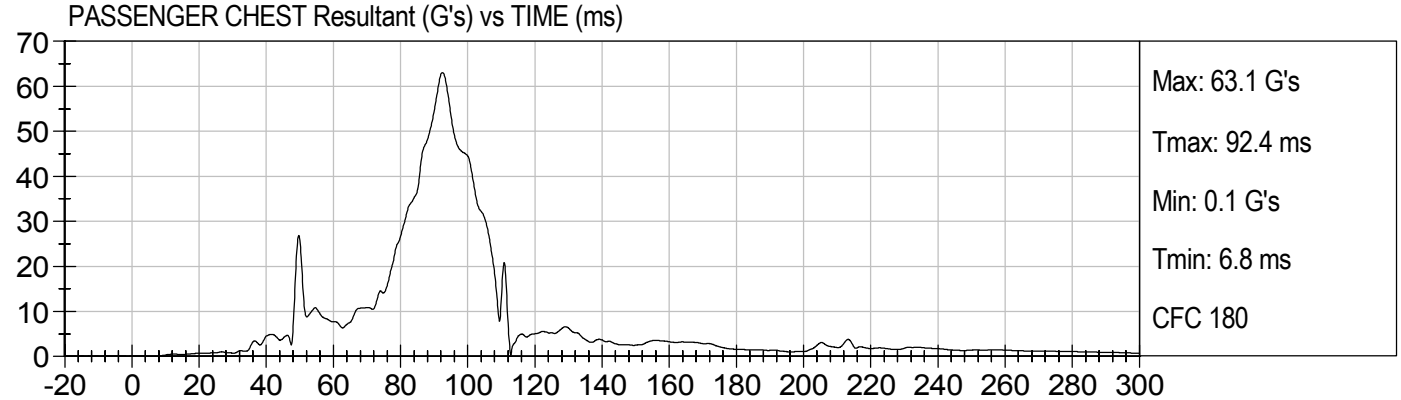
PASSENGER CHEST Y (G's) vs TIME (ms)



PASSENGER CHEST Z (G's) vs TIME (ms)



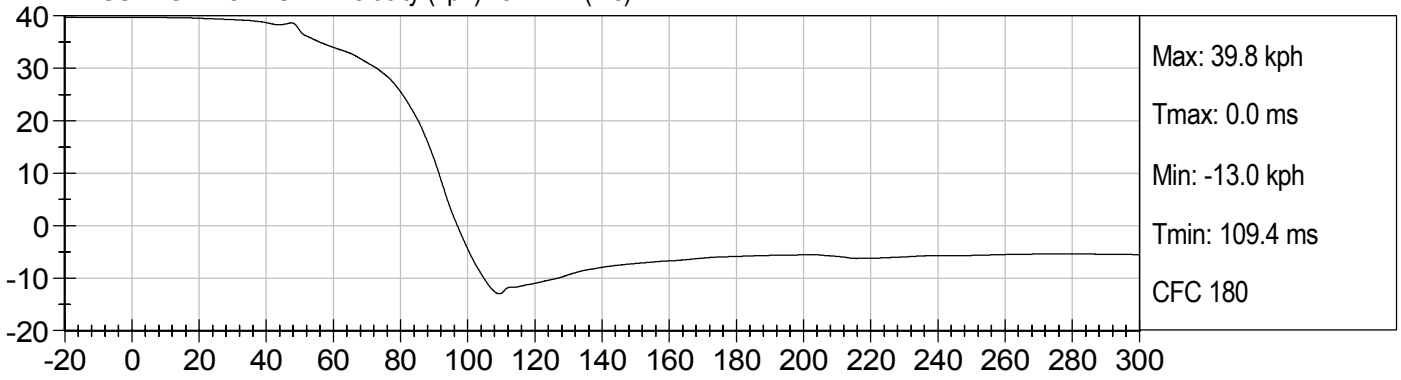
PASSENGER CHEST Resultant (G's) vs TIME (ms)



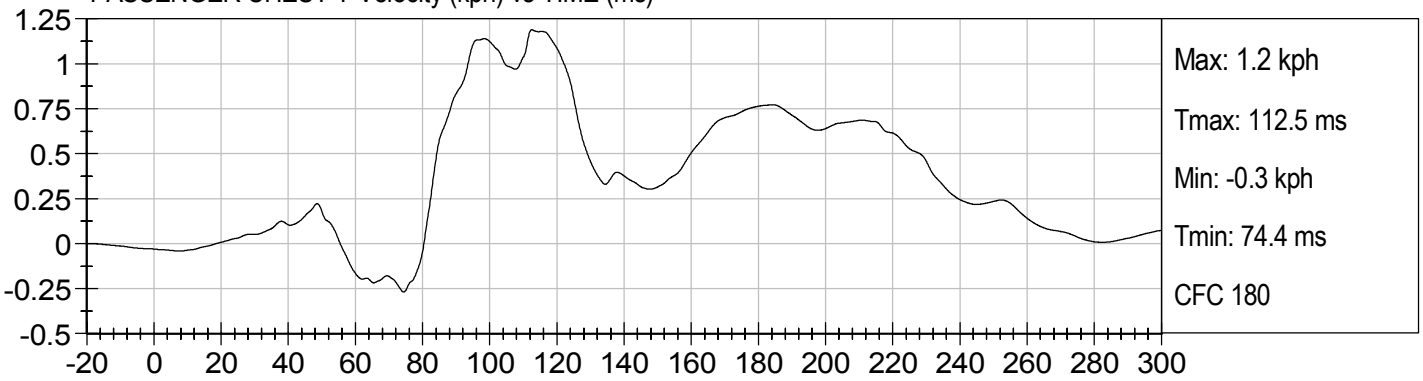
25 MPH FRONTAL UNBELTED
2007 DODGE CHARGER (C70307)

Test Date: 09/05/2007
Speed: 24.7 mph (39.8 km/h)

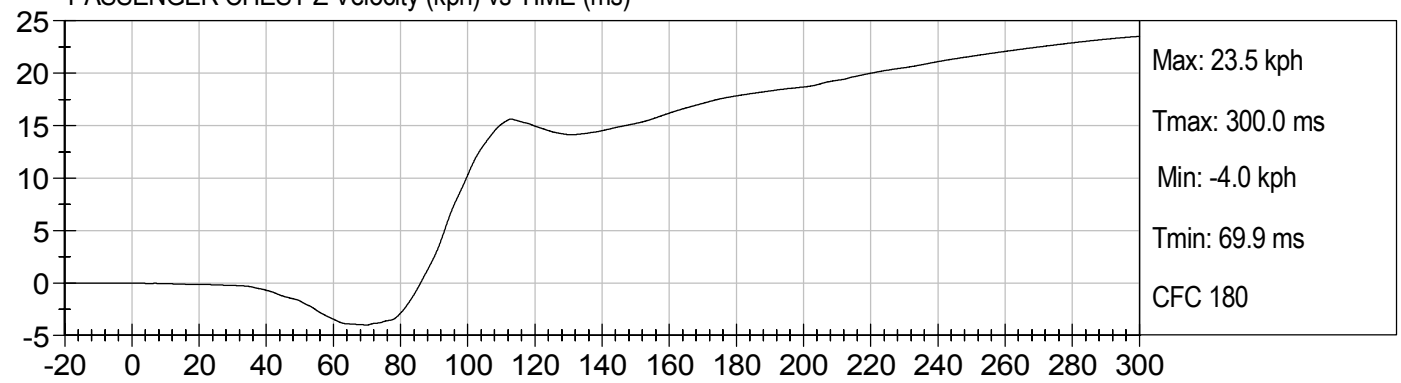
PASSENGER CHEST X Velocity (kph) vs TIME (ms)



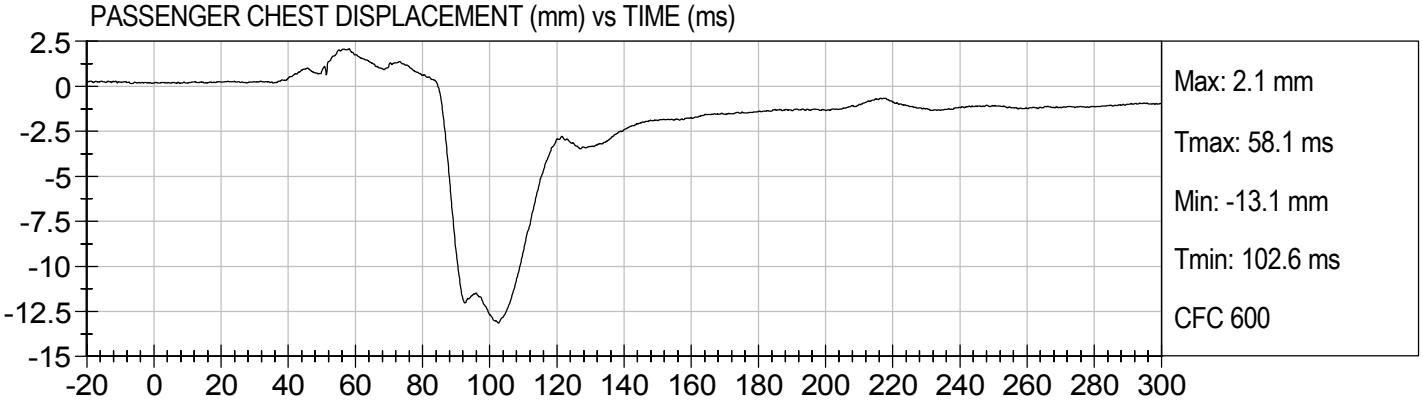
PASSENGER CHEST Y Velocity (kph) vs TIME (ms)



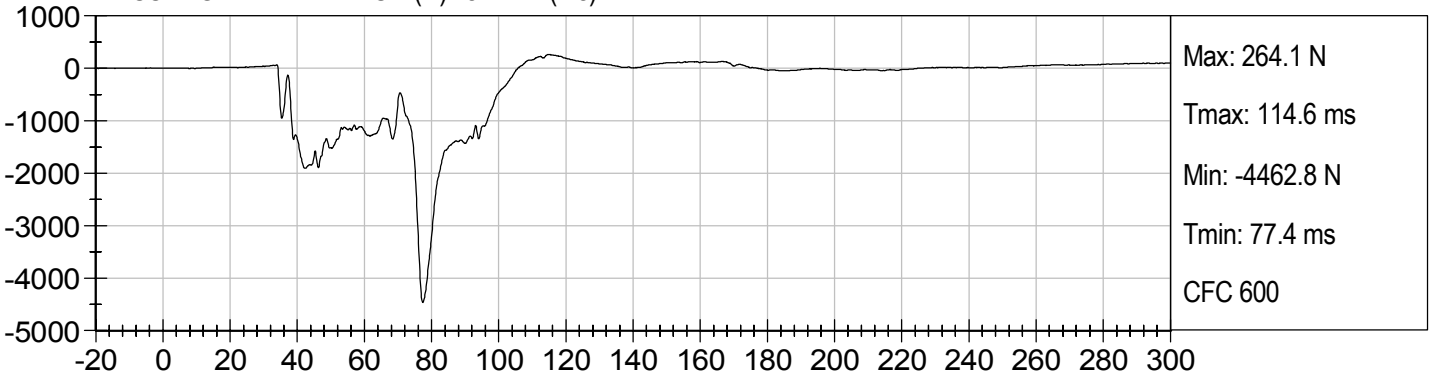
PASSENGER CHEST Z Velocity (kph) vs TIME (ms)



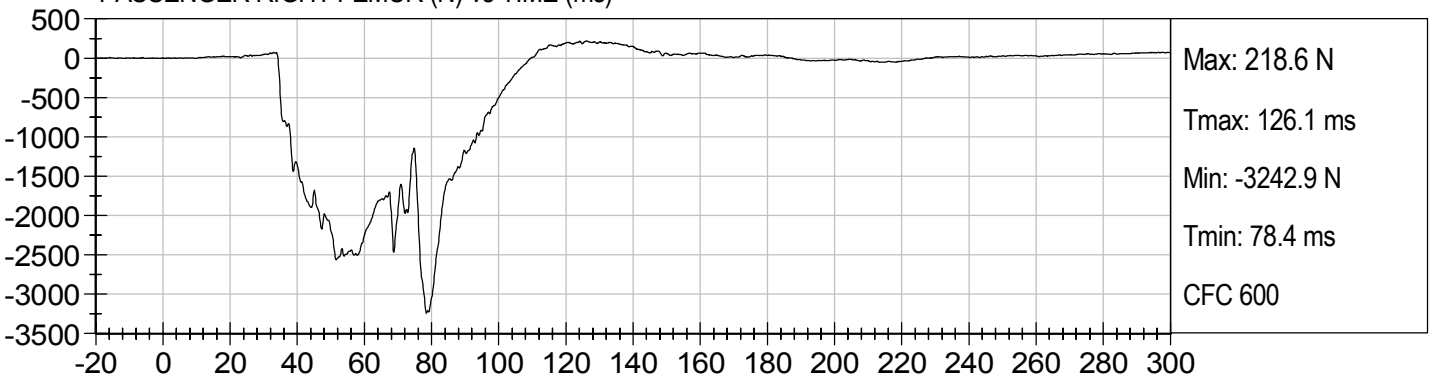
PASSENGER CHEST DISPLACEMENT (mm) vs TIME (ms)



PASSENGER LEFT FEMUR (N) vs TIME (ms)

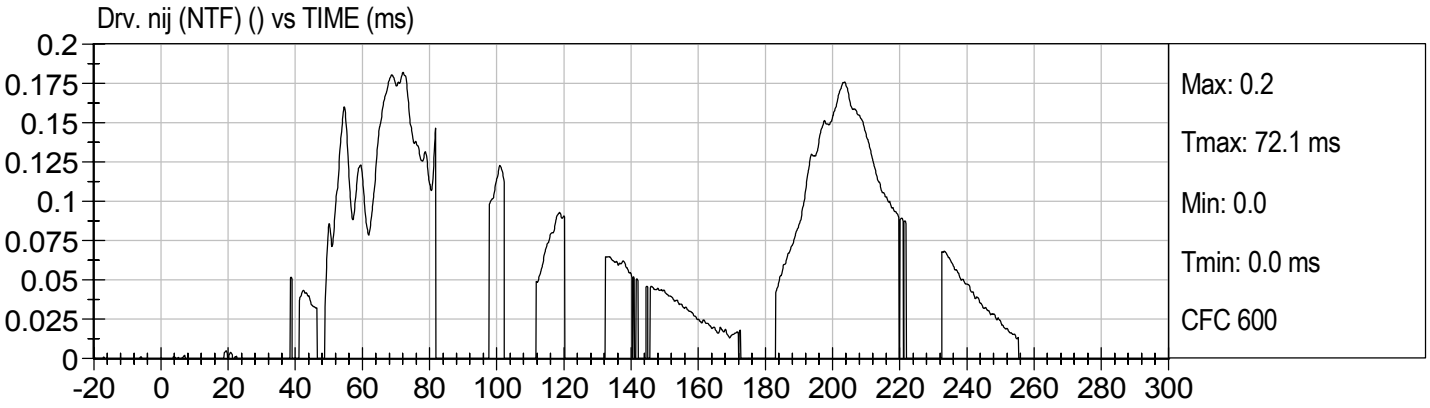


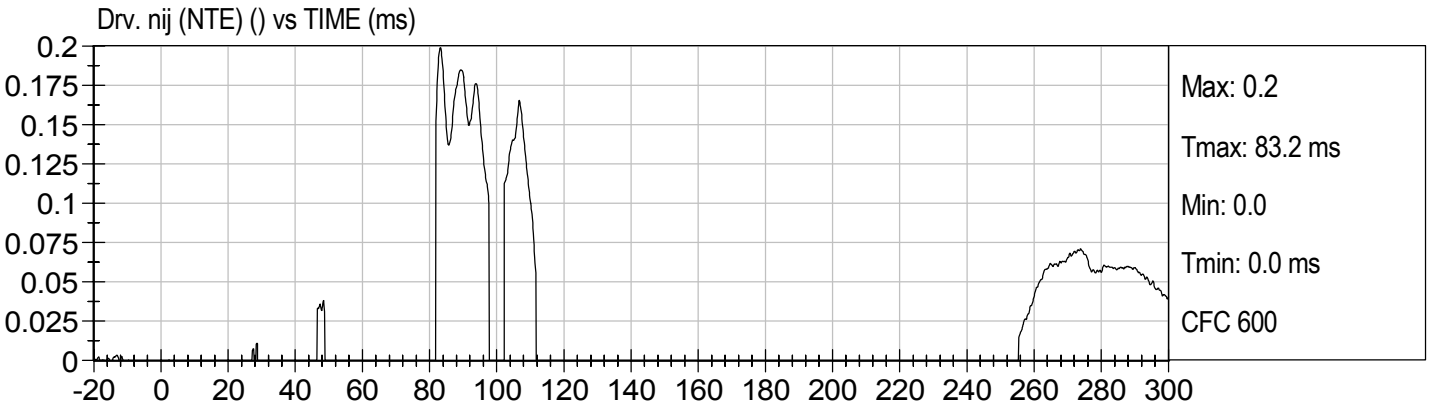
PASSENGER RIGHT FEMUR (N) vs TIME (ms)

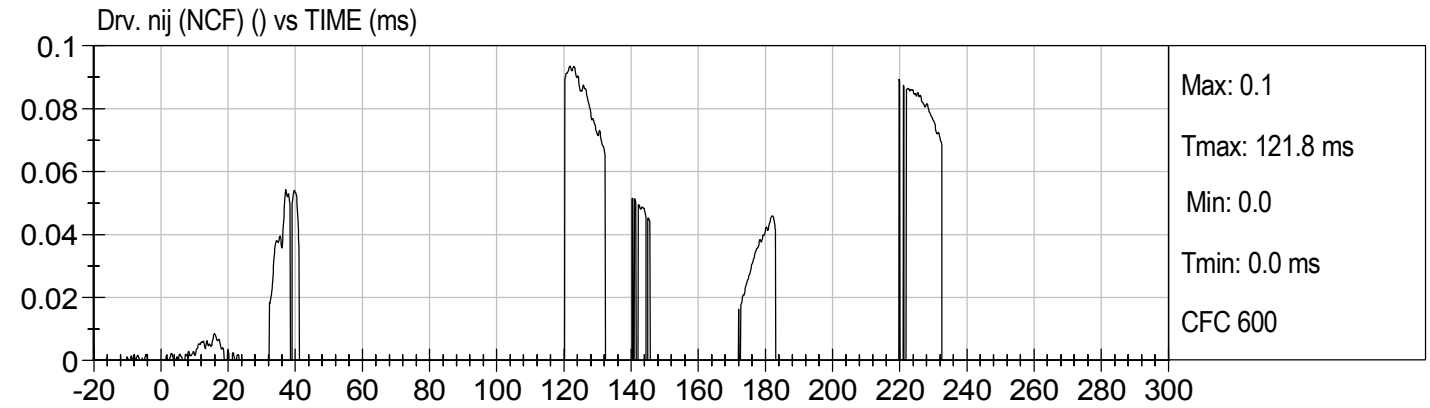


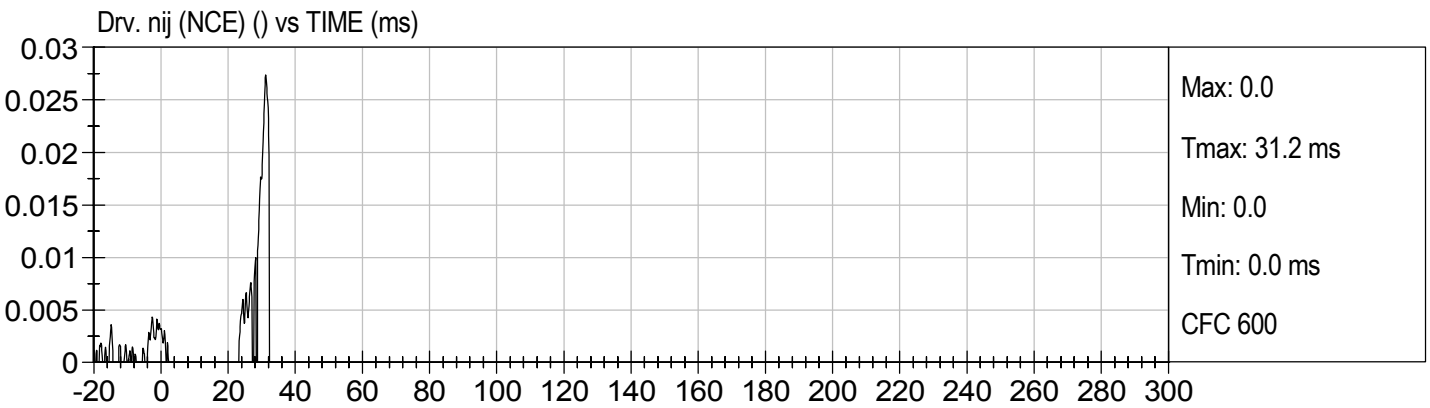
25 MPH FRONTAL UNBELTED
2007 DODGE CHARGER (C70307)

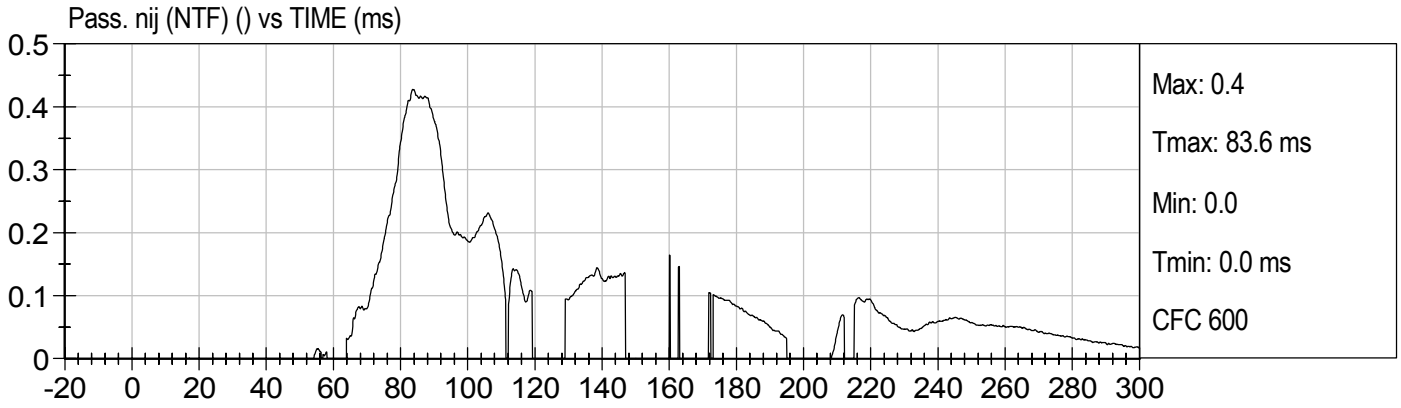
Test Date: 09/05/2007
Speed: 24.7 mph (39.8 km/h)

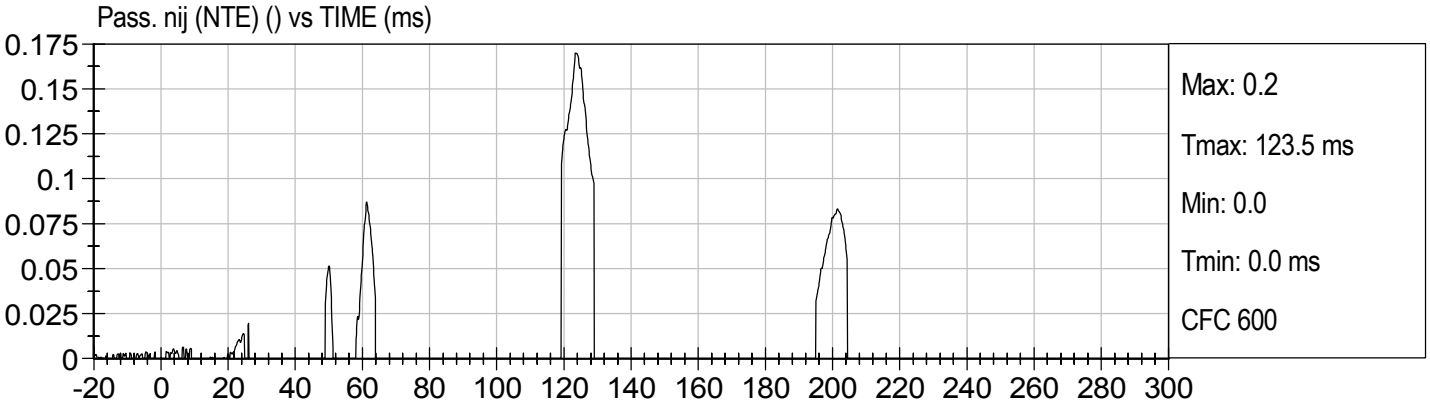


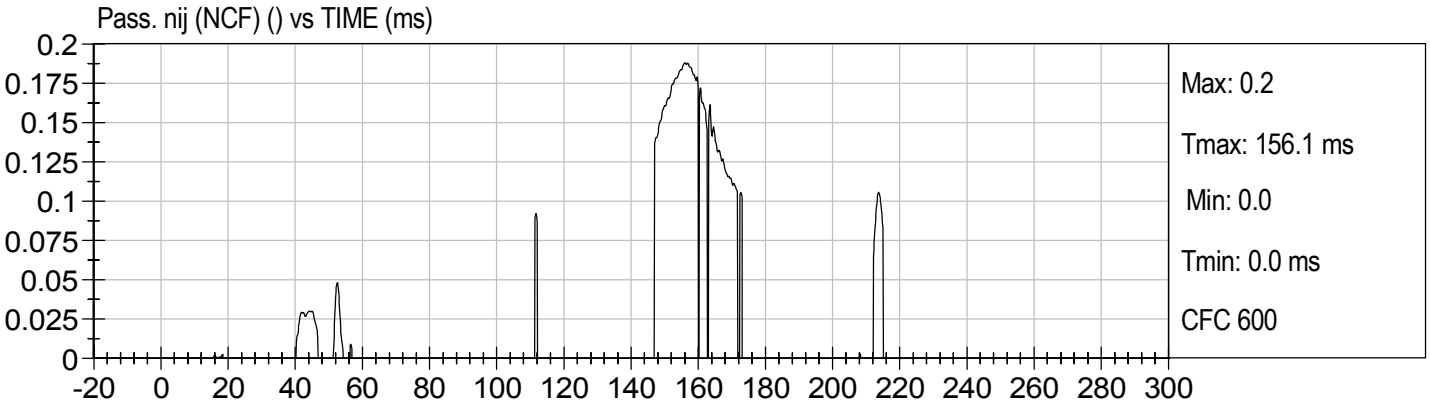


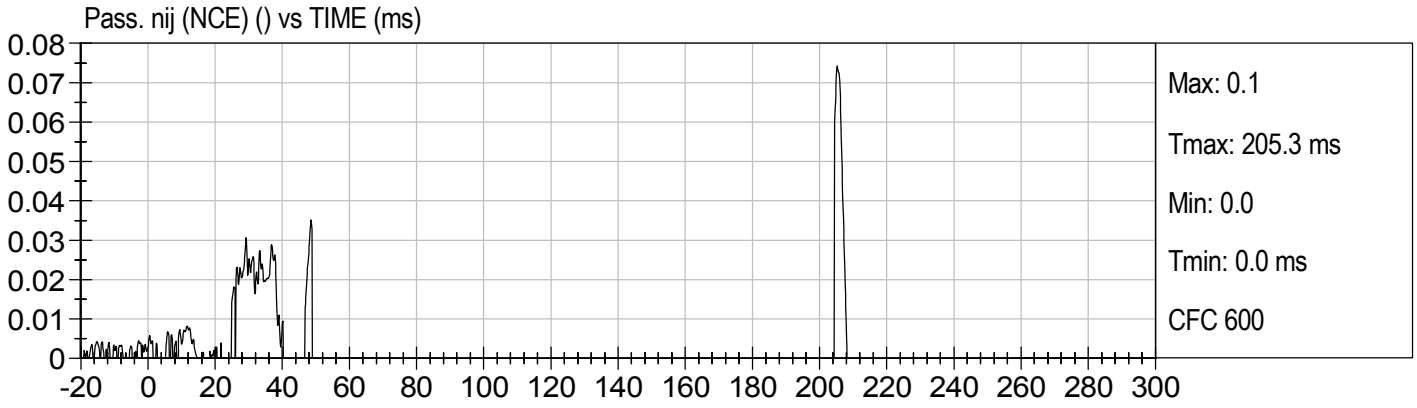




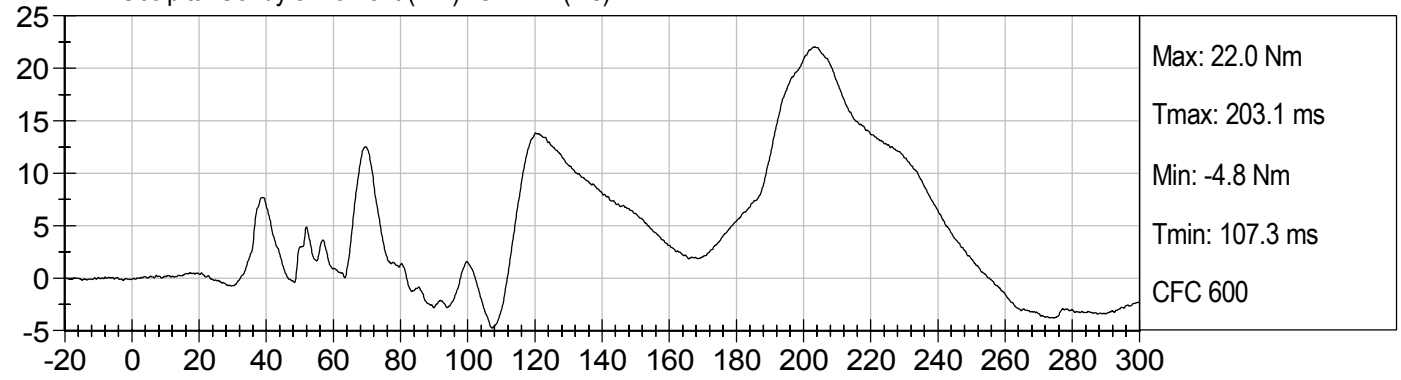

Pass. nij (NTF) () vs TIME (ms)
0.5
0.4
0.3
0.2
0.1
0
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 0.4
Tmax: 83.6 ms
Min: 0.0
Tmin: 0.0 ms
CFC 600


Pass. nij (NTE) () vs TIME (ms)
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 0.2
Tmax: 123.5 ms
Min: 0.0
Tmin: 0.0 ms
CFC 600

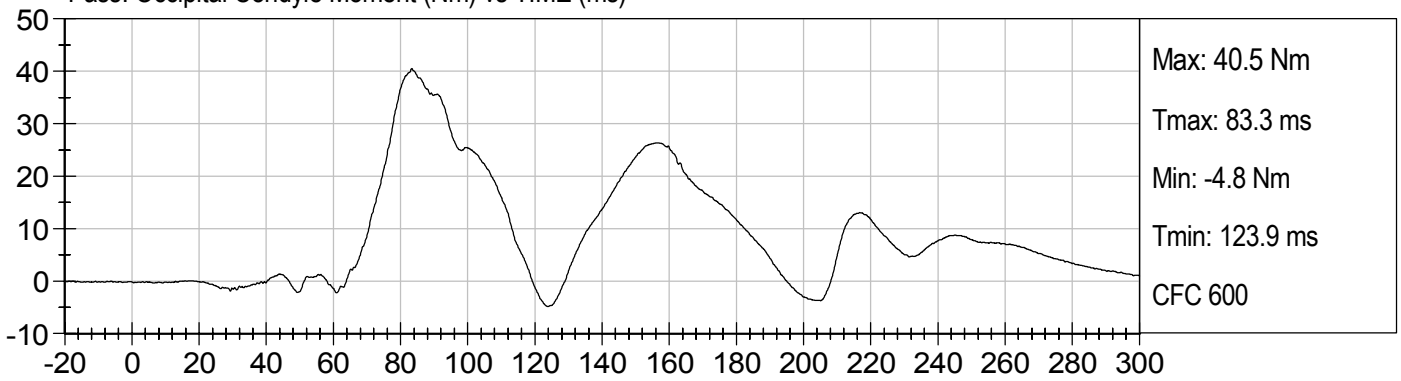

Pass. nij (NCF) () vs TIME (ms)
0.2
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 0.2
Tmax: 156.1 ms
Min: 0.0
Tmin: 0.0 ms
CFC 600


Pass. nij (NCE) () vs TIME (ms)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-20 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300
Max: 0.1
Tmax: 205.3 ms
Min: 0.0
Tmin: 0.0 ms
CFC 600

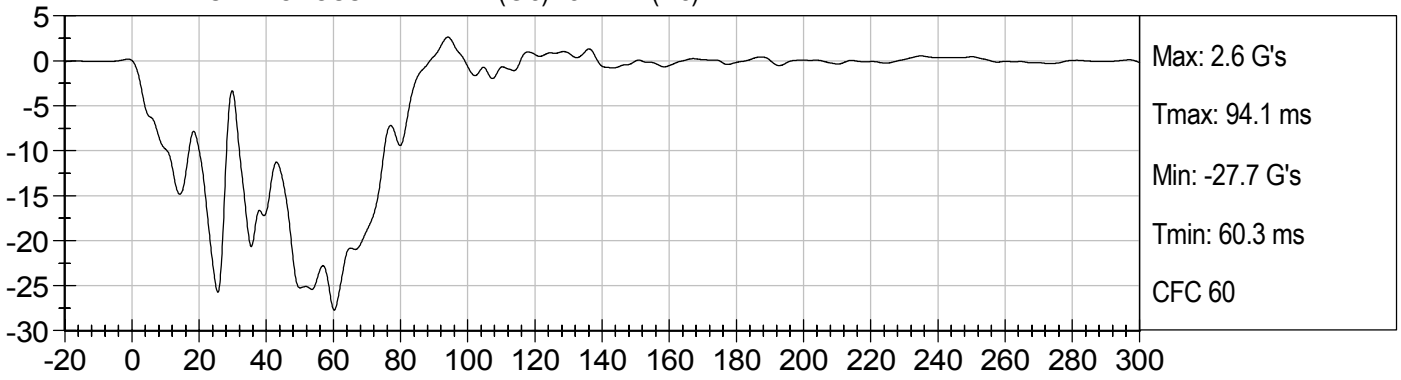
Drv. Occipital Condyle Moment (Nm) vs TIME (ms)



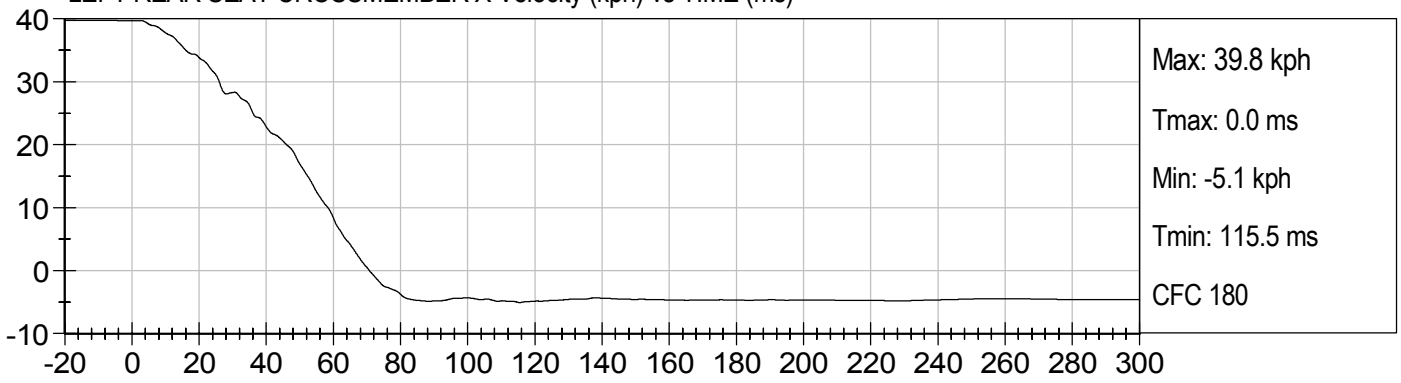
Pass. Occipital Condyle Moment (Nm) vs TIME (ms)



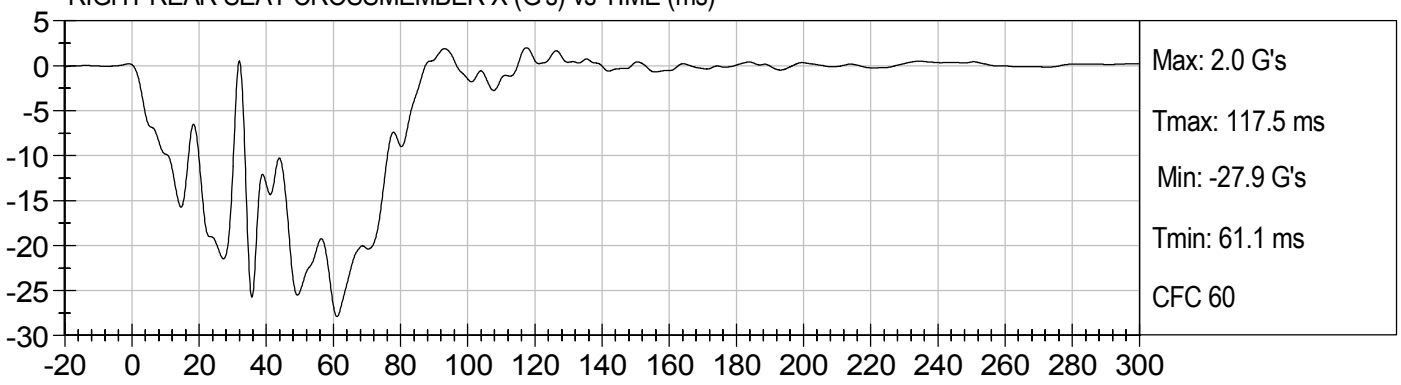
LEFT REAR SEAT CROSSMEMBER X (G's) vs TIME (ms)



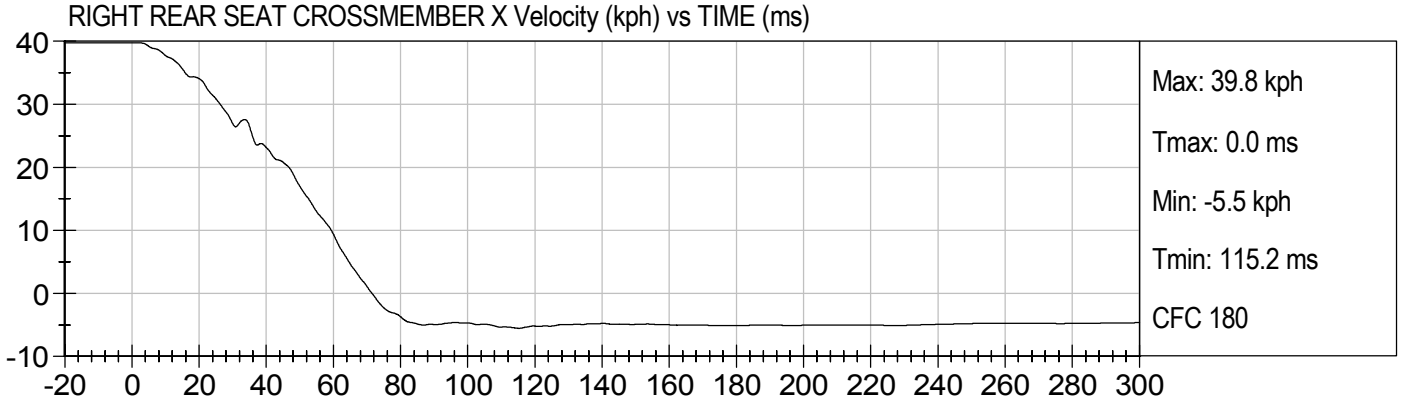
LEFT REAR SEAT CROSSMEMBER X Velocity (kph) vs TIME (ms)



RIGHT REAR SEAT CROSSMEMBER X (G's) vs TIME (ms)



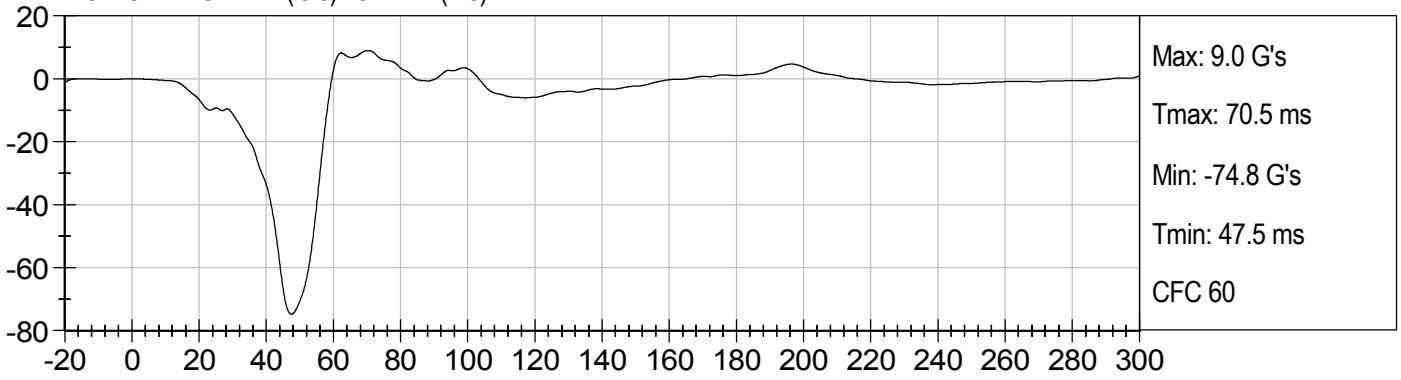
RIGHT REAR SEAT CROSSMEMBER X Velocity (kph) vs TIME (ms)



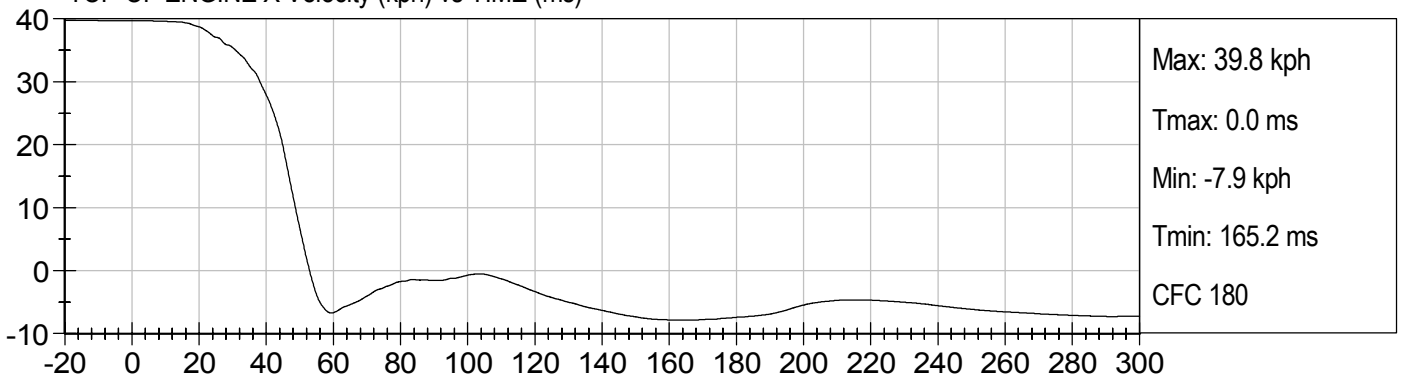
25 MPH FRONTAL UNBELTED
2007 DODGE CHARGER (C70307)

Test Date: 09/05/2007
Speed: 24.7 mph (39.8 km/h)

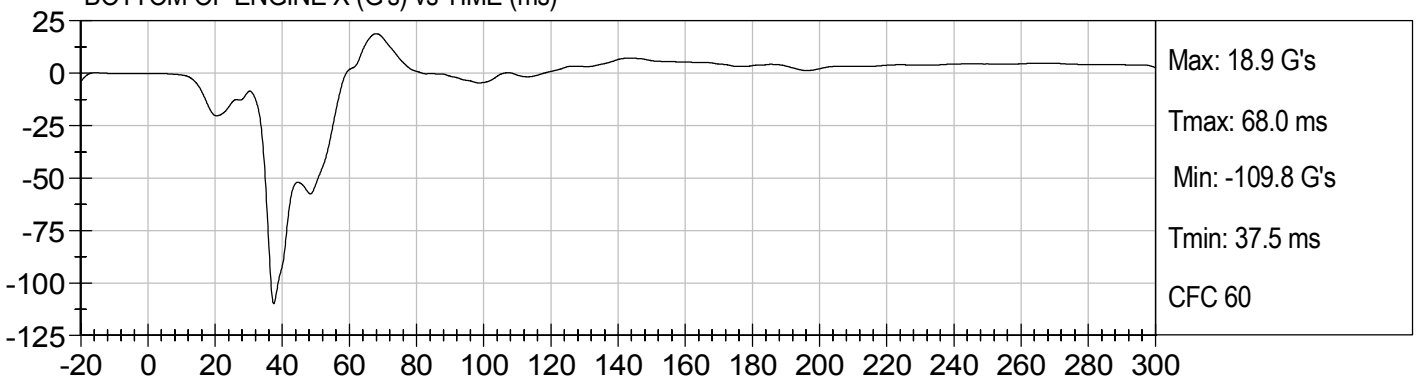
TOP OF ENGINE X (G's) vs TIME (ms)



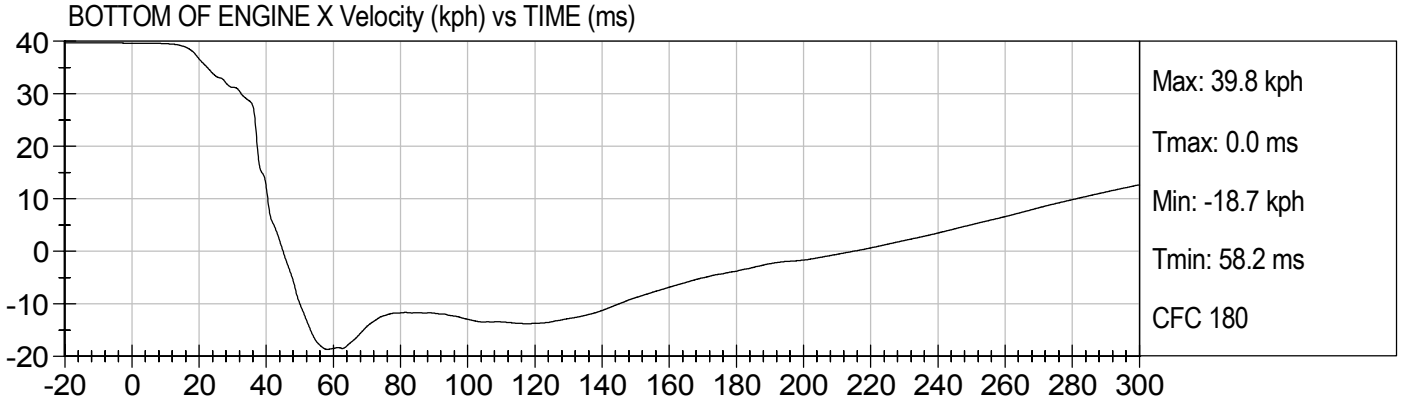
TOP OF ENGINE X Velocity (kph) vs TIME (ms)



BOTTOM OF ENGINE X (G's) vs TIME (ms)



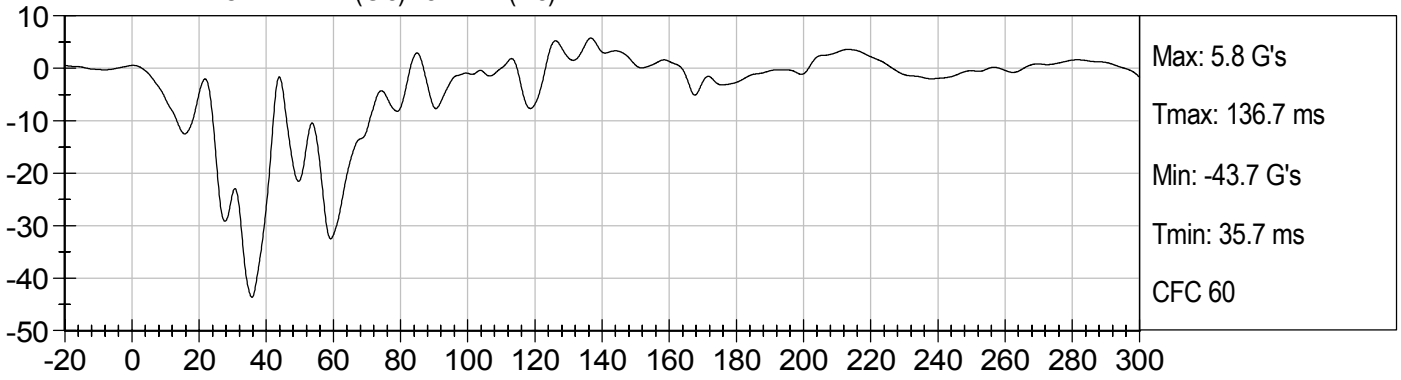
BOTTOM OF ENGINE X Velocity (kph) vs TIME (ms)



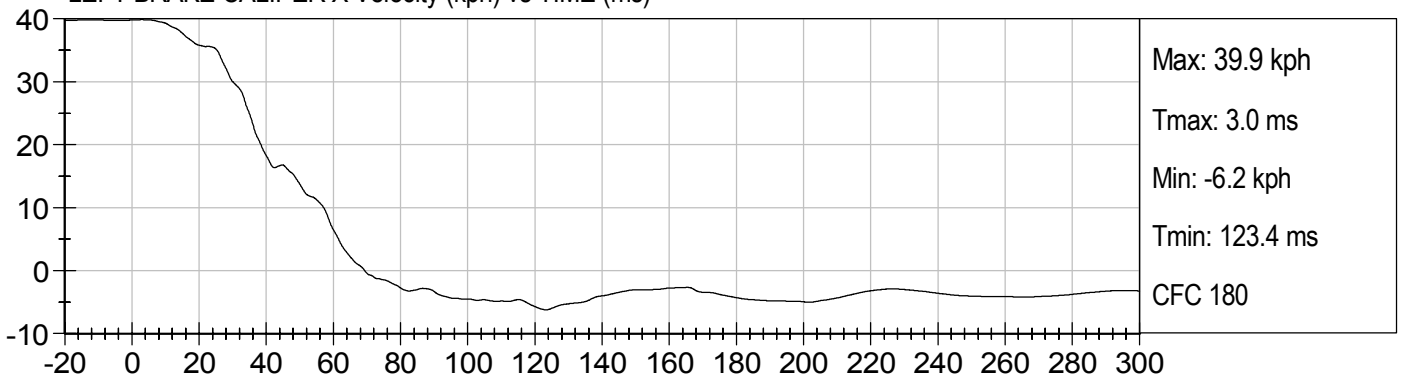
25 MPH FRONTAL UNBELTED
2007 DODGE CHARGER (C70307)

Test Date: 09/05/2007
Speed: 24.7 mph (39.8 km/h)

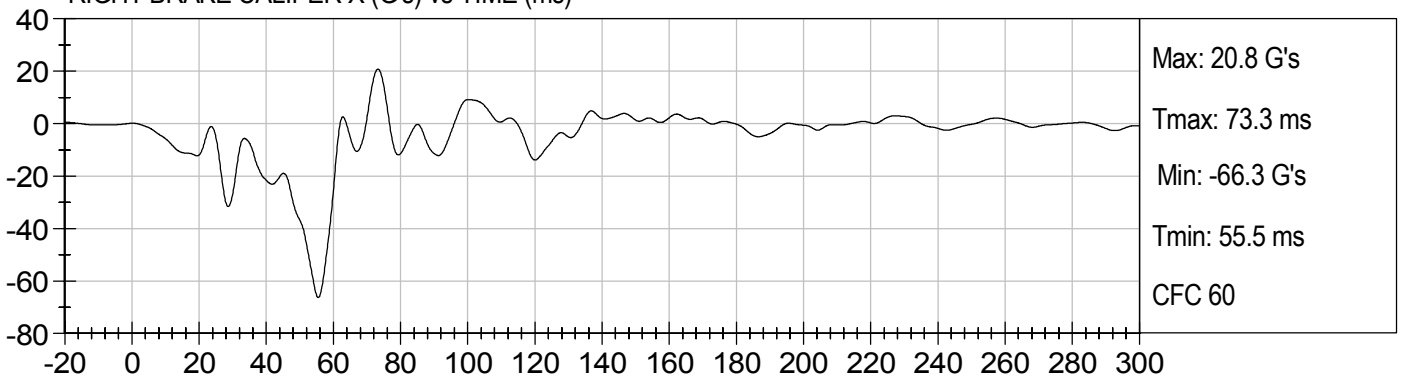
LEFT BRAKE CALIPER X (G's) vs TIME (ms)



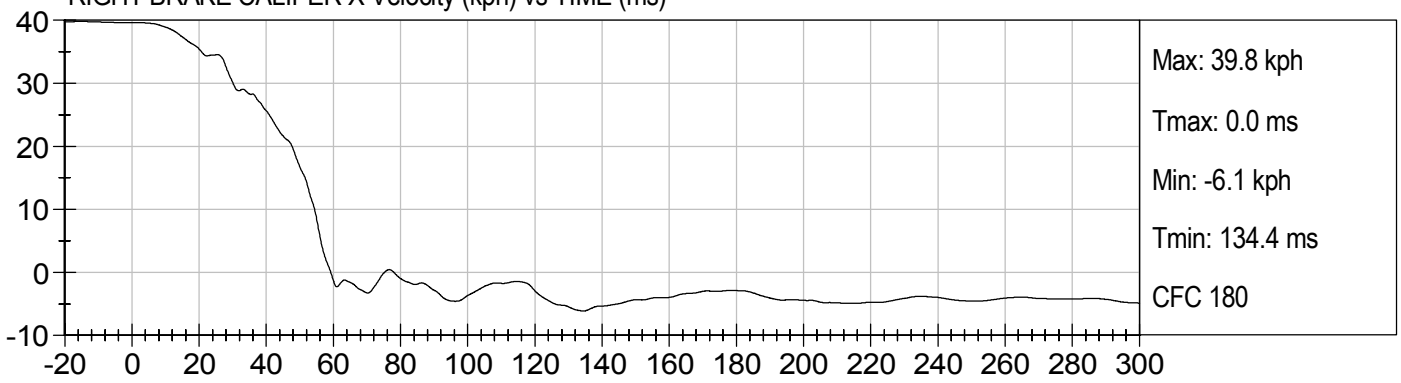
LEFT BRAKE CALIPER X Velocity (kph) vs TIME (ms)



RIGHT BRAKE CALIPER X (G's) vs TIME (ms)



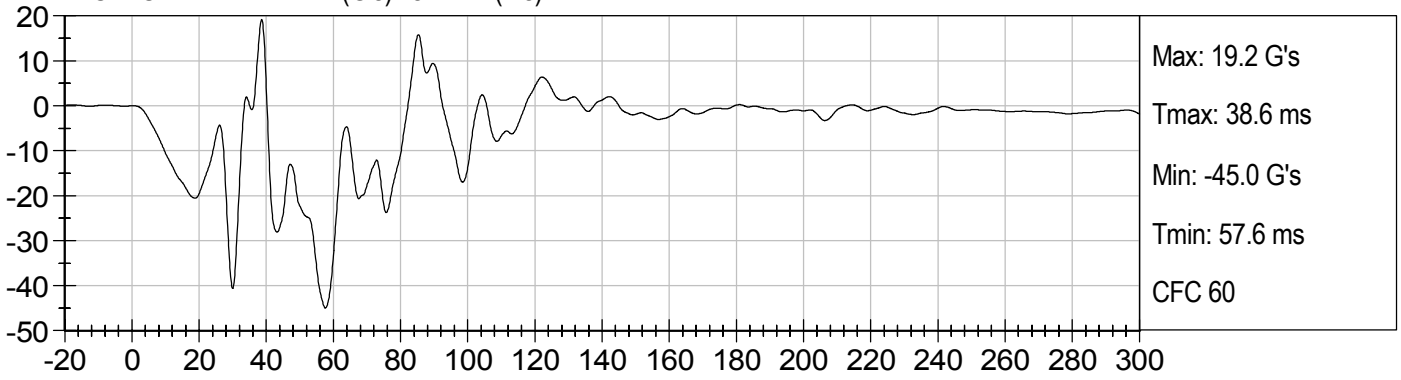
RIGHT BRAKE CALIPER X Velocity (kph) vs TIME (ms)



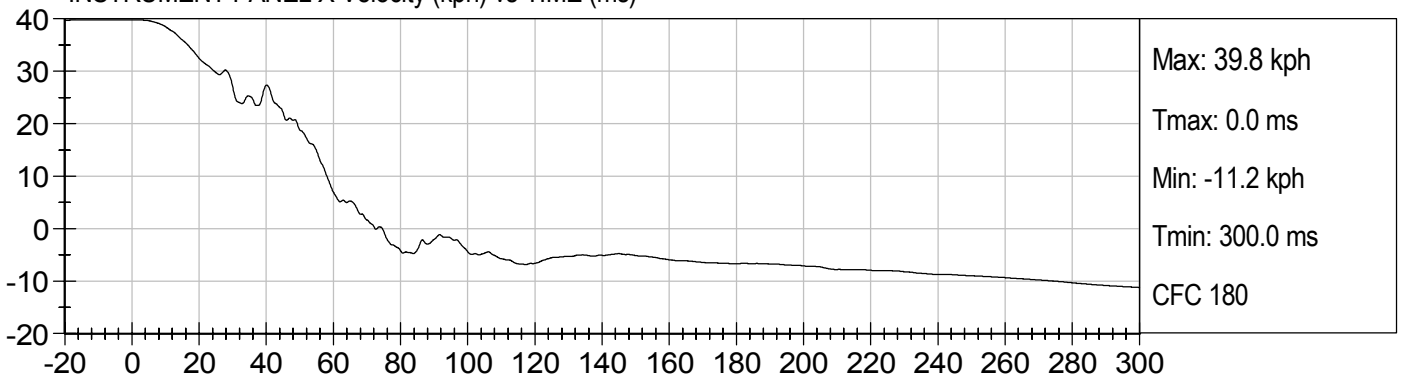
25 MPH FRONTAL UNBELTED
2007 DODGE CHARGER (C70307)

Test Date: 09/05/2007
Speed: 24.7 mph (39.8 km/h)

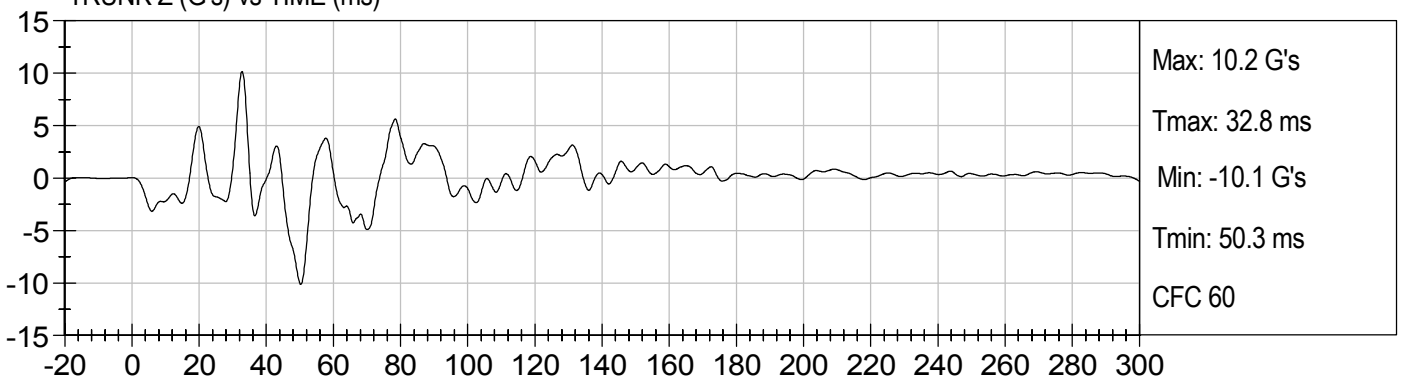
INSTRUMENT PANEL X (G's) vs TIME (ms)



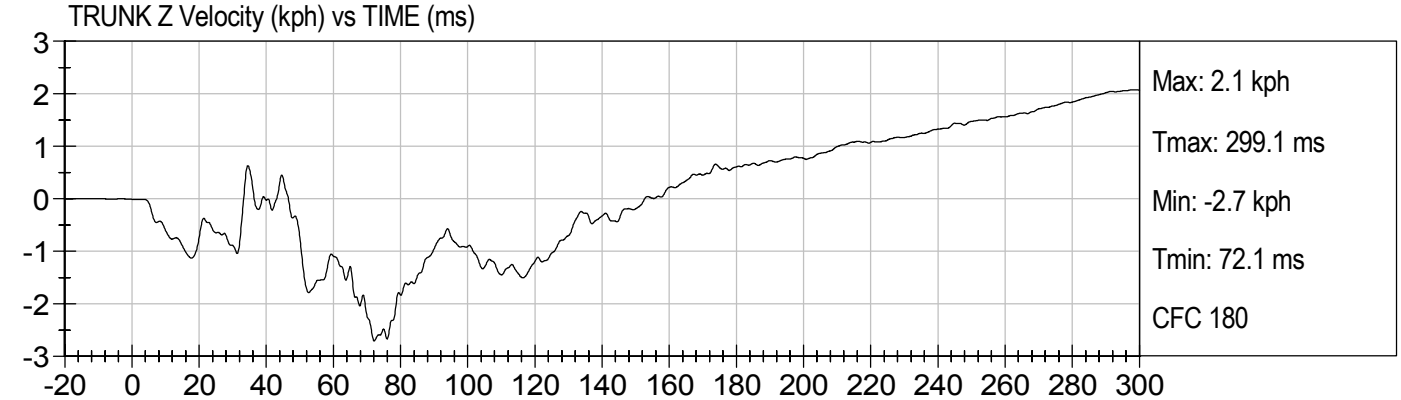
INSTRUMENT PANEL X Velocity (kph) vs TIME (ms)



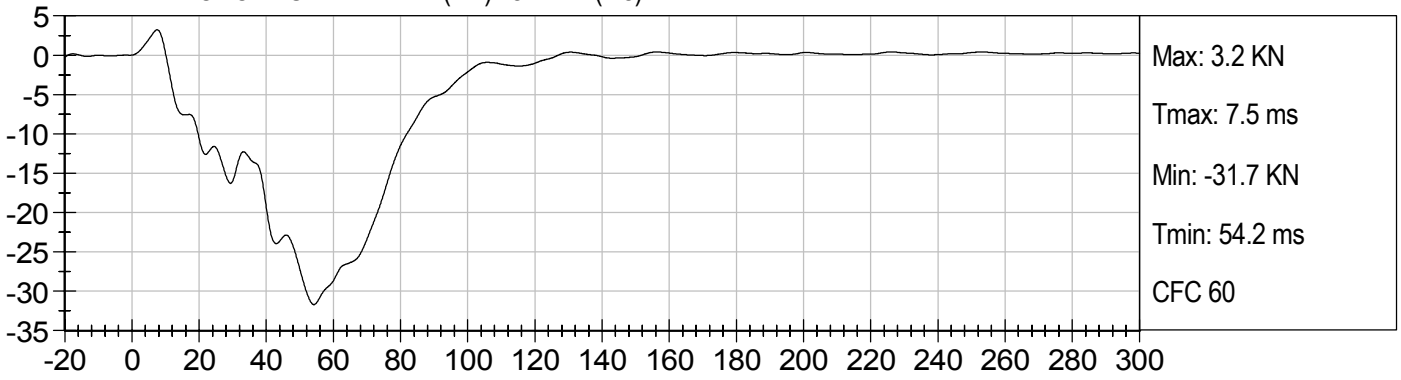
TRUNK Z (G's) vs TIME (ms)



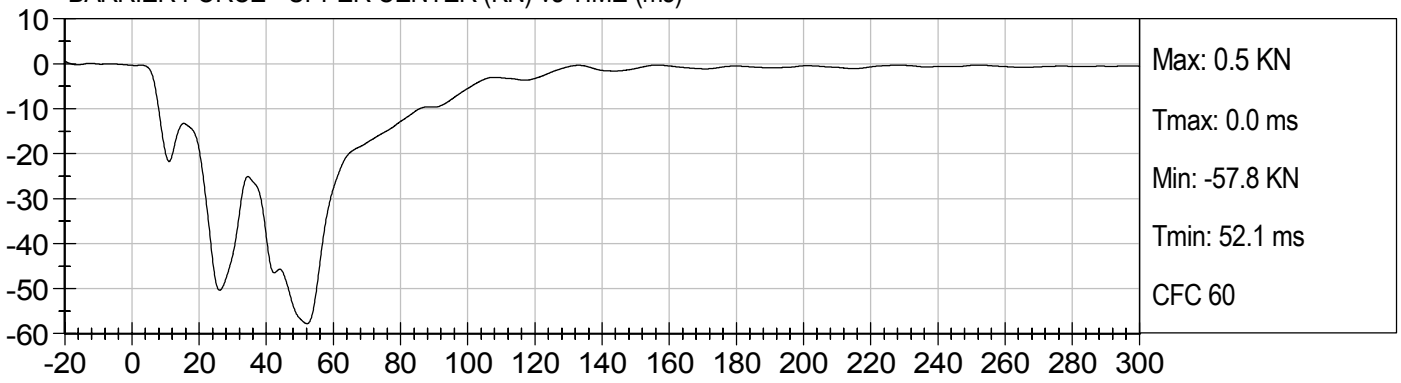
TRUNK Z Velocity (kph) vs TIME (ms)



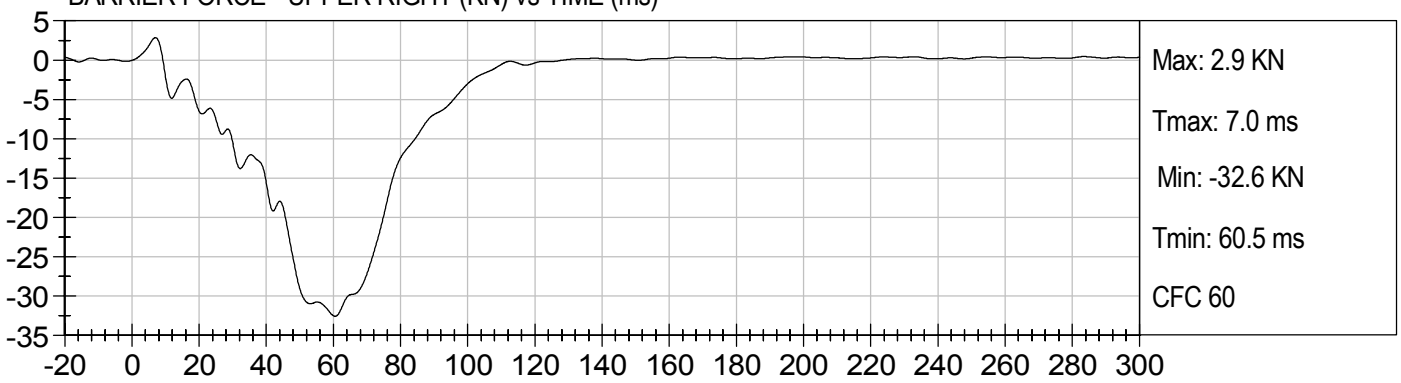
BARRIER FORCE - UPPER LEFT (KN) vs TIME (ms)



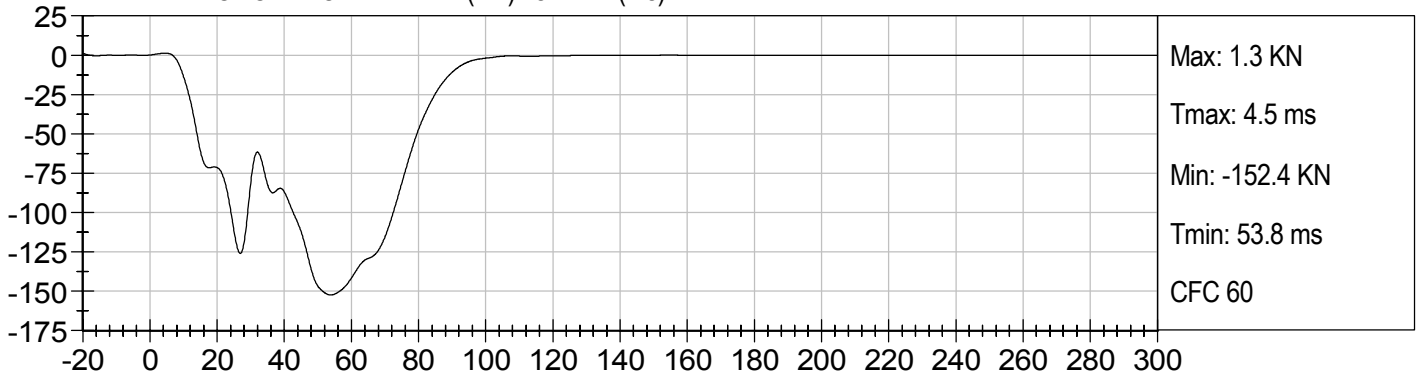
BARRIER FORCE - UPPER CENTER (KN) vs TIME (ms)



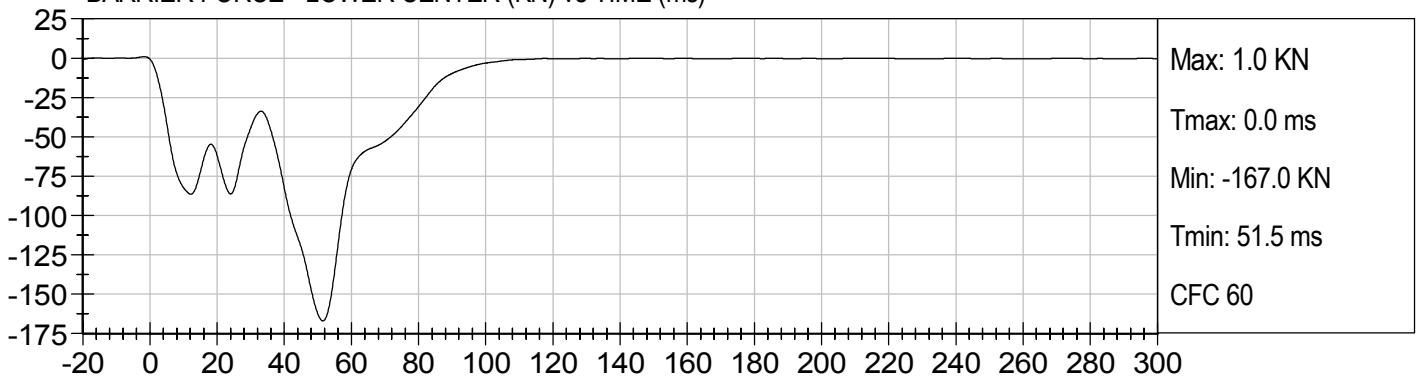
BARRIER FORCE - UPPER RIGHT (KN) vs TIME (ms)



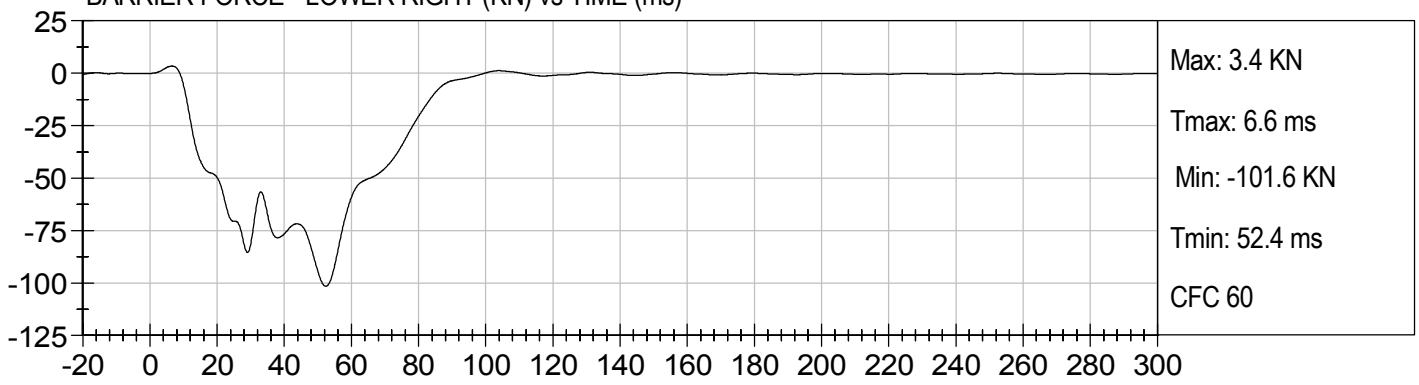
BARRIER FORCE - LOWER LEFT (KN) vs TIME (ms)



BARRIER FORCE - LOWER CENTER (KN) vs TIME (ms)



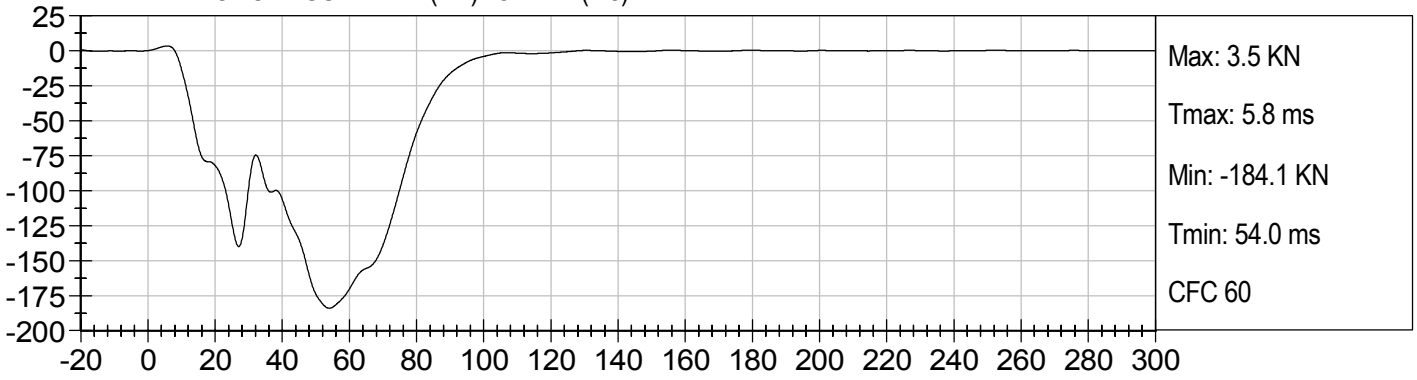
BARRIER FORCE - LOWER RIGHT (KN) vs TIME (ms)



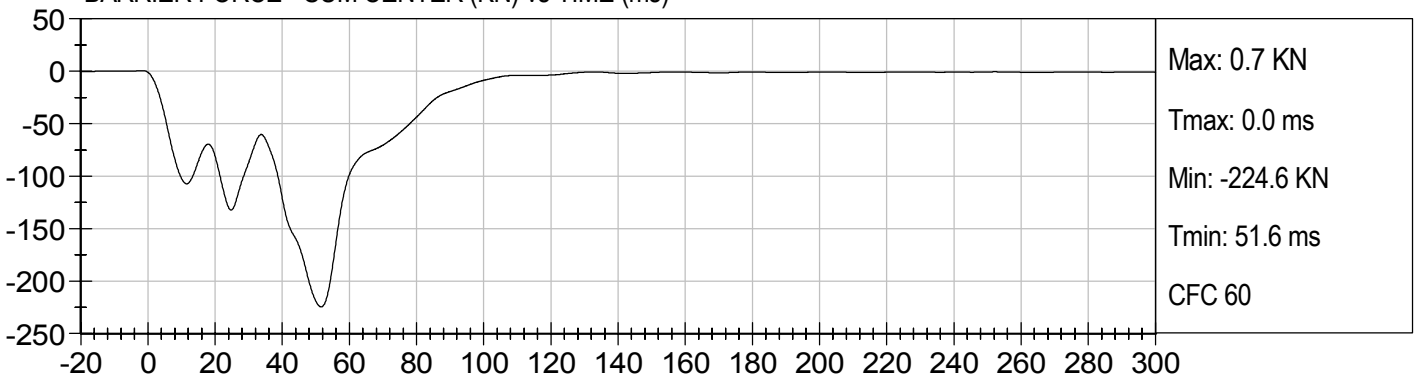
25 MPH FRONTAL UNBELTED
2007 DODGE CHARGER (C70307)

Test Date: 09/05/2007
Speed: 24.7 mph (39.8 km/h)

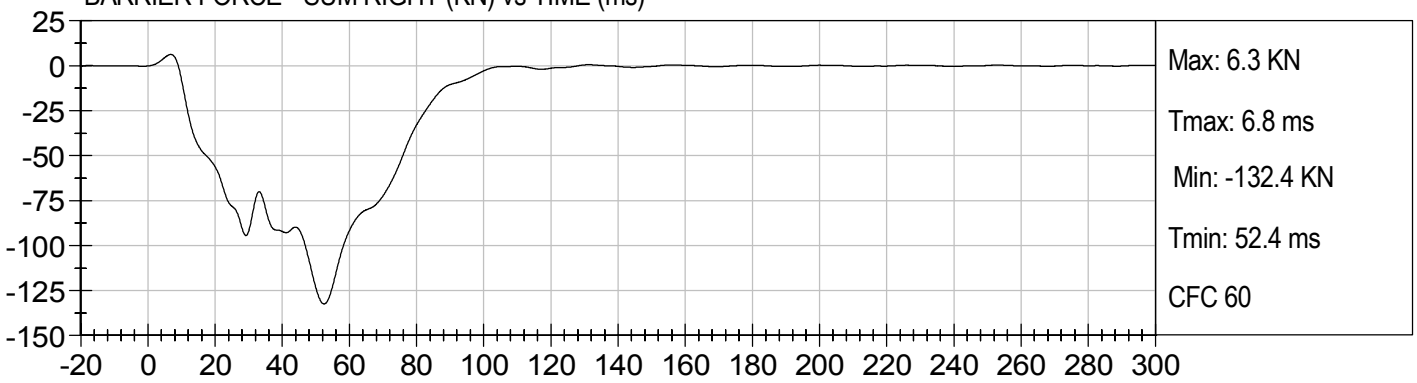
BARRIER FORCE - SUM LEFT (KN) vs TIME (ms)



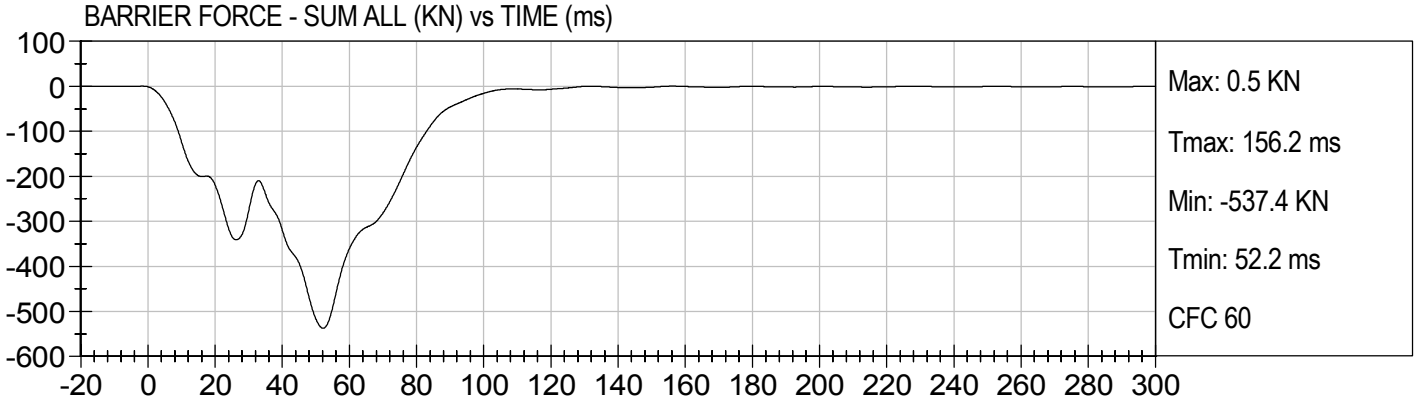
BARRIER FORCE - SUM CENTER (KN) vs TIME (ms)



BARRIER FORCE - SUM RIGHT (KN) vs TIME (ms)



BARRIER FORCE - SUM ALL (KN) vs TIME (ms)



APPENDIX B

LOW RISK TEST DATA

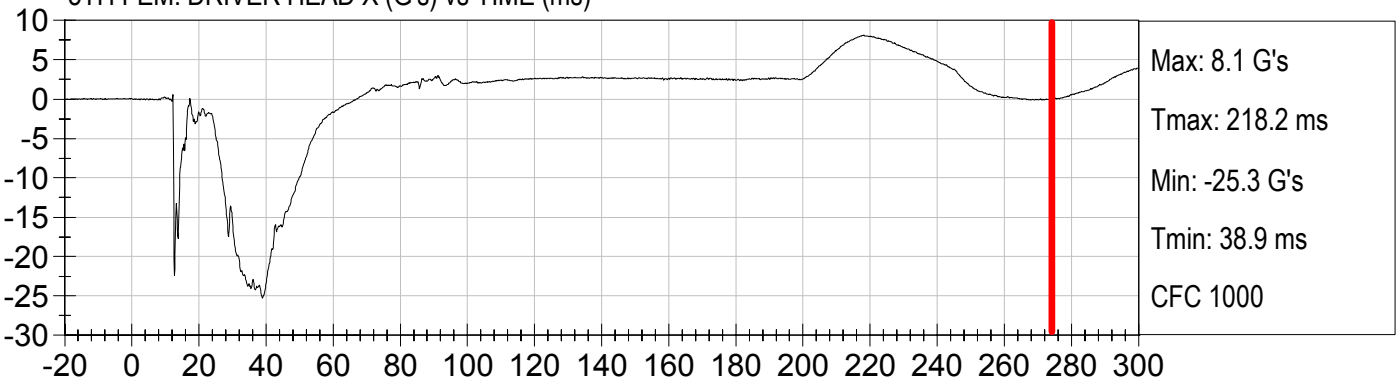
TABLE OF DATA PLOTS

LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P1)

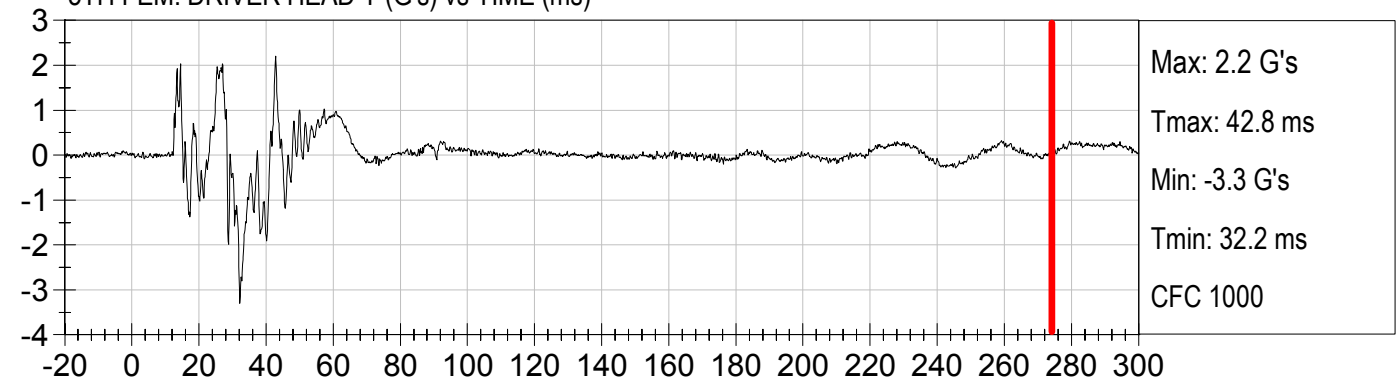
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms

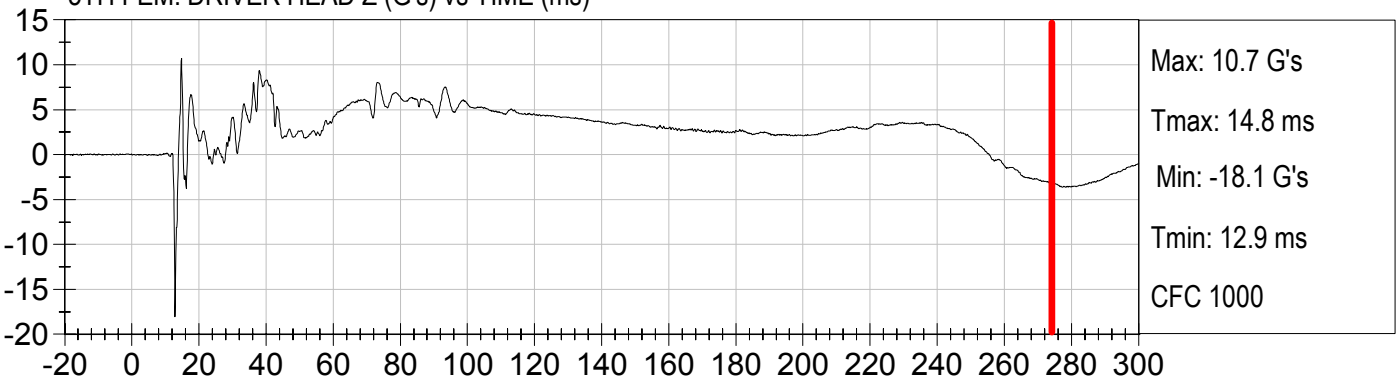
5TH FEM. DRIVER HEAD X (G's) vs TIME (ms)



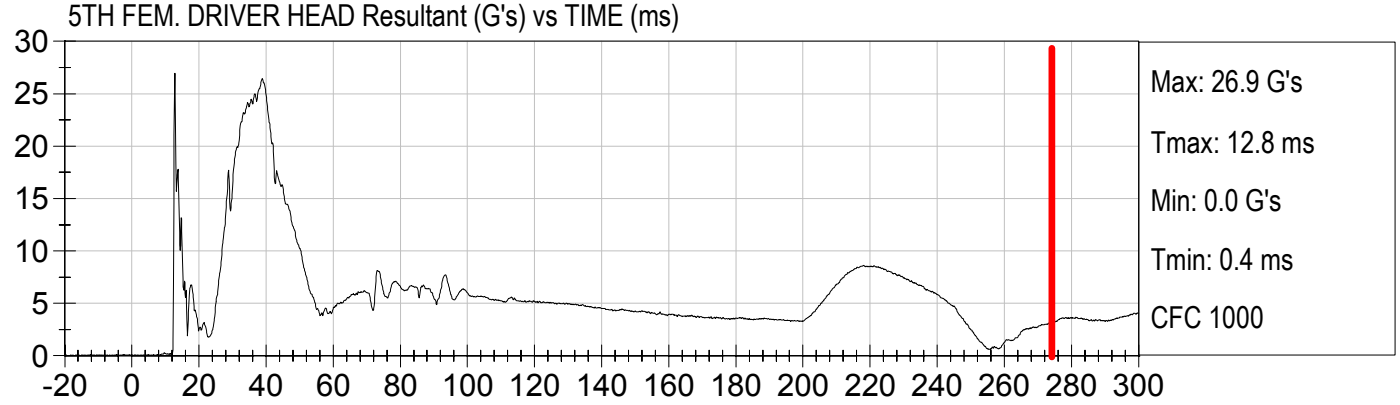
5TH FEM. DRIVER HEAD Y (G's) vs TIME (ms)



5TH FEM. DRIVER HEAD Z (G's) vs TIME (ms)



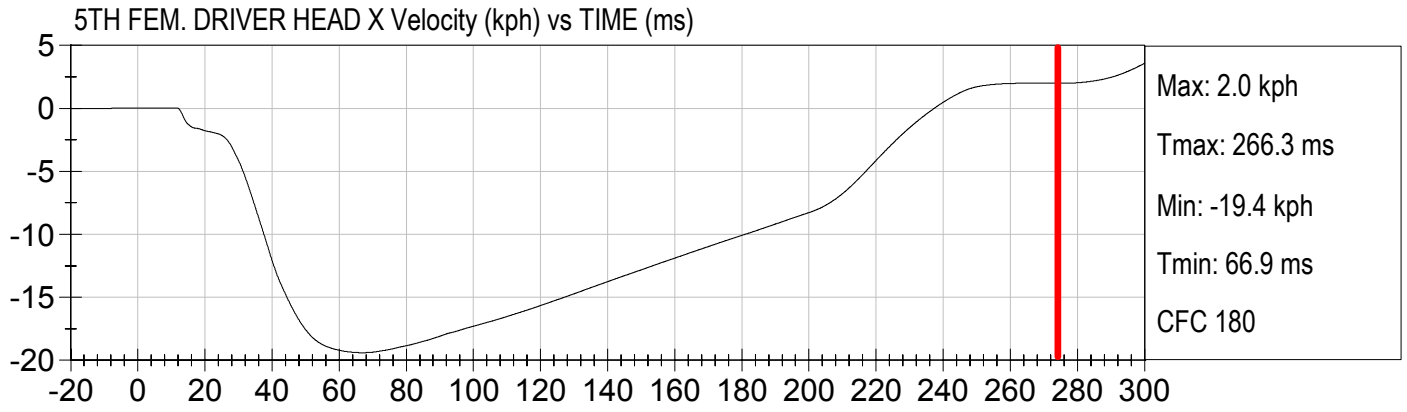
5TH FEM. DRIVER HEAD Resultant (G's) vs TIME (ms)

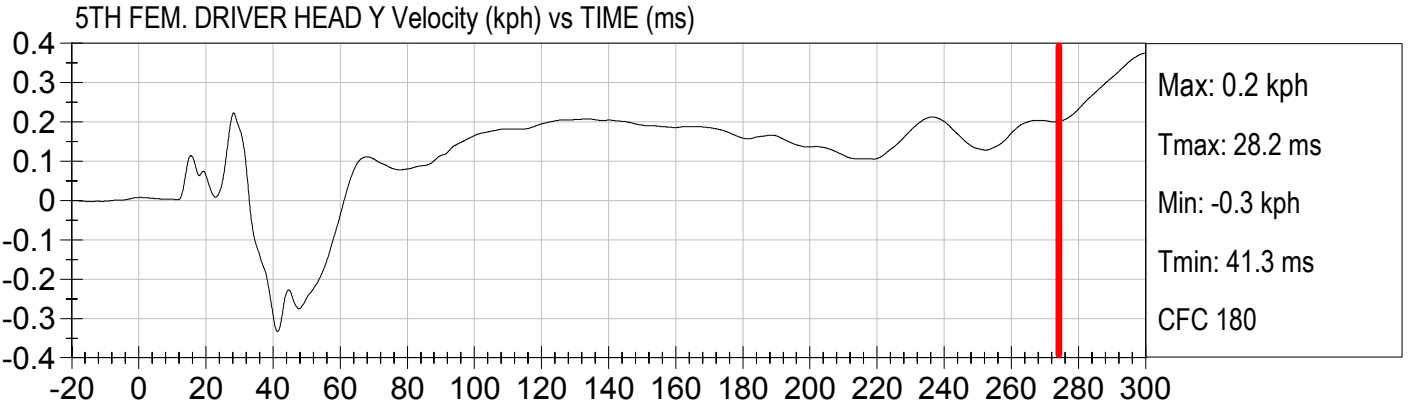


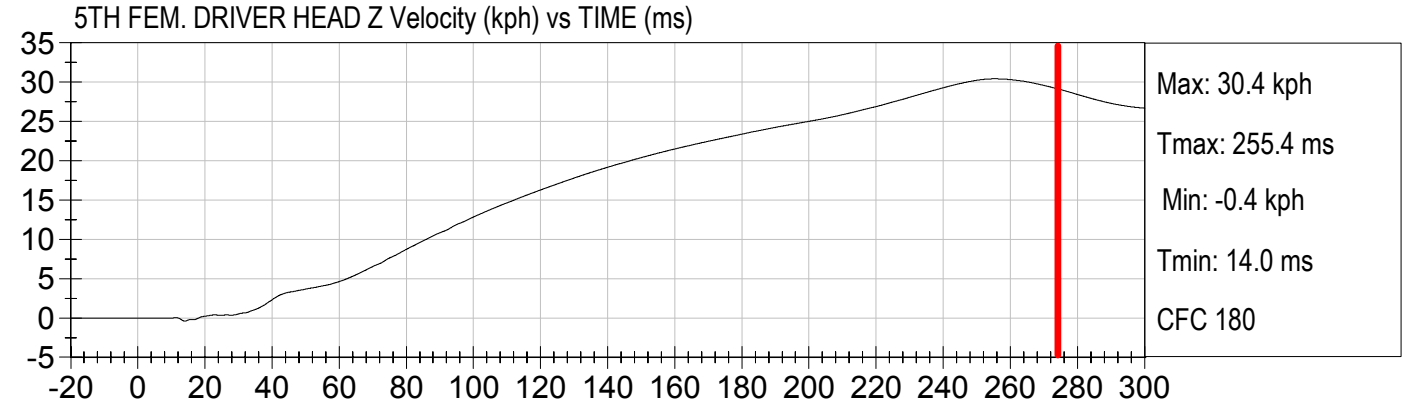
LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P1)

Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms





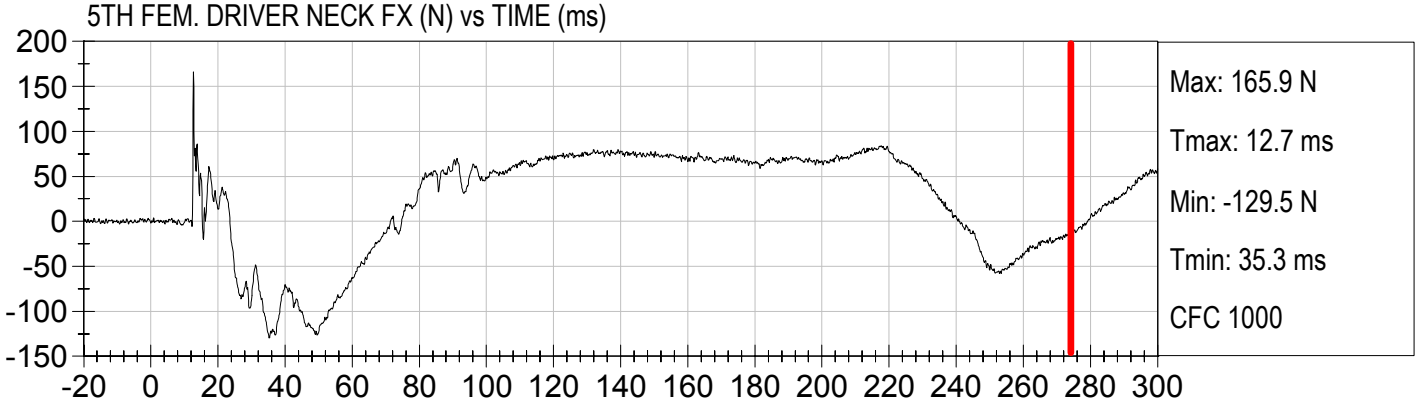


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P1)

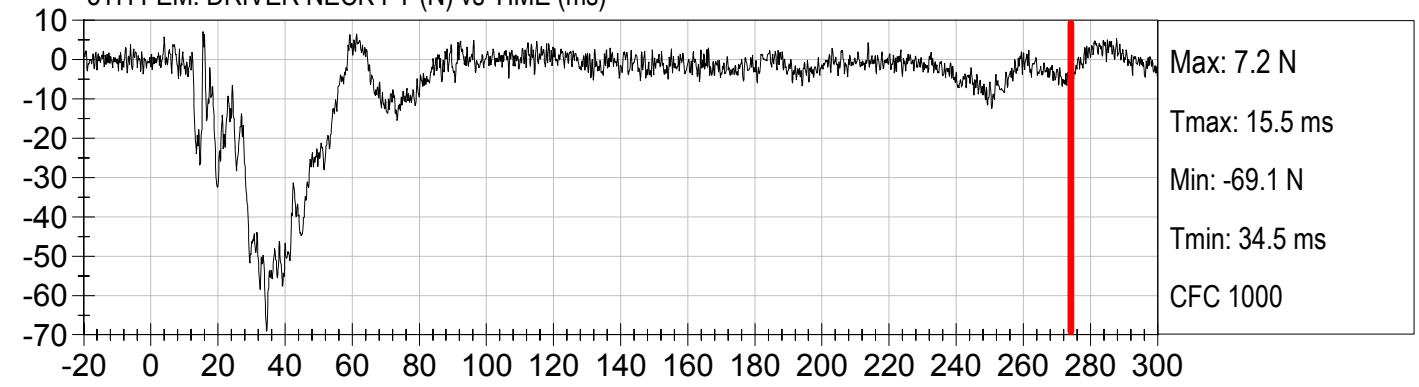
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms

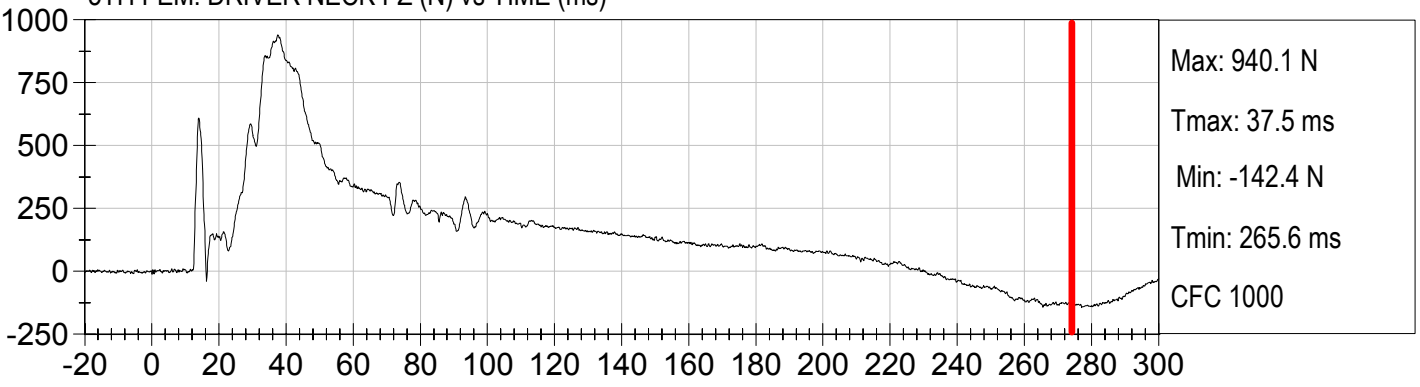
5TH FEM. DRIVER NECK FX (N) vs TIME (ms)



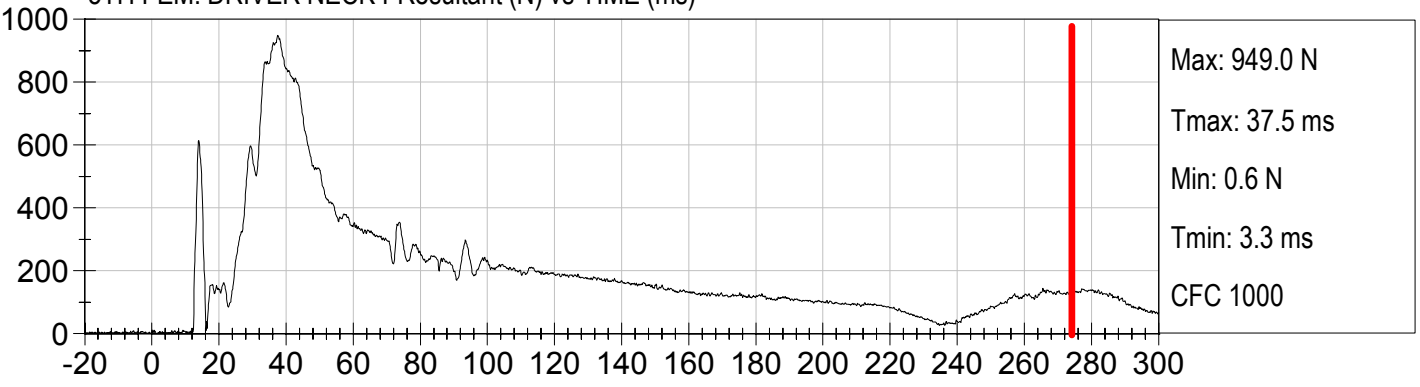
5TH FEM. DRIVER NECK FY (N) vs TIME (ms)



5TH FEM. DRIVER NECK FZ (N) vs TIME (ms)



5TH FEM. DRIVER NECK FResultant (N) vs TIME (ms)

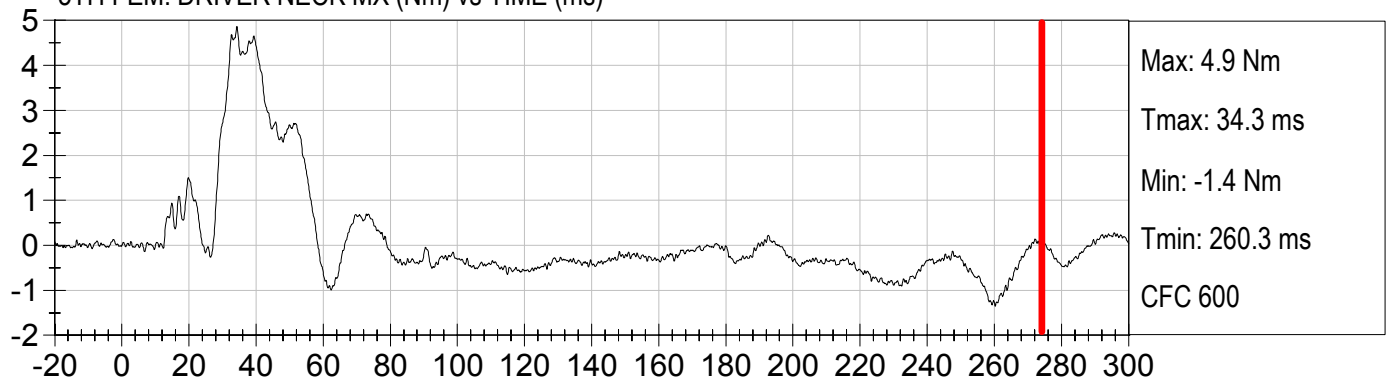


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P1)

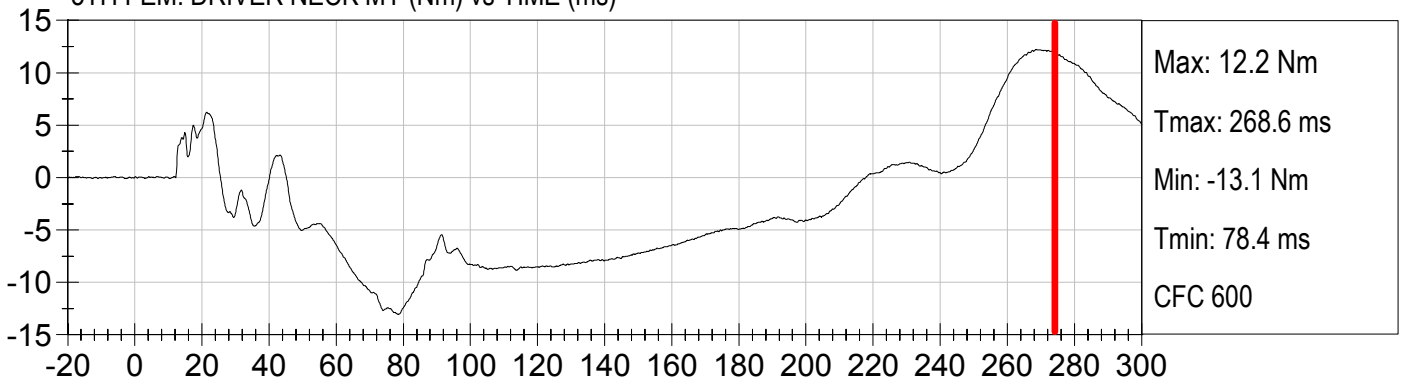
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms

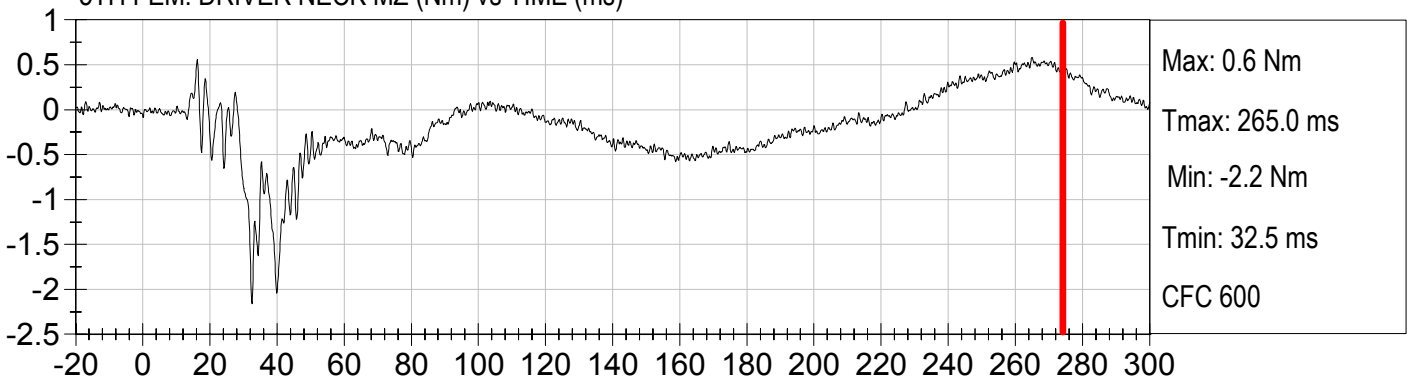
5TH FEM. DRIVER NECK MX (Nm) vs TIME (ms)



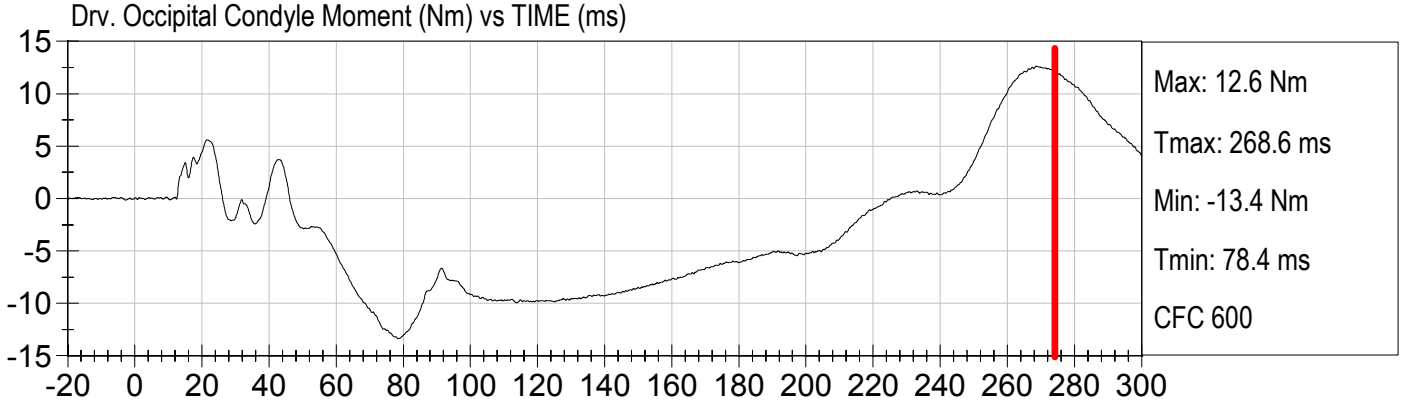
5TH FEM. DRIVER NECK MY (Nm) vs TIME (ms)



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



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

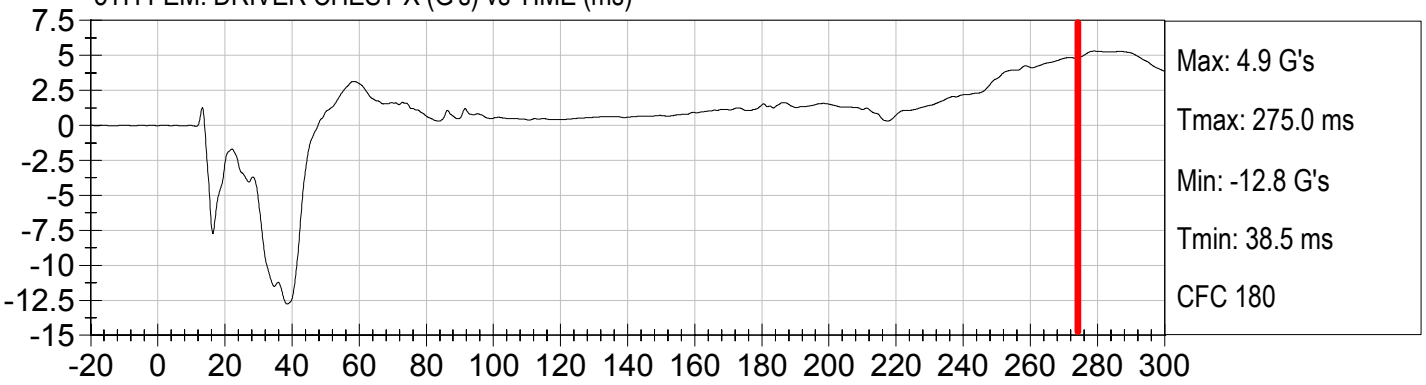


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P1)

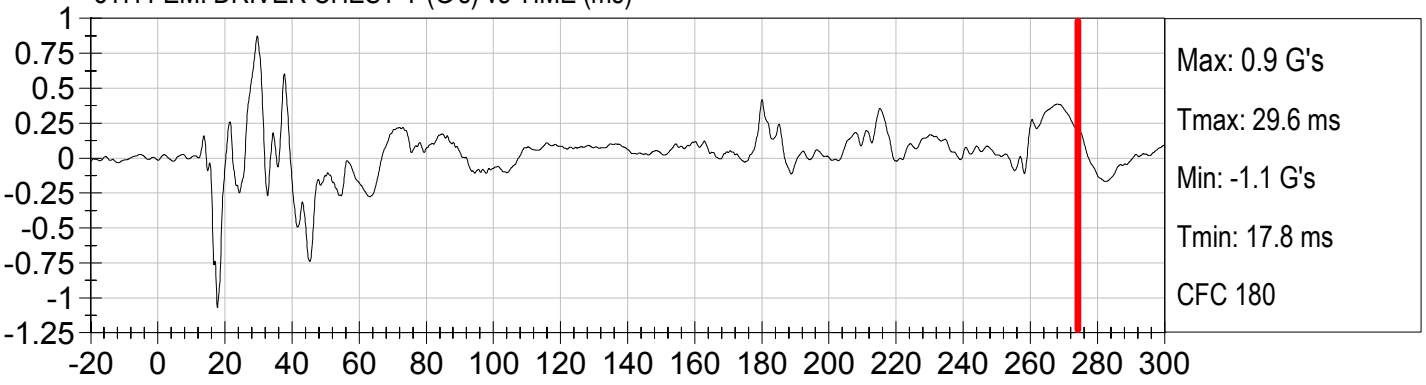
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms

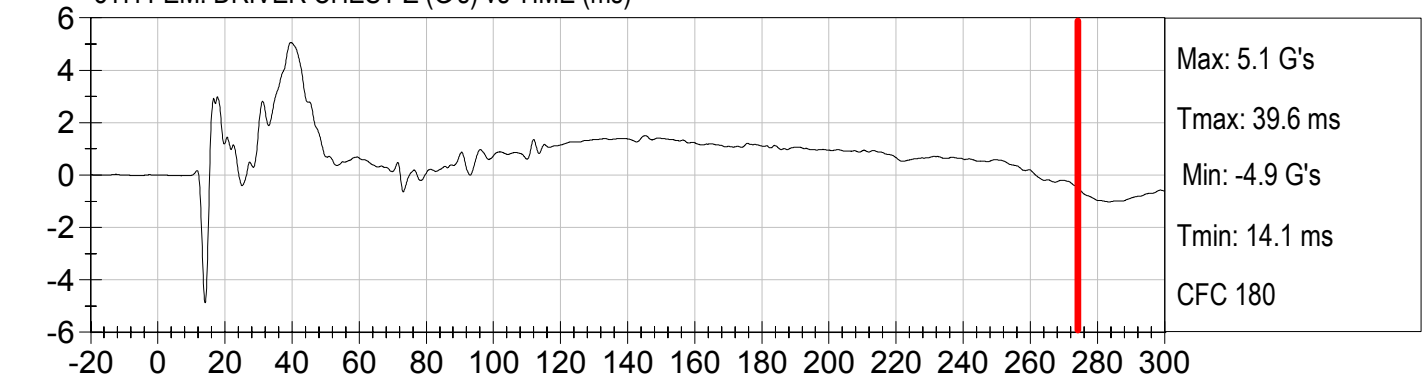
5TH FEM. DRIVER CHEST X (G's) vs TIME (ms)



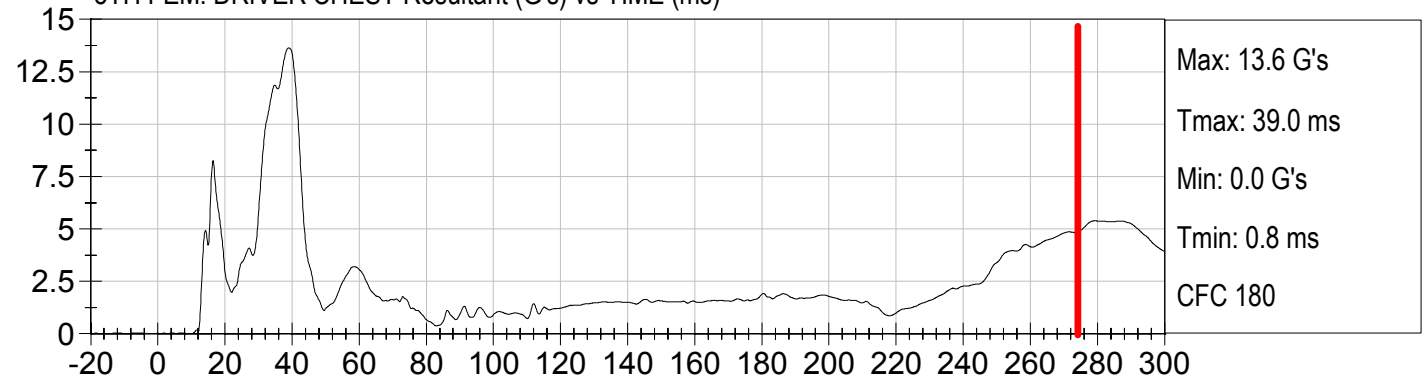
5TH FEM. DRIVER CHEST Y (G's) vs TIME (ms)



5TH FEM. DRIVER CHEST Z (G's) vs TIME (ms)



5TH FEM. DRIVER CHEST Resultant (G's) vs TIME (ms)

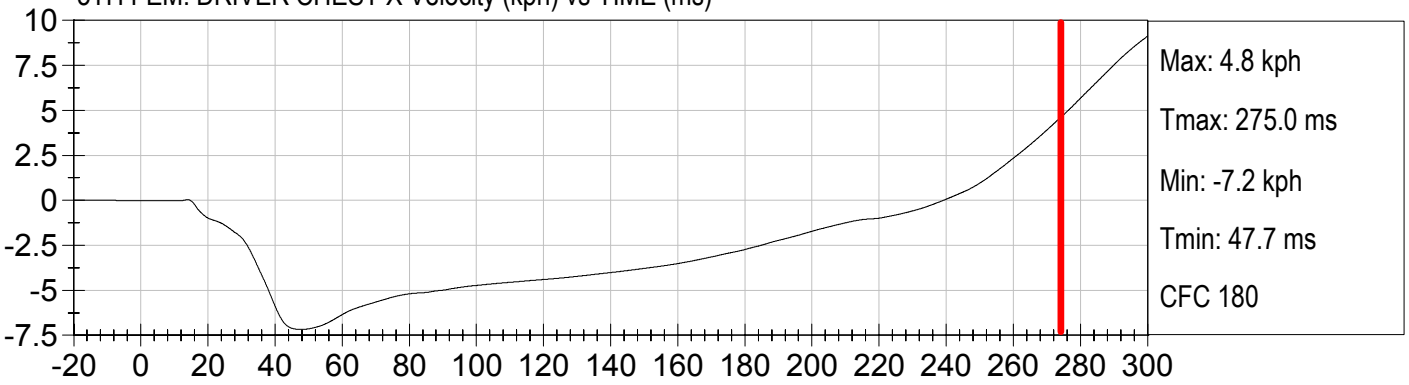


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P1)

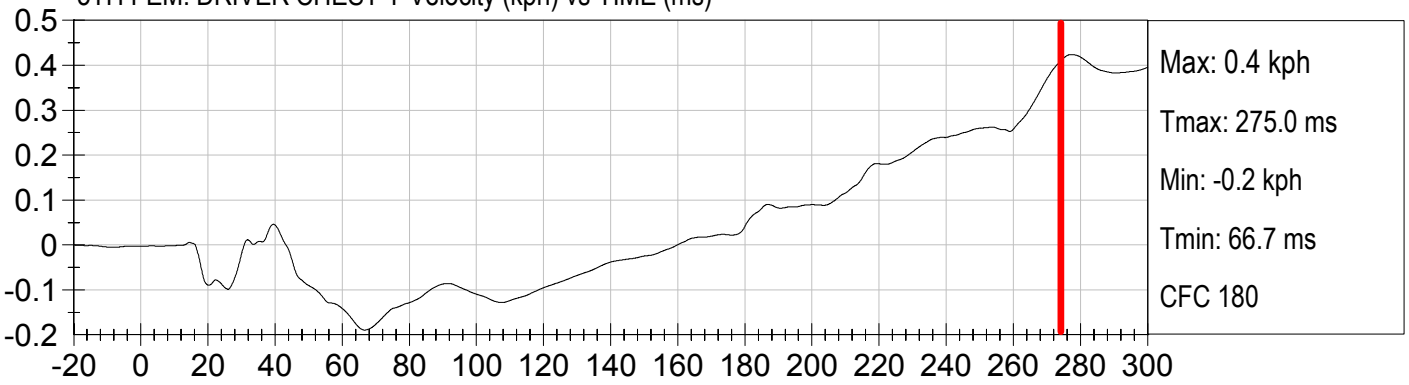
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms

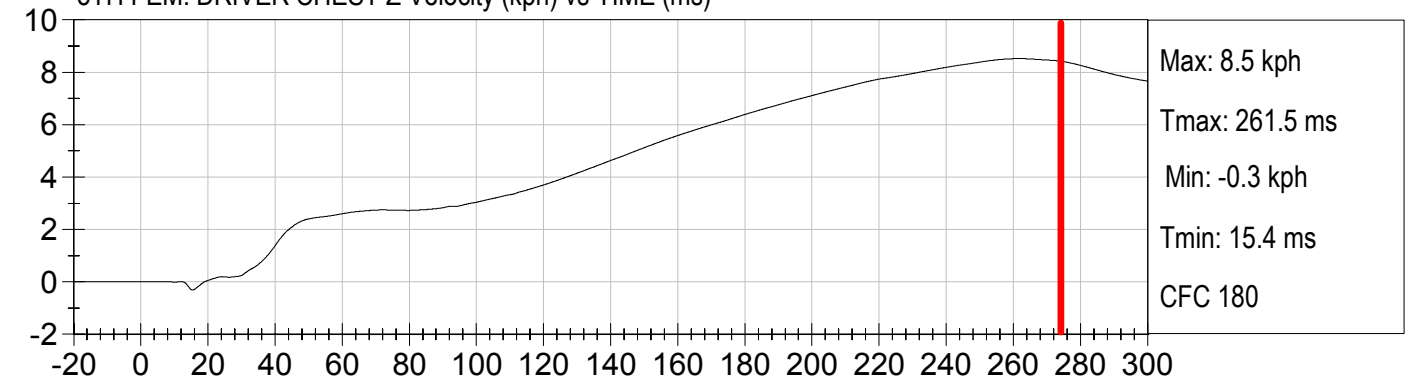
5TH FEM. DRIVER CHEST X Velocity (kph) vs TIME (ms)



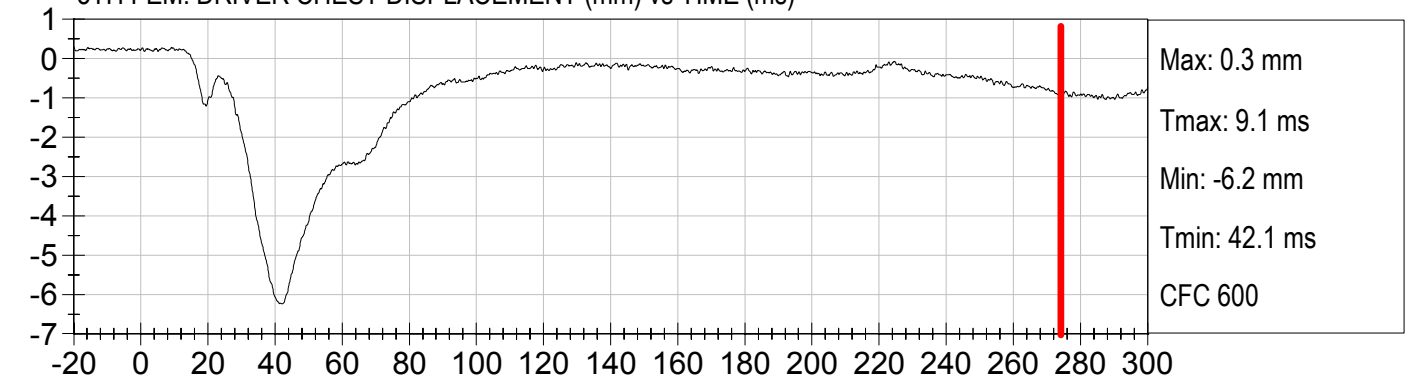
5TH FEM. DRIVER CHEST Y Velocity (kph) vs TIME (ms)



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



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

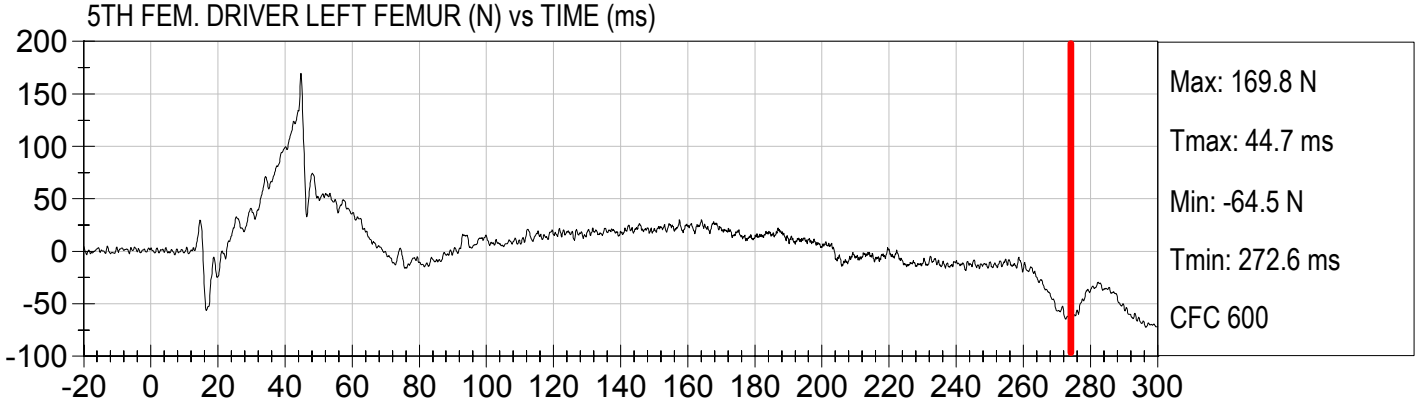


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P1)

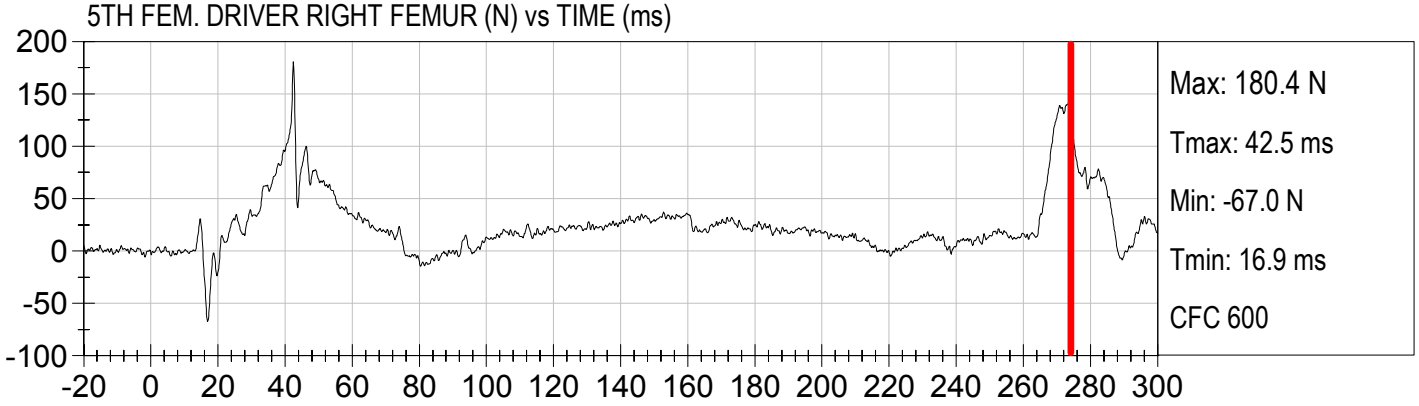
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms

5TH FEM. DRIVER LEFT FEMUR (N) vs TIME (ms)



5TH FEM. DRIVER RIGHT FEMUR (N) vs TIME (ms)

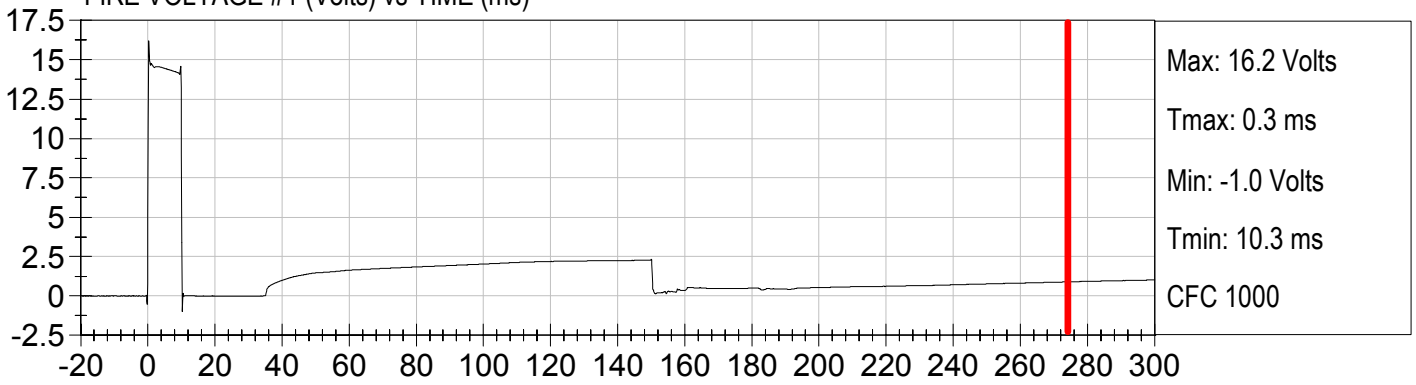


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P1)

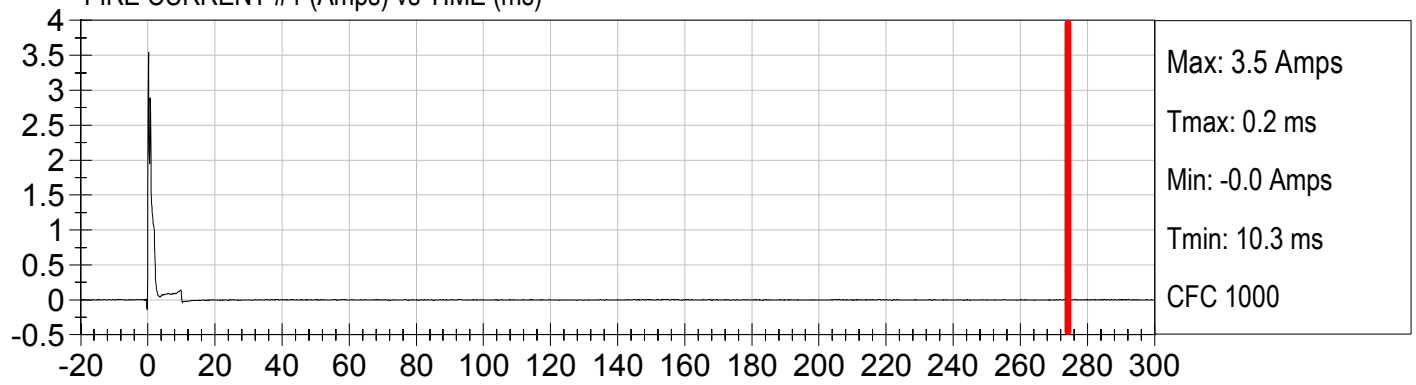
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms

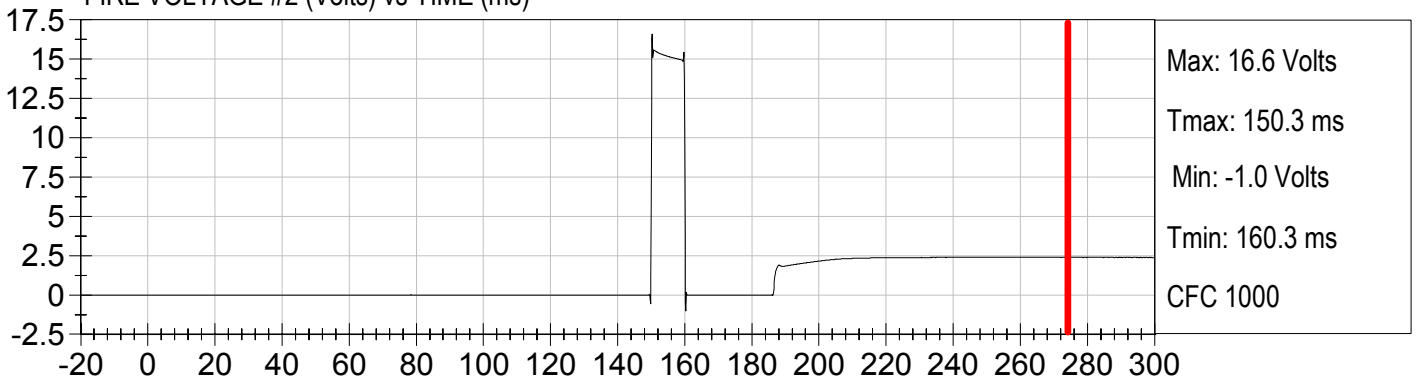
FIRE VOLTAGE #1 (Volts) vs TIME (ms)



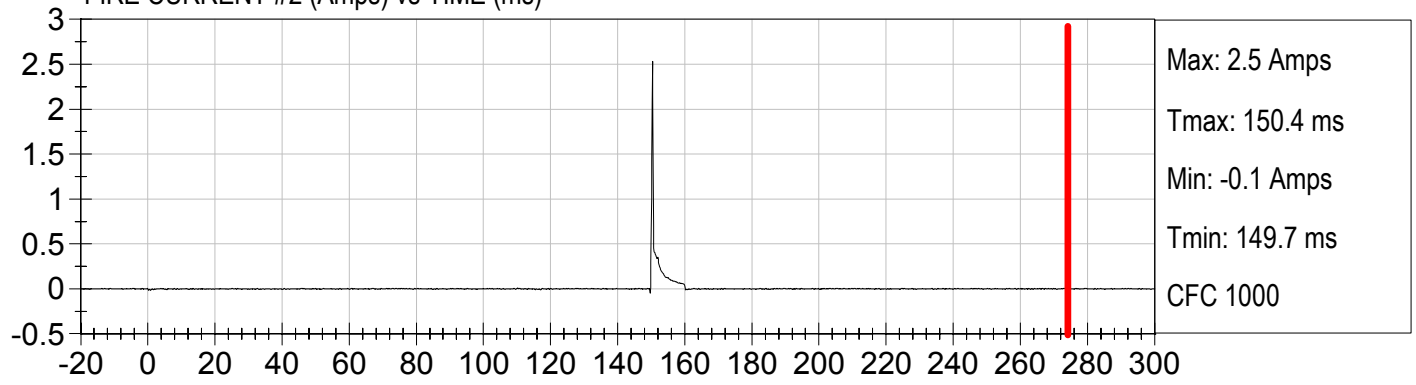
FIRE CURRENT #1 (Amps) vs TIME (ms)



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

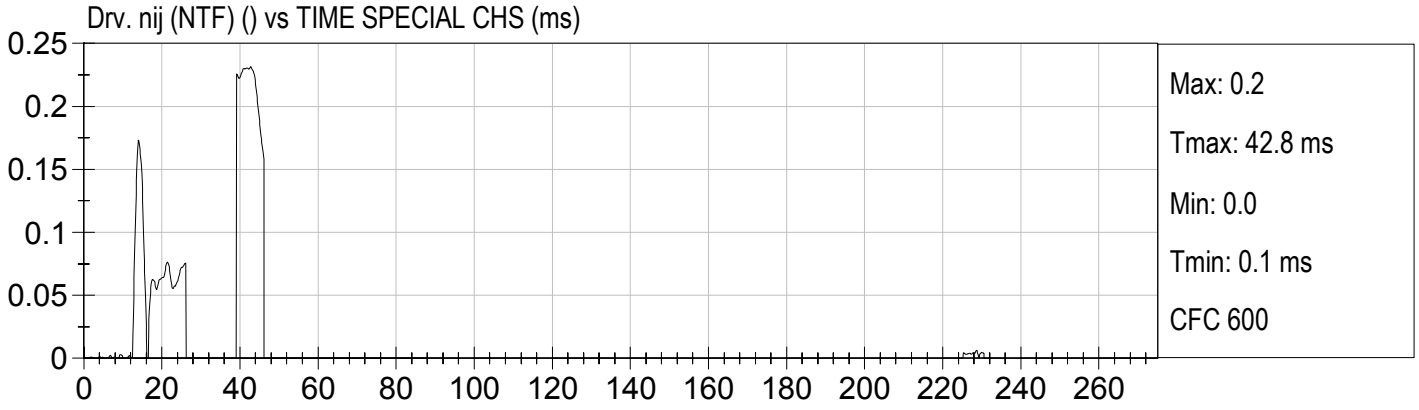


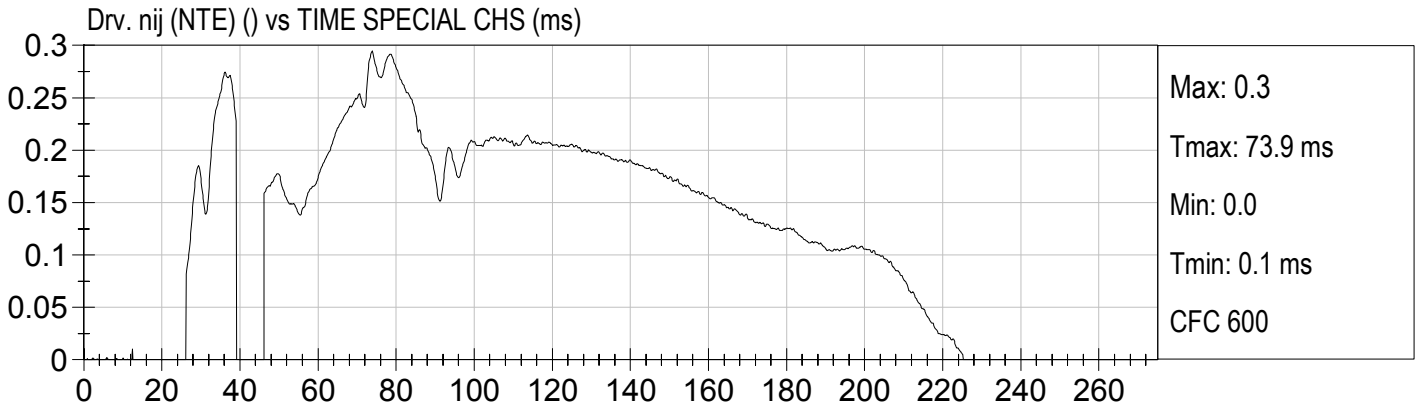
FIRE CURRENT #2 (Amps) vs TIME (ms)

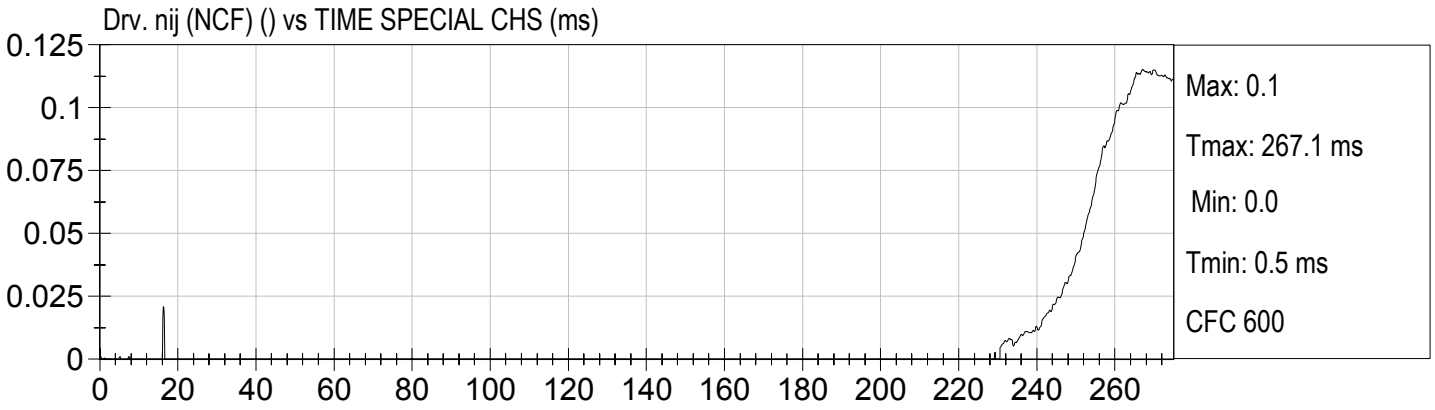


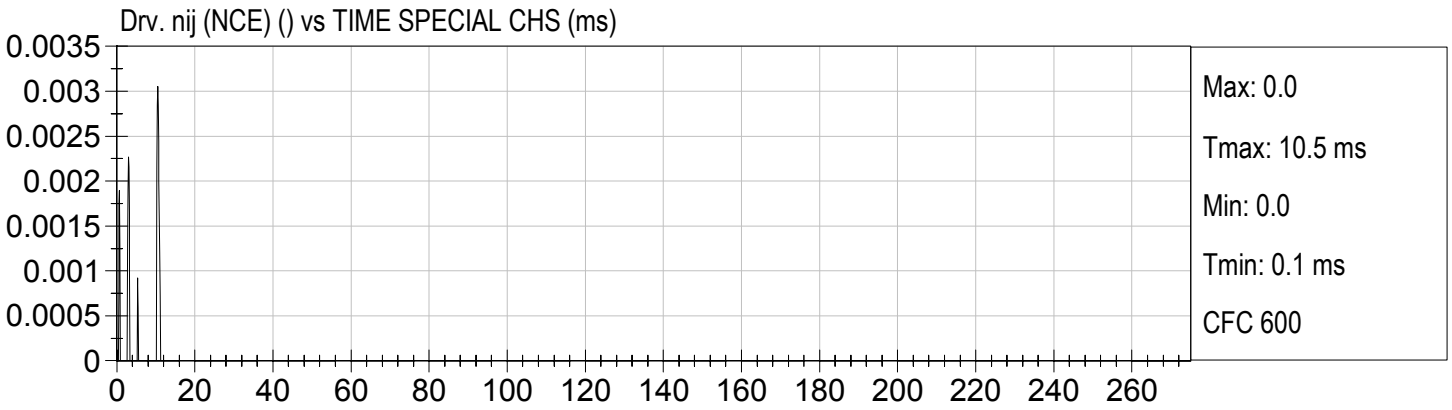
LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P1)

Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)







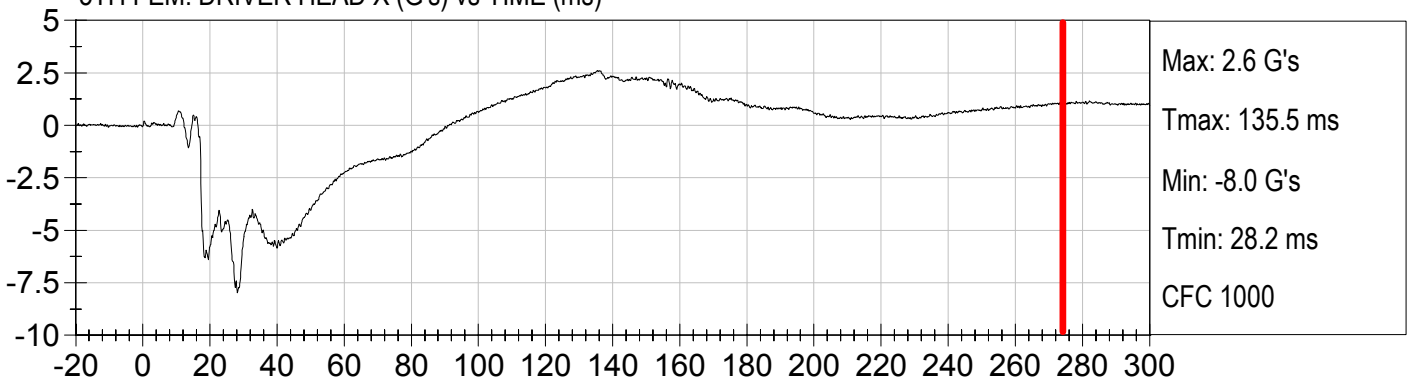


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P2)

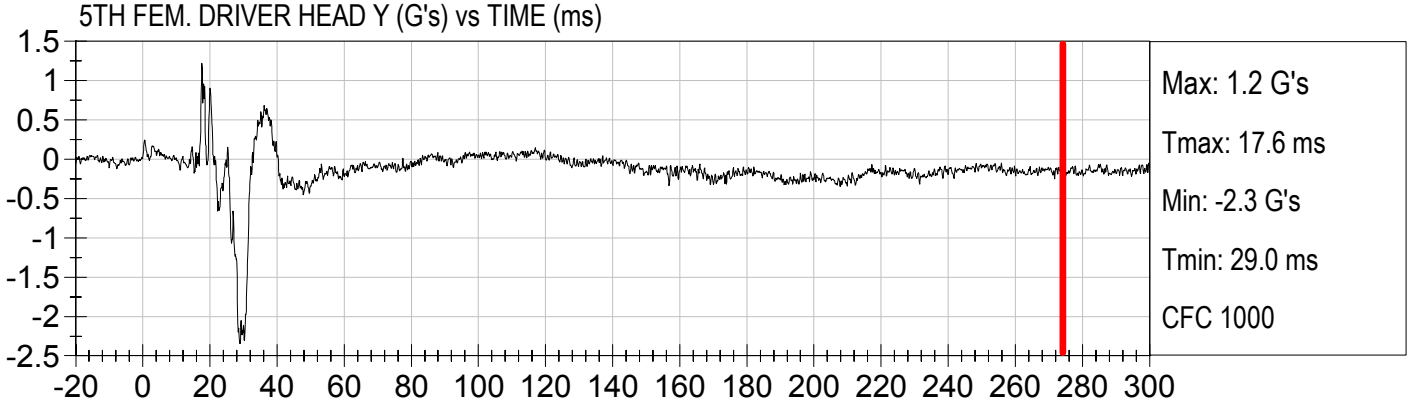
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms

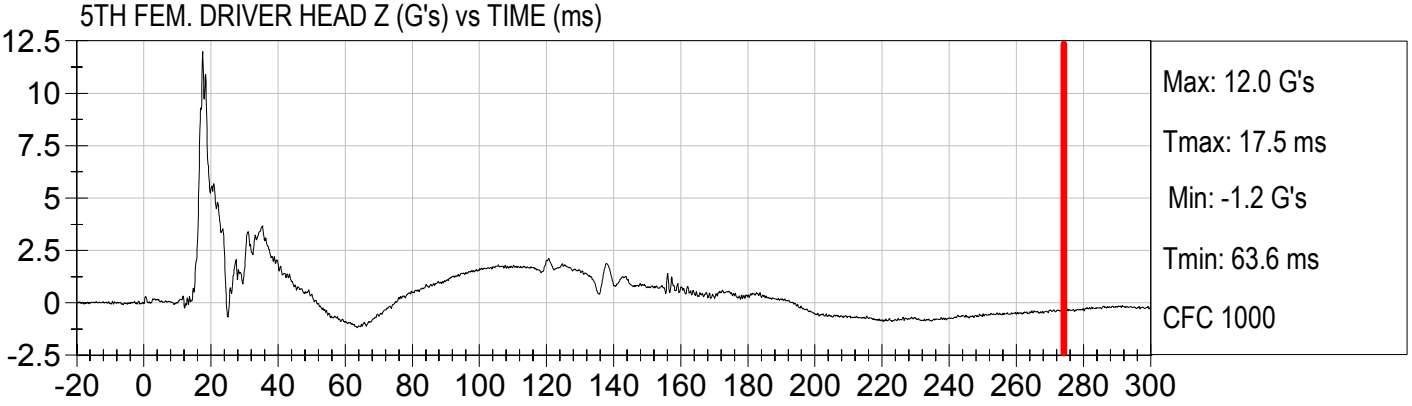
5TH FEM. DRIVER HEAD X (G's) vs TIME (ms)



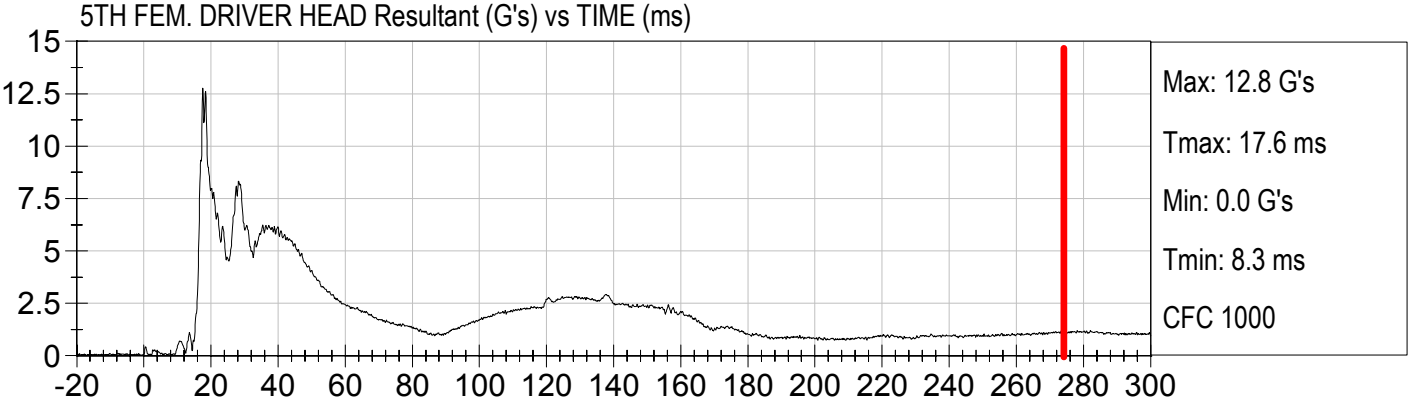
5TH FEM. DRIVER HEAD Y (G's) vs TIME (ms)



5TH FEM. DRIVER HEAD Z (G's) vs TIME (ms)



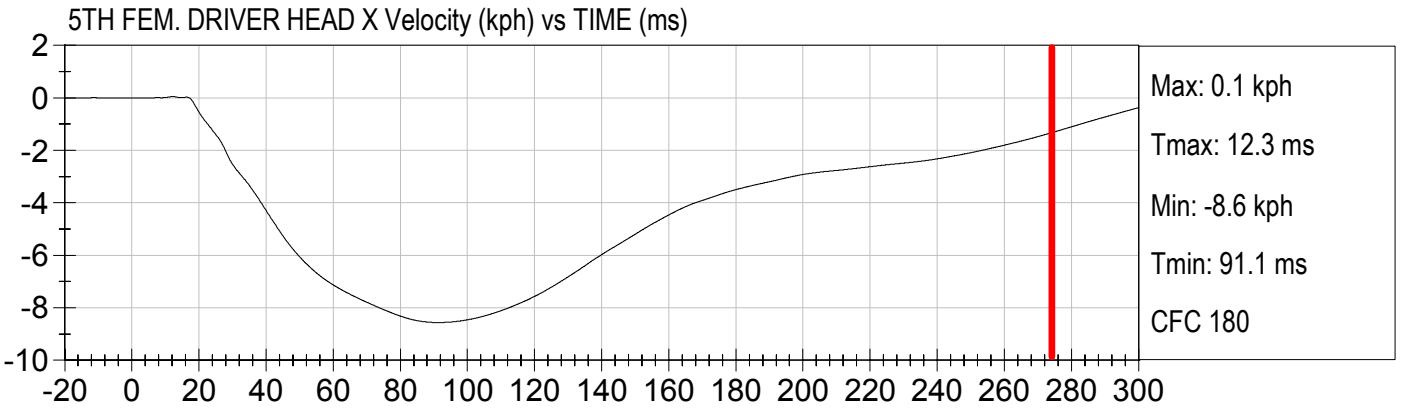
5TH FEM. DRIVER HEAD Resultant (G's) vs TIME (ms)

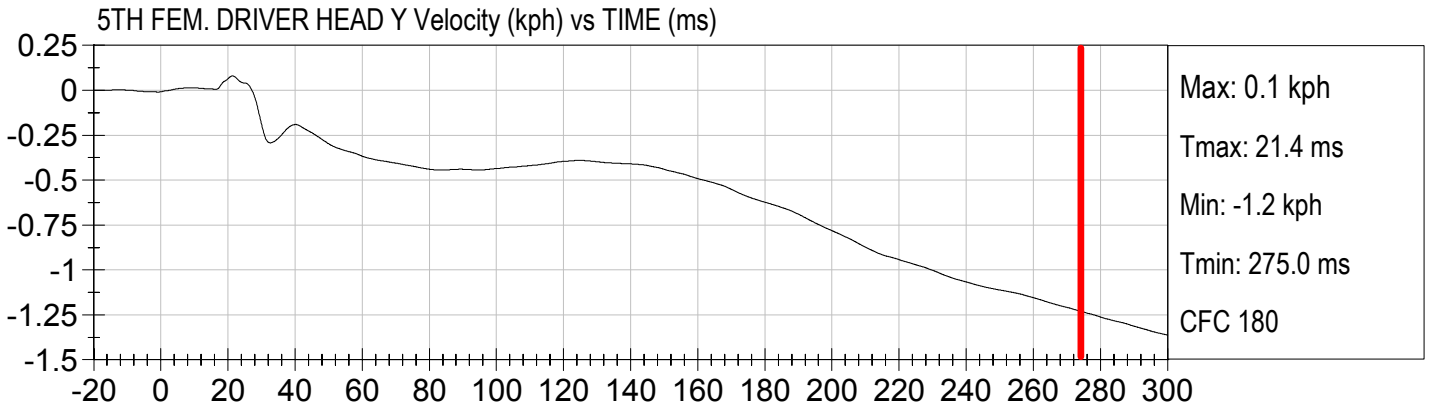


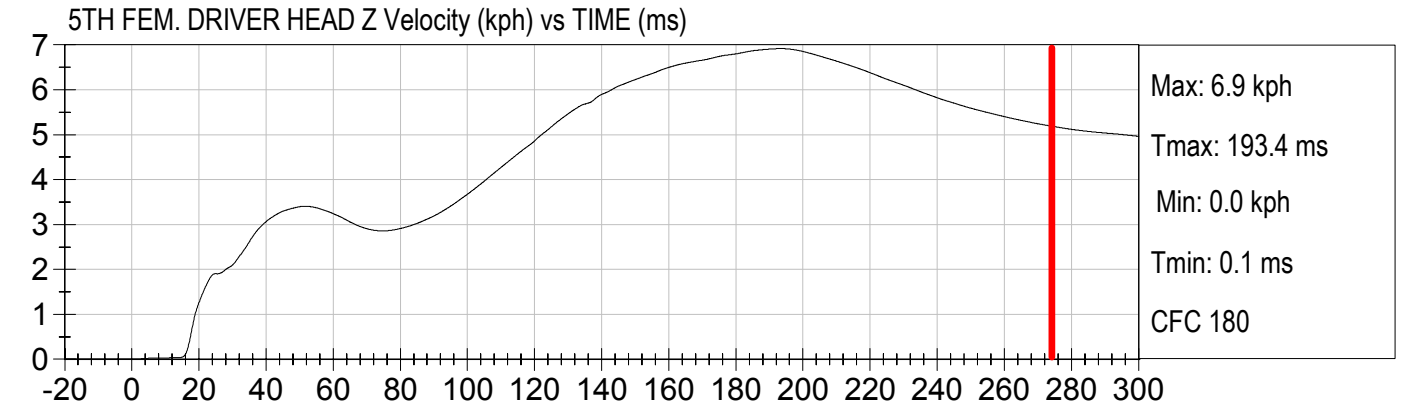
LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P2)

Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms





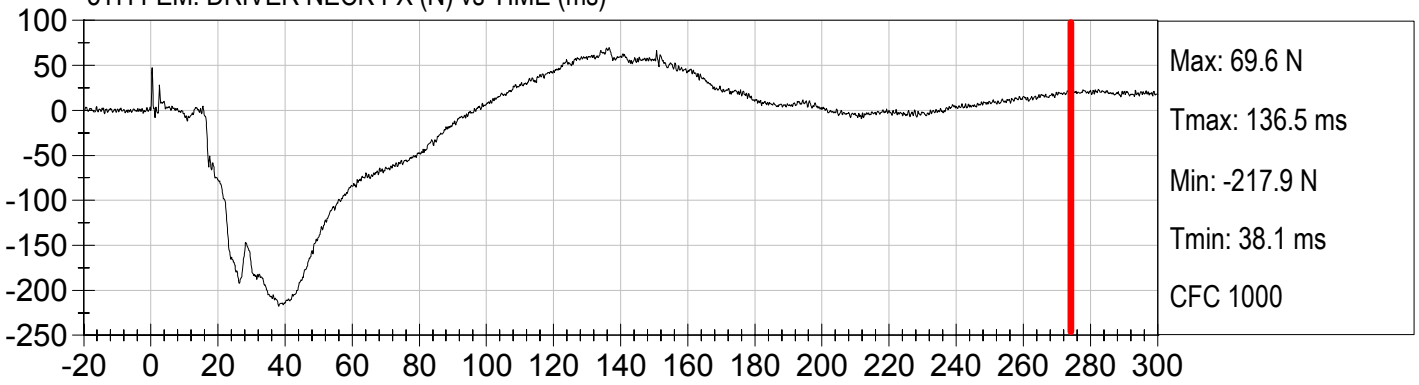


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P2)

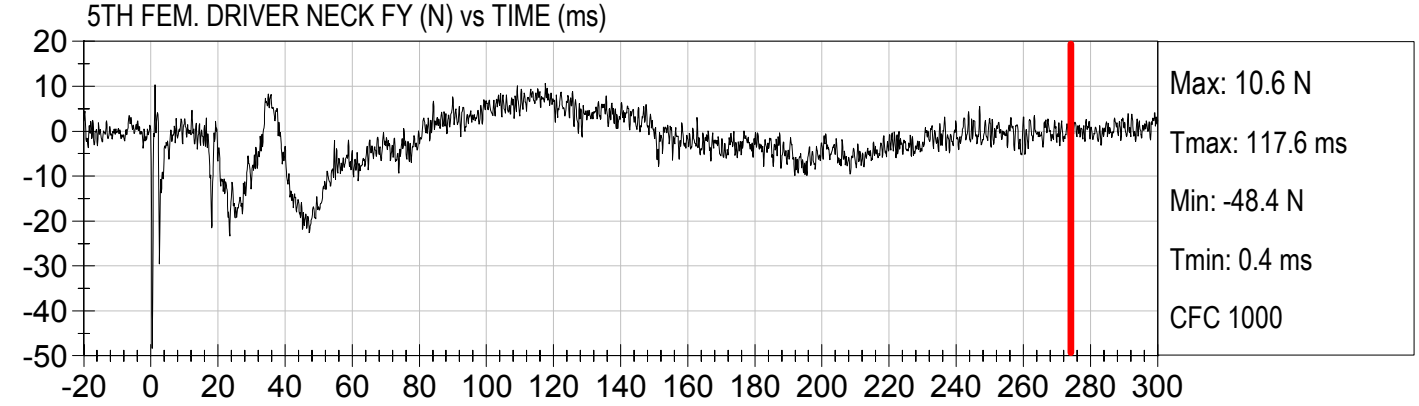
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms

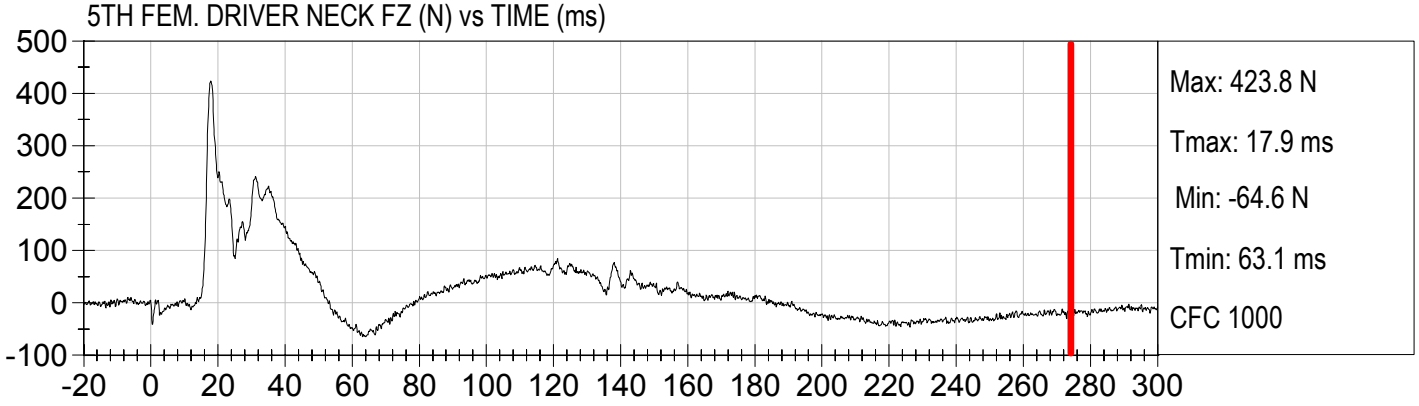
5TH FEM. DRIVER NECK FX (N) vs TIME (ms)



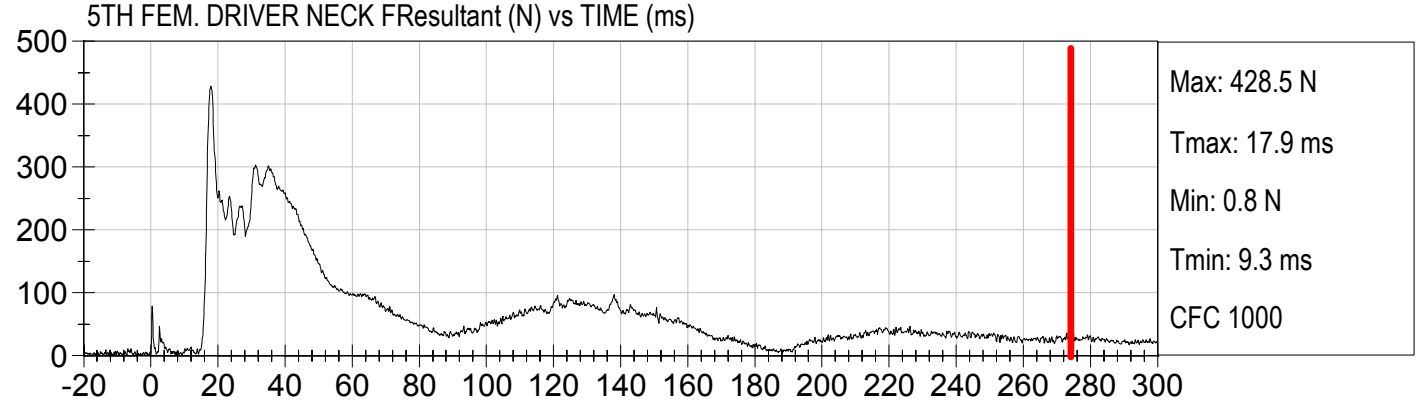
5TH FEM. DRIVER NECK FY (N) vs TIME (ms)



5TH FEM. DRIVER NECK FZ (N) vs TIME (ms)



5TH FEM. DRIVER NECK FResultant (N) vs TIME (ms)

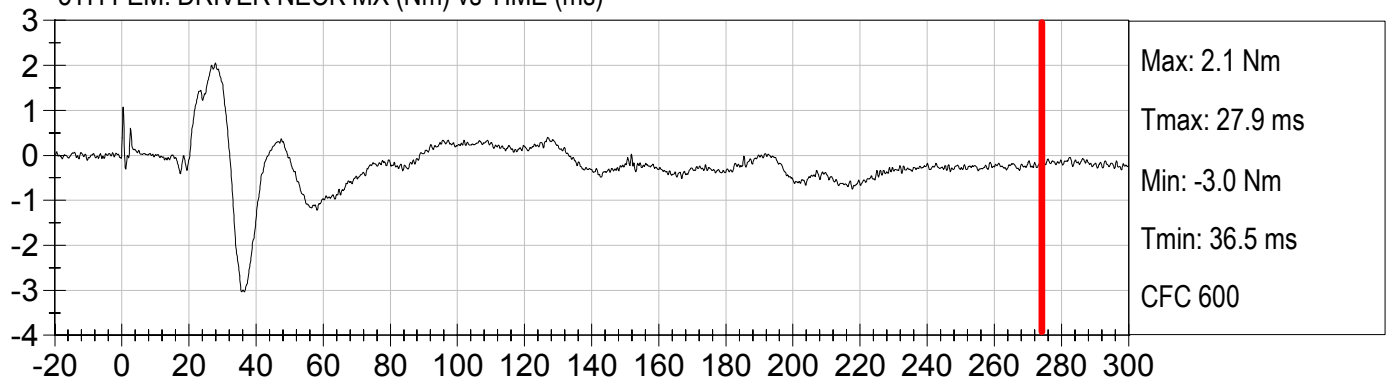


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P2)

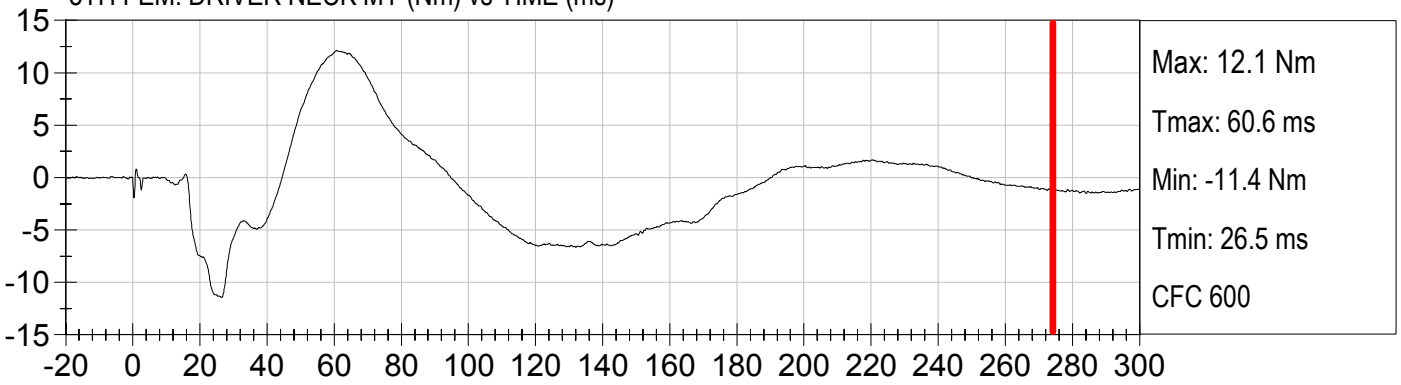
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms

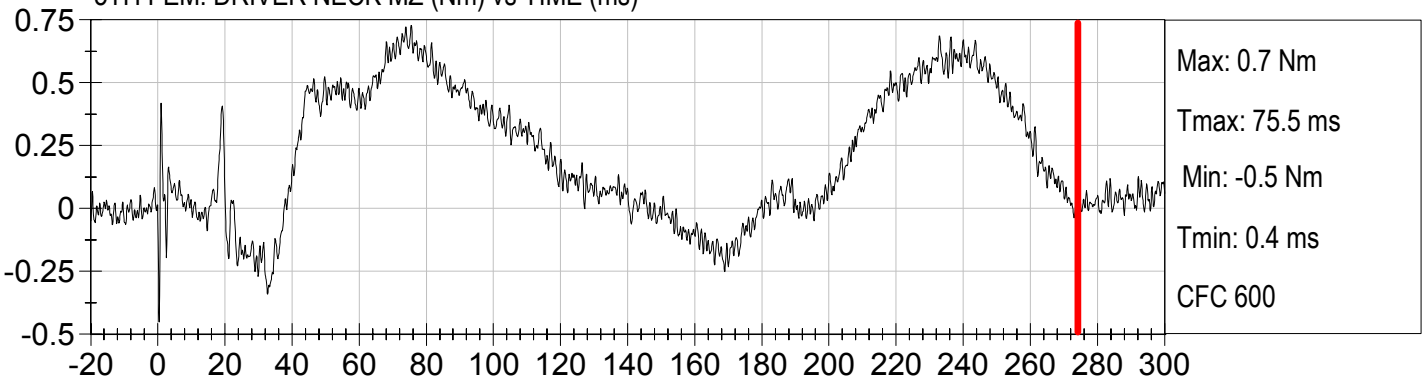
5TH FEM. DRIVER NECK MX (Nm) vs TIME (ms)



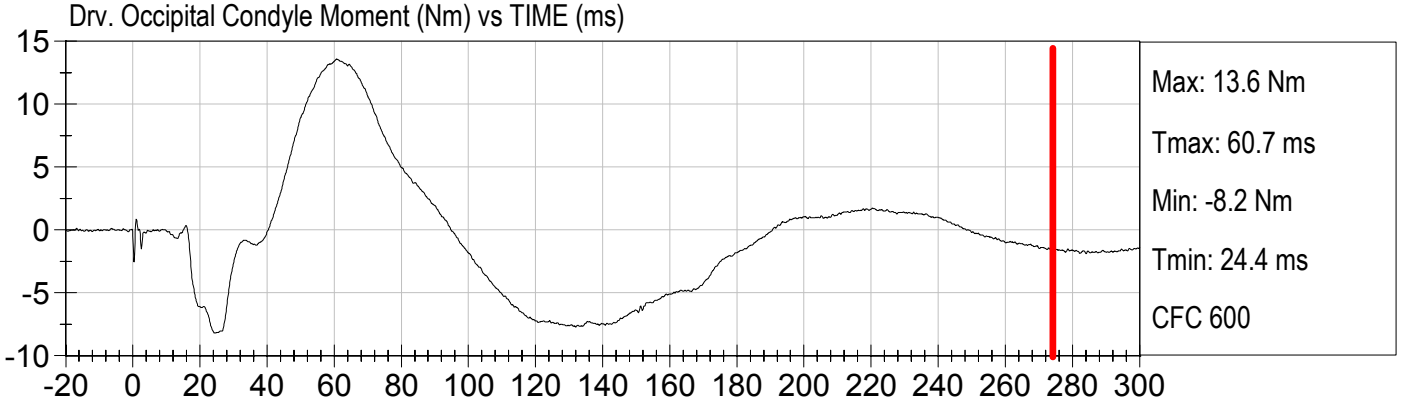
5TH FEM. DRIVER NECK MY (Nm) vs TIME (ms)



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



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

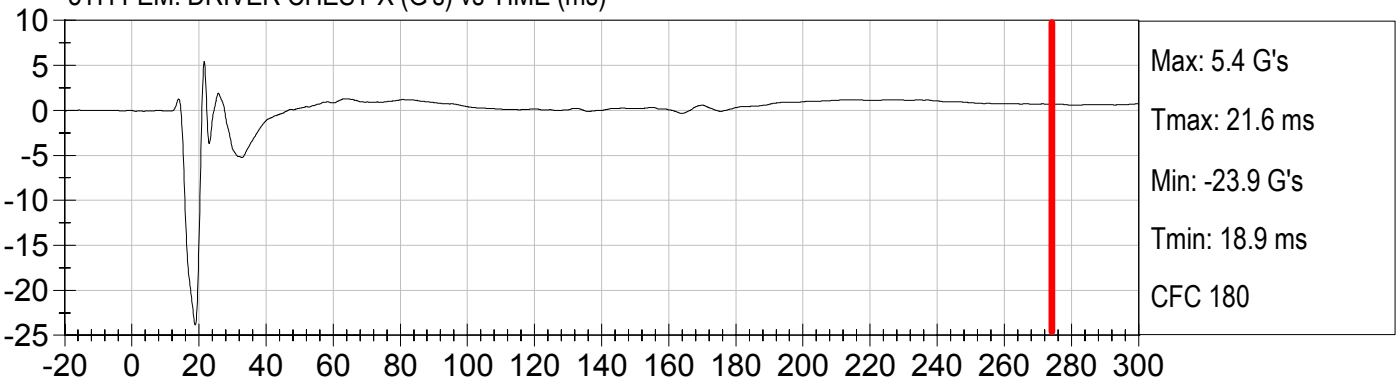


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P2)

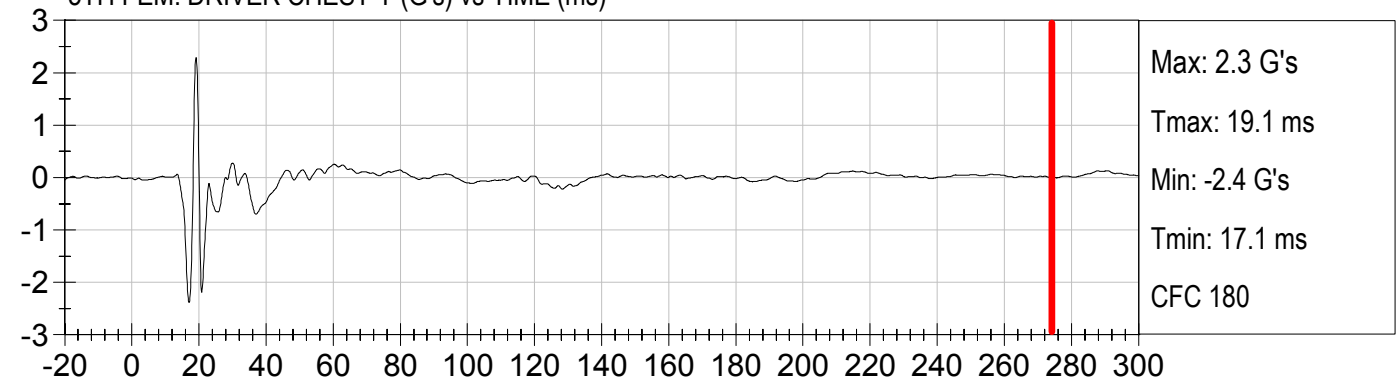
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms

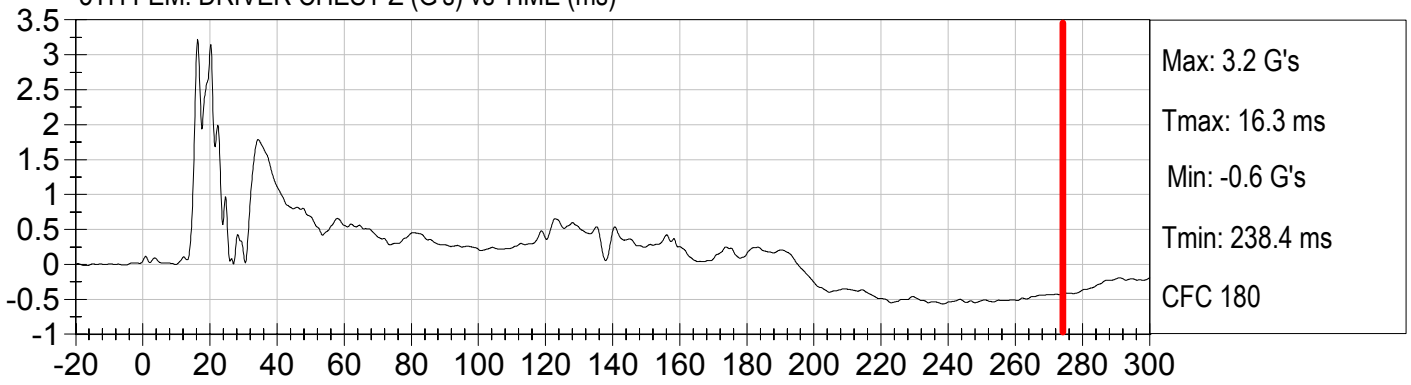
5TH FEM. DRIVER CHEST X (G's) vs TIME (ms)



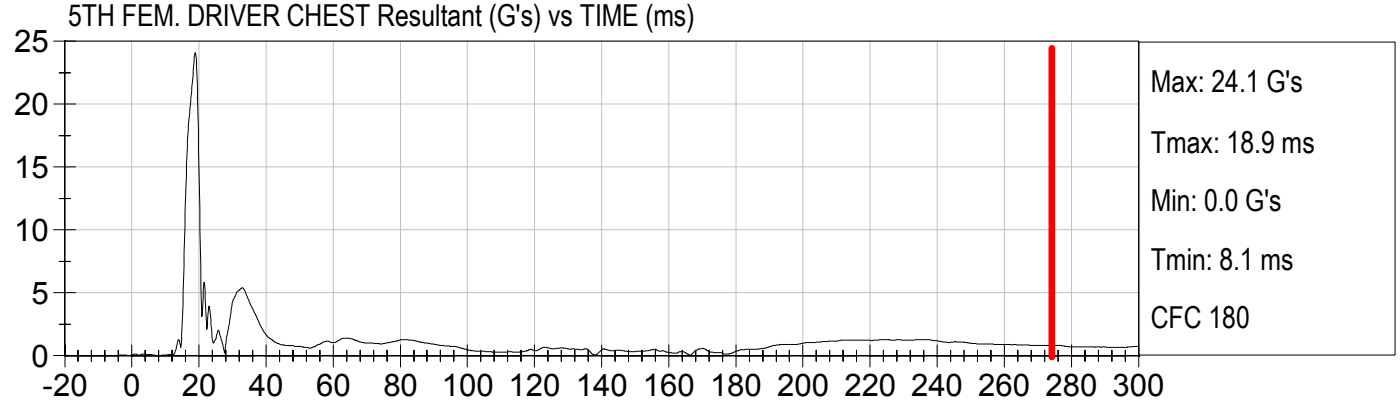
5TH FEM. DRIVER CHEST Y (G's) vs TIME (ms)



5TH FEM. DRIVER CHEST Z (G's) vs TIME (ms)



5TH FEM. DRIVER CHEST Resultant (G's) vs TIME (ms)

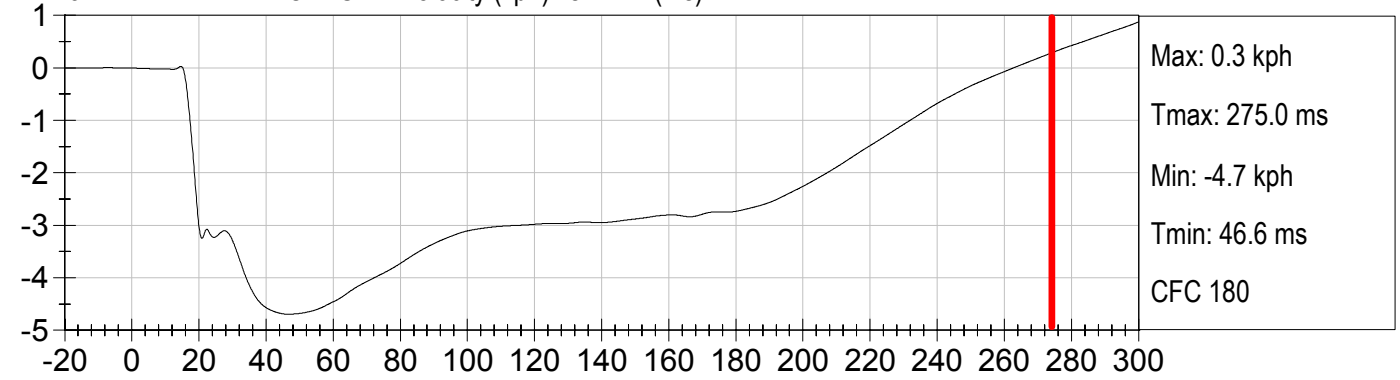


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P2)

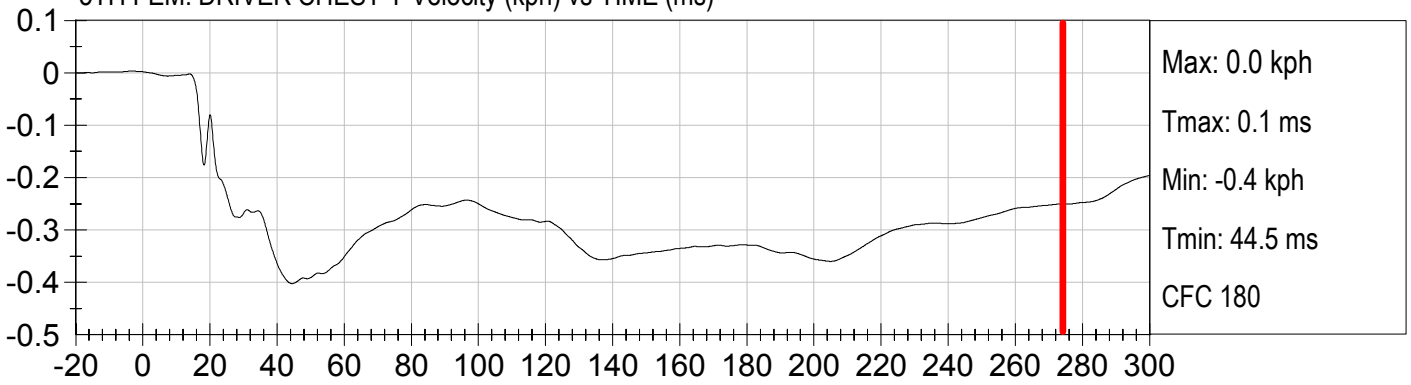
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms

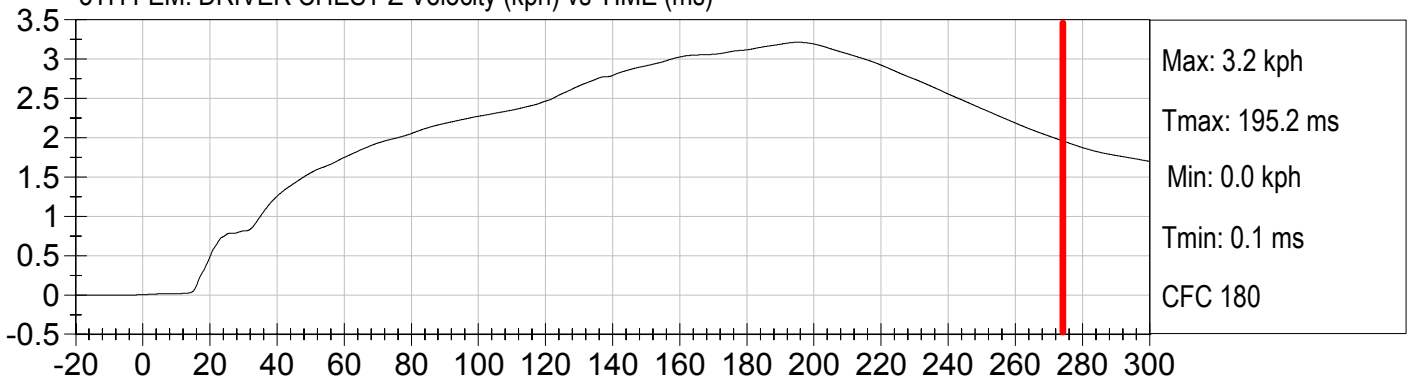
5TH FEM. DRIVER CHEST X Velocity (kph) vs TIME (ms)



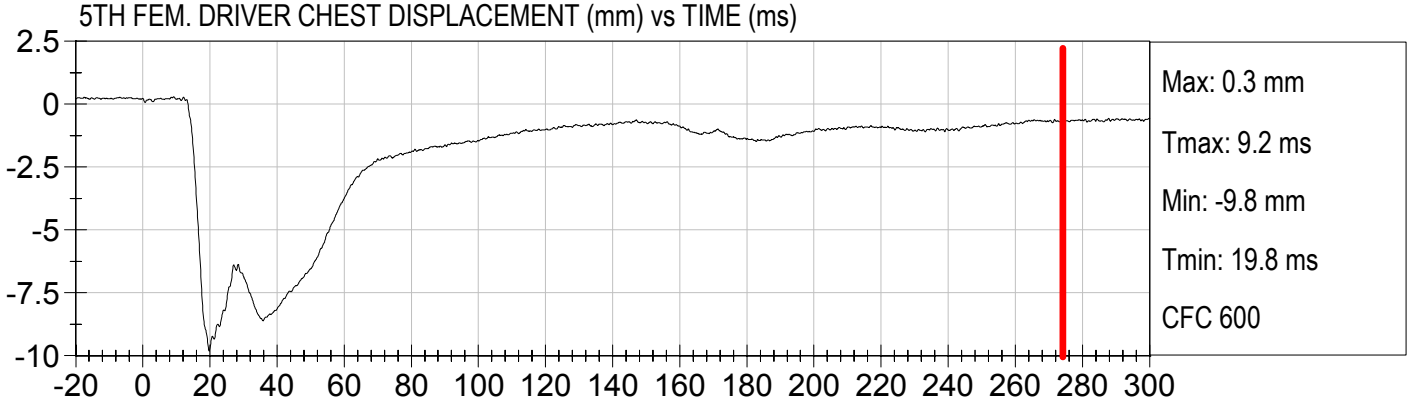
5TH FEM. DRIVER CHEST Y Velocity (kph) vs TIME (ms)



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



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

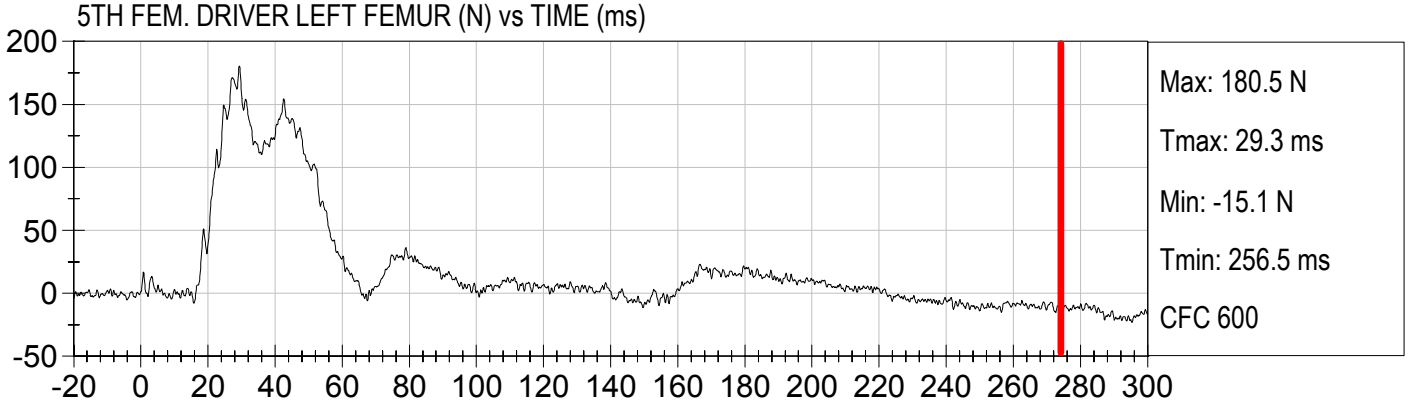


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P2)

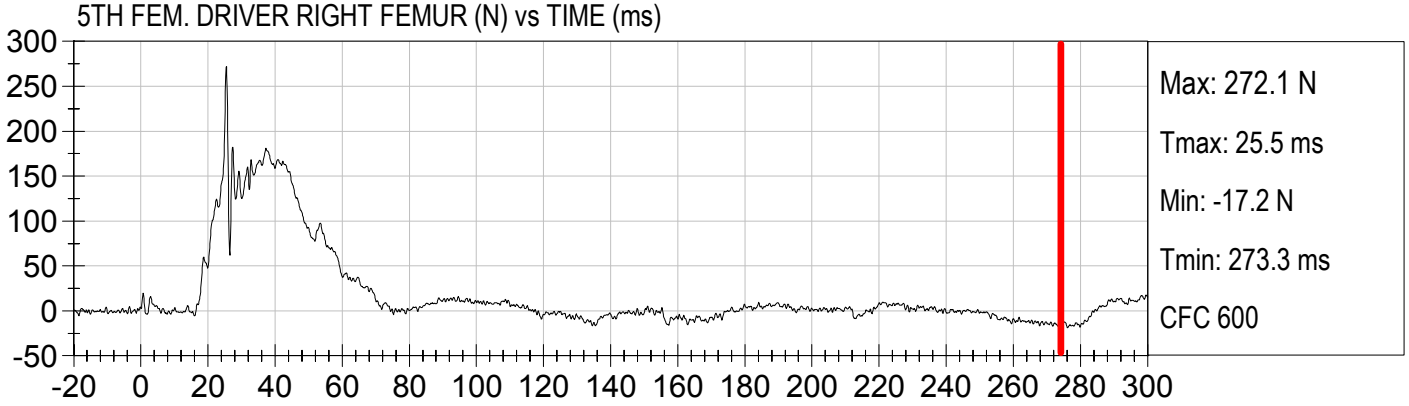
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms

5TH FEM. DRIVER LEFT FEMUR (N) vs TIME (ms)



5TH FEM. DRIVER RIGHT FEMUR (N) vs TIME (ms)

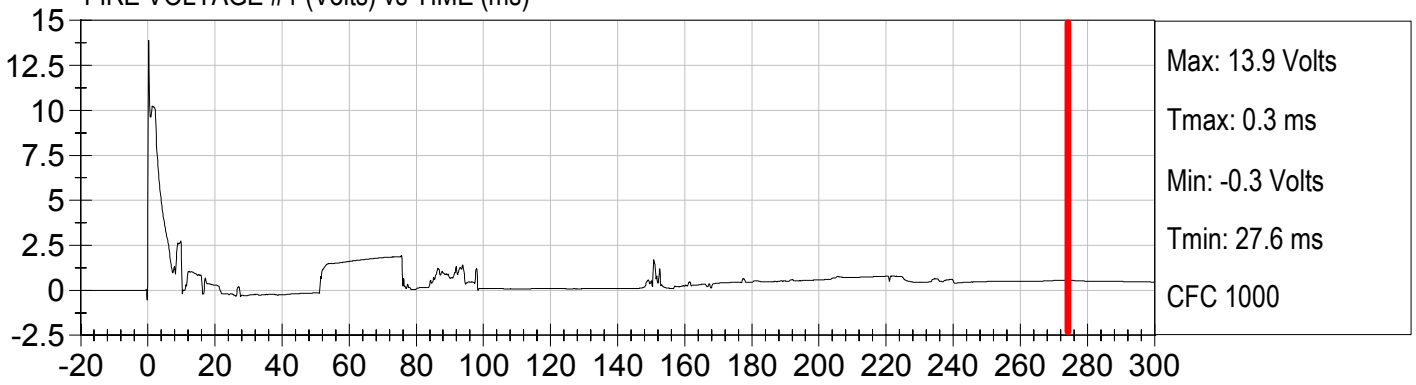


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) (5th P2)

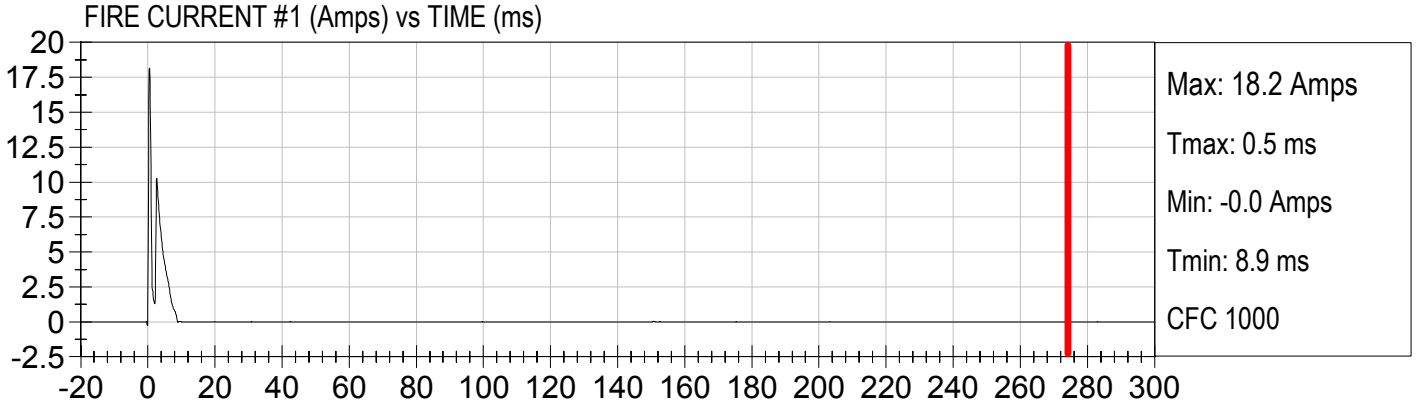
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 275ms

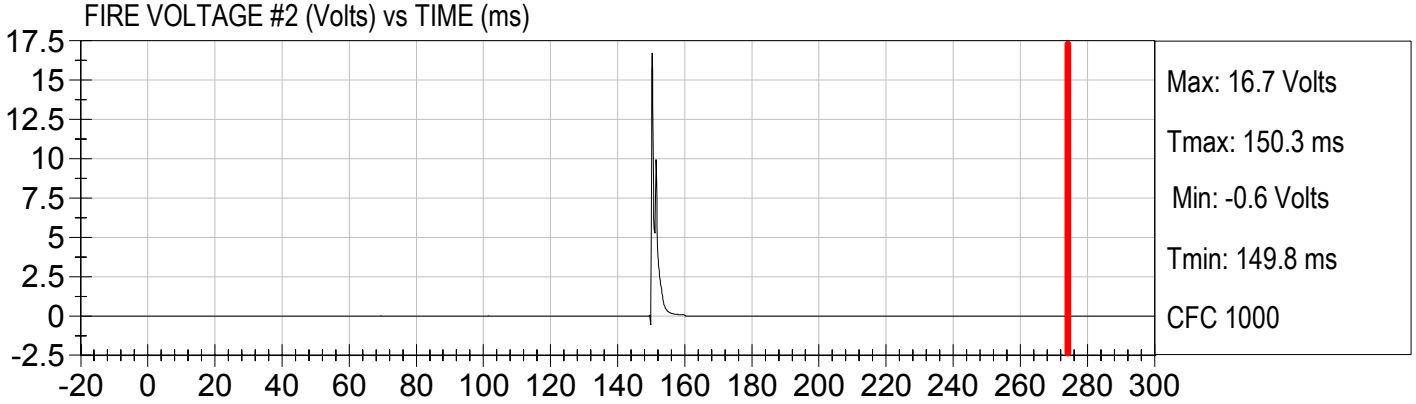
FIRE VOLTAGE #1 (Volts) vs TIME (ms)



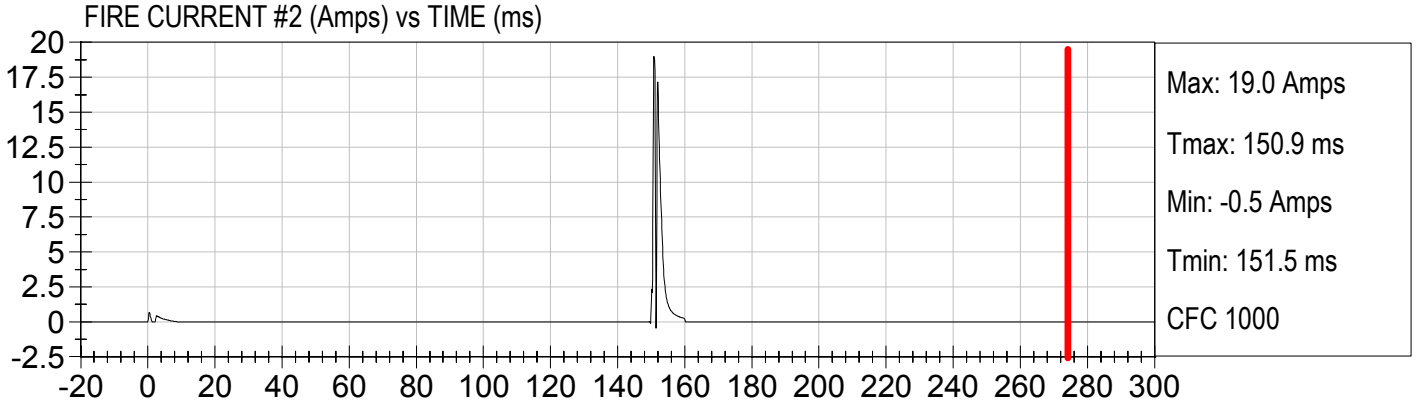
FIRE CURRENT #1 (Amps) vs TIME (ms)

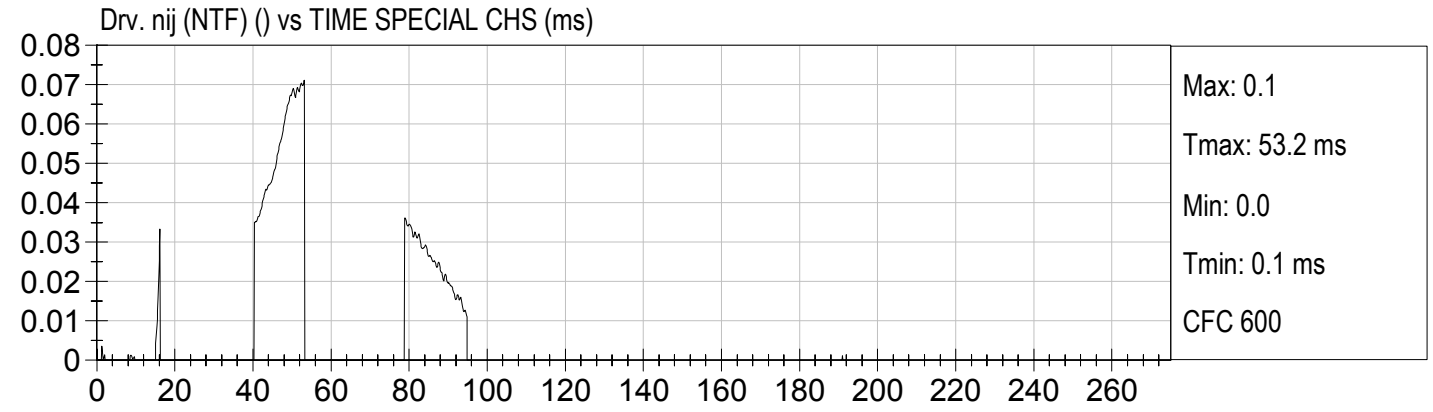


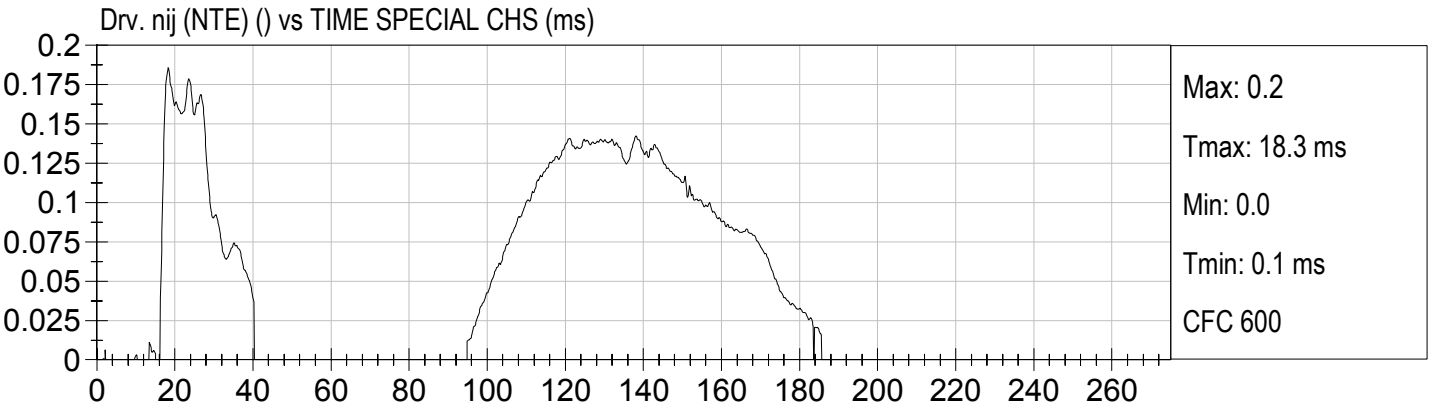
FIRE VOLTAGE #2 (Volts) vs TIME (ms)

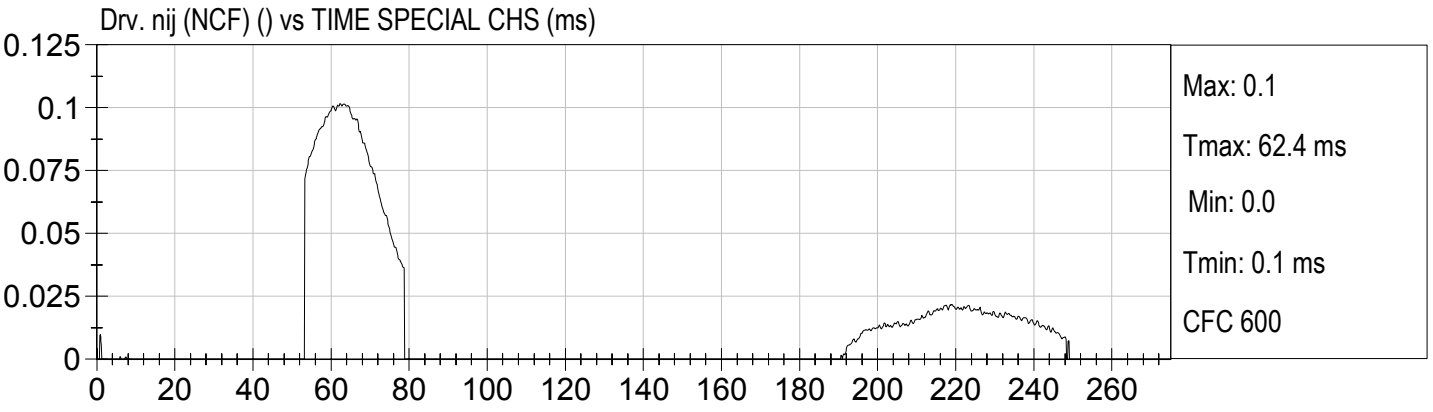


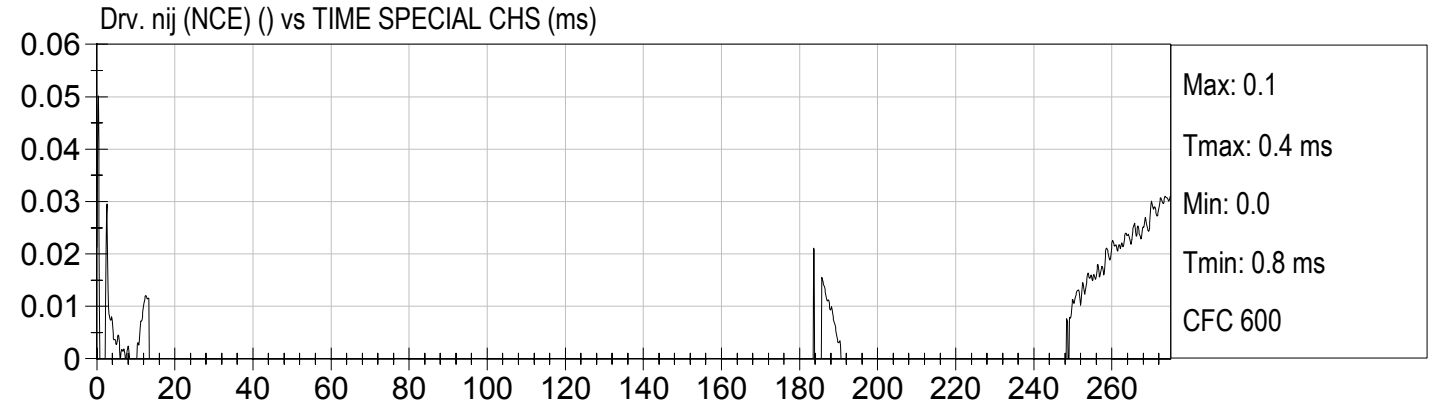
FIRE CURRENT #2 (Amps) vs TIME (ms)




Drv. nij (NTF) () vs TIME SPECIAL CHS (ms)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0 20 40 60 80 100 120 140 160 180 200 220 240 260
Max: 0.1
Tmax: 53.2 ms
Min: 0.0
Tmin: 0.1 ms
CFC 600


Drv. nij (NTE) () vs TIME SPECIAL CHS (ms)
0.2
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
0 20 40 60 80 100 120 140 160 180 200 220 240 260
Max: 0.2
Tmax: 18.3 ms
Min: 0.0
Tmin: 0.1 ms
CFC 600


Drv. nij (NCF) () vs TIME SPECIAL CHS (ms)
0.125
0.1
0.075
0.05
0.025
0
0 20 40 60 80 100 120 140 160 180 200 220 240 260
Max: 0.1
Tmax: 62.4 ms
Min: 0.0
Tmin: 0.1 ms
CFC 600

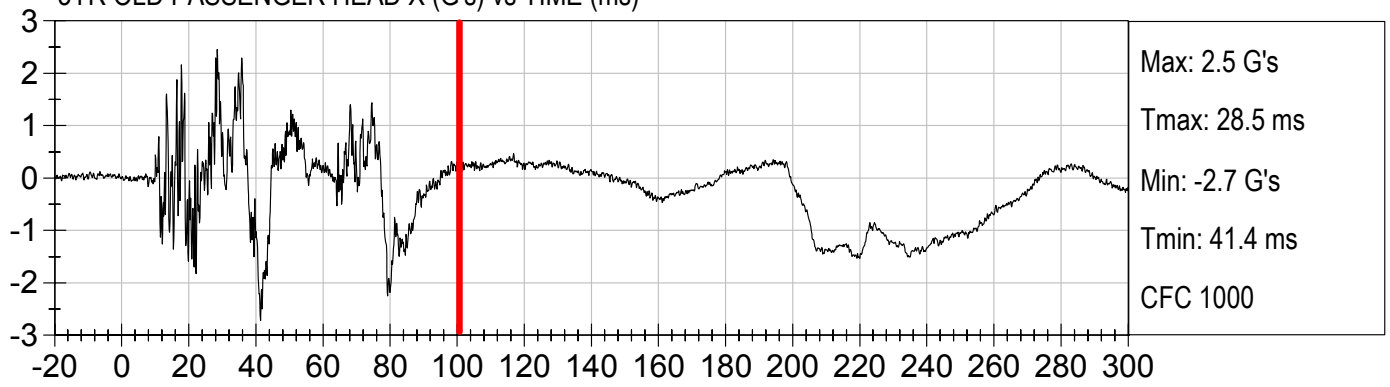

Drv. nij (NCE) () vs TIME SPECIAL CHS (ms)
0.06
0.05
0.04
0.03
0.02
0.01
0
0 20 40 60 80 100 120 140 160 180 200 220 240 260
Max: 0.1
Tmax: 0.4 ms
Min: 0.0
Tmin: 0.8 ms
CFC 600

LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 3YO P2

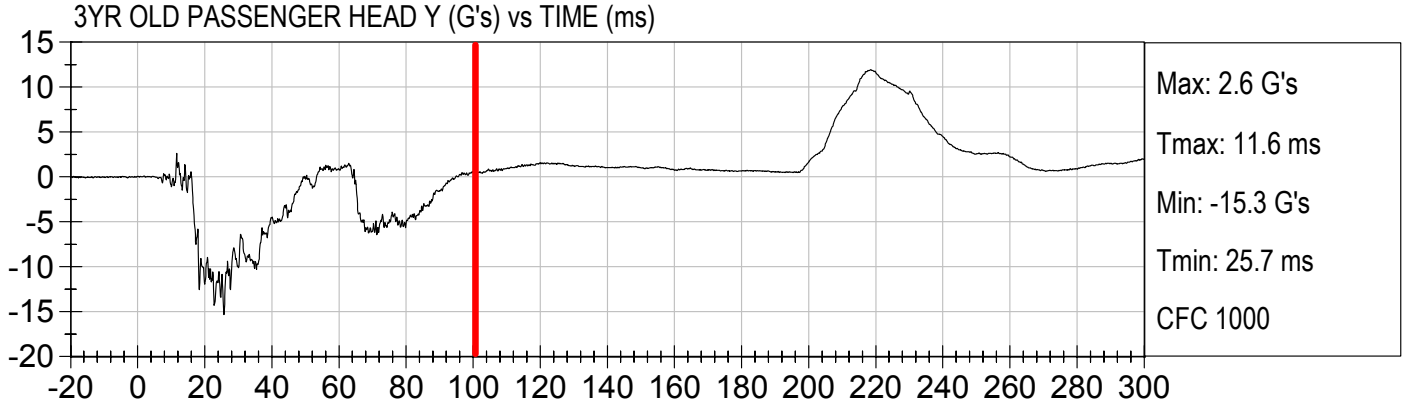
Test Date: 08/20/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 100ms

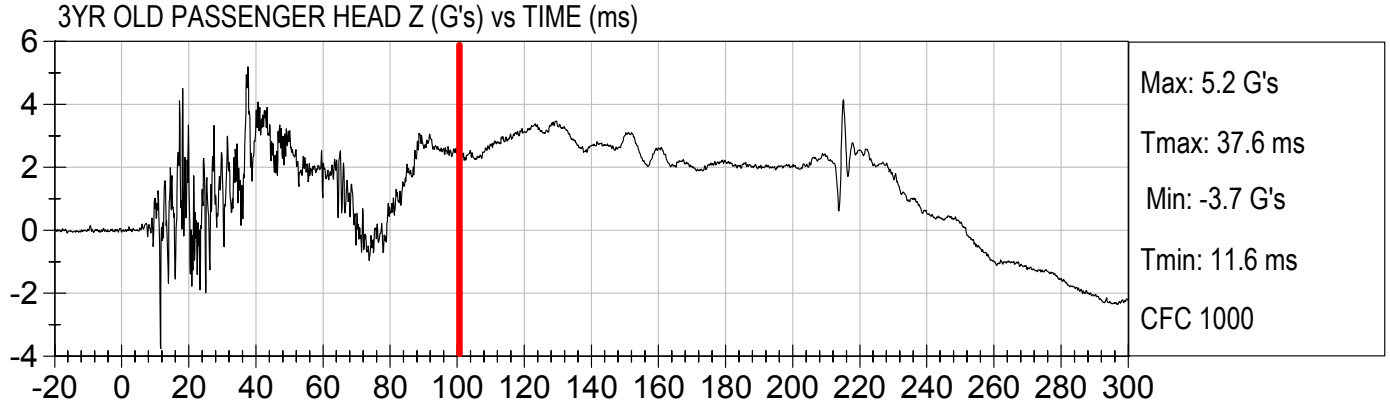
3YR OLD PASSENGER HEAD X (G's) vs TIME (ms)



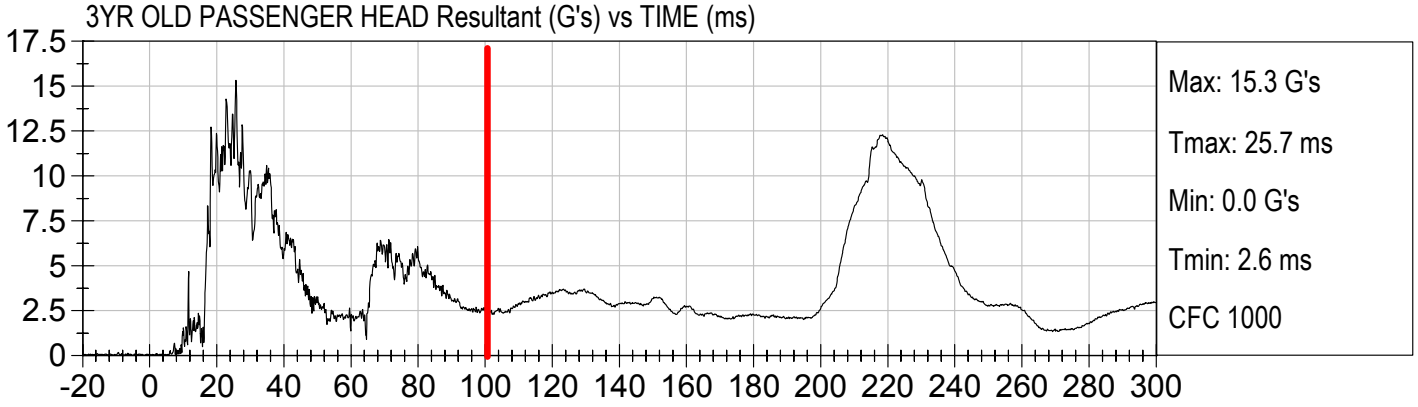
3YR OLD PASSENGER HEAD Y (G's) vs TIME (ms)



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



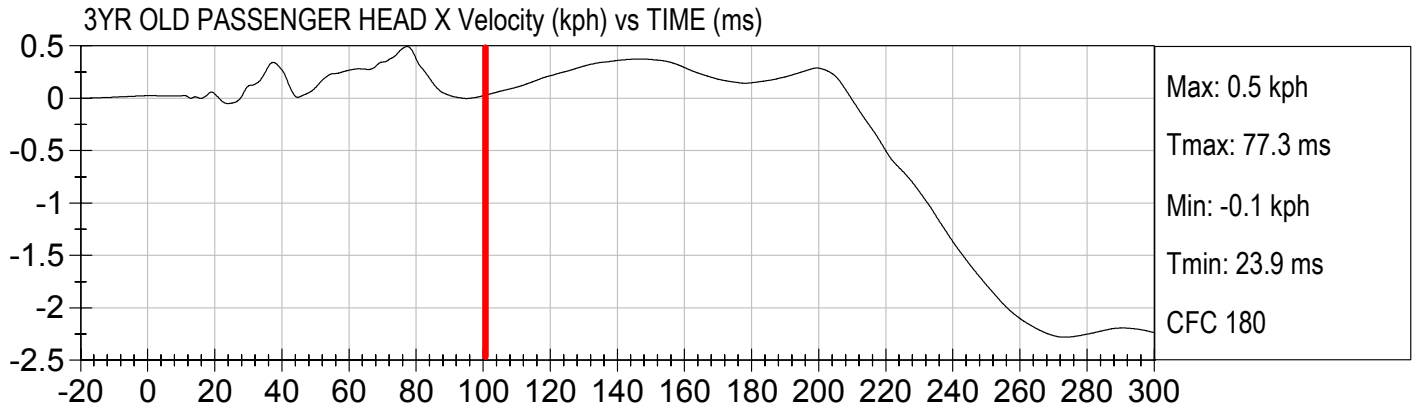
3YR OLD PASSENGER HEAD Resultant (G's) vs TIME (ms)

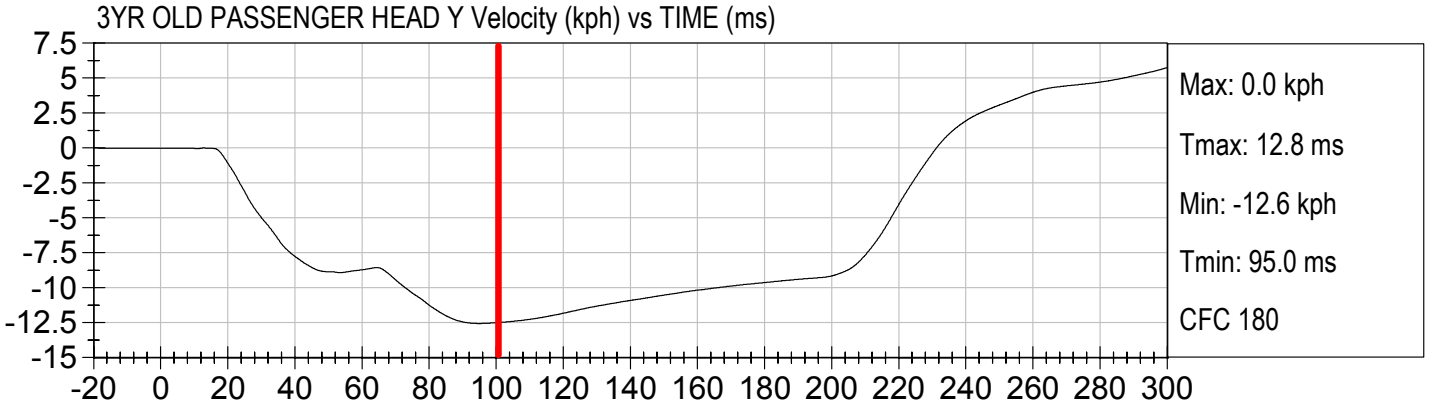


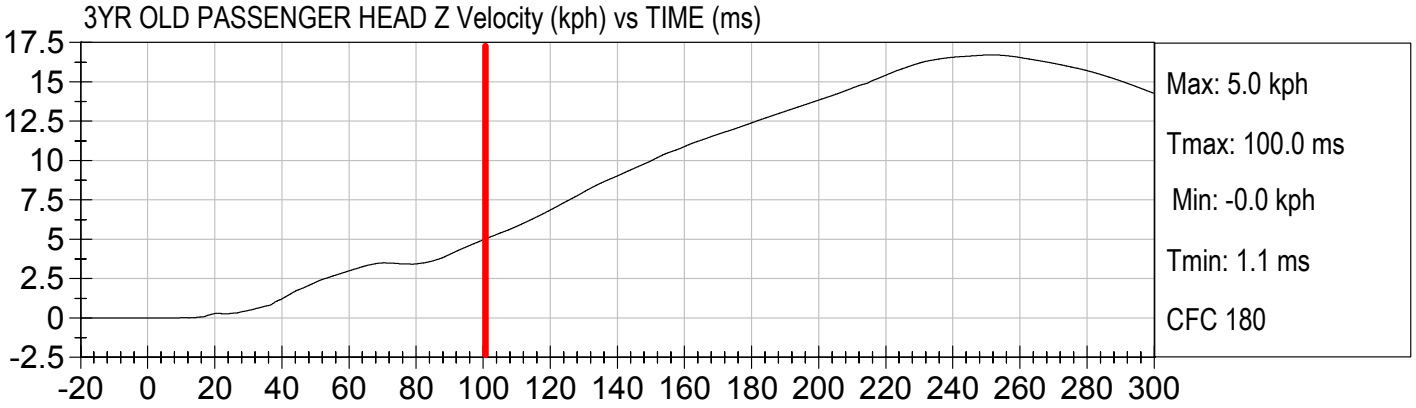
LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 3YO P2

Test Date: 08/20/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 100ms





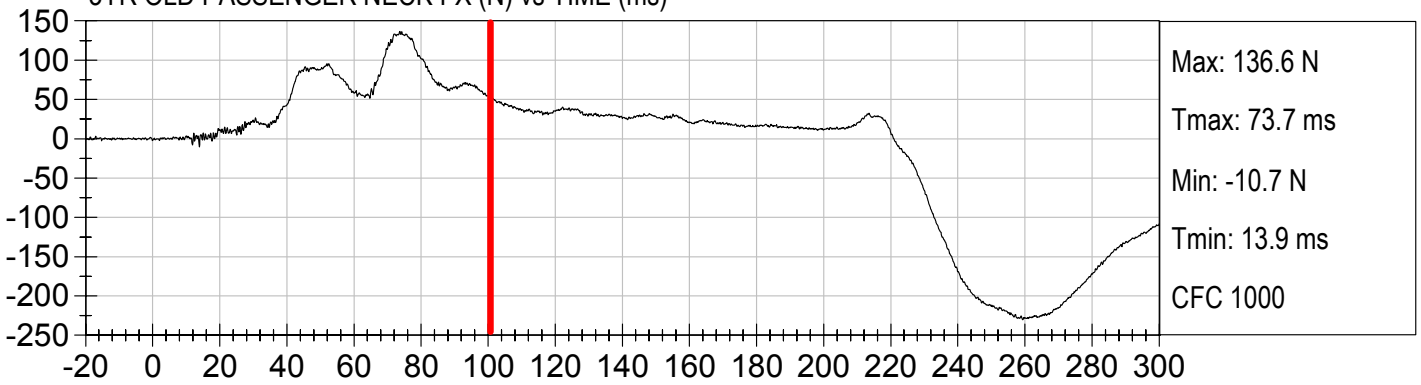


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 3YO P2

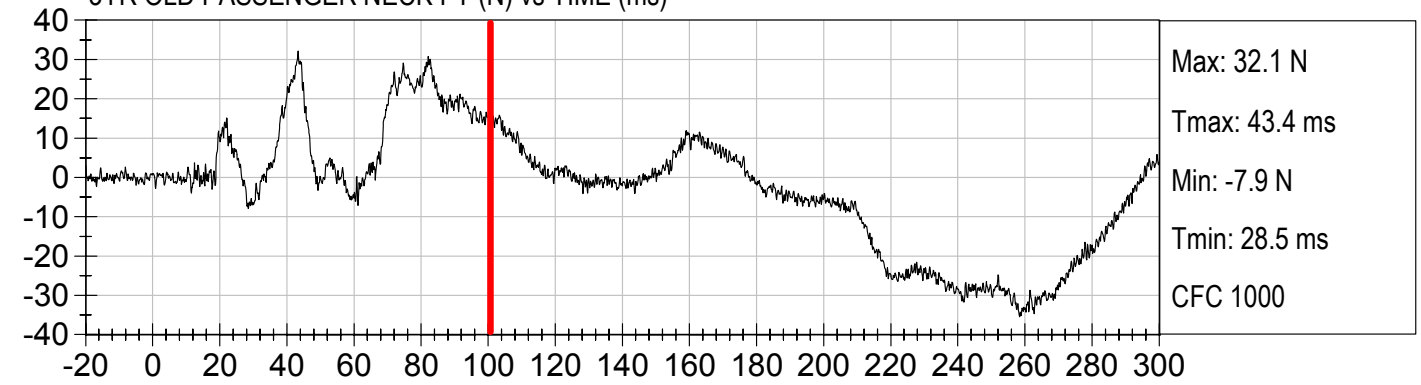
Test Date: 08/20/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 100ms

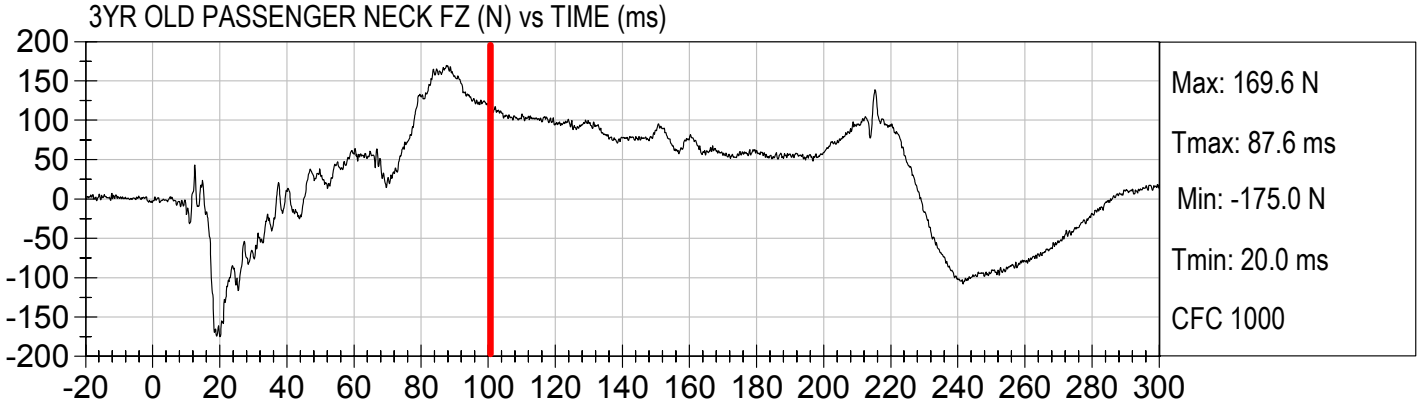
3YR OLD PASSENGER NECK FX (N) vs TIME (ms)



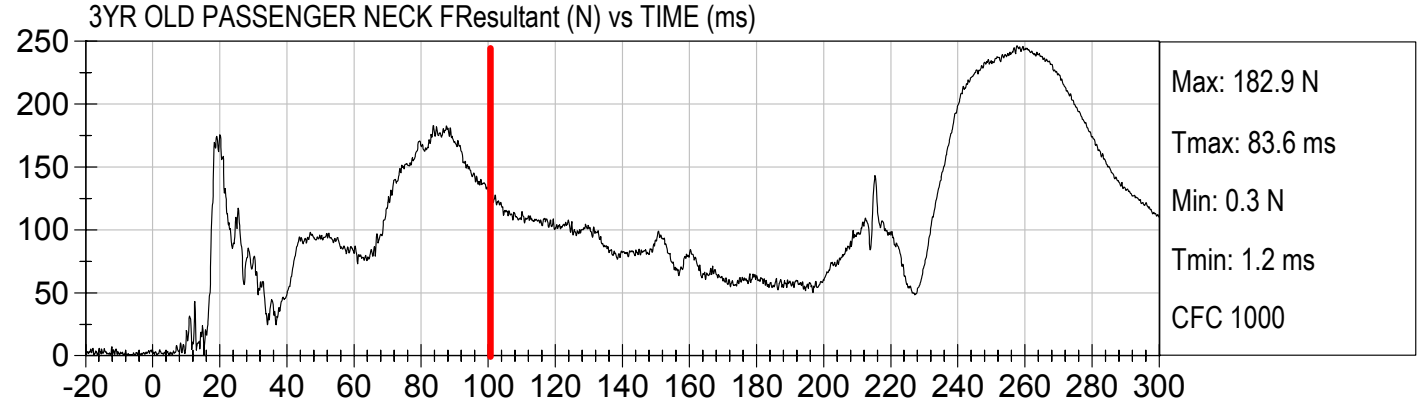
3YR OLD PASSENGER NECK FY (N) vs TIME (ms)



3YR OLD PASSENGER NECK FZ (N) vs TIME (ms)



3YR OLD PASSENGER NECK FResultant (N) vs TIME (ms)

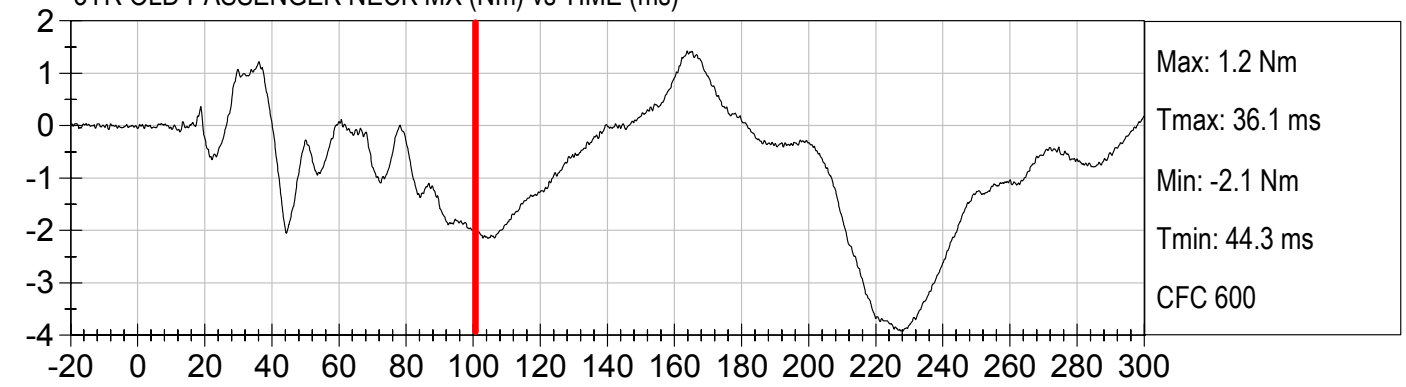


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 3YO P2

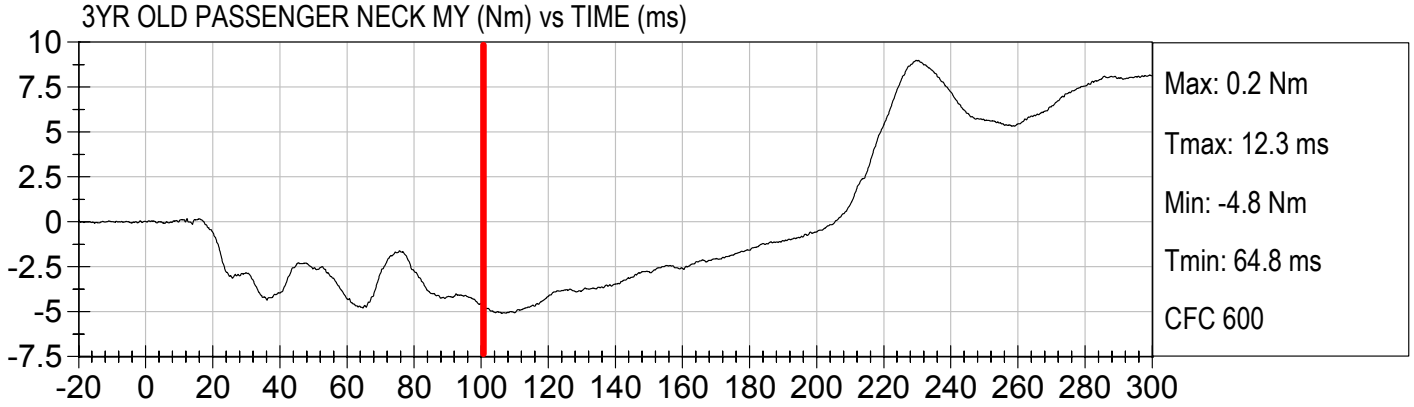
Test Date: 08/20/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 100ms

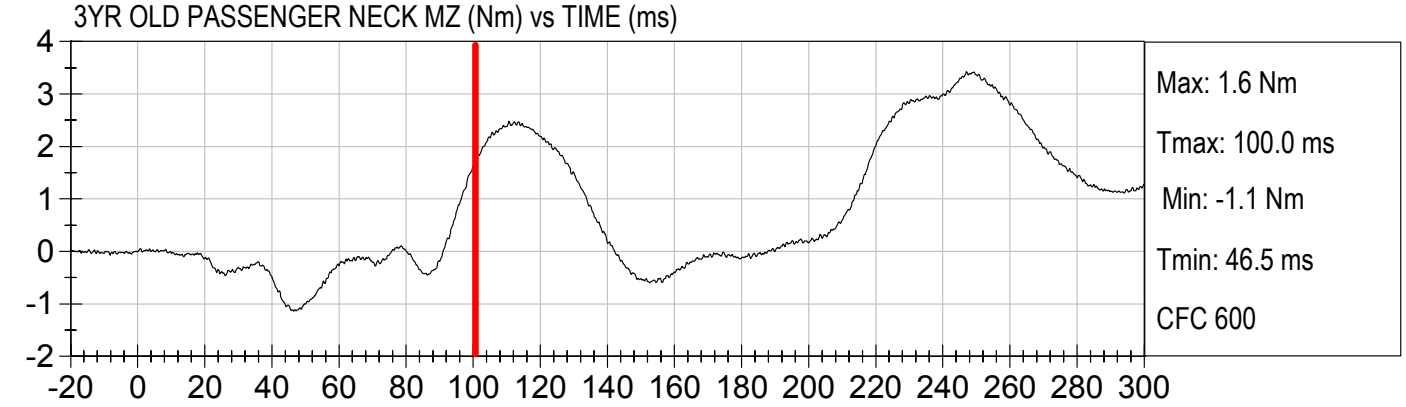
3YR OLD PASSENGER NECK MX (Nm) vs TIME (ms)



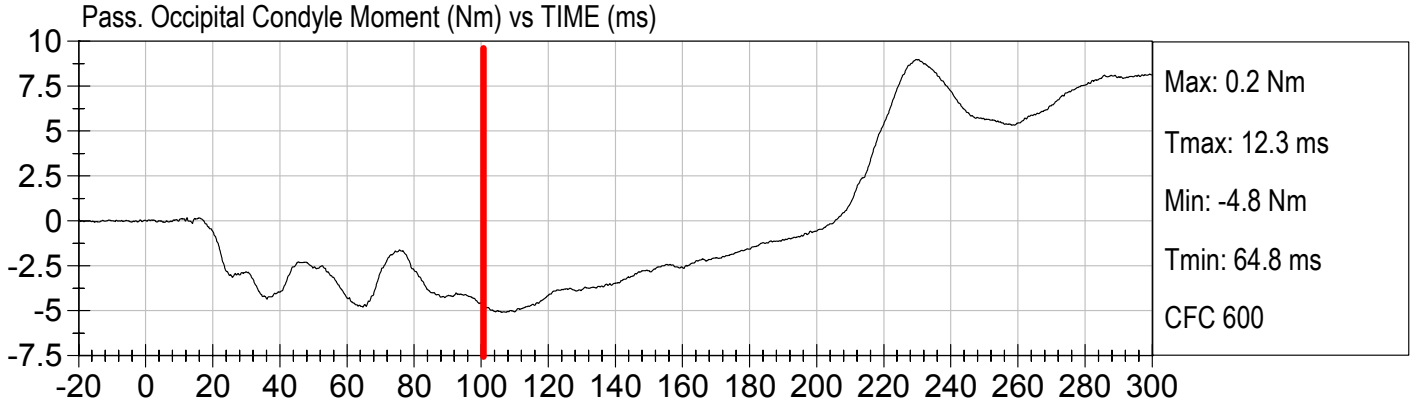
3YR OLD PASSENGER NECK MY (Nm) vs TIME (ms)



3YR OLD PASSENGER NECK MZ (Nm) vs TIME (ms)



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

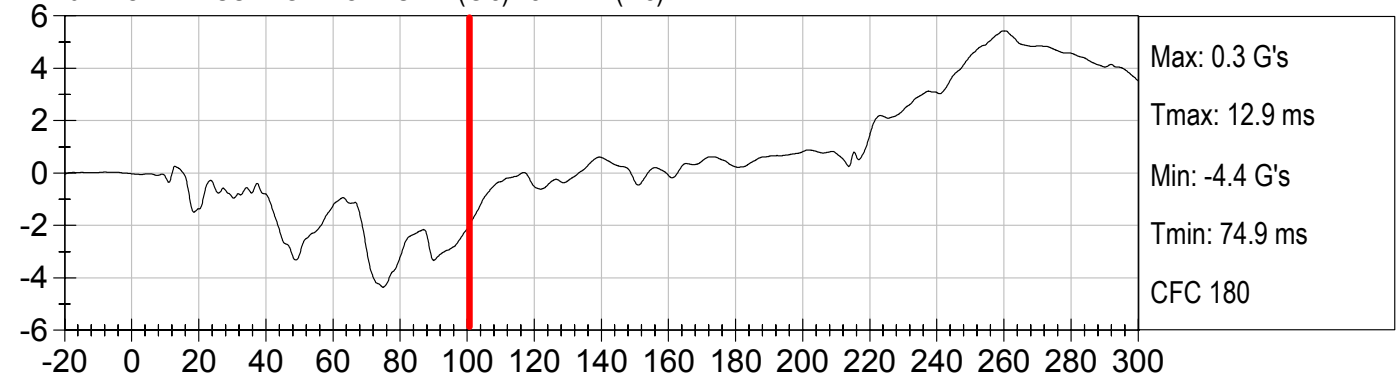


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 3YO P2

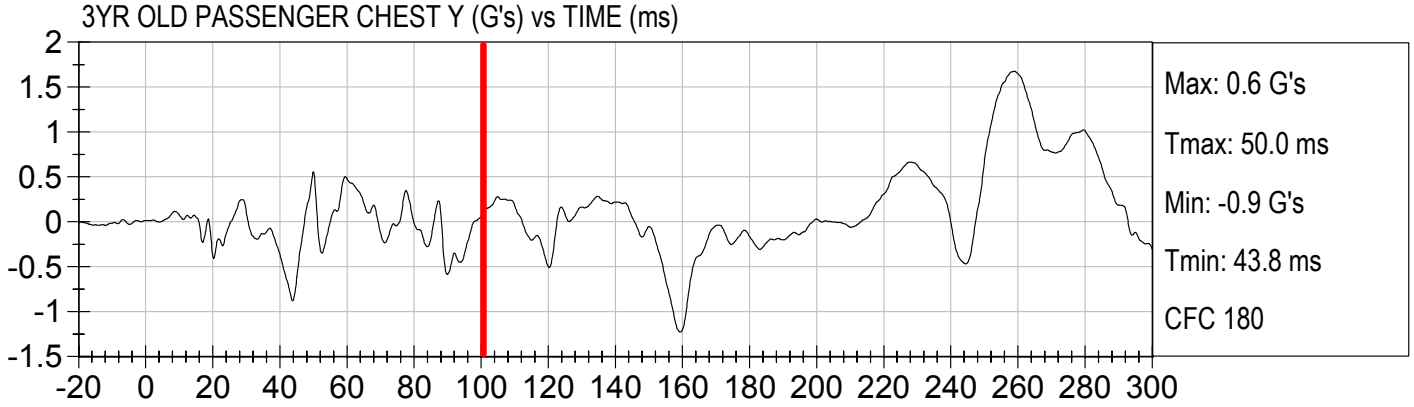
Test Date: 08/20/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 100ms

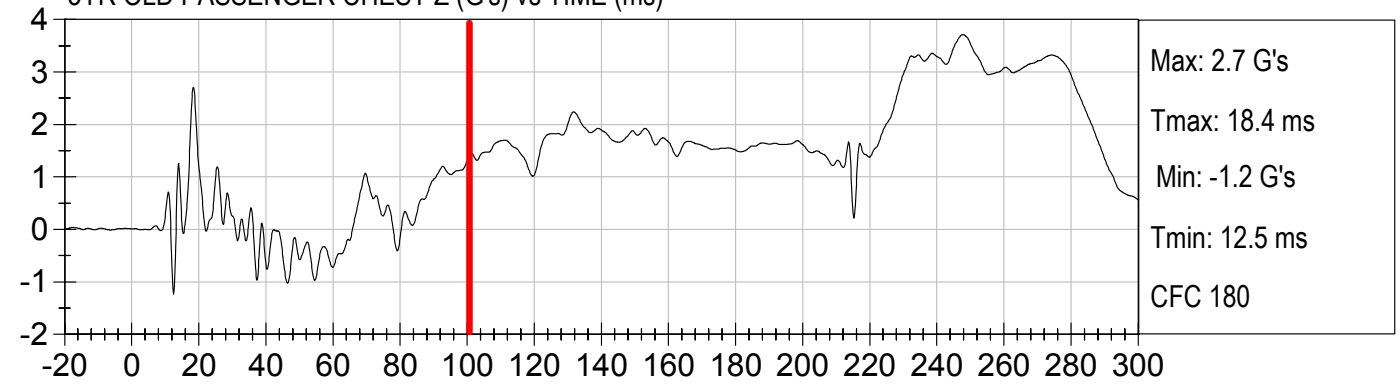
3YR OLD PASSENGER CHEST X (G's) vs TIME (ms)



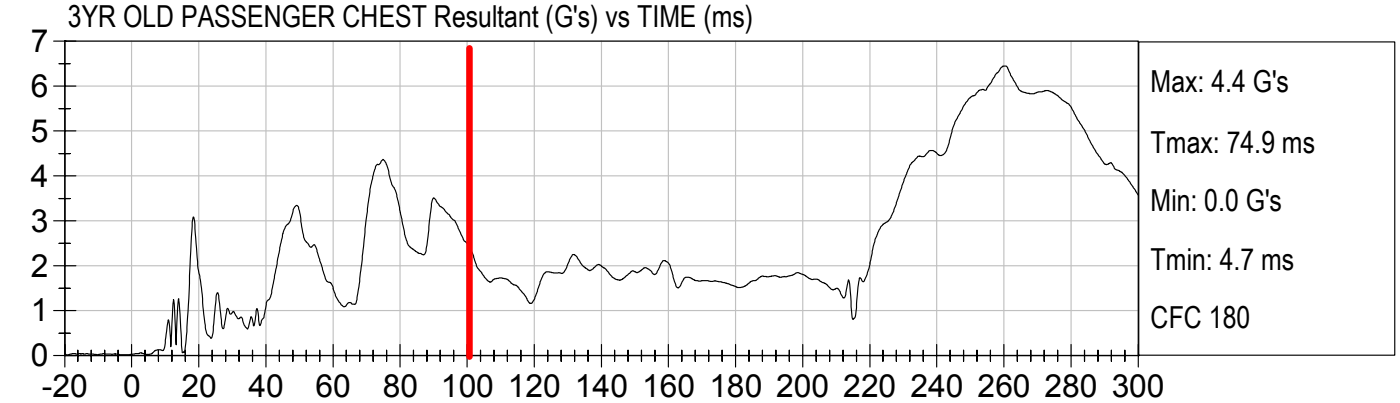
3YR OLD PASSENGER CHEST Y (G's) vs TIME (ms)



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



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

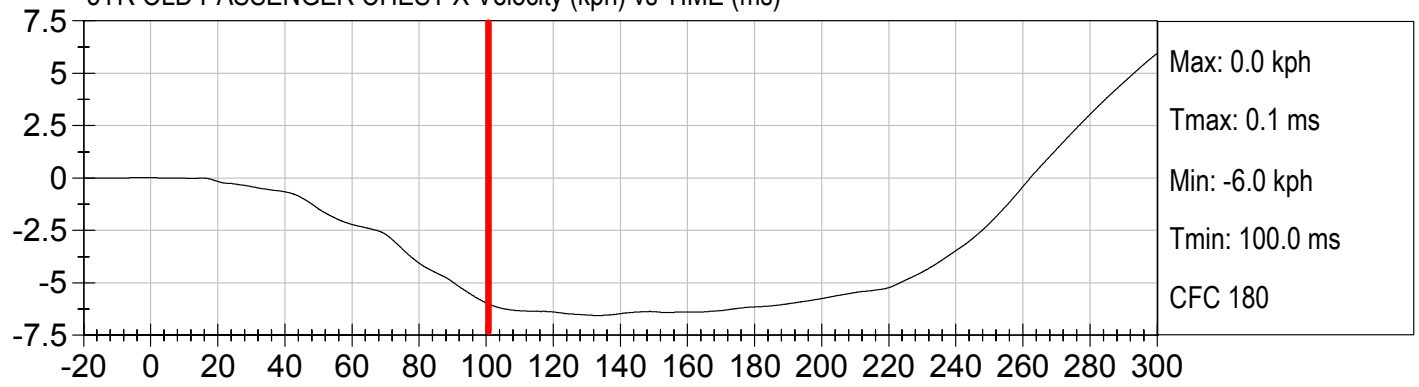


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 3YO P2

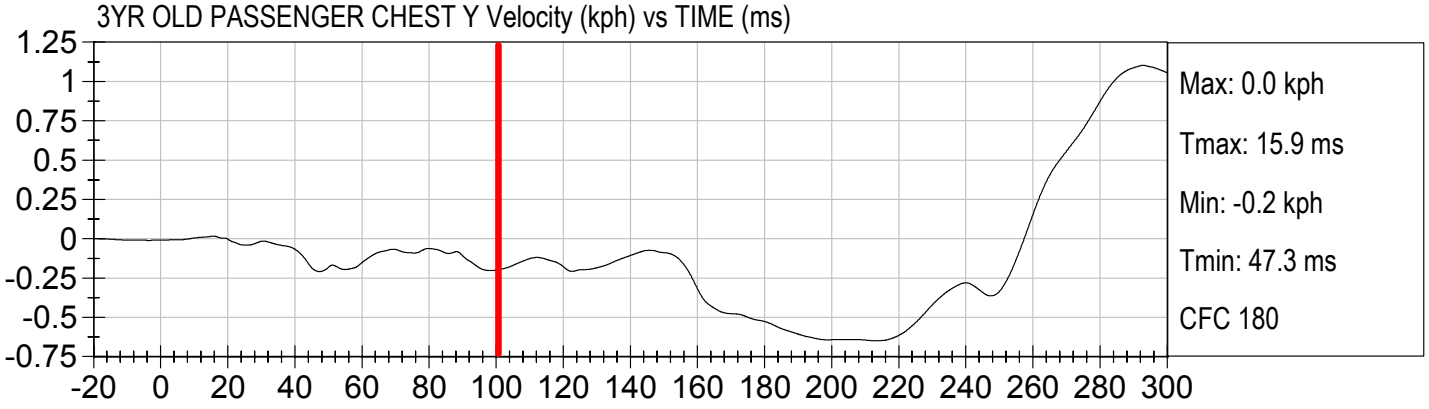
Test Date: 08/20/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 100ms

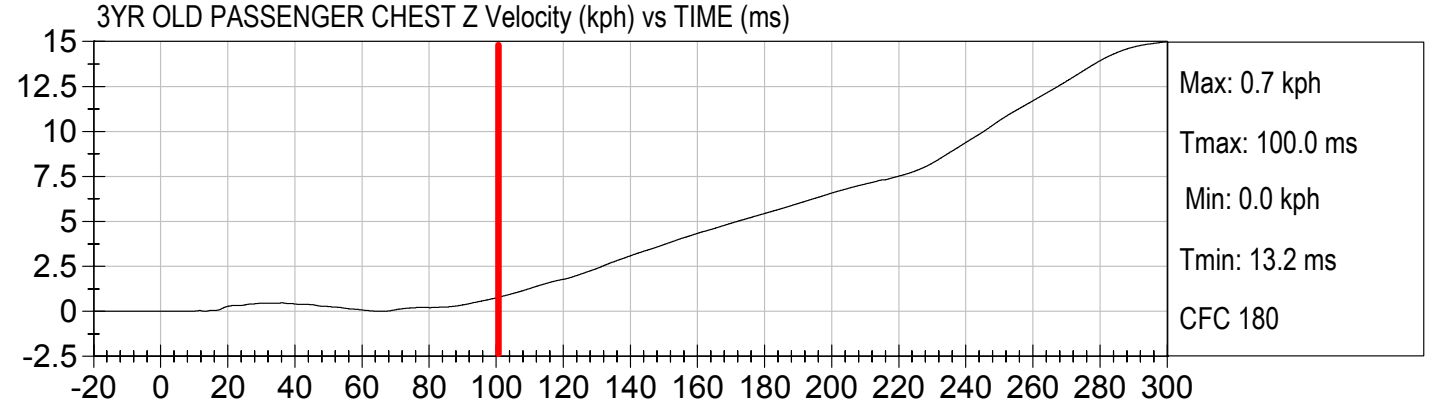
3YR OLD PASSENGER CHEST X Velocity (kph) vs TIME (ms)



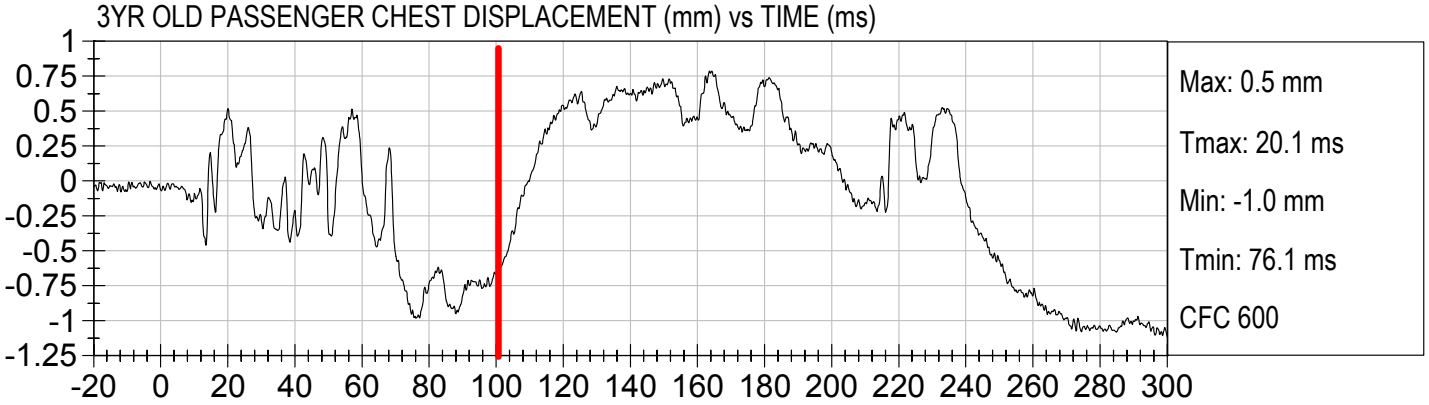
3YR OLD PASSENGER CHEST Y Velocity (kph) vs TIME (ms)



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



3YR OLD PASSENGER CHEST DISPLACEMENT (mm) vs TIME (ms)

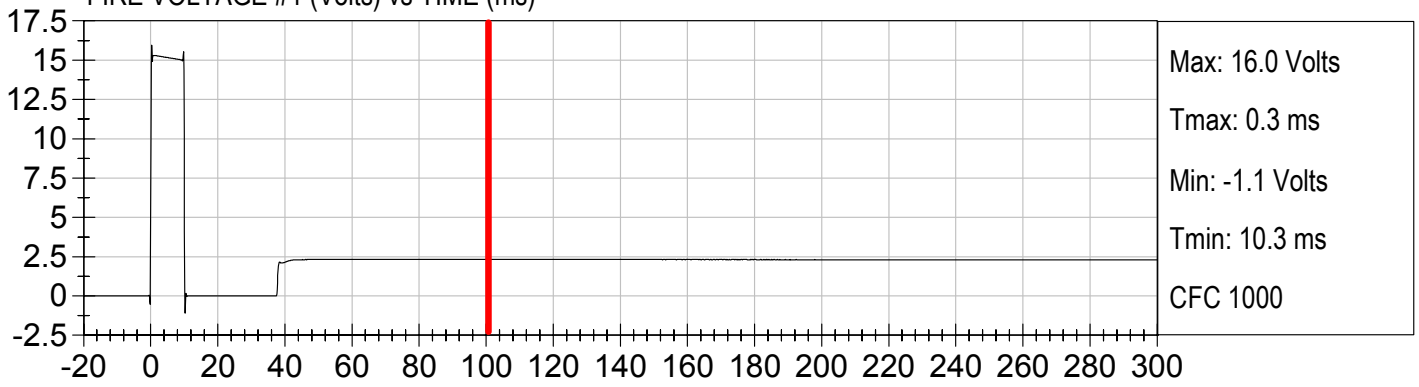


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 3YO P2

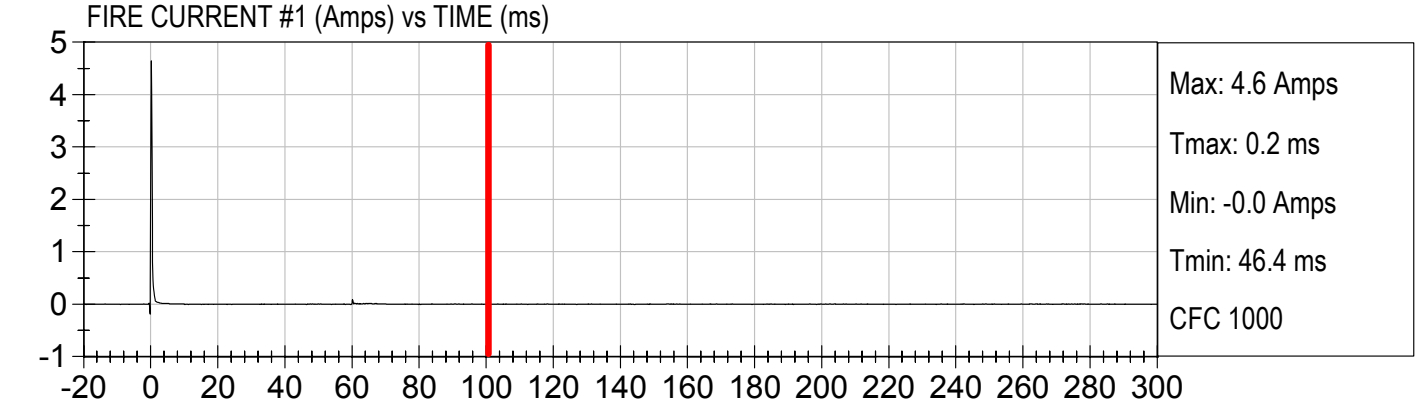
Test Date: 08/20/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 100ms

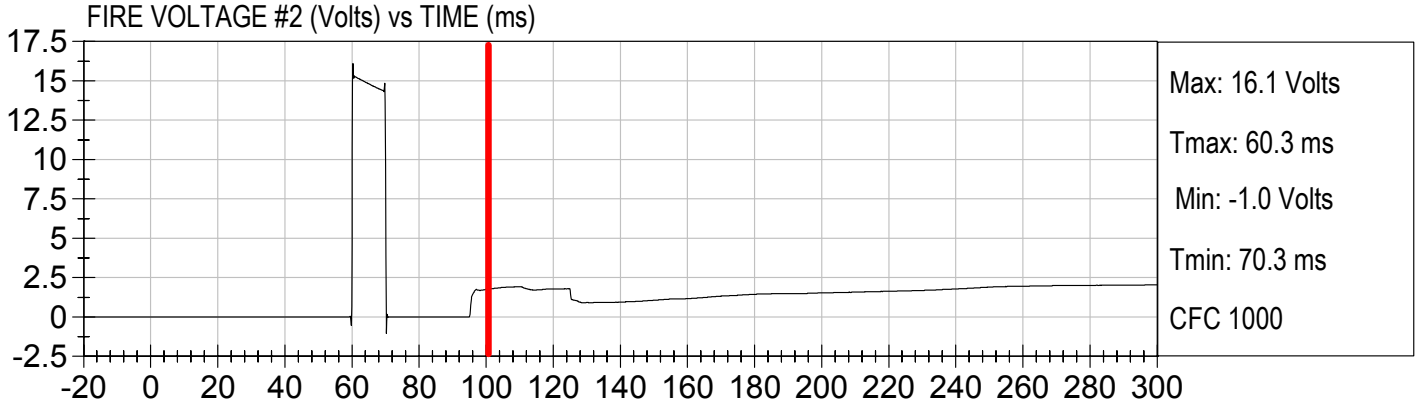
FIRE VOLTAGE #1 (Volts) vs TIME (ms)



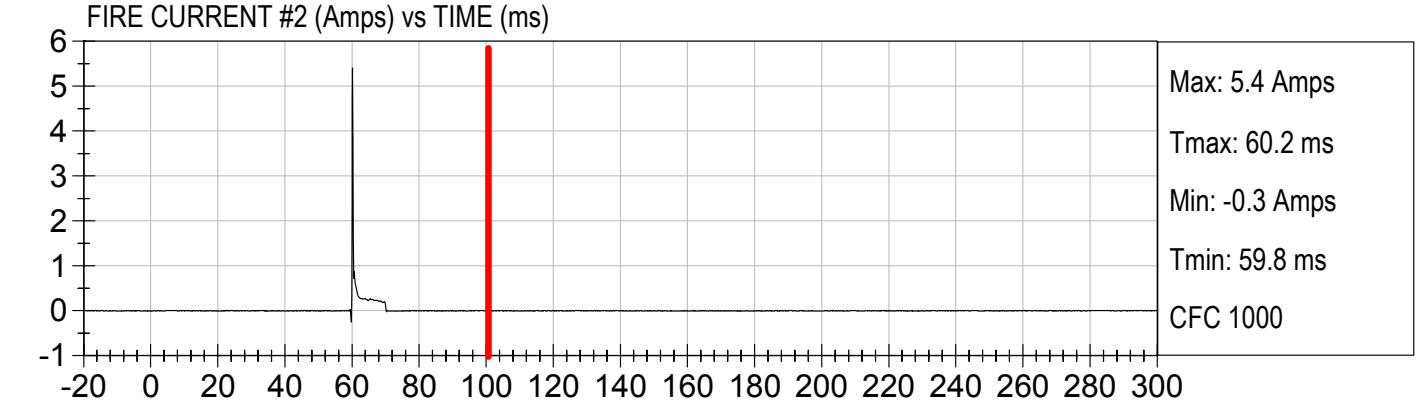
FIRE CURRENT #1 (Amps) vs TIME (ms)



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



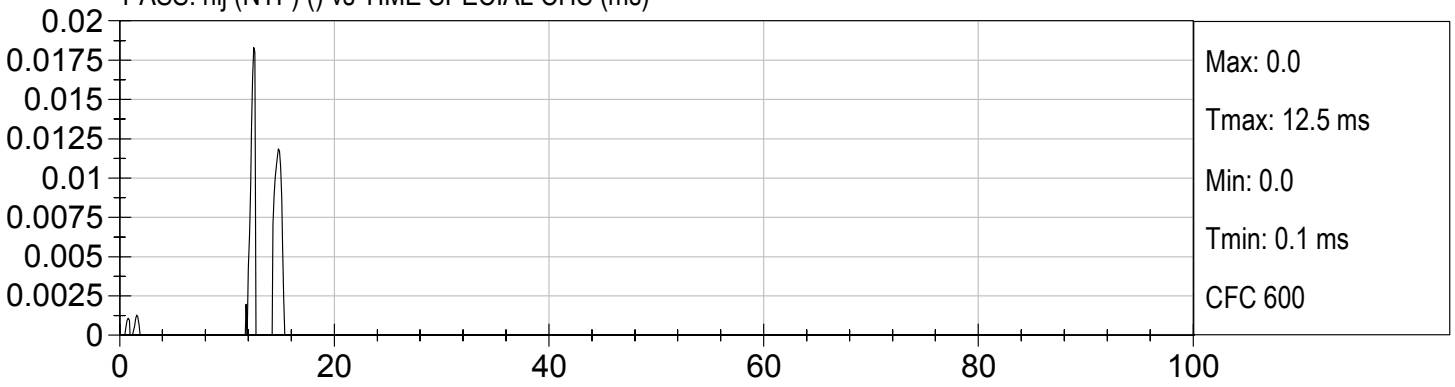
FIRE CURRENT #2 (Amps) vs TIME (ms)



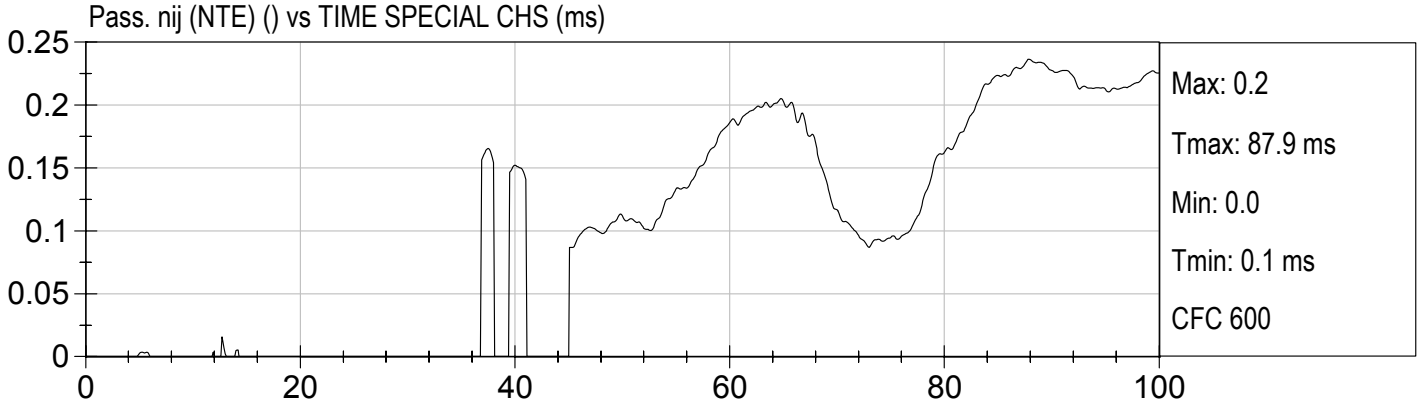
LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 3YO P2

Test Date: 08/20/07
Speed: 0.0 mph (0.0 km/h)

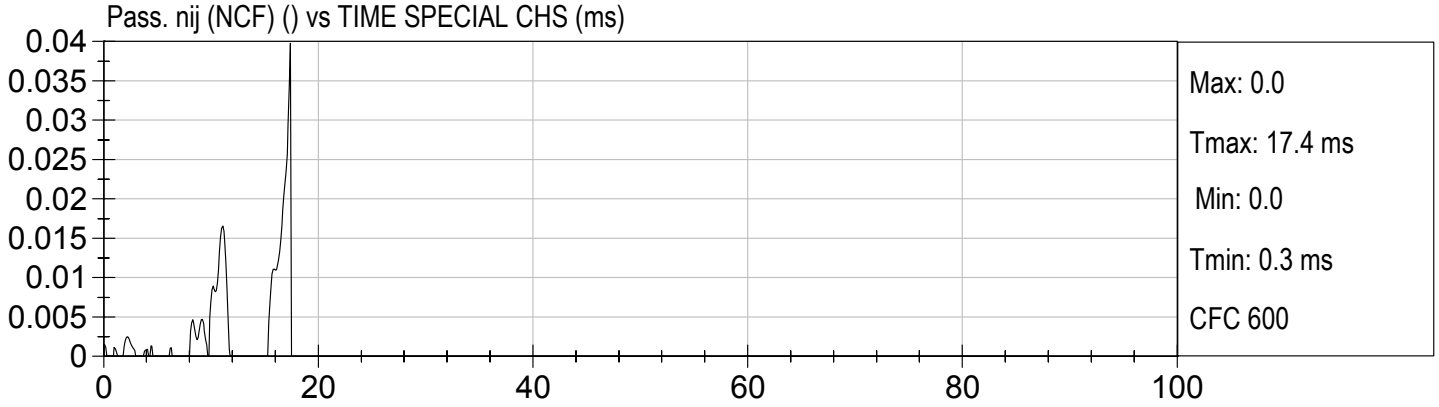
PASS. nij (NTF) () vs TIME SPECIAL CHS (ms)



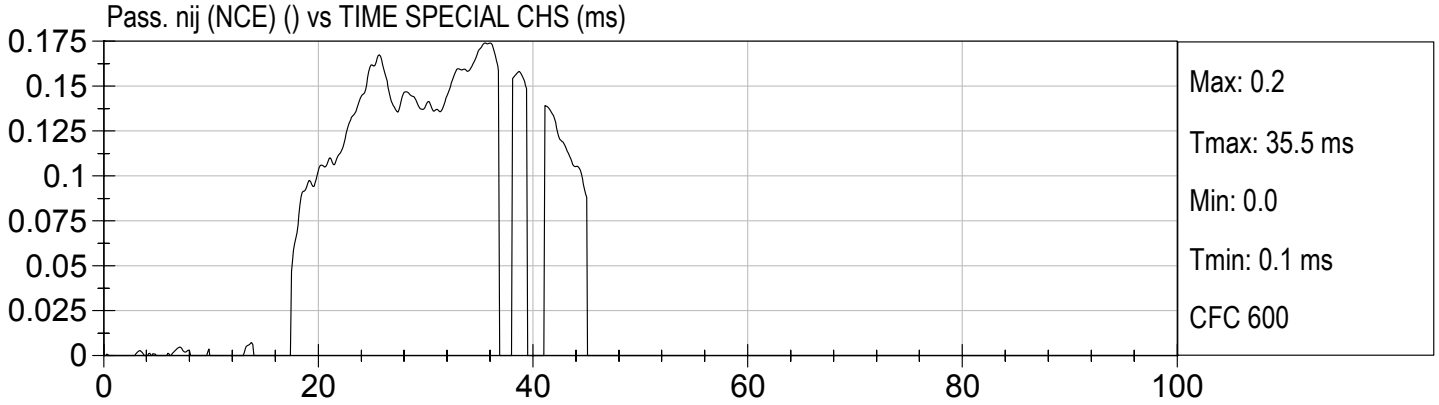
Pass. nij (NTE) () vs TIME SPECIAL CHS (ms)



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



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

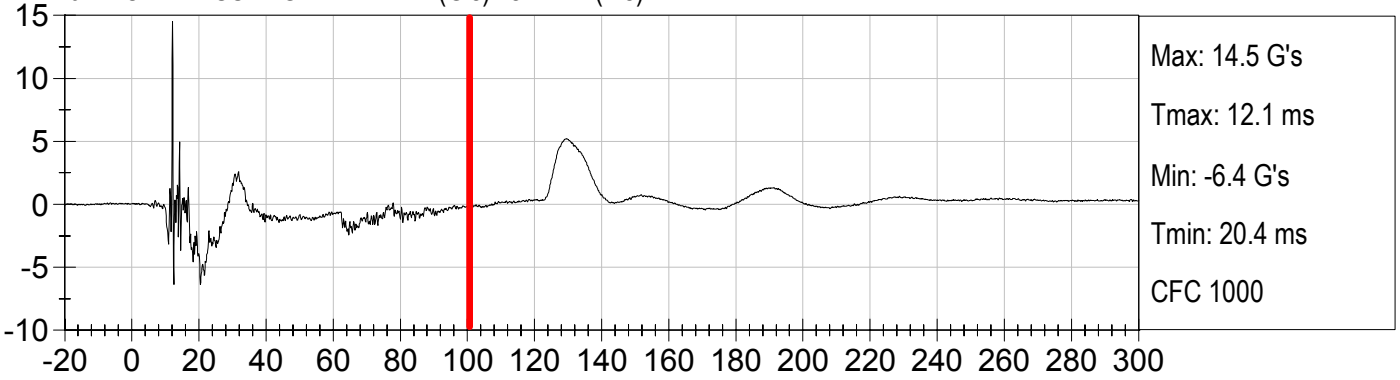


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 6YO P1

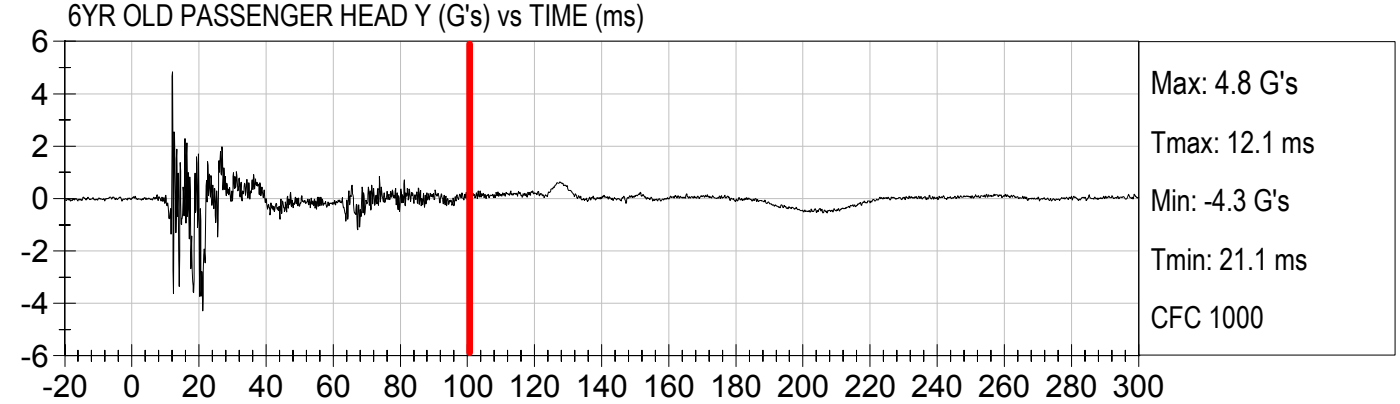
Test Date: 08/23/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 100ms

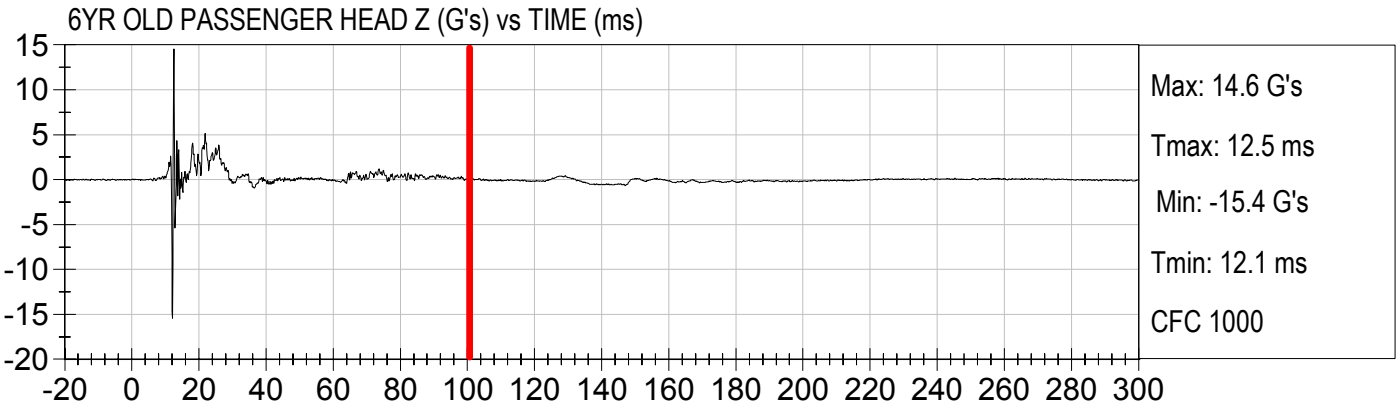
6YR OLD PASSENGER HEAD X (G's) vs TIME (ms)



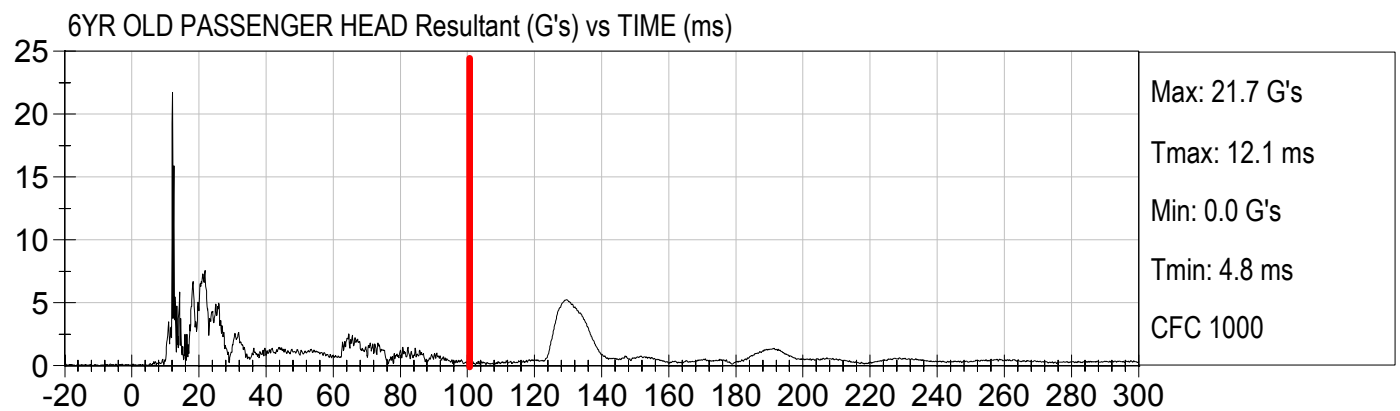
6YR OLD PASSENGER HEAD Y (G's) vs TIME (ms)



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



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

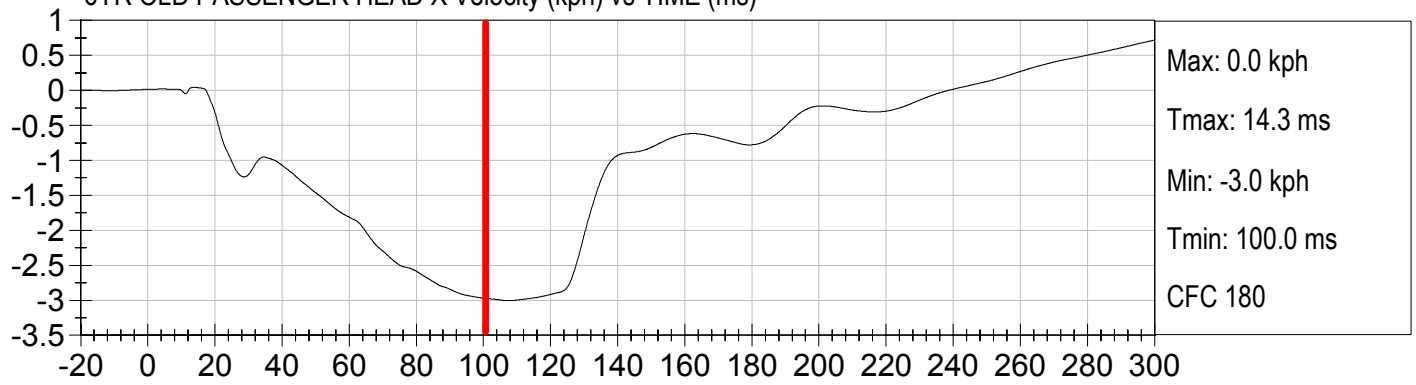


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 6YO P1

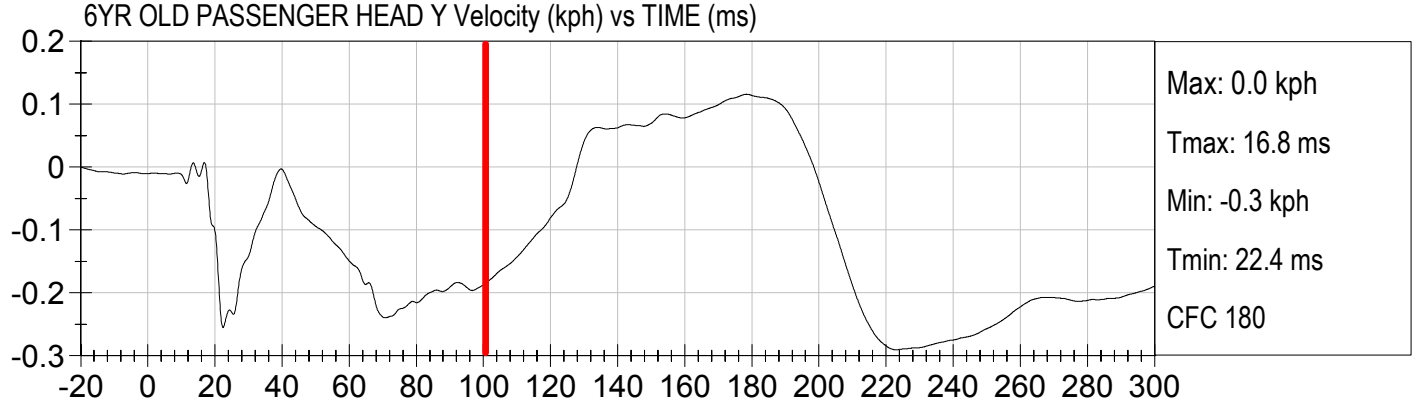
Test Date: 08/23/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 100ms

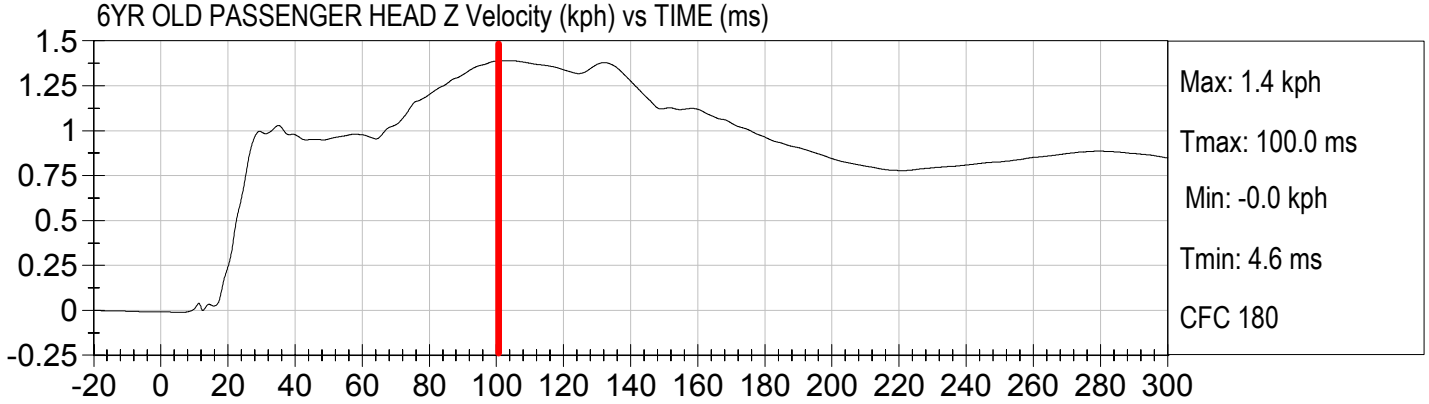
6YR OLD PASSENGER HEAD X Velocity (kph) vs TIME (ms)



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



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

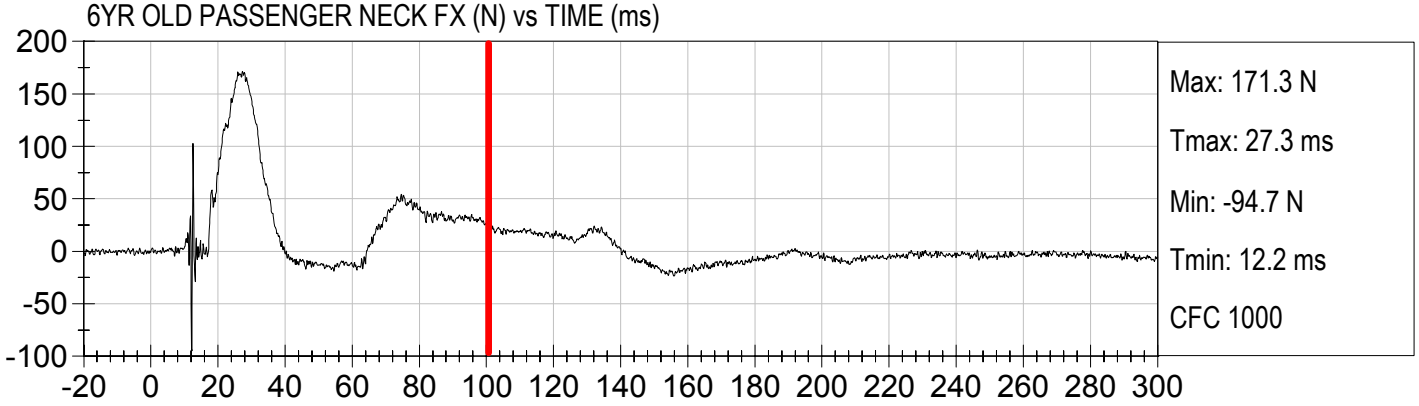


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 6YO P1

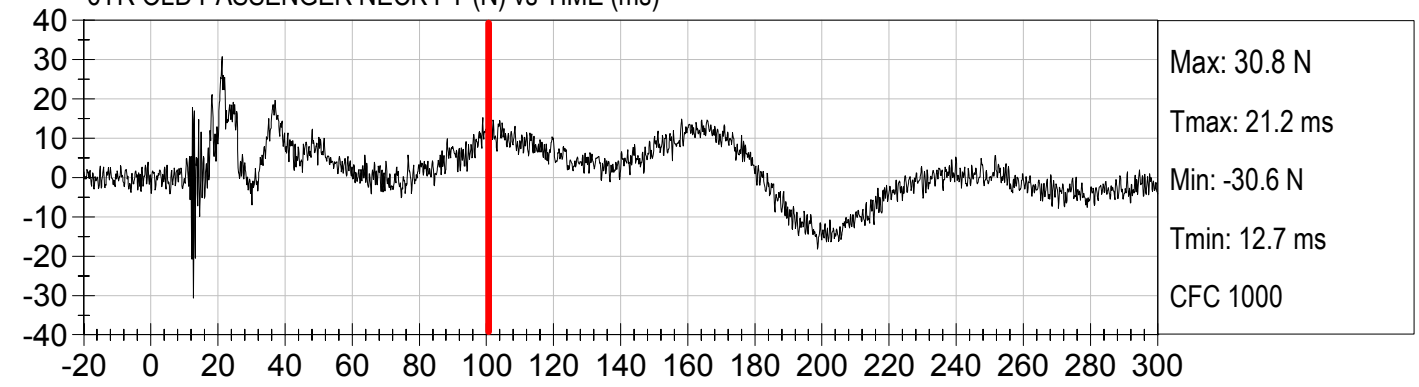
Test Date: 08/23/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 100ms

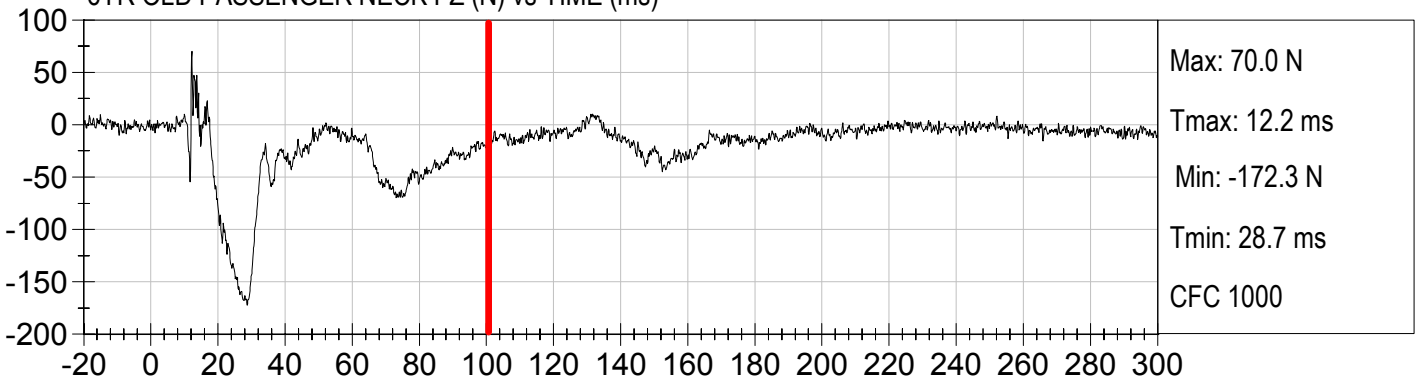
6YR OLD PASSENGER NECK FX (N) vs TIME (ms)



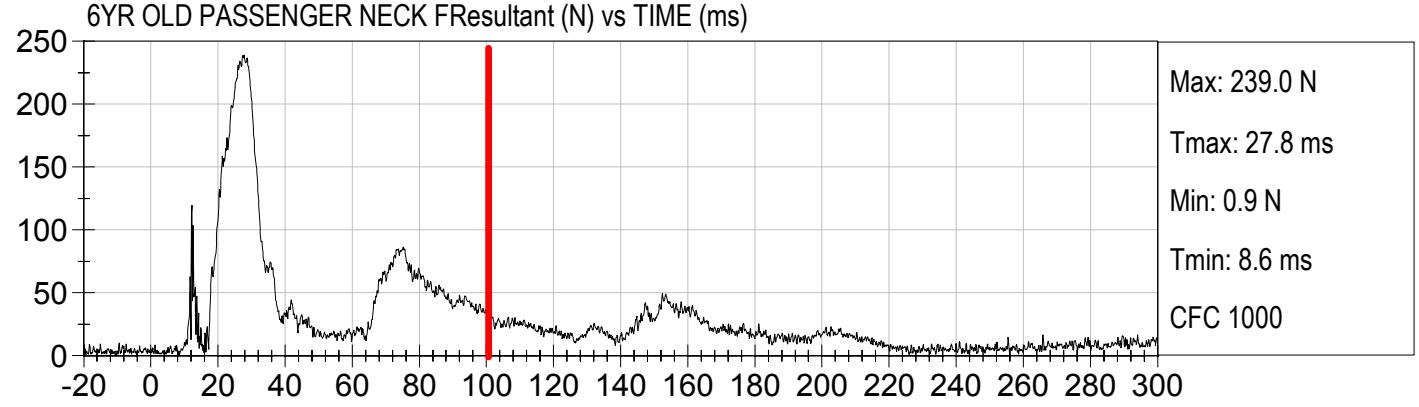
6YR OLD PASSENGER NECK FY (N) vs TIME (ms)



6YR OLD PASSENGER NECK FZ (N) vs TIME (ms)



6YR OLD PASSENGER NECK FResultant (N) vs TIME (ms)

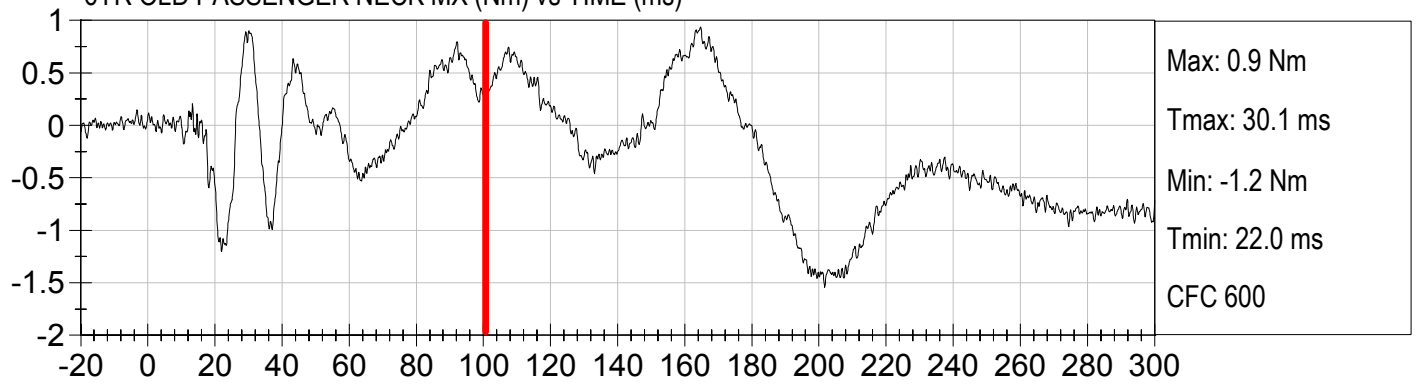


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 6YO P1

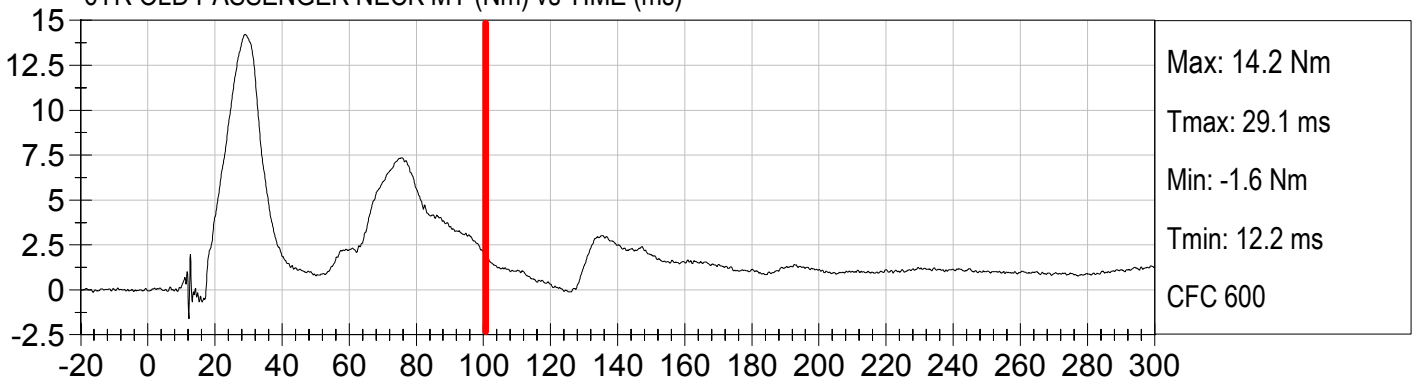
Test Date: 08/23/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 100ms

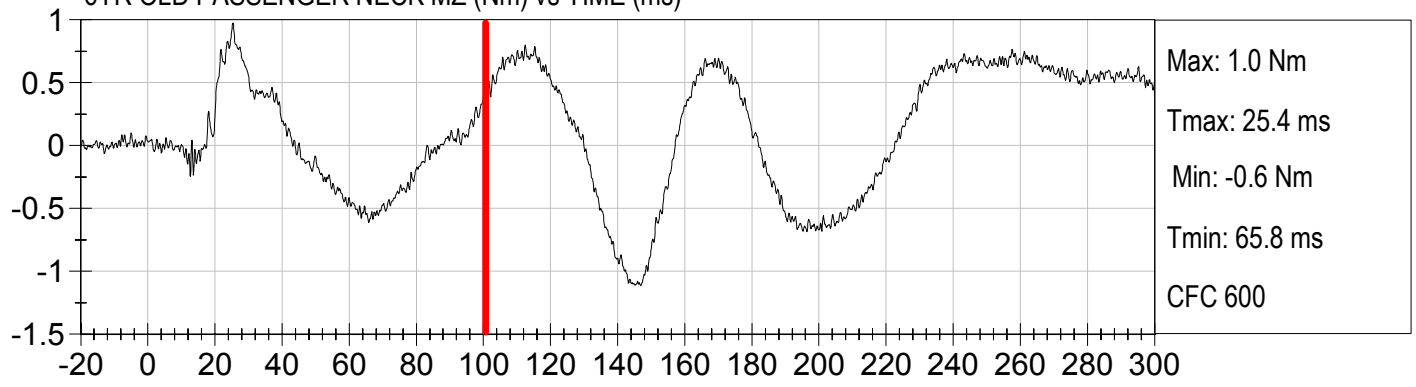
6YR OLD PASSENGER NECK MX (Nm) vs TIME (ms)



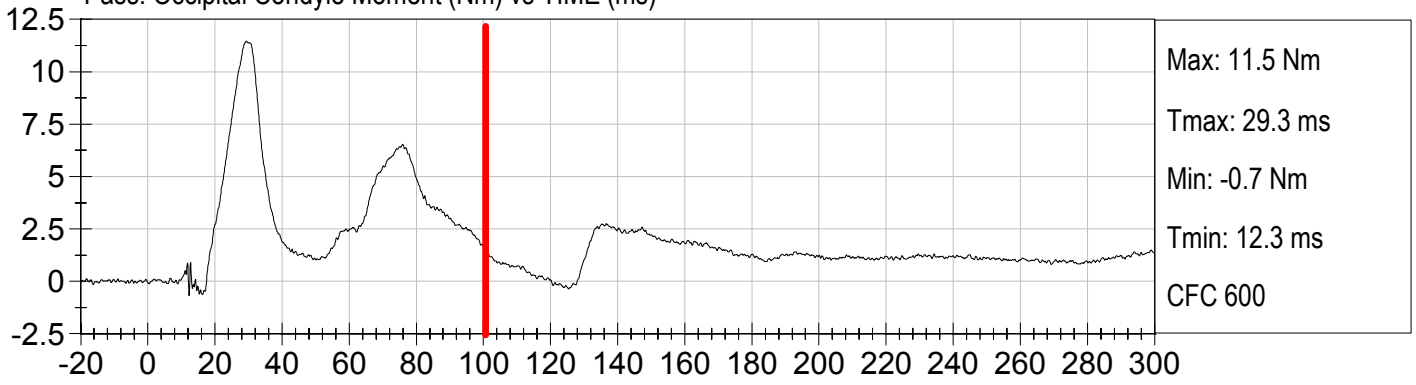
6YR OLD PASSENGER NECK MY (Nm) vs TIME (ms)



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



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

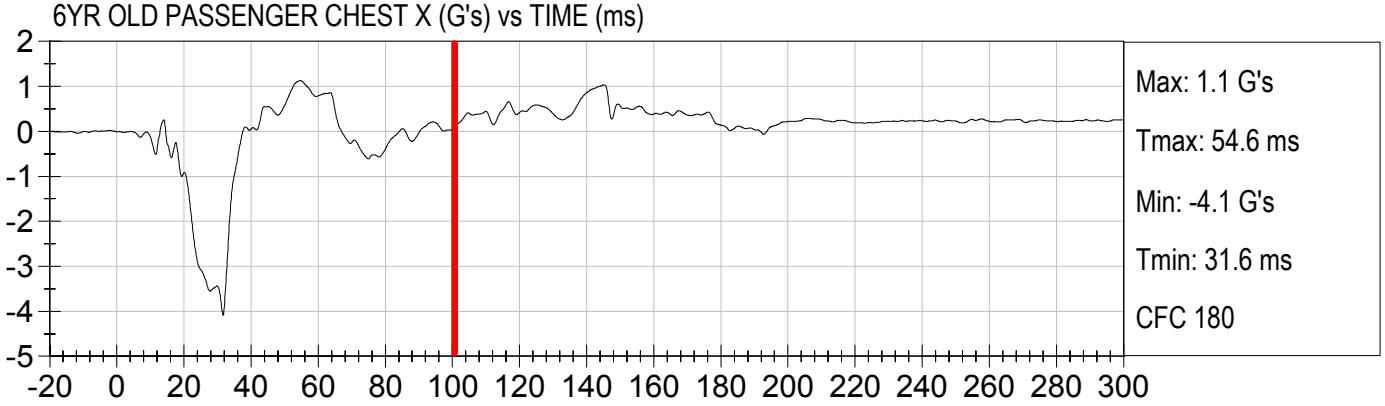


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 6YO P1

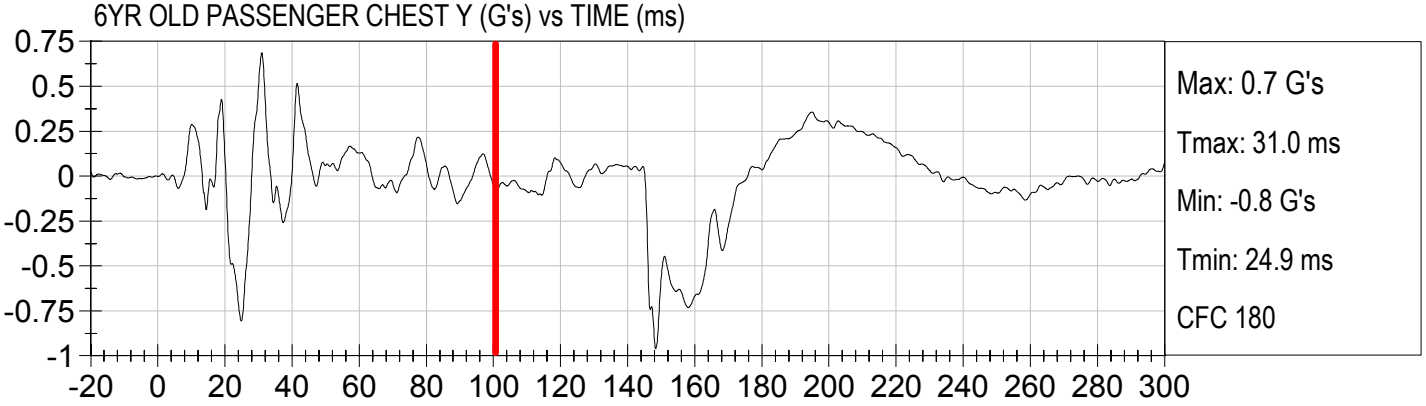
Test Date: 08/23/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 100ms

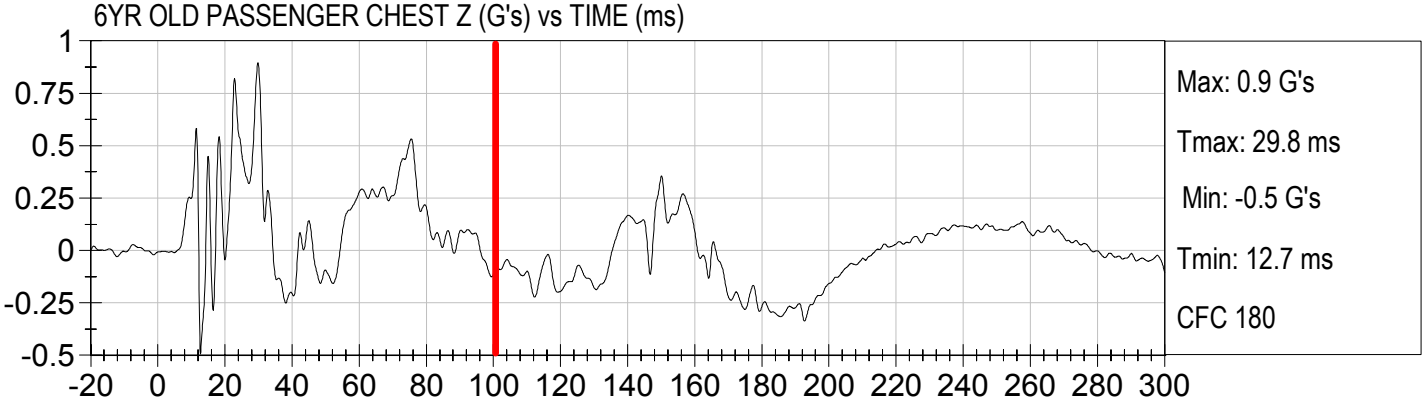
6YR OLD PASSENGER CHEST X (G's) vs TIME (ms)



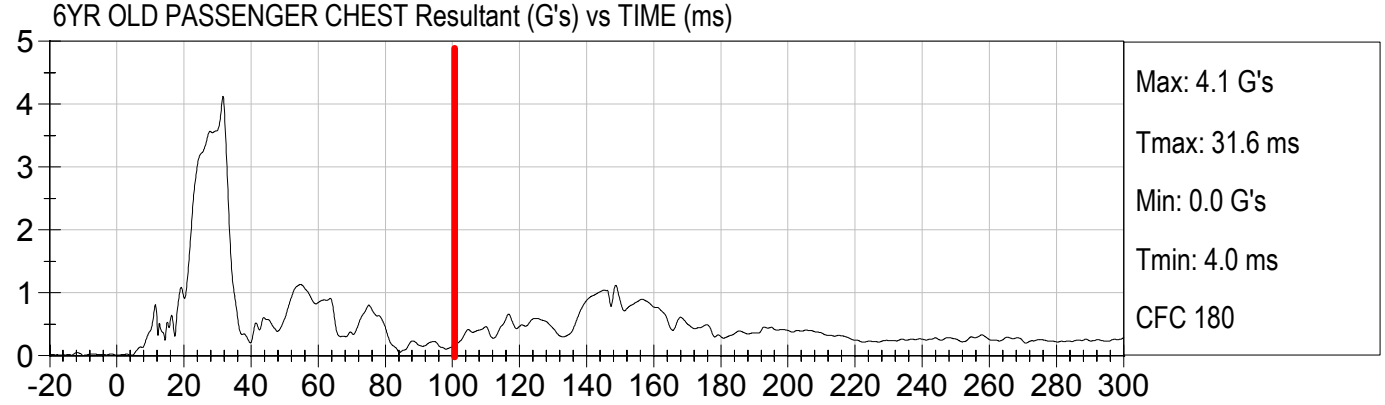
6YR OLD PASSENGER CHEST Y (G's) vs TIME (ms)



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



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

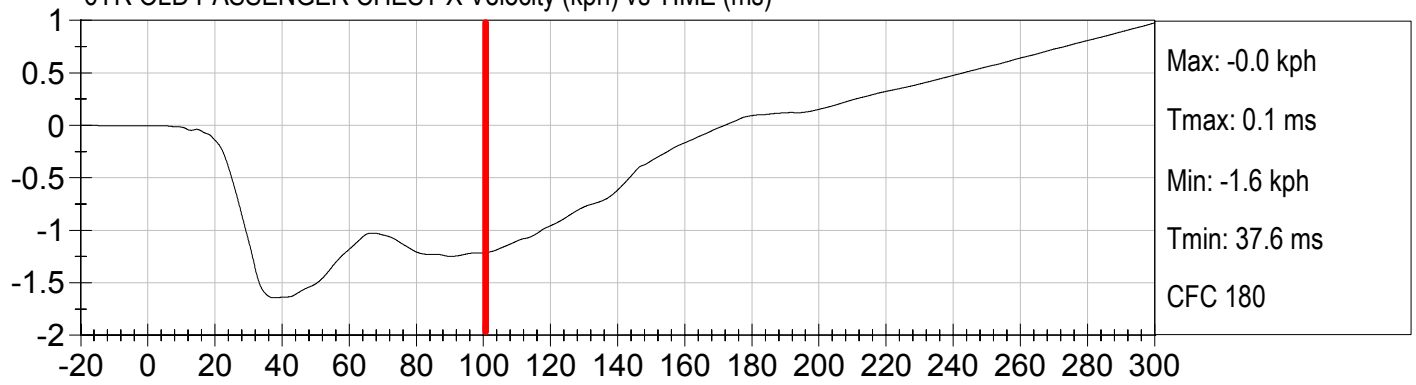


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 6YO P1

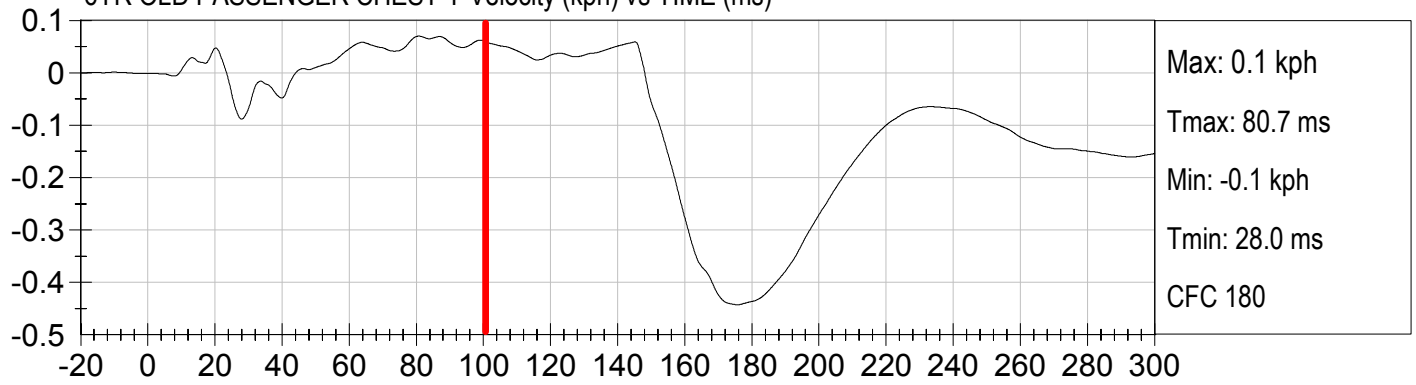
Test Date: 08/23/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 100ms

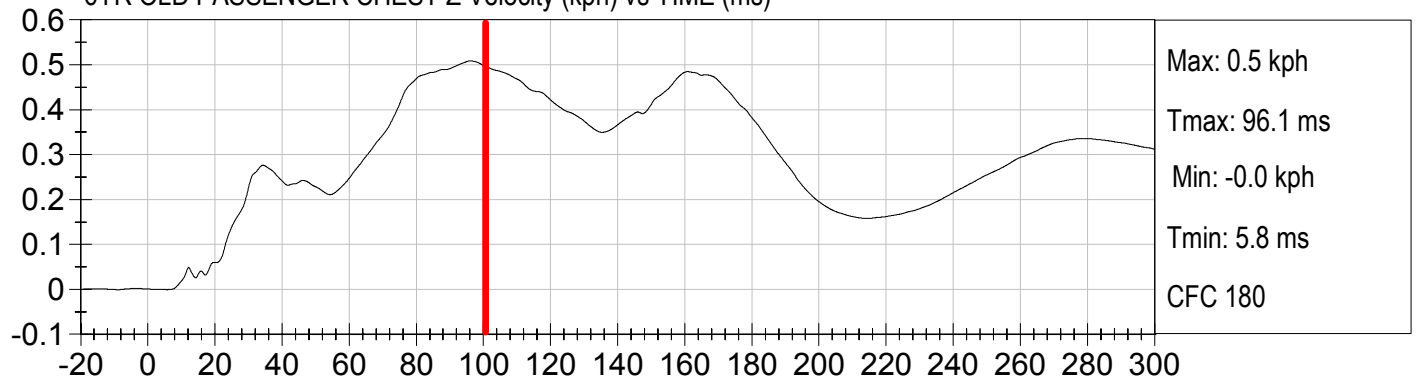
6YR OLD PASSENGER CHEST X Velocity (kph) vs TIME (ms)



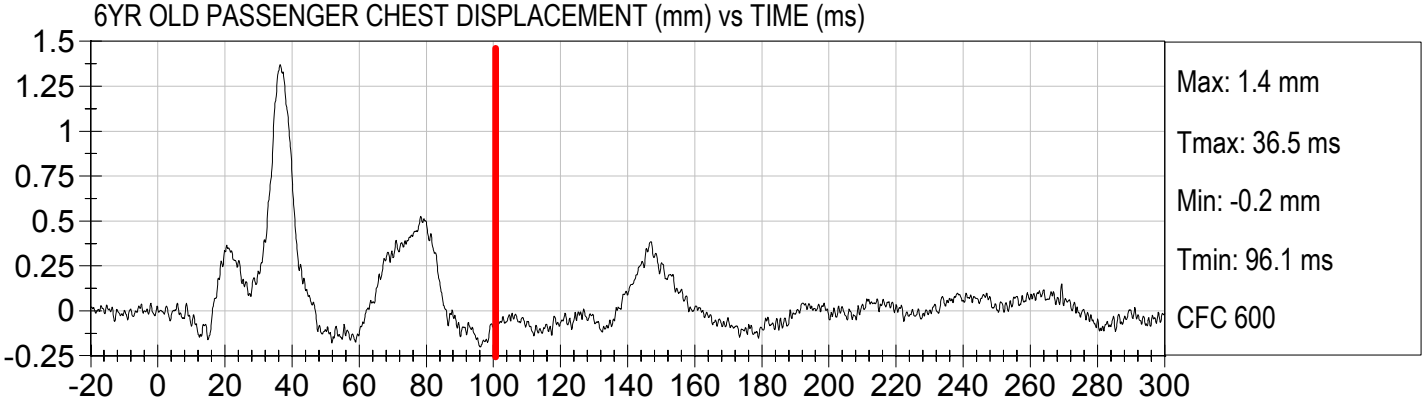
6YR OLD PASSENGER CHEST Y Velocity (kph) vs TIME (ms)



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



6YR OLD PASSENGER CHEST DISPLACEMENT (mm) vs TIME (ms)

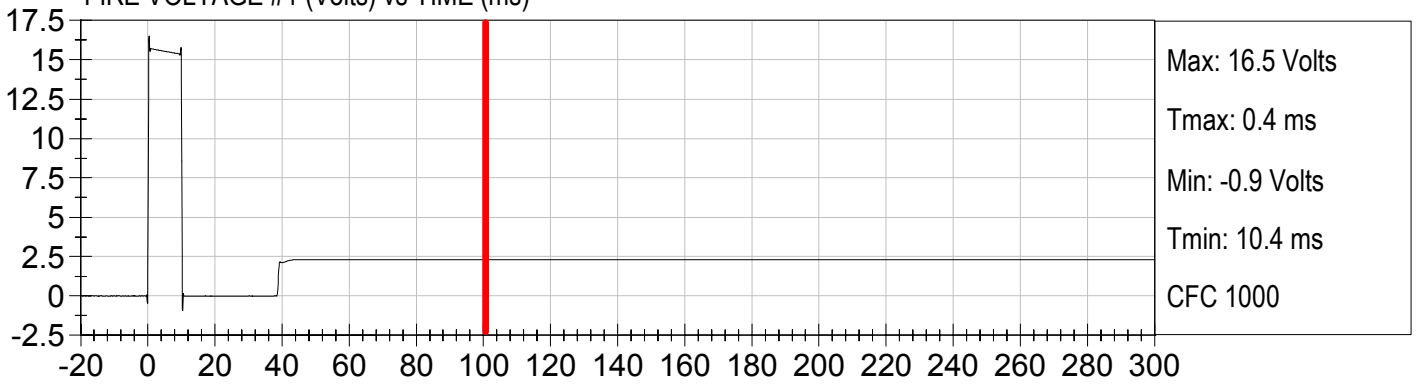


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 6YO P1

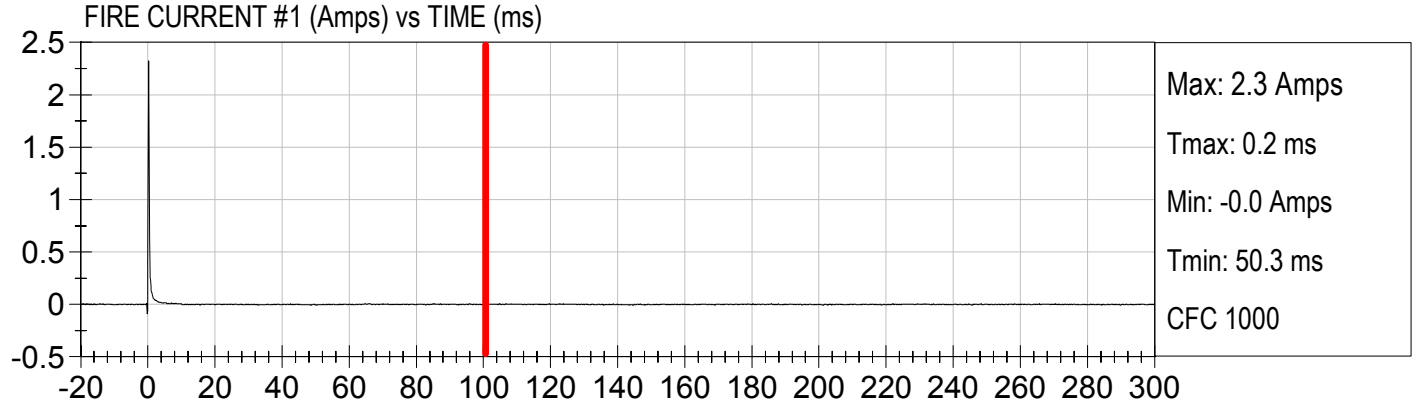
Test Date: 08/23/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 100ms

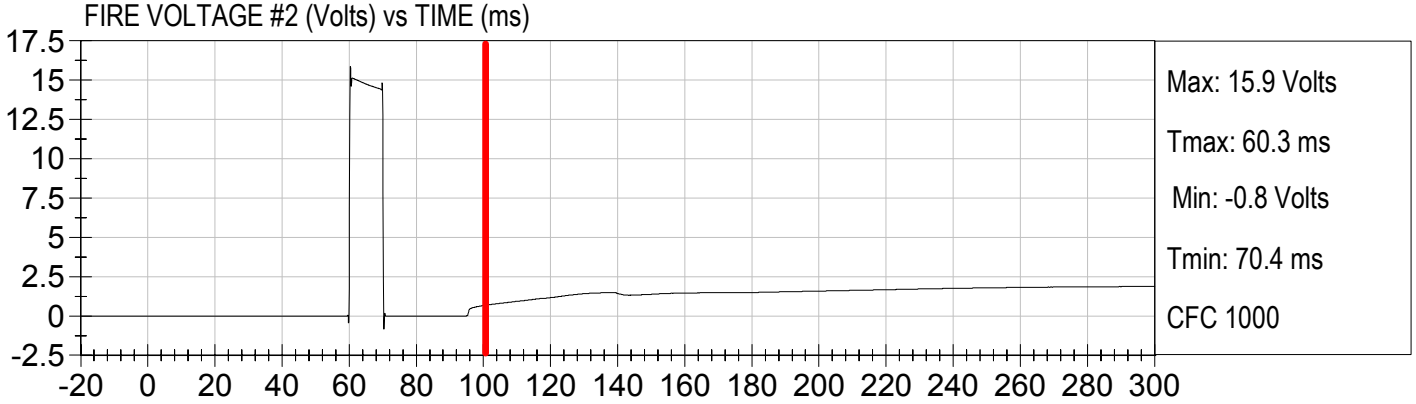
FIRE VOLTAGE #1 (Volts) vs TIME (ms)



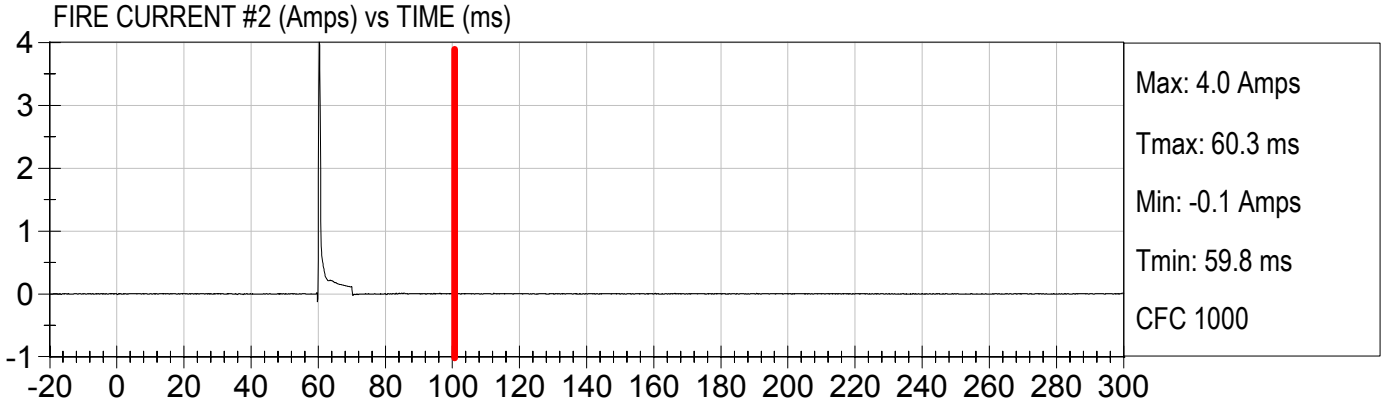
FIRE CURRENT #1 (Amps) vs TIME (ms)



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



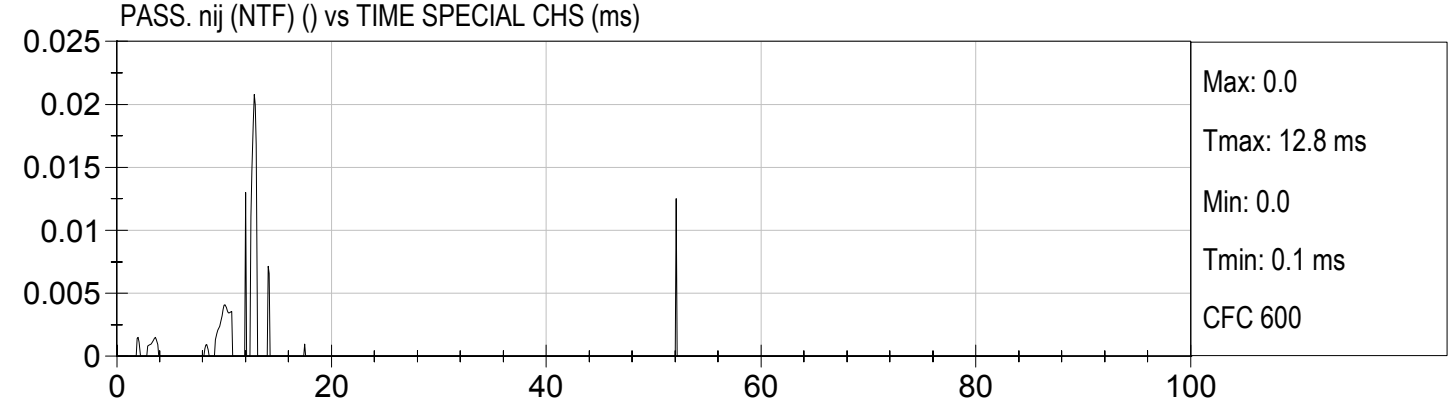
FIRE CURRENT #2 (Amps) vs TIME (ms)



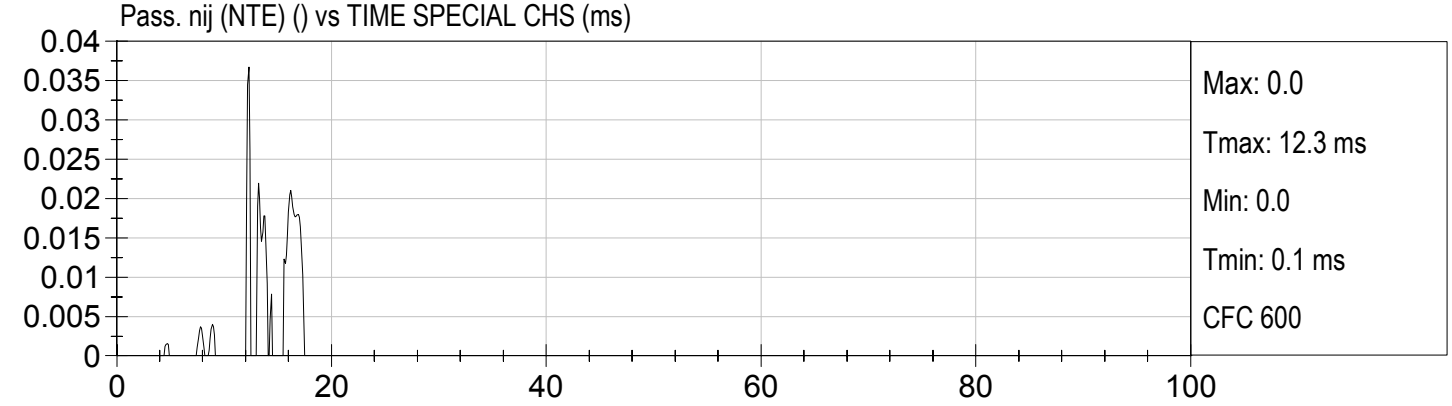
LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307) 6YO P1

Test Date: 08/23/07
Speed: 0.0 mph (0.0 km/h)

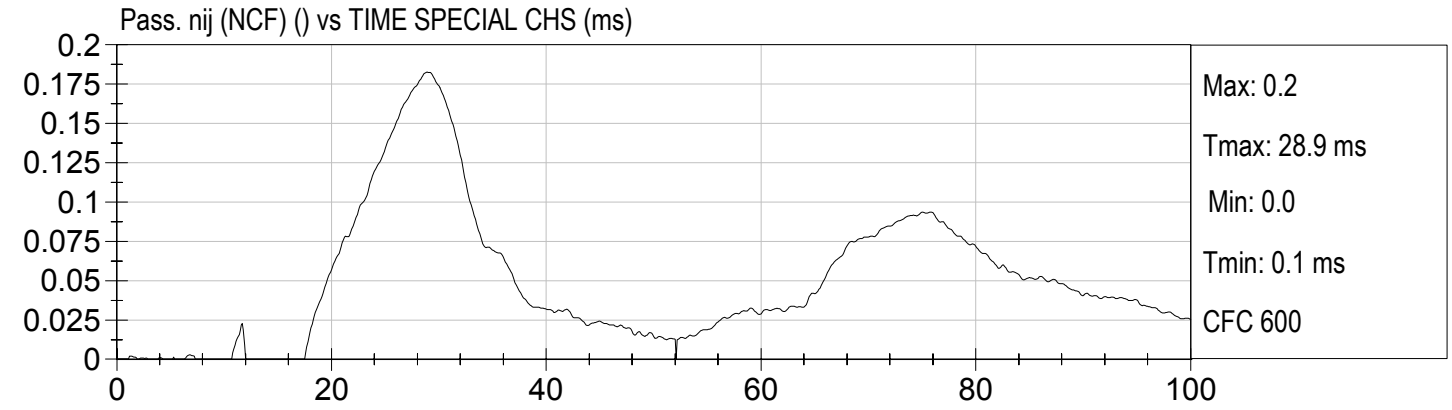
PASS. nij (NTF) () vs TIME SPECIAL CHS (ms)



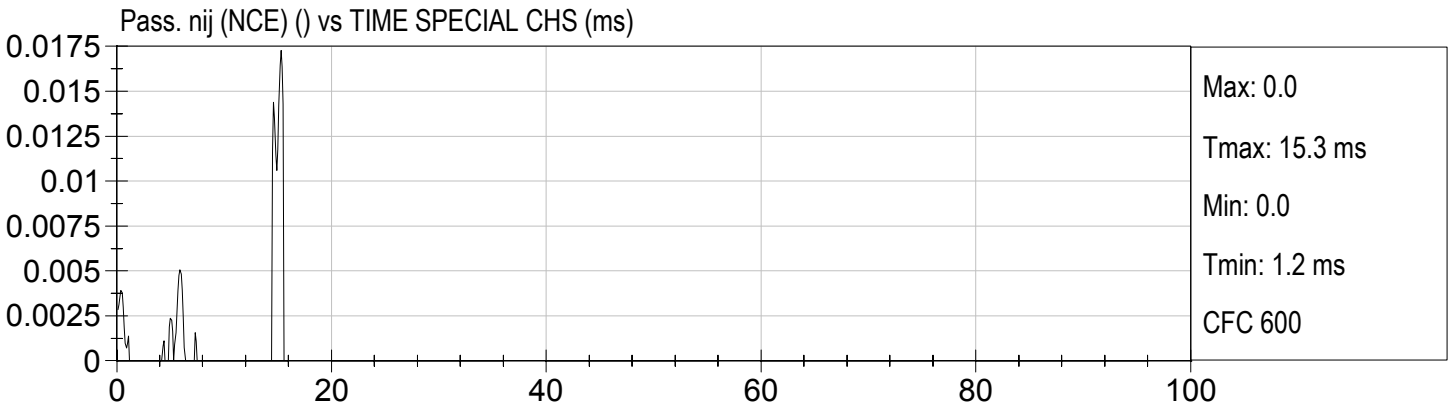
Pass. nij (NTE) () vs TIME SPECIAL CHS (ms)



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



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

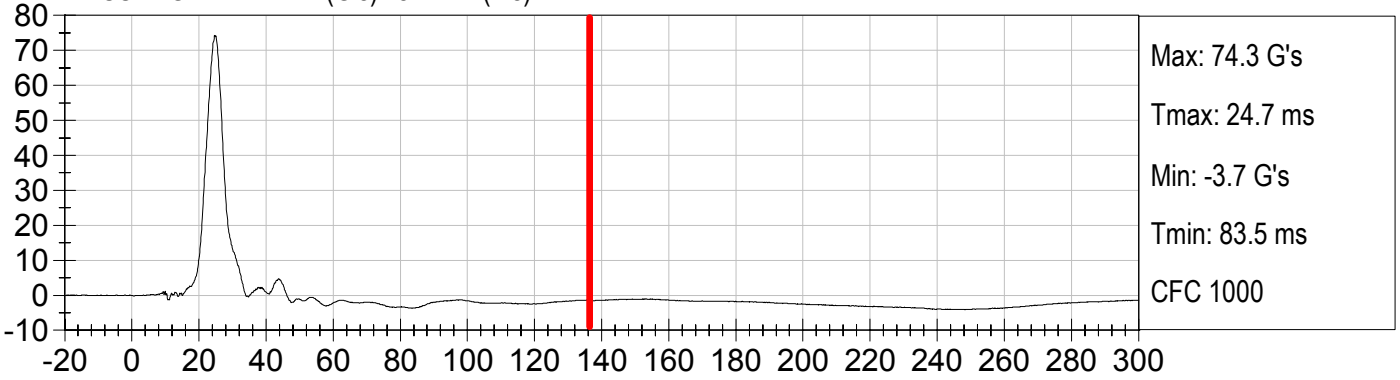


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307)(12 month Century Encore)

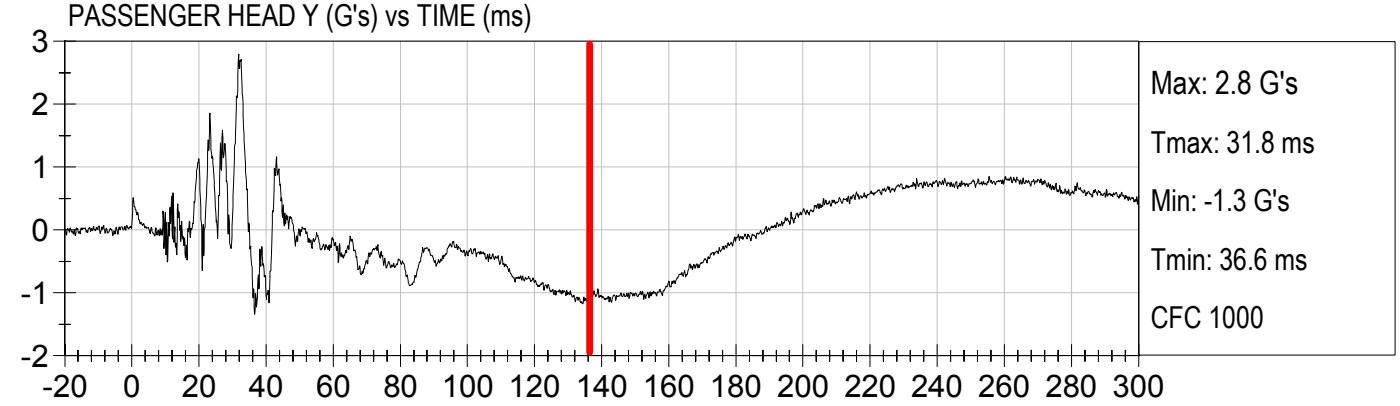
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 135ms

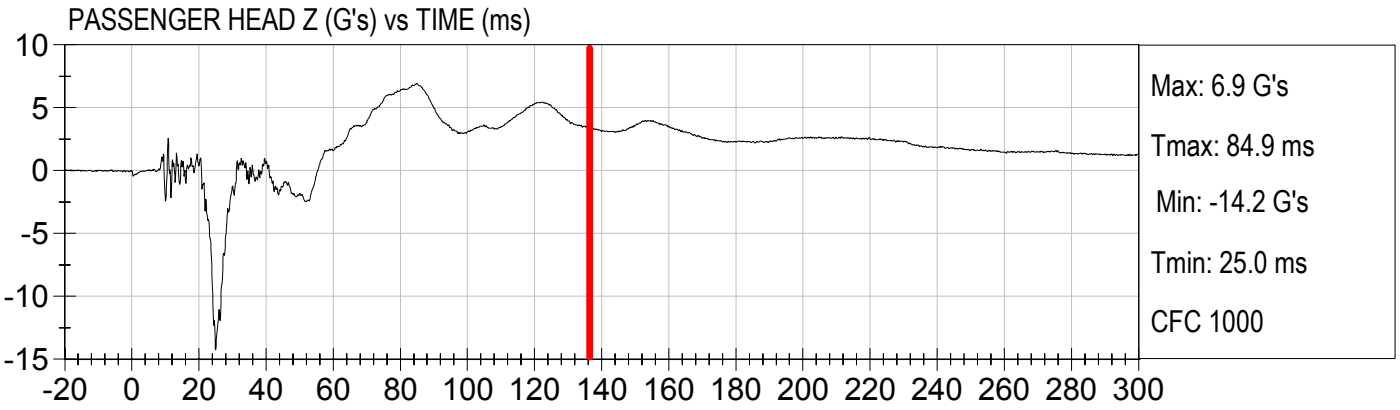
PASSENGER HEAD X (G's) vs TIME (ms)



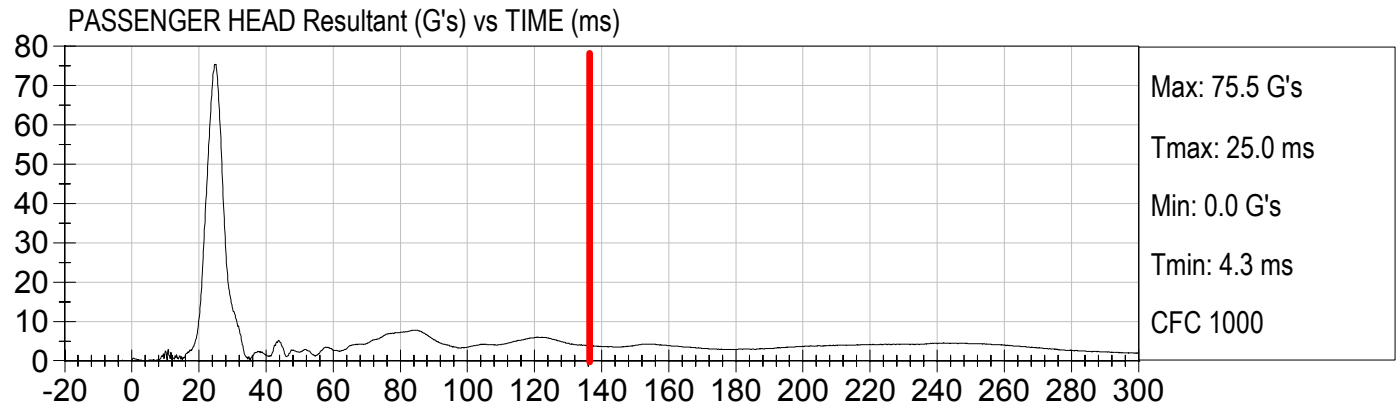
PASSENGER HEAD Y (G's) vs TIME (ms)



PASSENGER HEAD Z (G's) vs TIME (ms)



PASSENGER HEAD Resultant (G's) vs TIME (ms)

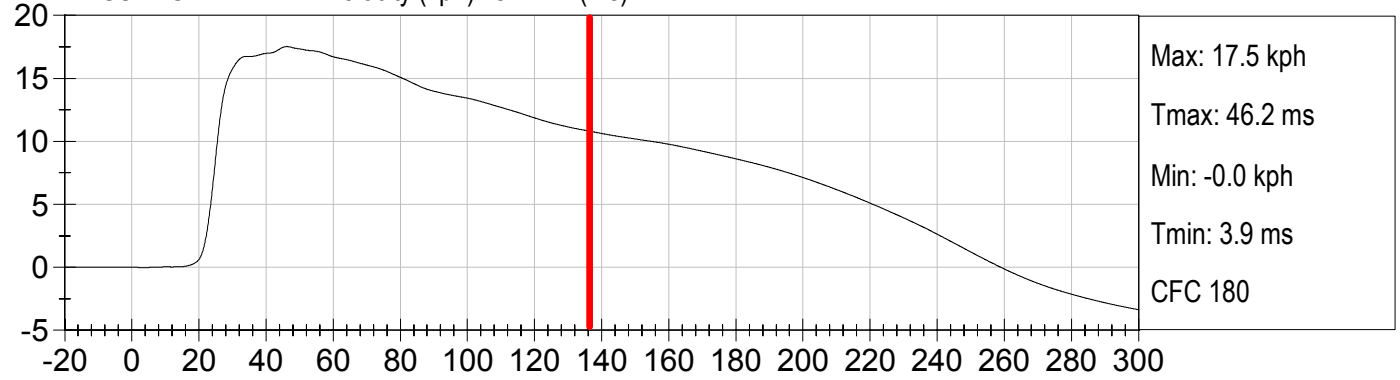


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307)(12 month Century Encore)

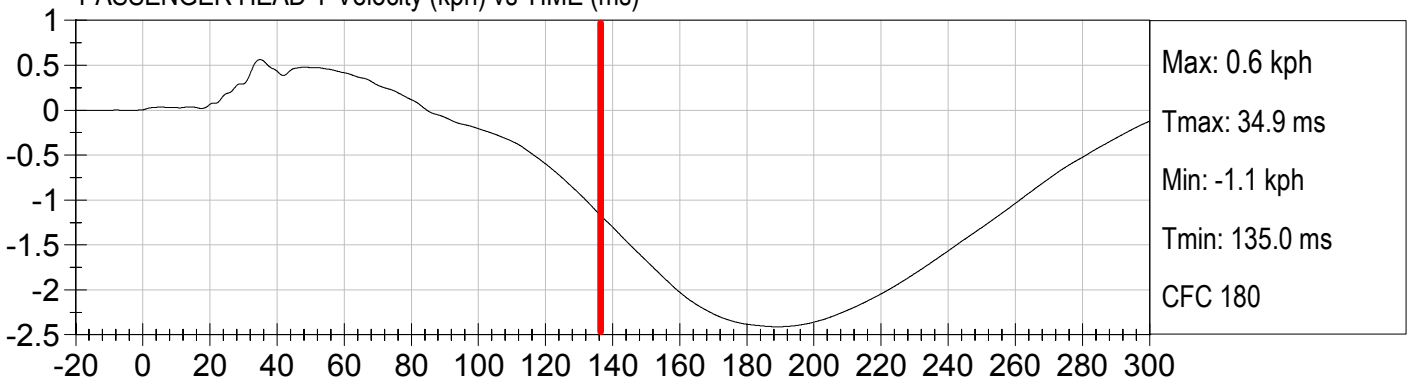
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 135ms

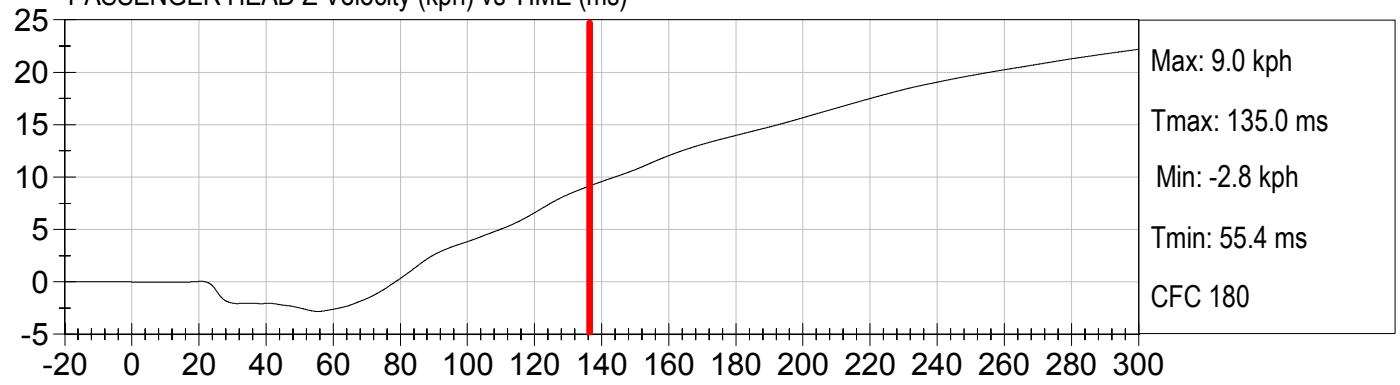
PASSENGER HEAD X Velocity (kph) vs TIME (ms)



PASSENGER HEAD Y Velocity (kph) vs TIME (ms)



PASSENGER HEAD Z Velocity (kph) vs TIME (ms)

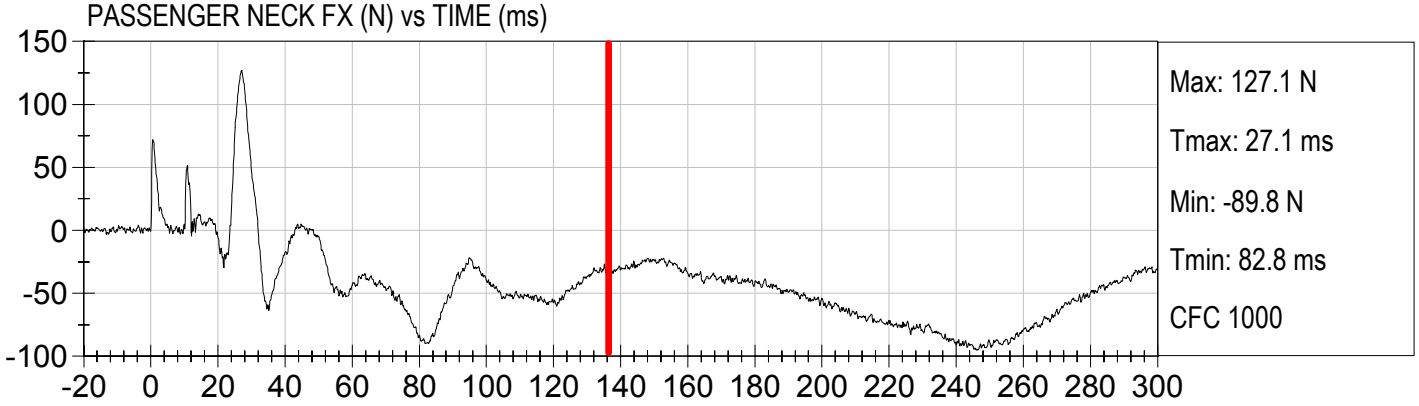


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307)(12 month Century Encore)

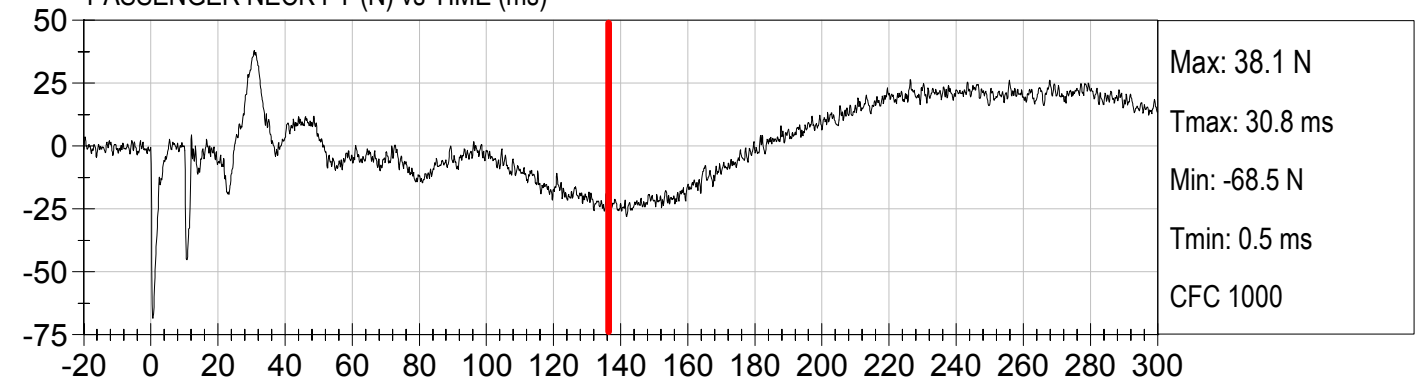
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 135ms

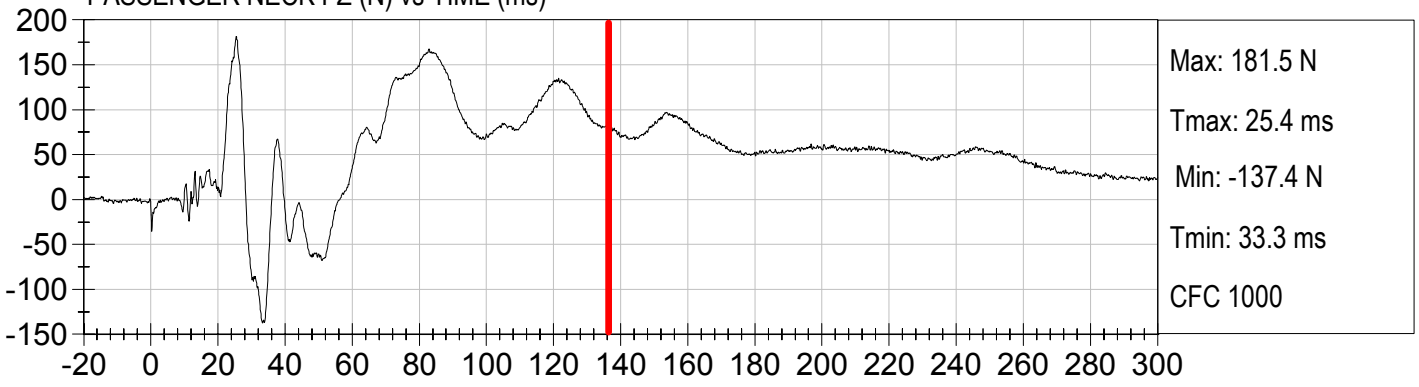
PASSENGER NECK FX (N) vs TIME (ms)



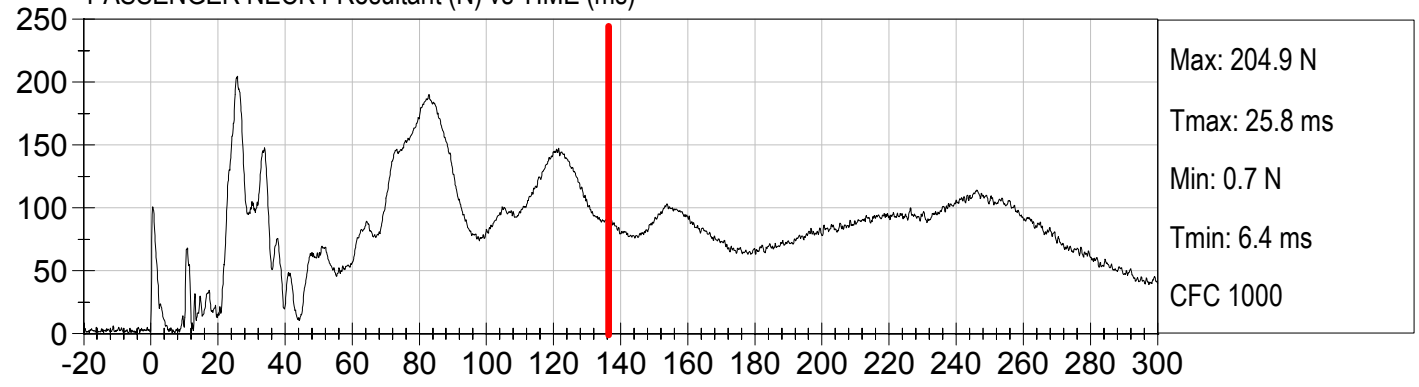
PASSENGER NECK FY (N) vs TIME (ms)



PASSENGER NECK FZ (N) vs TIME (ms)



PASSENGER NECK FResultant (N) vs TIME (ms)

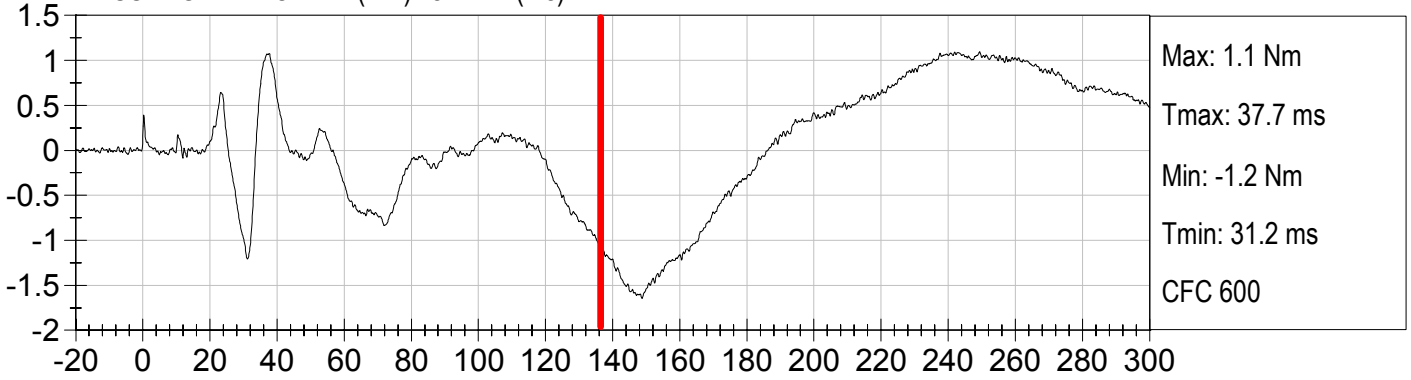


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307)(12 month Century Encore)

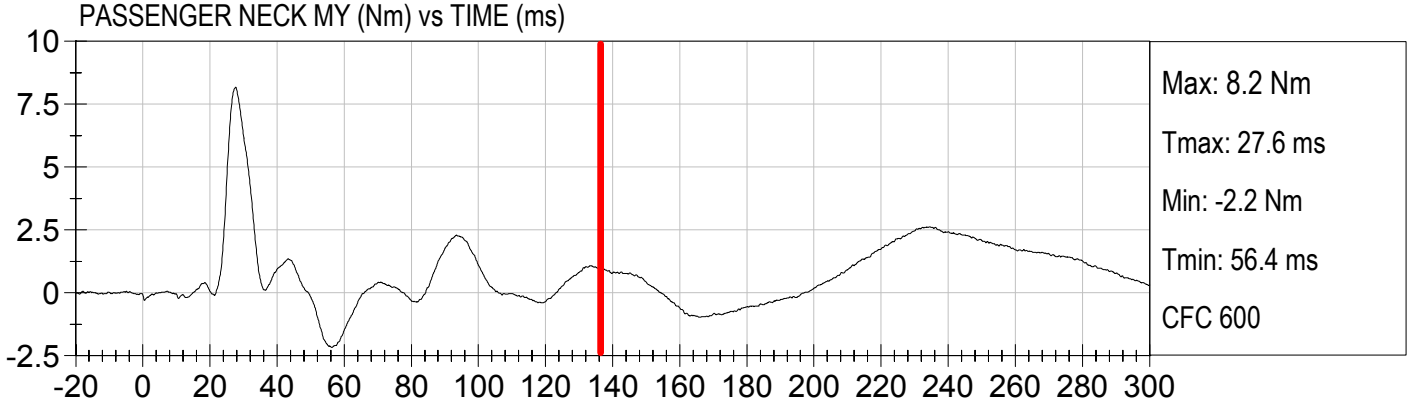
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 135ms

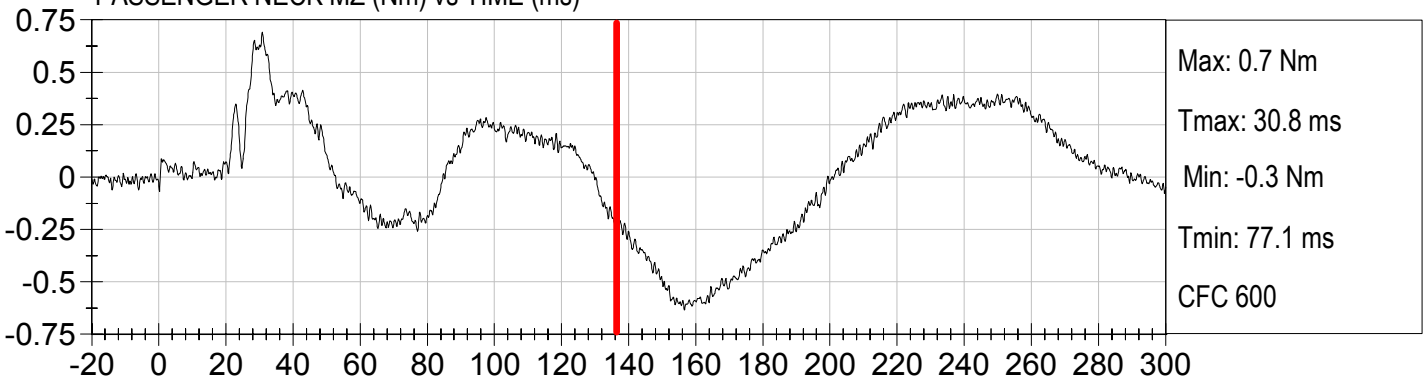
PASSENGER NECK MX (Nm) vs TIME (ms)



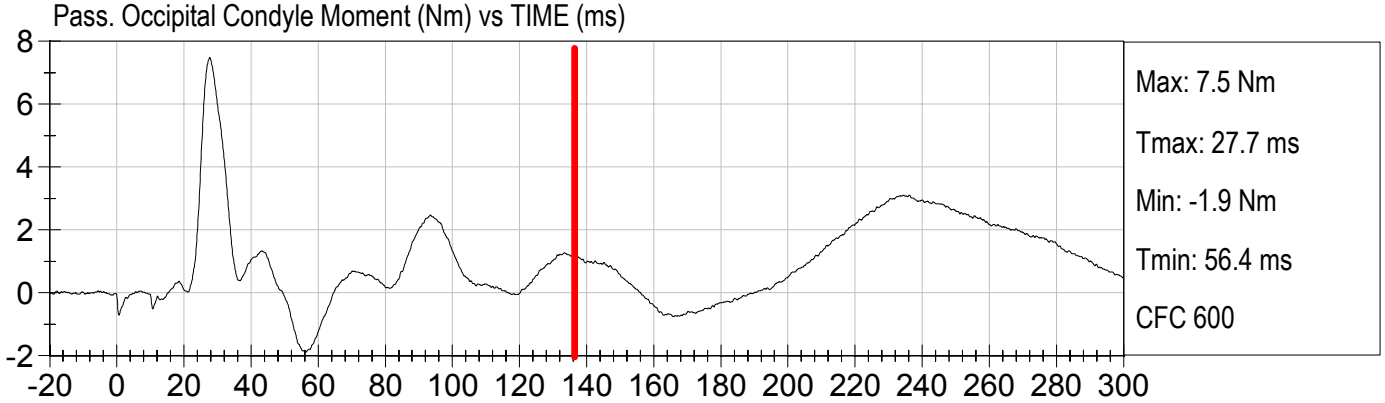
PASSENGER NECK MY (Nm) vs TIME (ms)



PASSENGER NECK MZ (Nm) vs TIME (ms)



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

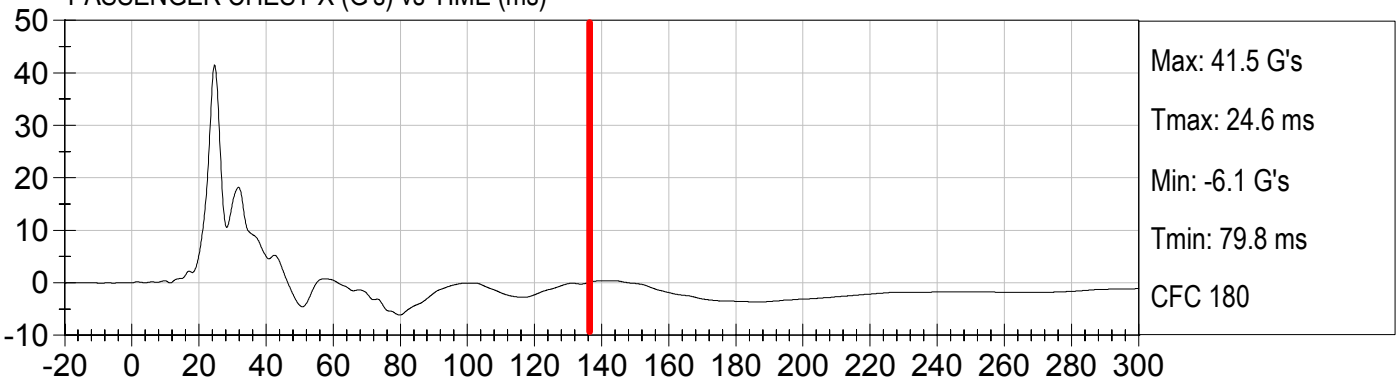


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307)(12 month Century Encore)

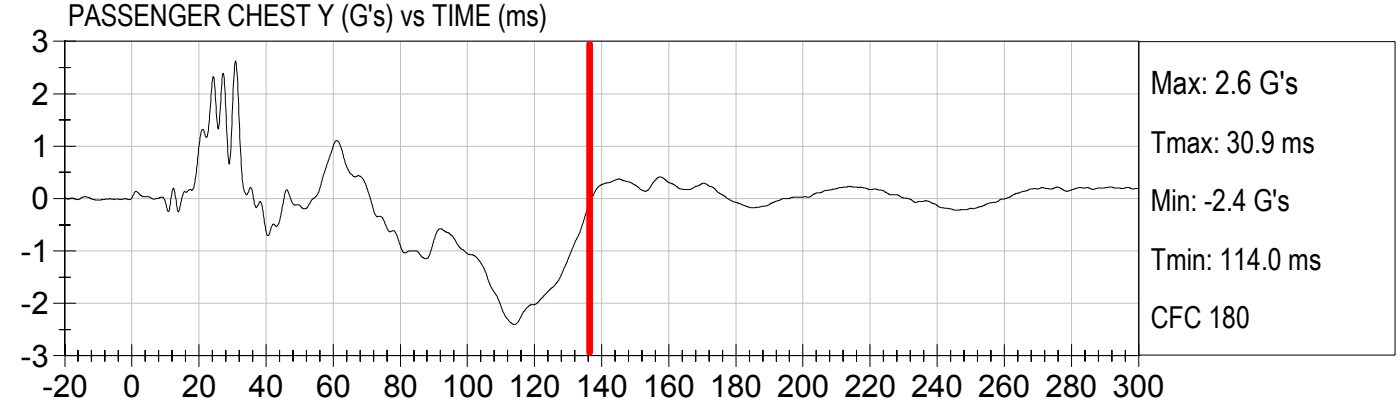
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 135ms

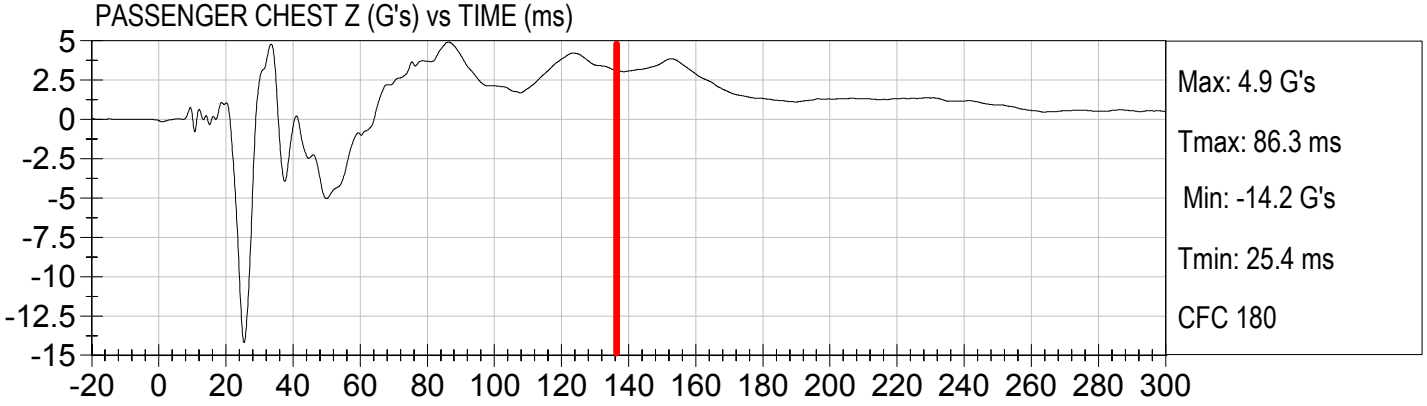
PASSENGER CHEST X (G's) vs TIME (ms)



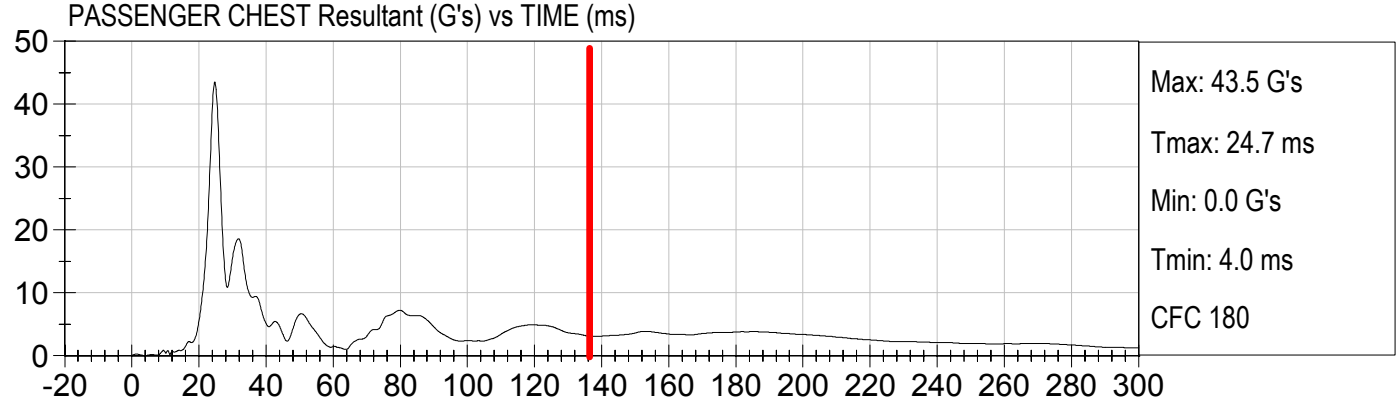
PASSENGER CHEST Y (G's) vs TIME (ms)



PASSENGER CHEST Z (G's) vs TIME (ms)



PASSENGER CHEST Resultant (G's) vs TIME (ms)

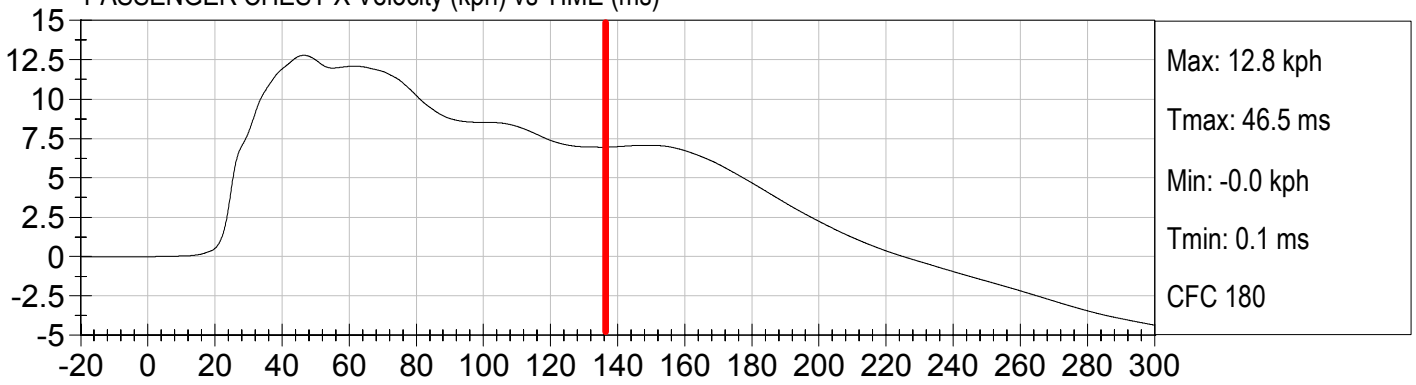


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307)(12 month Century Encore)

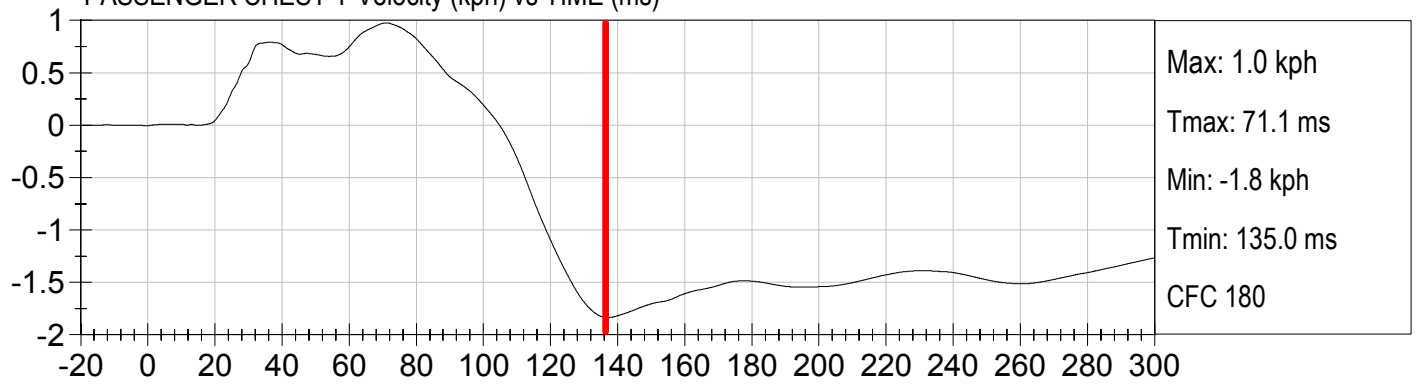
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 135ms

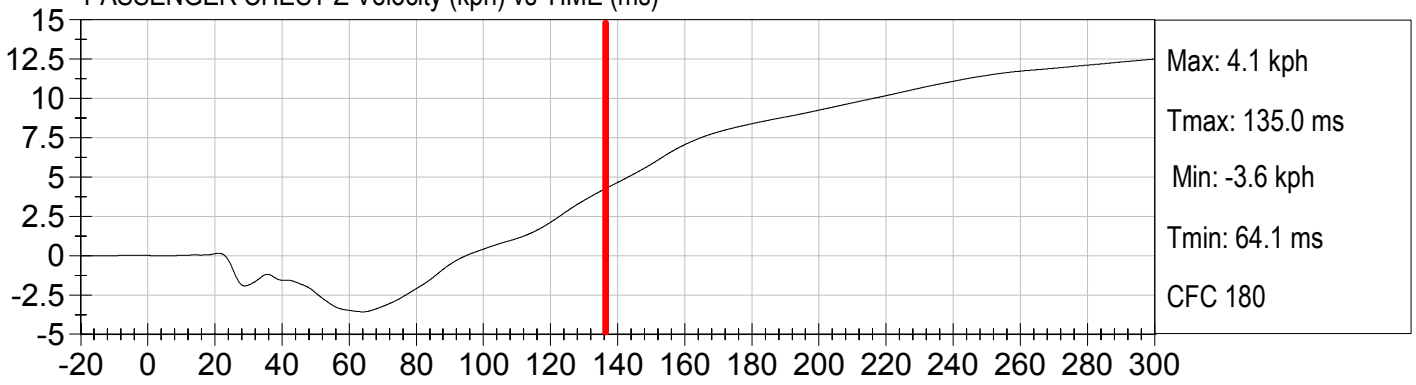
PASSENGER CHEST X Velocity (kph) vs TIME (ms)



PASSENGER CHEST Y Velocity (kph) vs TIME (ms)



PASSENGER CHEST Z Velocity (kph) vs TIME (ms)

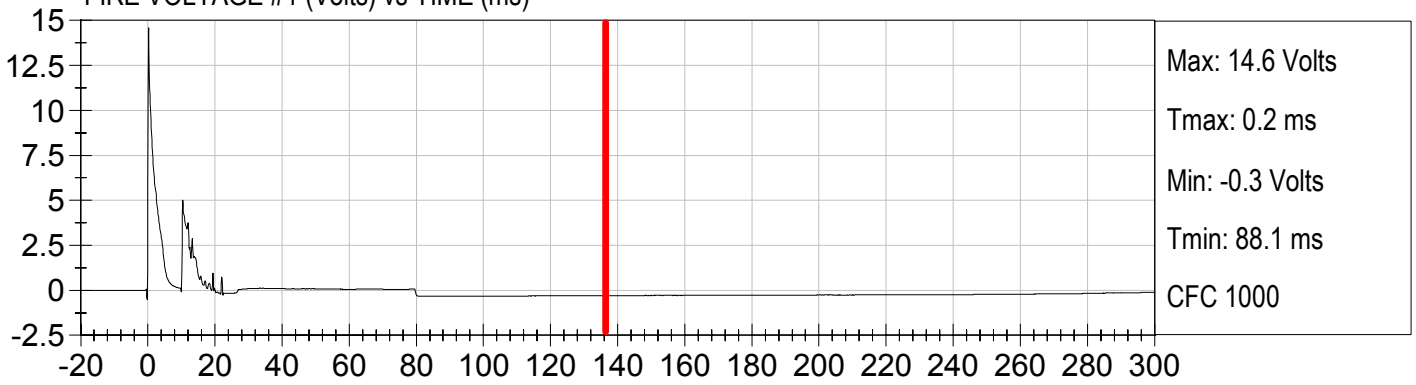


LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307)(12 month Century Encore)

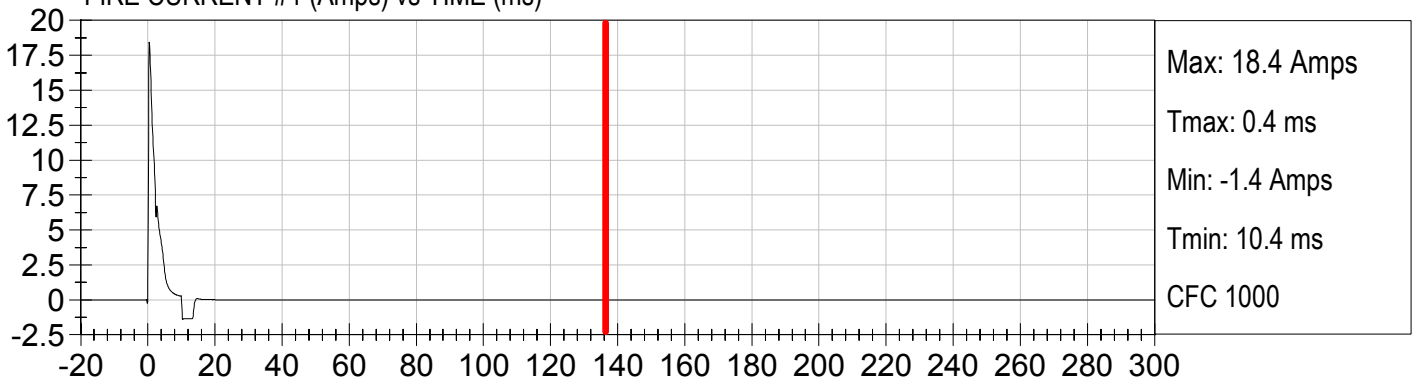
Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 135ms

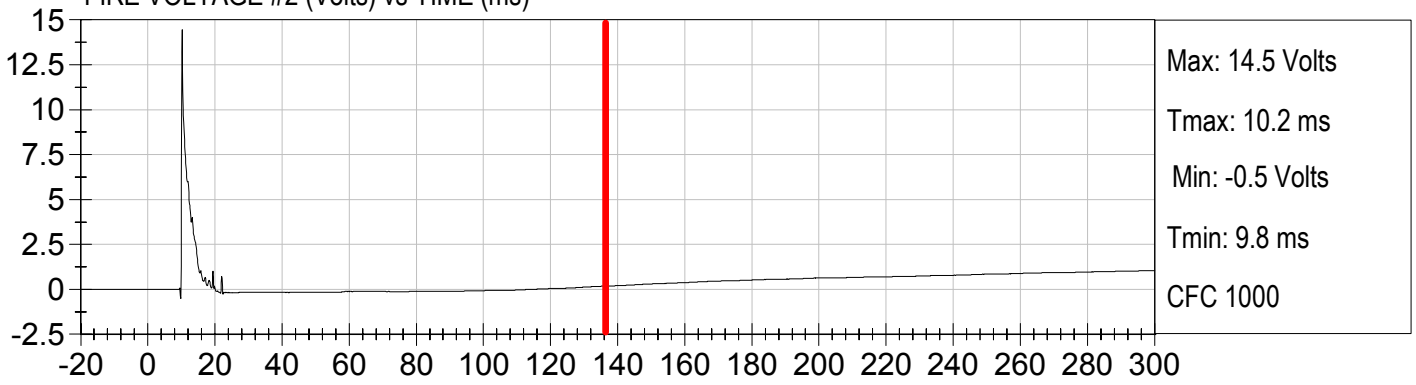
FIRE VOLTAGE #1 (Volts) vs TIME (ms)



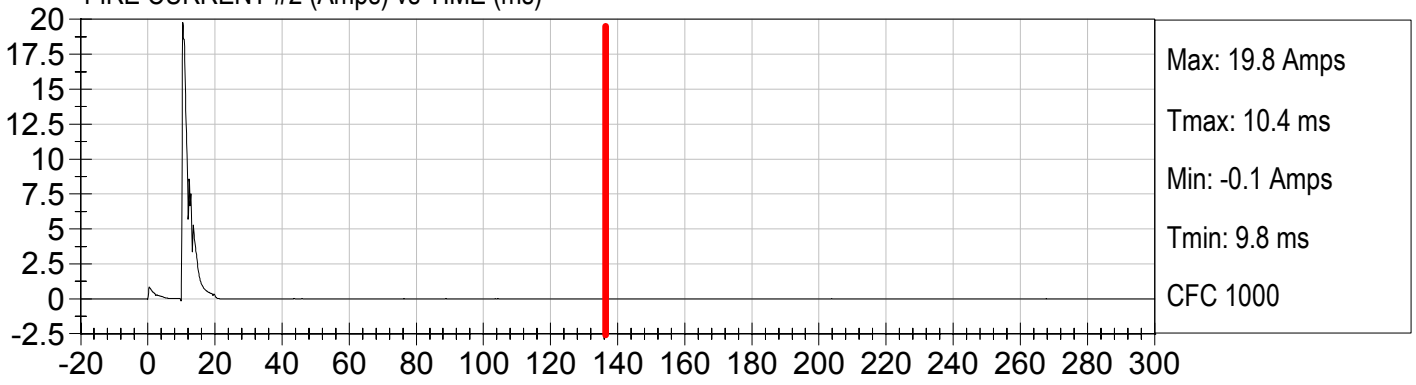
FIRE CURRENT #1 (Amps) vs TIME (ms)



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



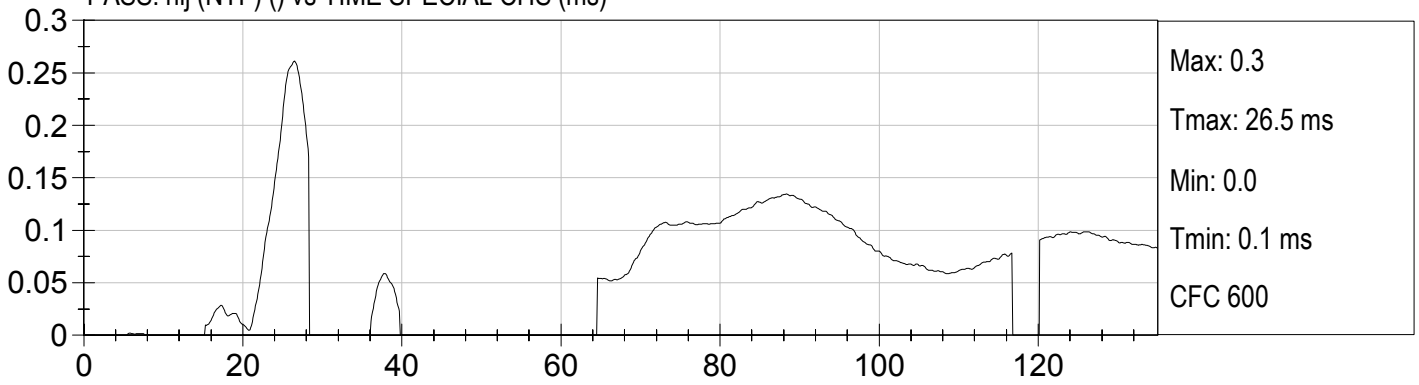
FIRE CURRENT #2 (Amps) vs TIME (ms)



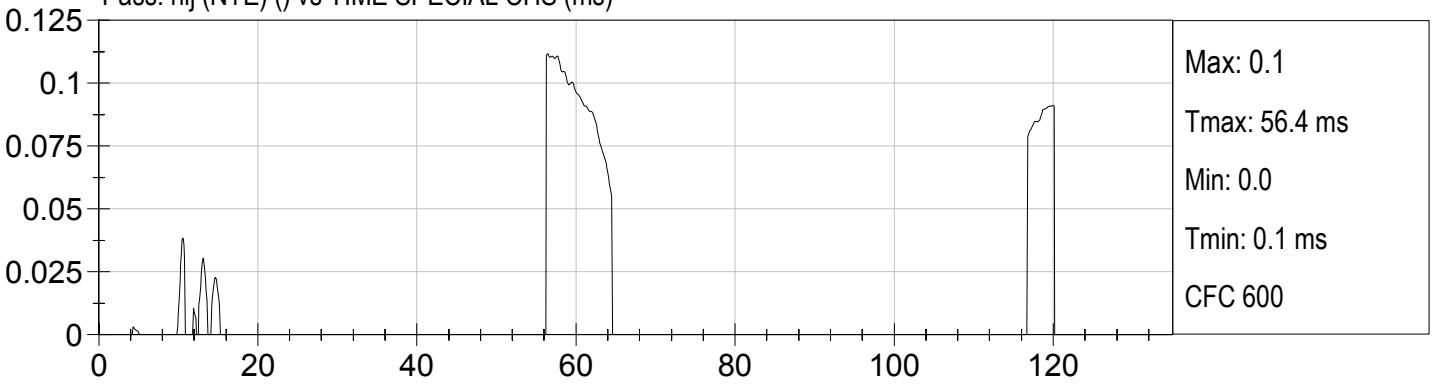
LOW RISK DEPLOYMENT
2007 Dodge Charger (C70307)(12 month Century Encore)

Test Date: 07/25/07
Speed: 0.0 mph (0.0 km/h)

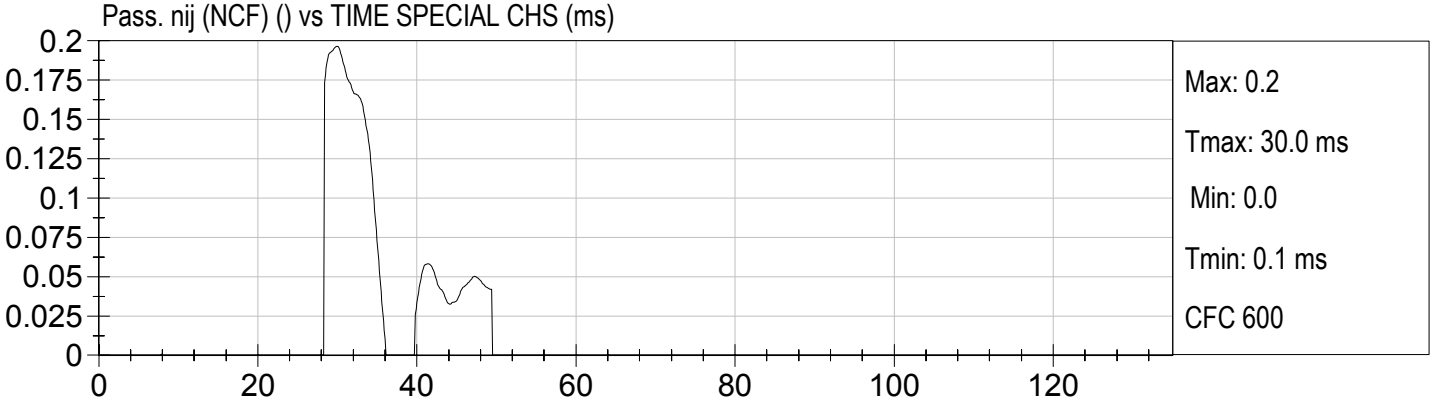
PASS. nij (NTF) () vs TIME SPECIAL CHS (ms)



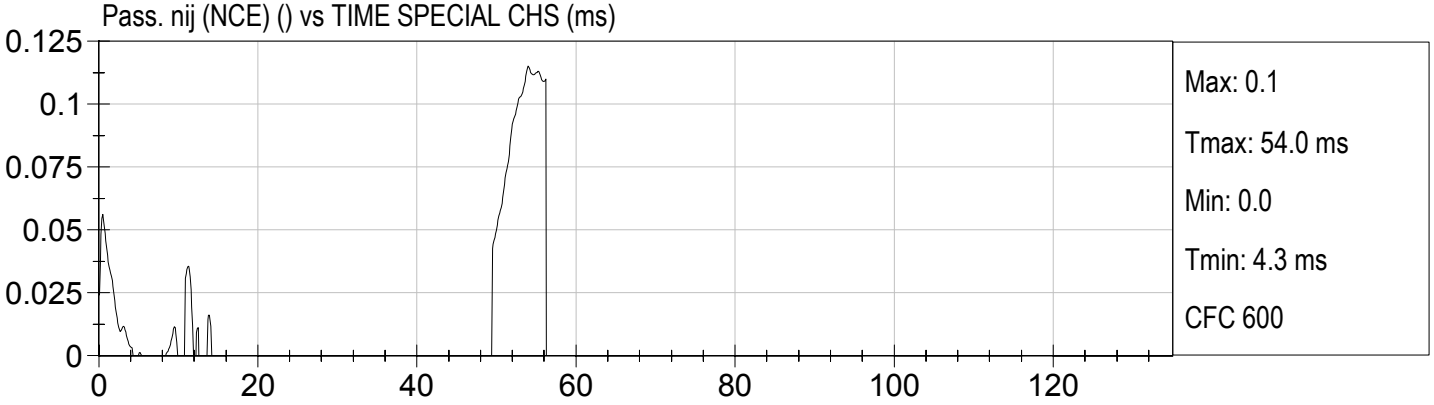
Pass. nij (NTE) () vs TIME SPECIAL CHS (ms)



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



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

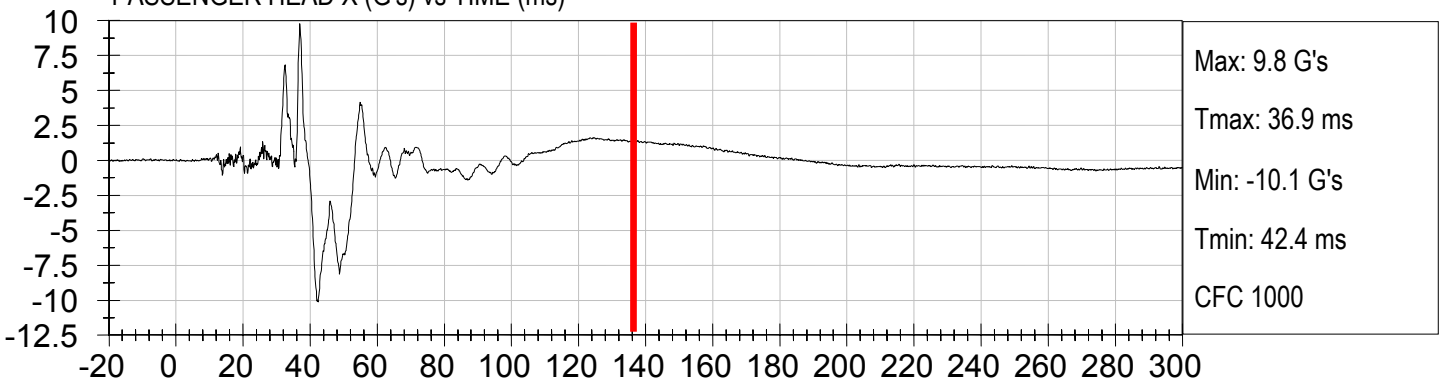


LOW RISK DEPLOYMENT Test Date: 08/07/07

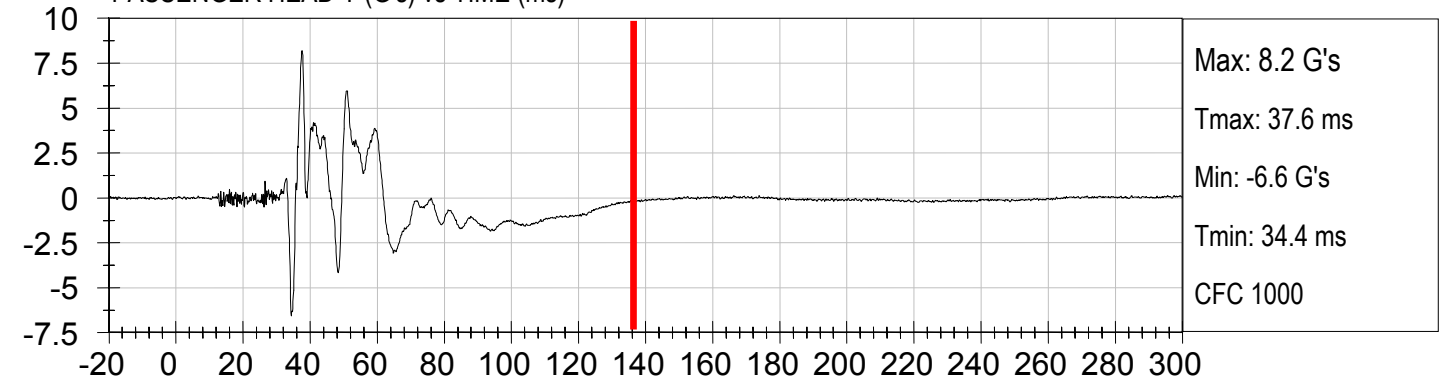
2007 Dodge Charger (C70307)(12 month Britax Handle W/ Care) Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 135ms

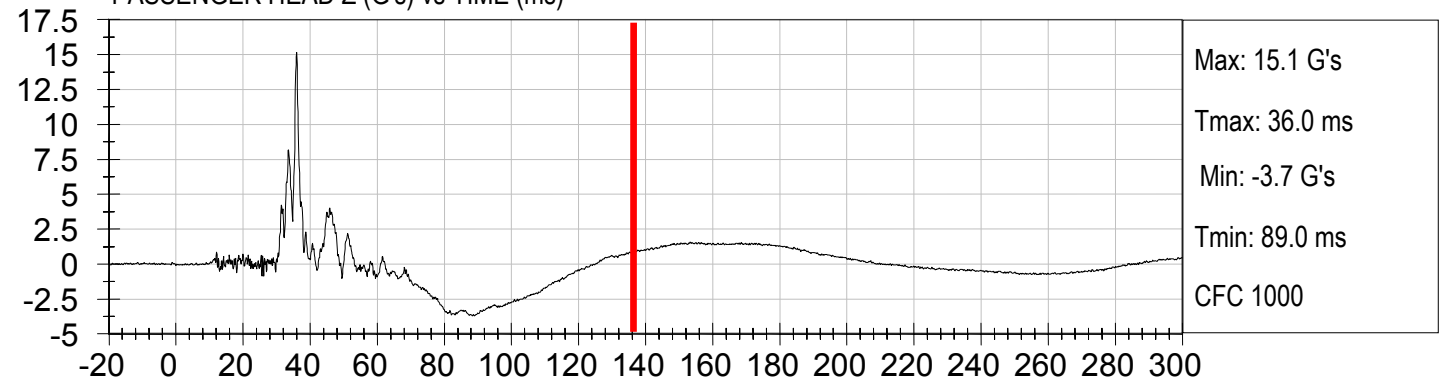
PASSENGER HEAD X (G's) vs TIME (ms)



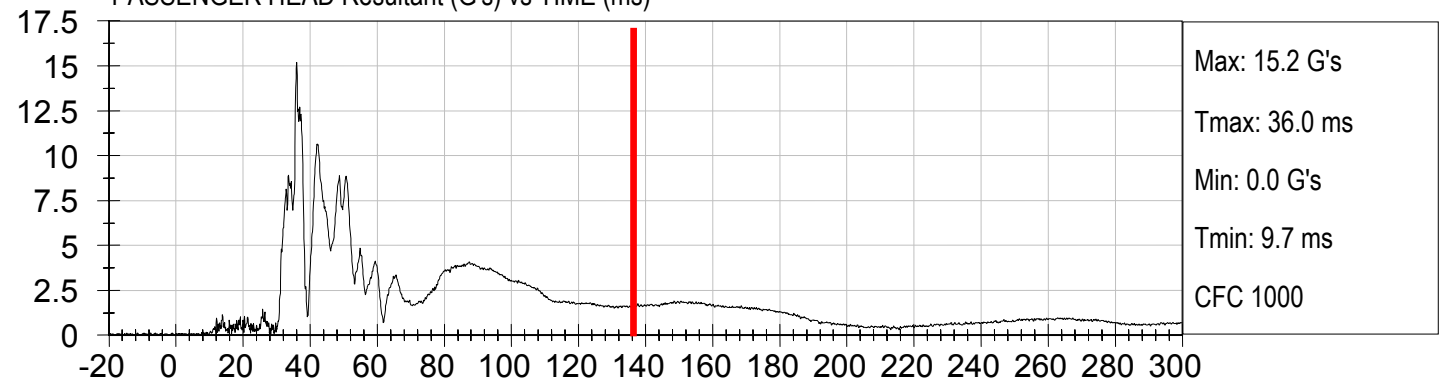
PASSENGER HEAD Y (G's) vs TIME (ms)



PASSENGER HEAD Z (G's) vs TIME (ms)



PASSENGER HEAD Resultant (G's) vs TIME (ms)

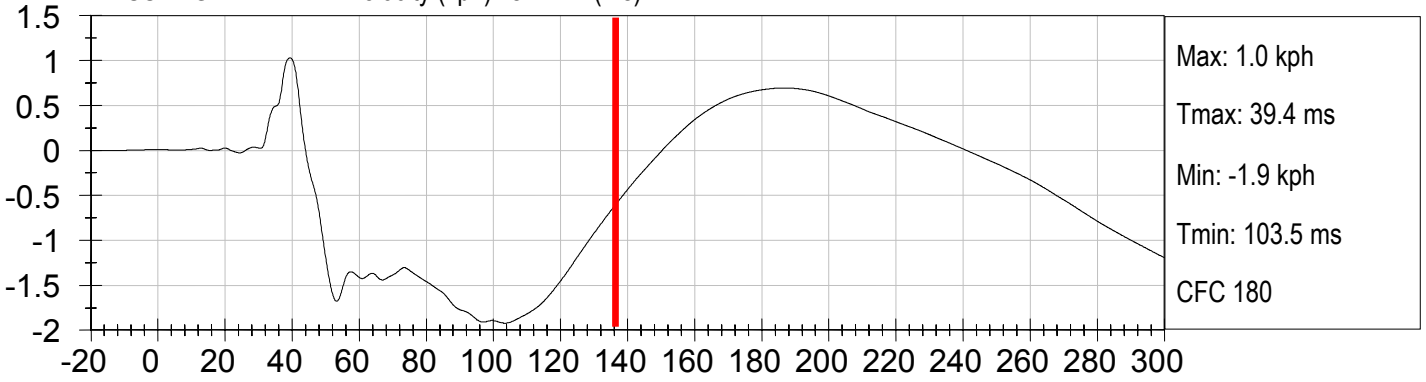


LOW RISK DEPLOYMENT Test Date: 08/07/07

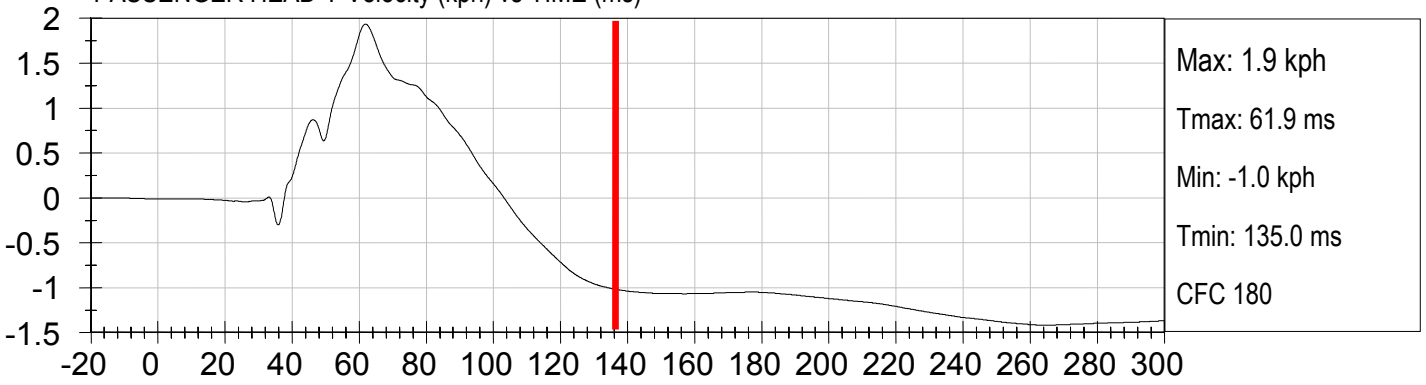
2007 Dodge Charger (C70307)(12 month Britax Handle W/ Care) Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 135ms

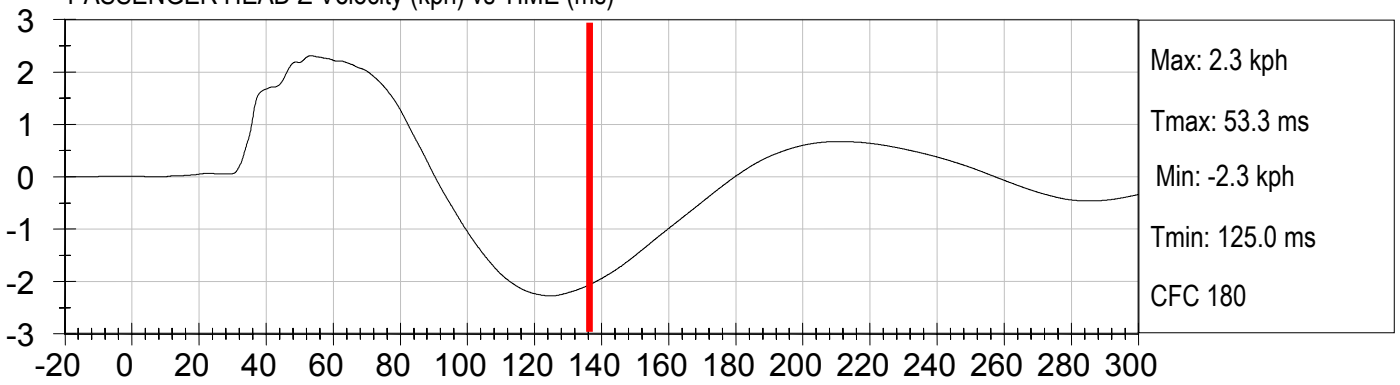
PASSENGER HEAD X Velocity (kph) vs TIME (ms)



PASSENGER HEAD Y Velocity (kph) vs TIME (ms)



PASSENGER HEAD Z Velocity (kph) vs TIME (ms)

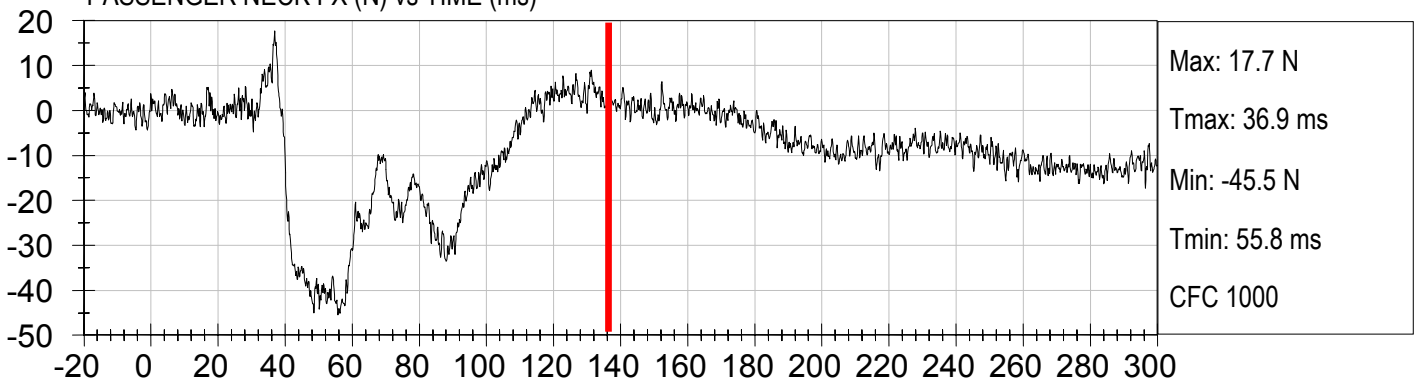


LOW RISK DEPLOYMENT Test Date: 08/07/07

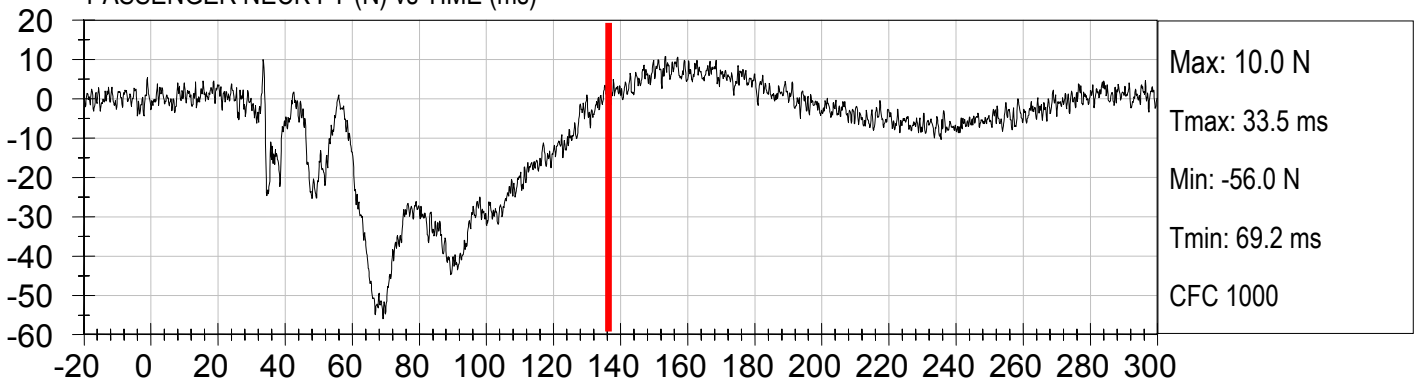
2007 Dodge Charger (C70307)(12 month Britax Handle W/ Care) Speed 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 135ms

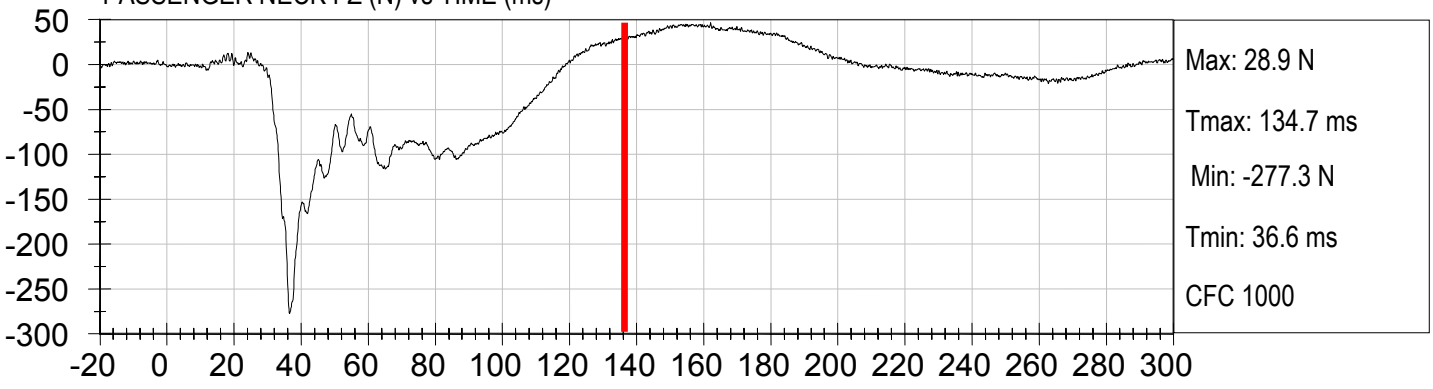
PASSENGER NECK FX (N) vs TIME (ms)



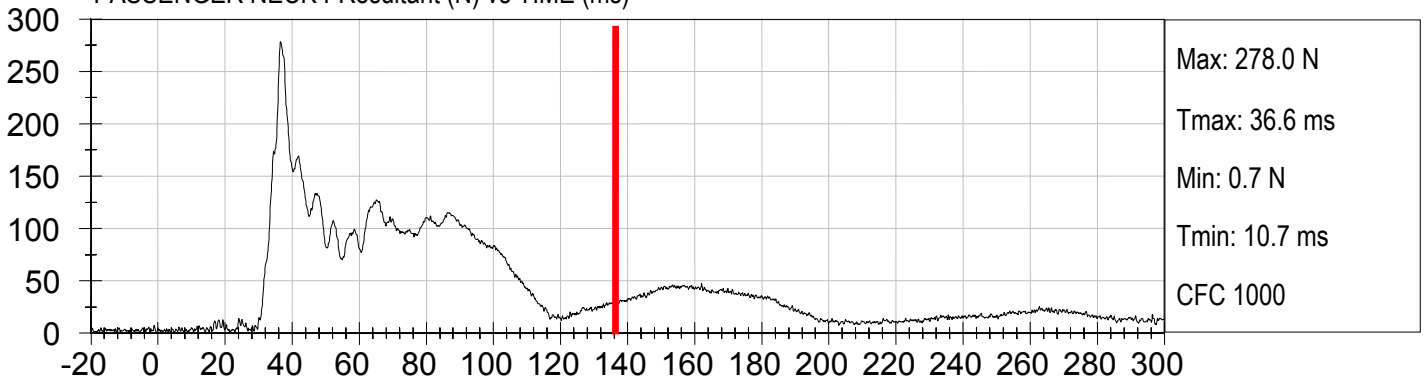
PASSENGER NECK FY (N) vs TIME (ms)



PASSENGER NECK FZ (N) vs TIME (ms)



PASSENGER NECK FResultant (N) vs TIME (ms)

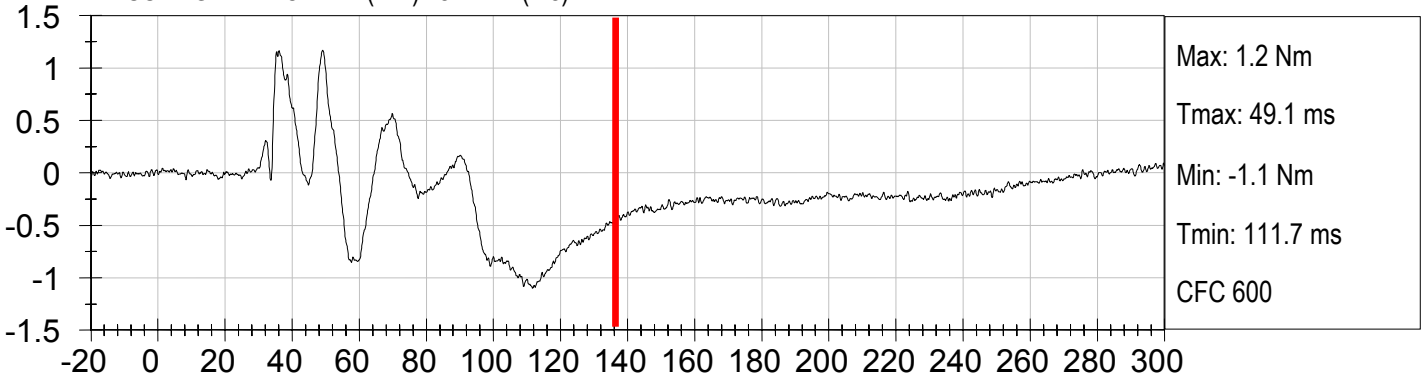


LOW RISK DEPLOYMENT Test Date: 08/07/07

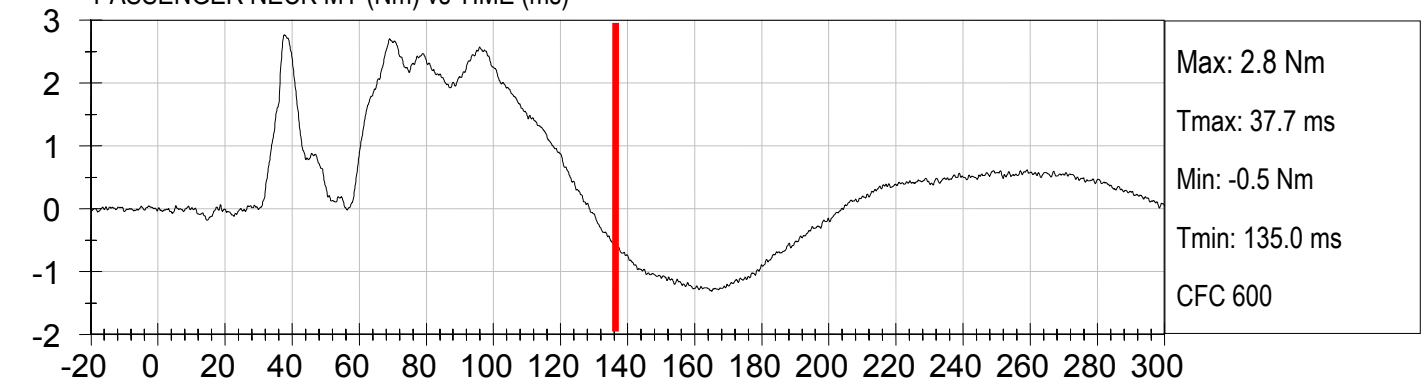
2007 Dodge Charger (C70307)(12 month Britax Handle W/ Care) Speed 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 135ms

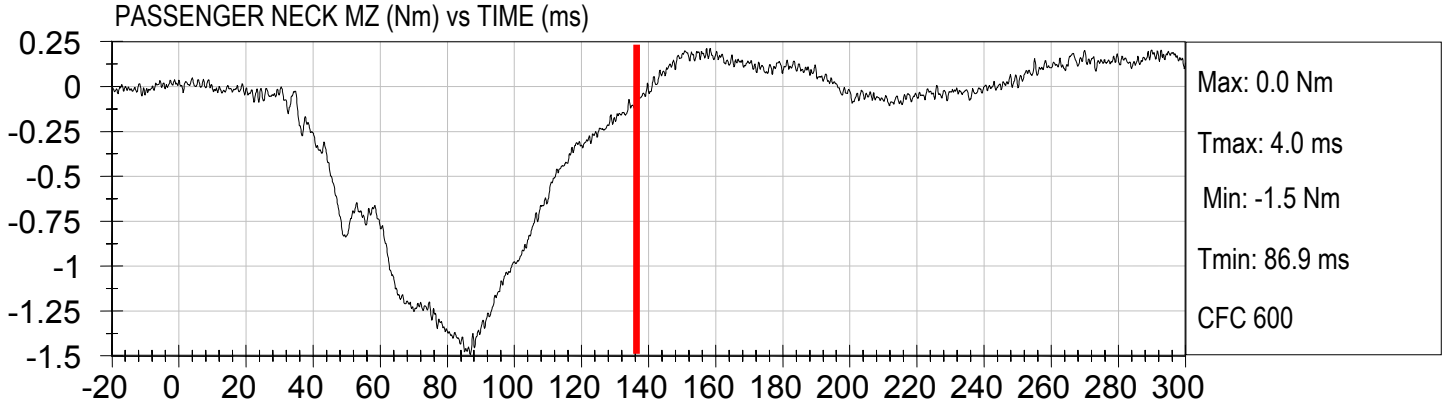
PASSENGER NECK MX (Nm) vs TIME (ms)



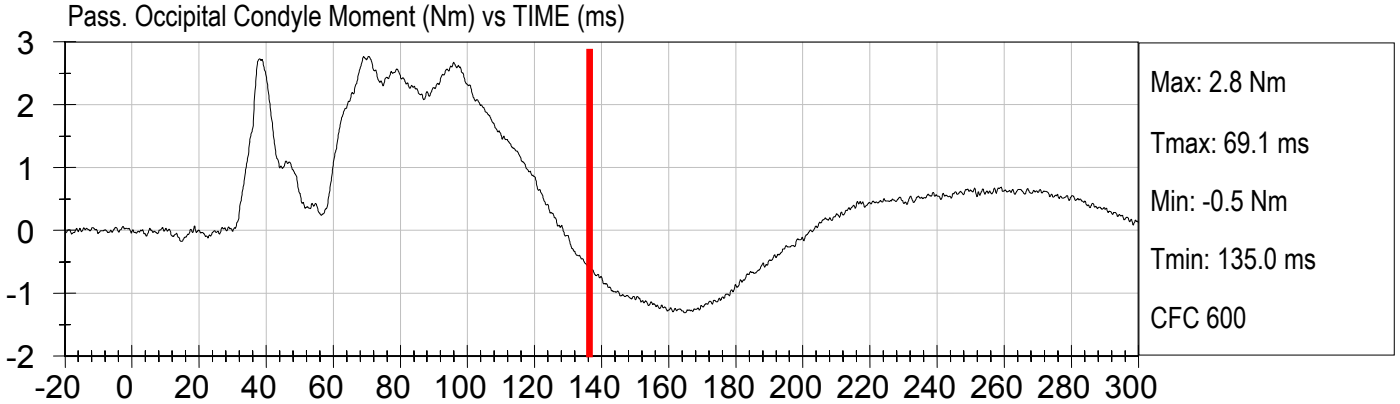
PASSENGER NECK MY (Nm) vs TIME (ms)



PASSENGER NECK MZ (Nm) vs TIME (ms)



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

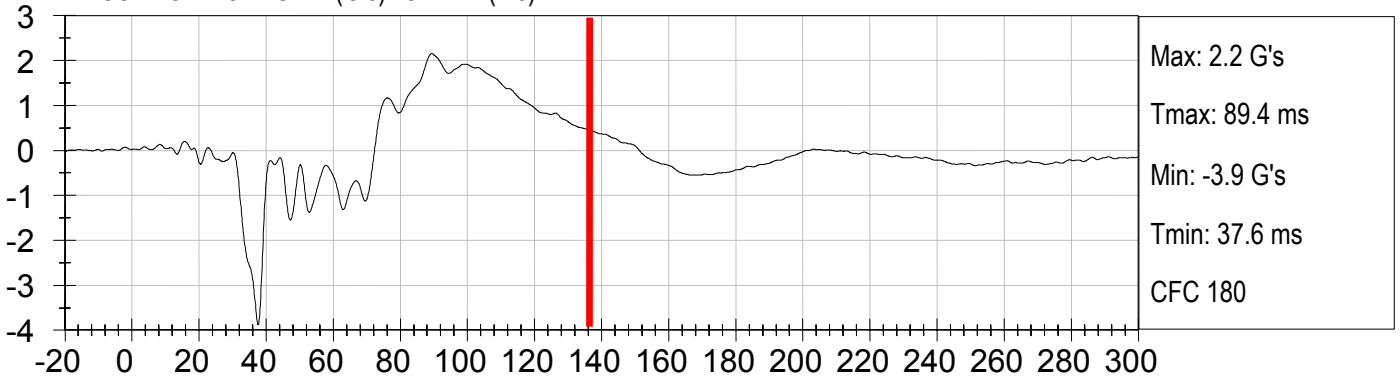


LOW RISK DEPLOYMENT Test Date: 08/07/07

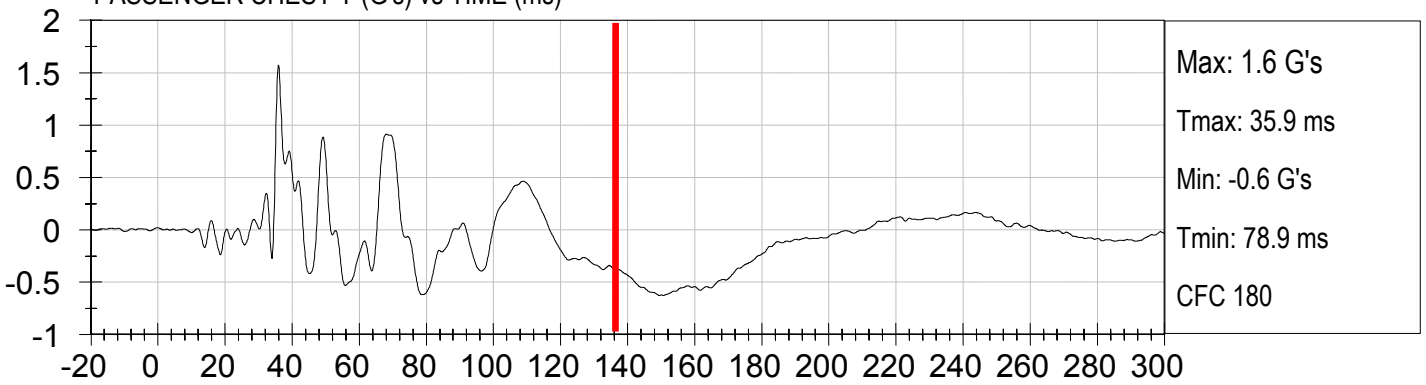
2007 Dodge Charger (C70307)(12 month Britax Handle W/ Care) Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 135ms

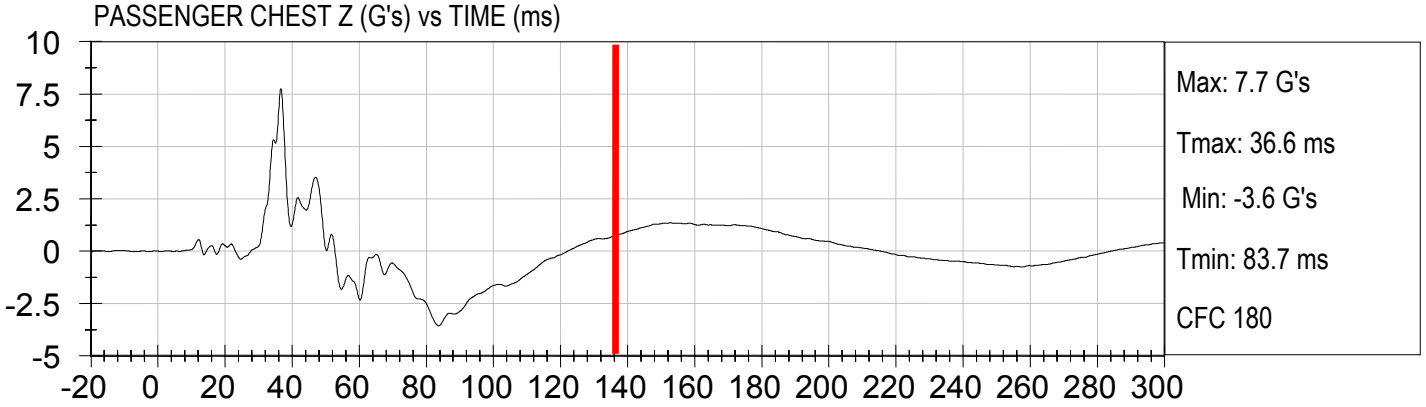
PASSENGER CHEST X (G's) vs TIME (ms)



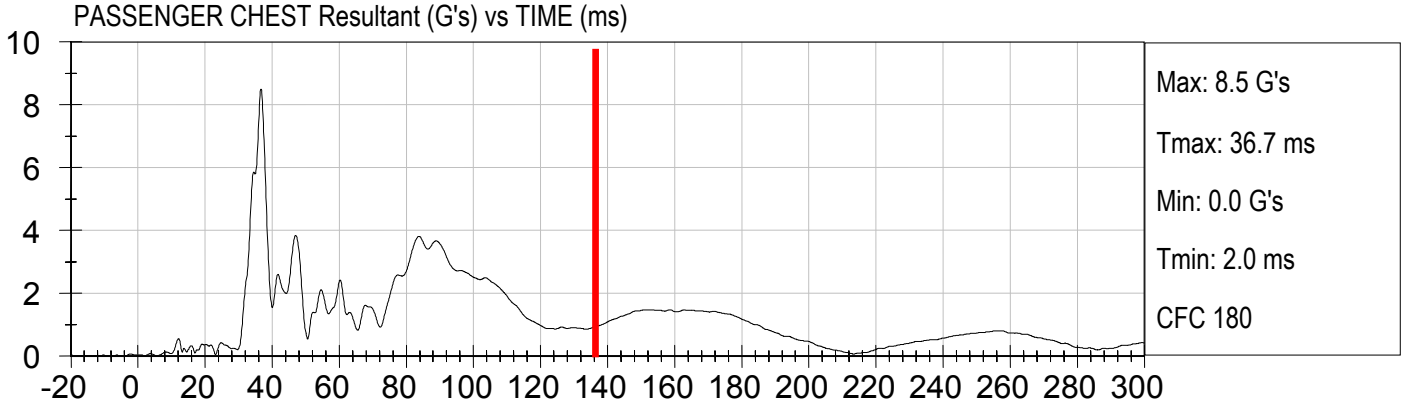
PASSENGER CHEST Y (G's) vs TIME (ms)



PASSENGER CHEST Z (G's) vs TIME (ms)



PASSENGER CHEST Resultant (G's) vs TIME (ms)

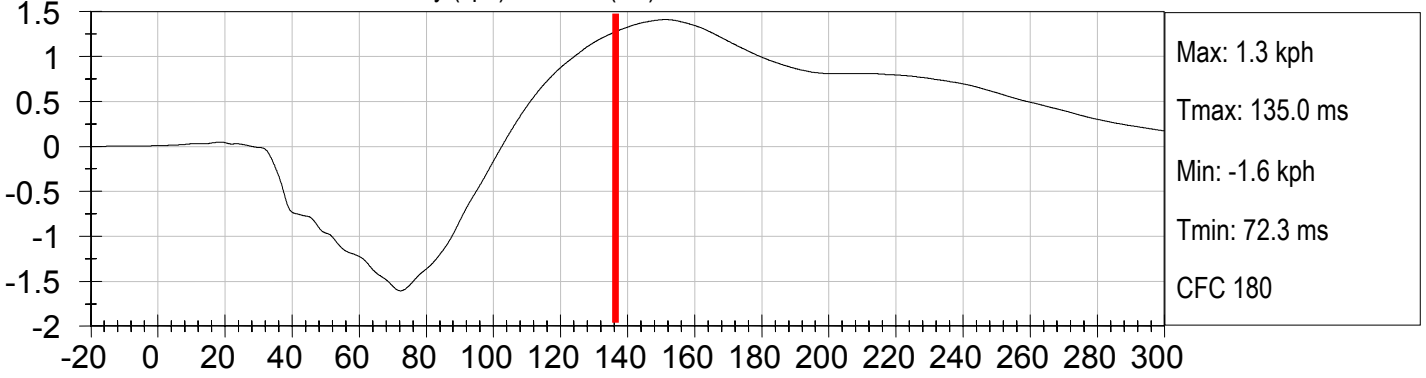


LOW RISK DEPLOYMENT Test Date: 08/07/07

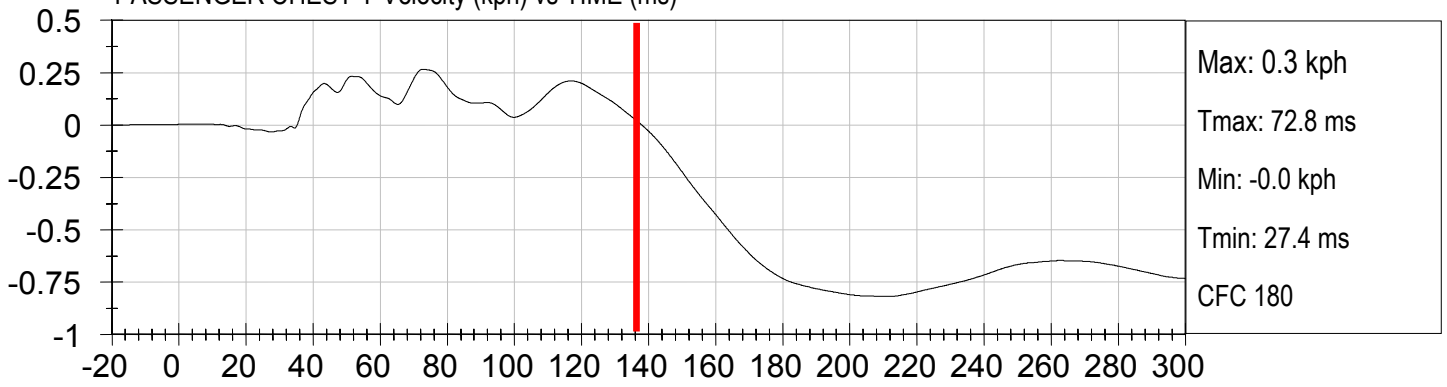
2007 Dodge Charger (C70307)(12 month Britax Handle W/ Care) Speed: 0.0 mph (0.0 km.h)

Injury Values Calculated between 0ms and 135ms

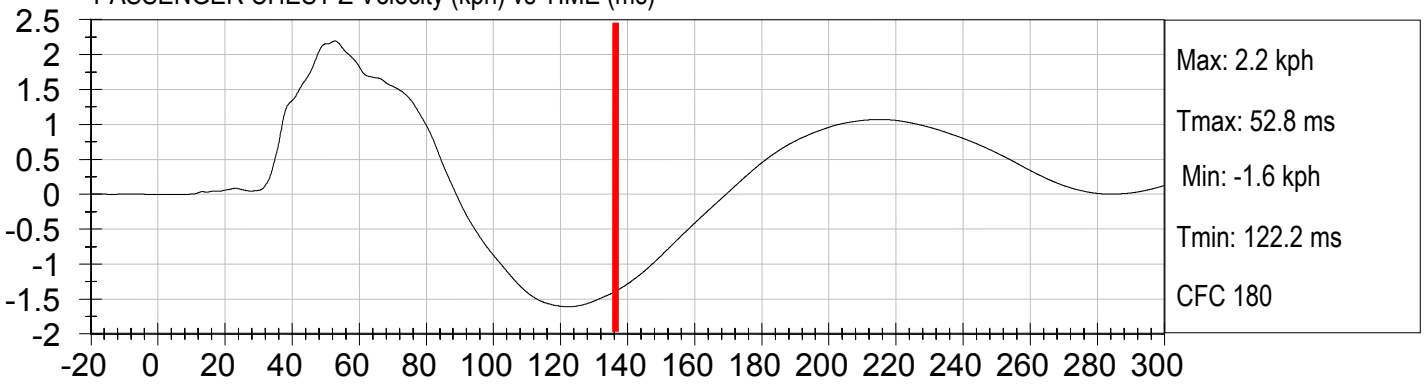
PASSENGER CHEST X Velocity (kph) vs TIME (ms)



PASSENGER CHEST Y Velocity (kph) vs TIME (ms)



PASSENGER CHEST Z Velocity (kph) vs TIME (ms)

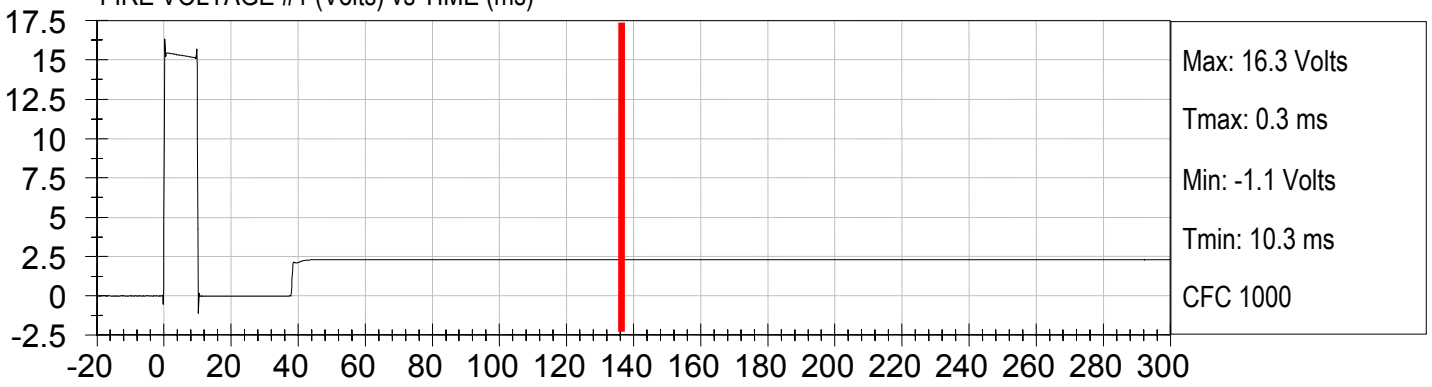


LOW RISK DEPLOYMENT Test Date: 08/07/07

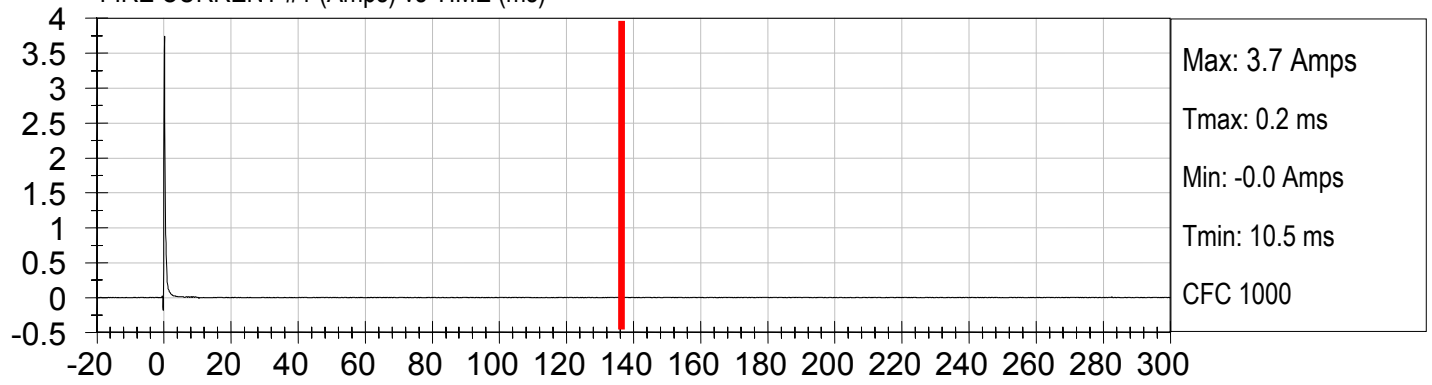
2007 Dodge Charger (C70307)(12 month Britax Handle W/ Care) Speed: 0.0 mph (0.0 km/h)

Injury Values Calculated between 0ms and 135ms

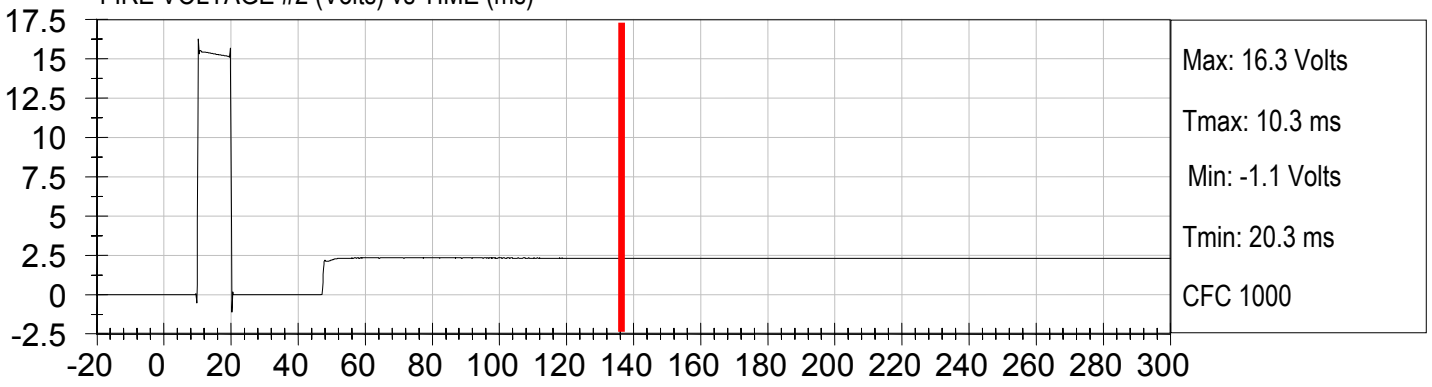
FIRE VOLTAGE #1 (Volts) vs TIME (ms)



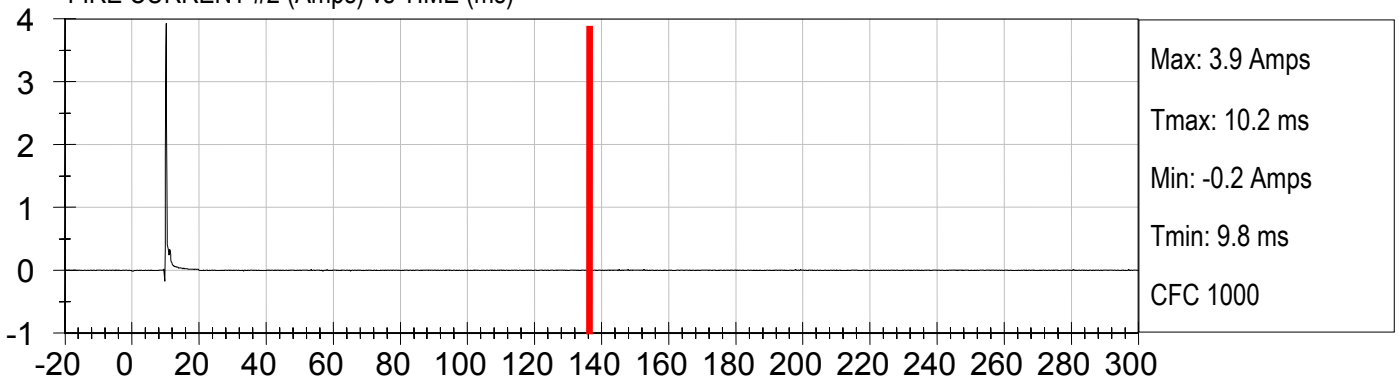
FIRE CURRENT #1 (Amps) vs TIME (ms)



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

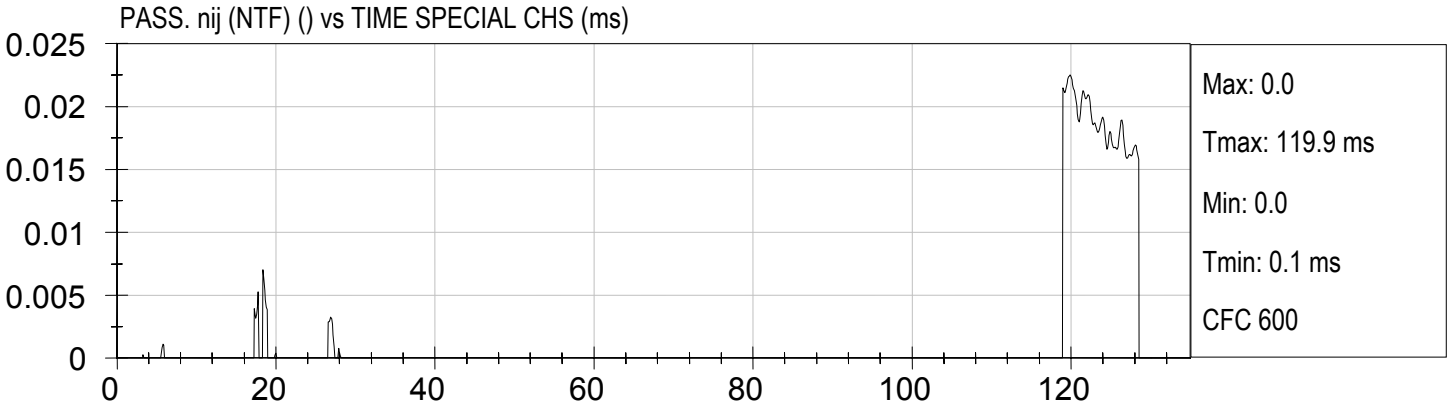


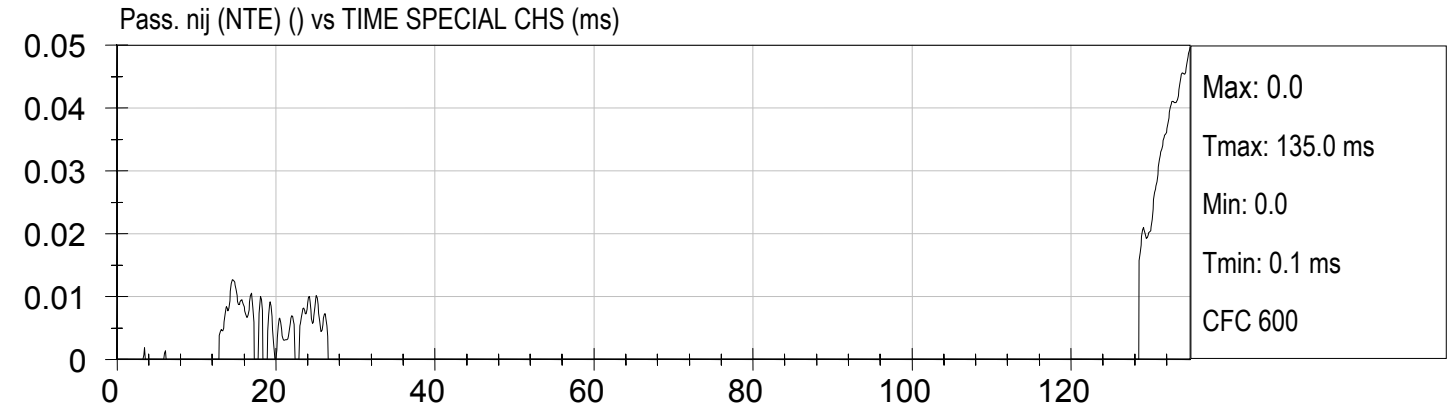
FIRE CURRENT #2 (Amps) vs TIME (ms)

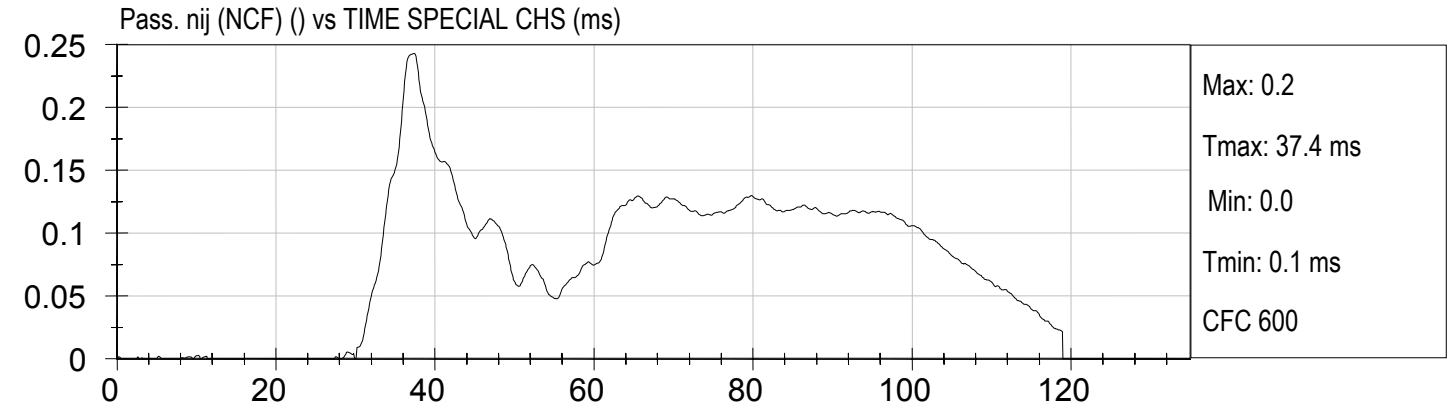


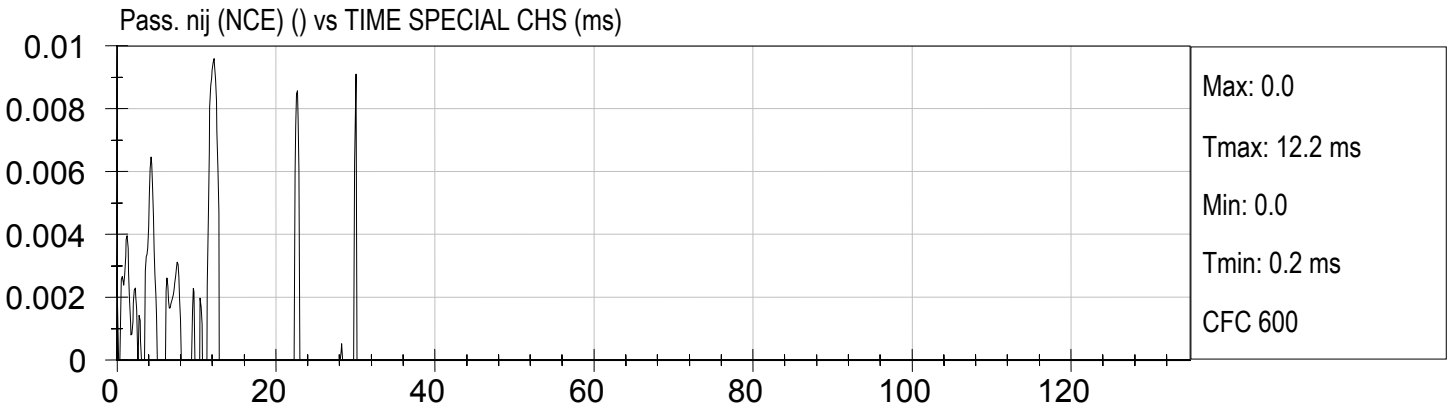
LOW RISK DEPLOYMENT Test Date: 08/07/07

2007 Dodge Charger (C70307)(12 month Britax Handle W/ Care) Speed: 0.0 mph (0.0 km/h)









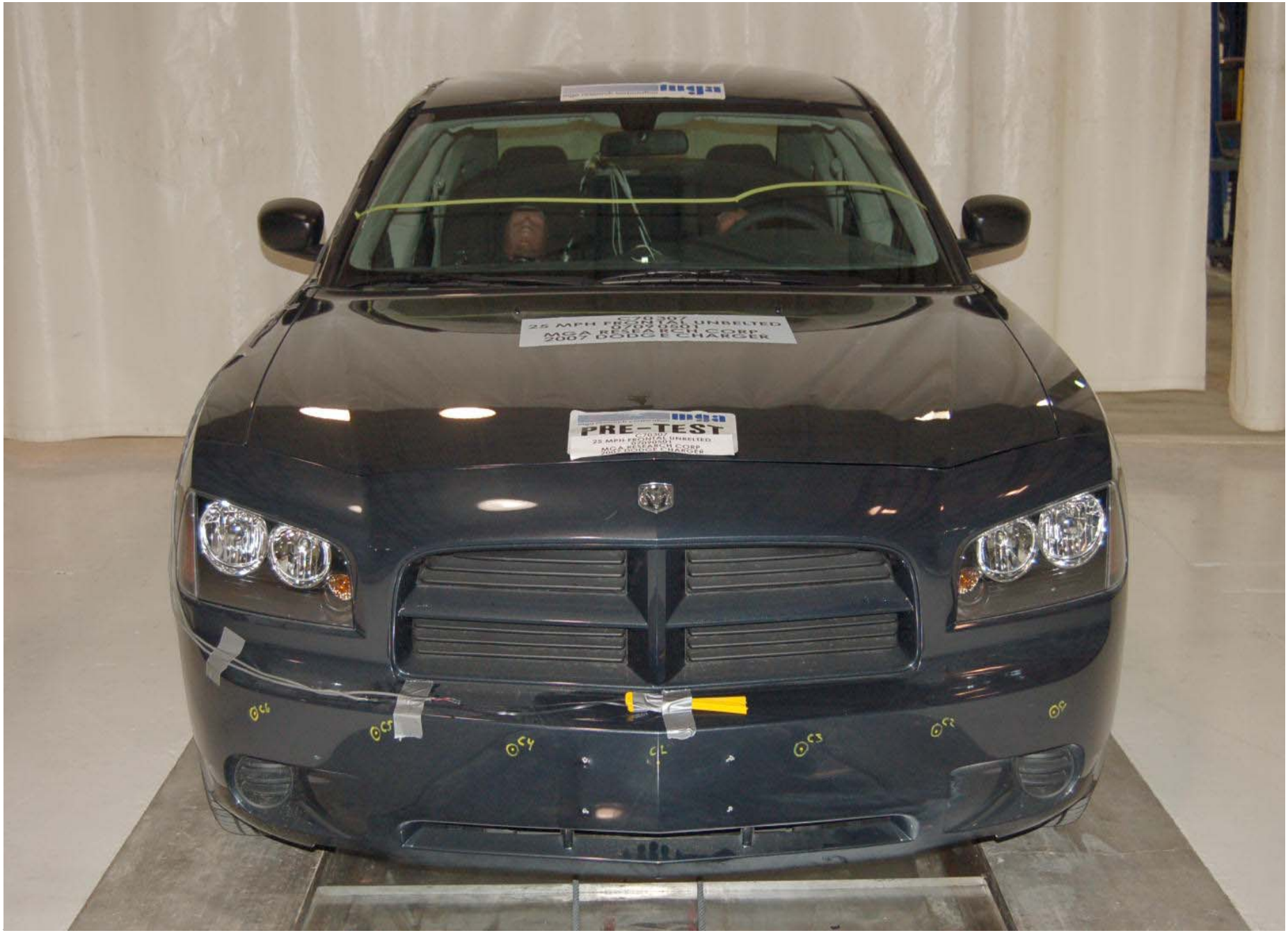
APPENDIX C

CRASH TEST PHOTOGRAPHS

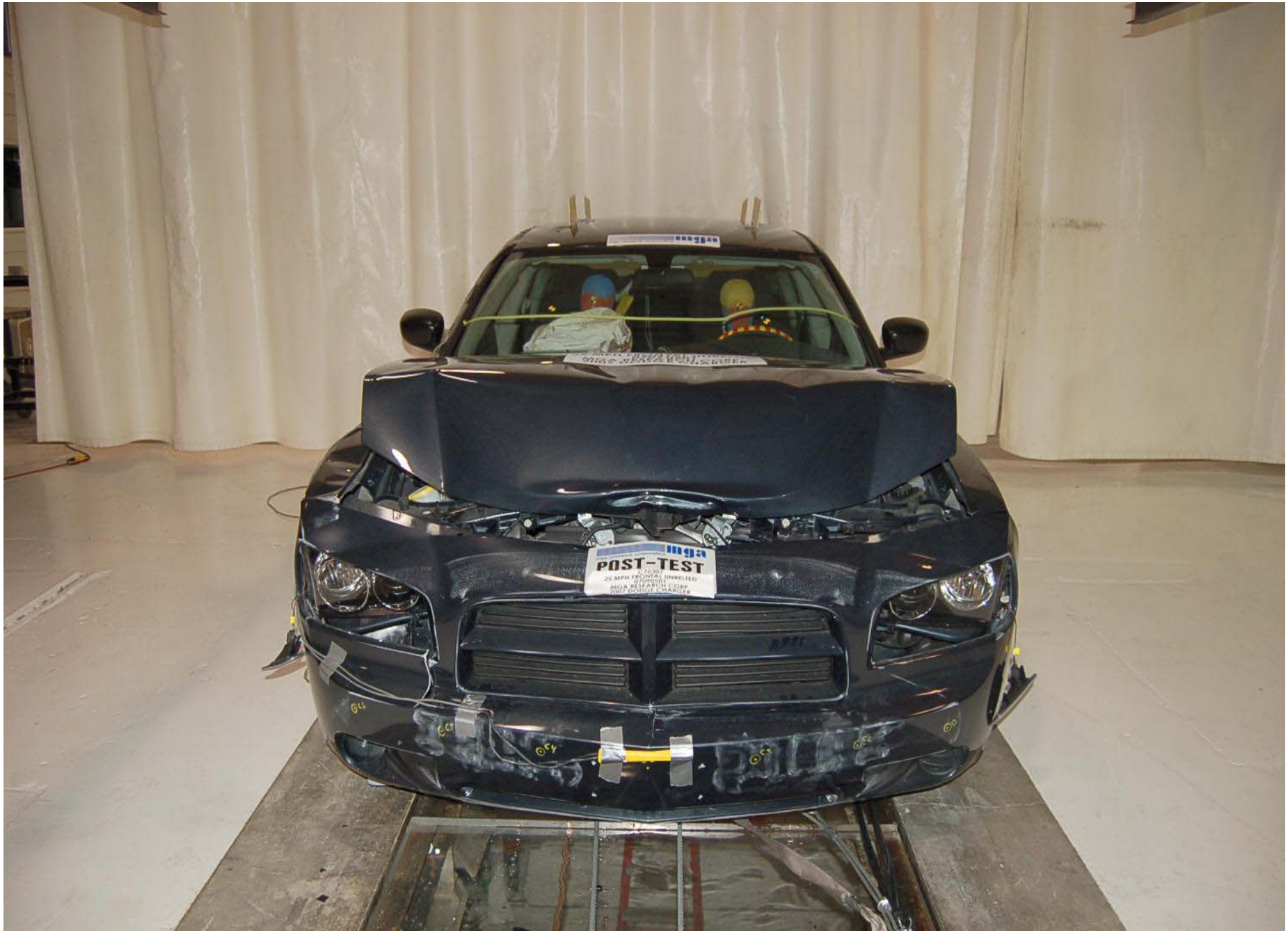
TABLE OF PHOTOGRAPHS

Vehicle Certification Label

Tire Placard



Pre-Test Front View of Test Vehicle



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 Right Front Three-Quarter View of Test Vehicle

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

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

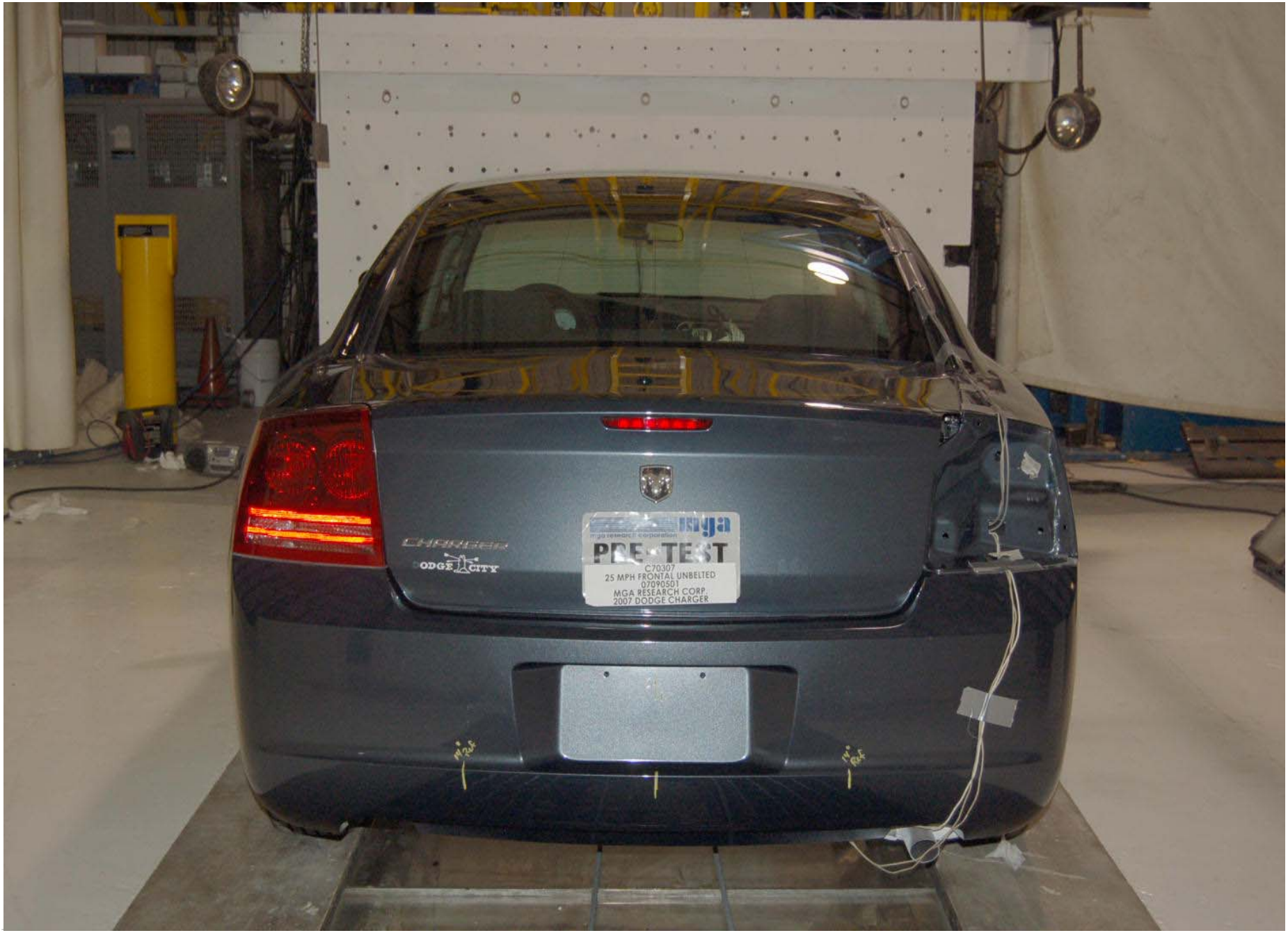
Post-Test Left Front Three-Quarter View of Test Vehicle

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

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

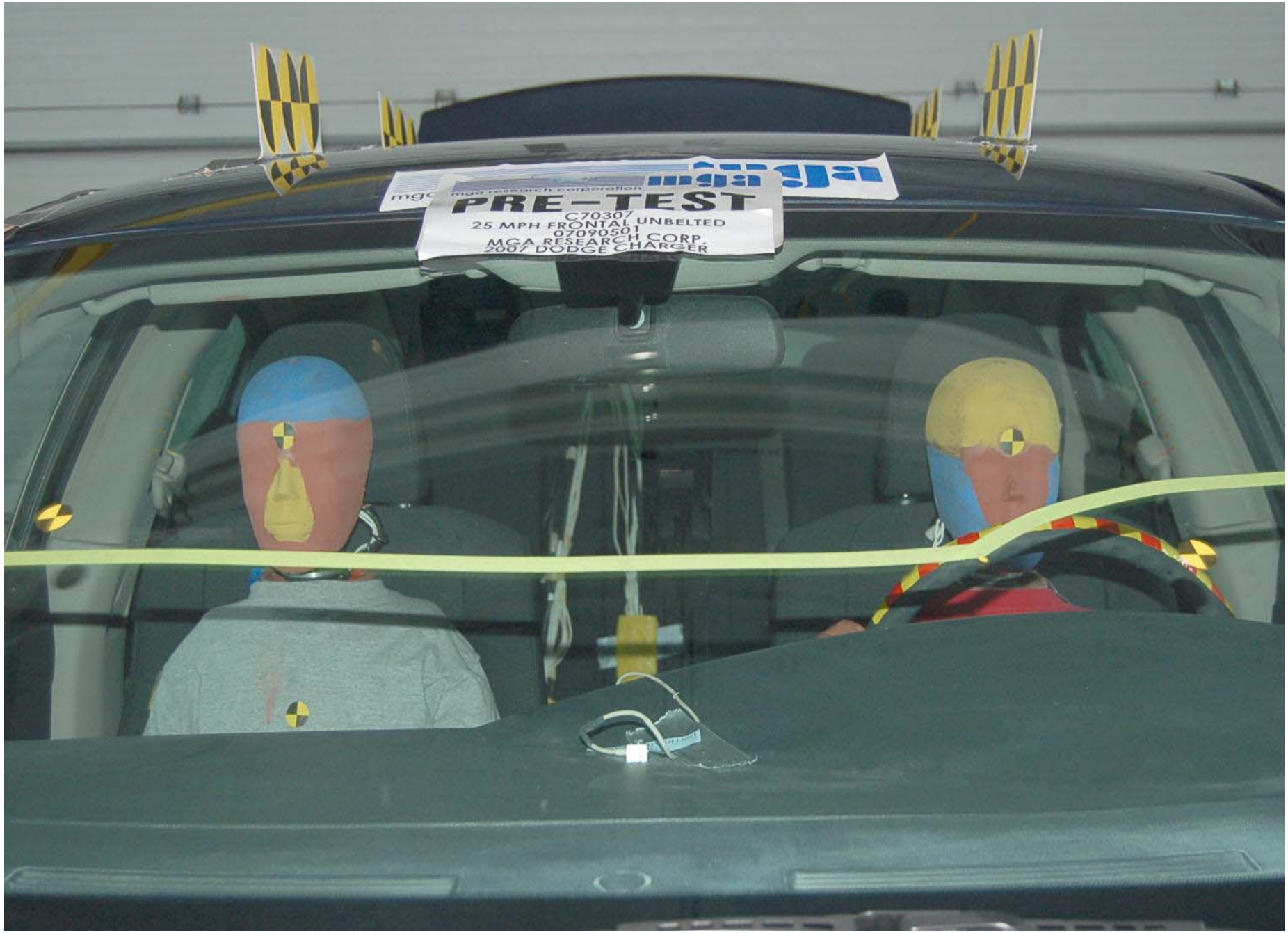
Pre-Test Left Rear Three-Quarter View of Test Vehicle

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

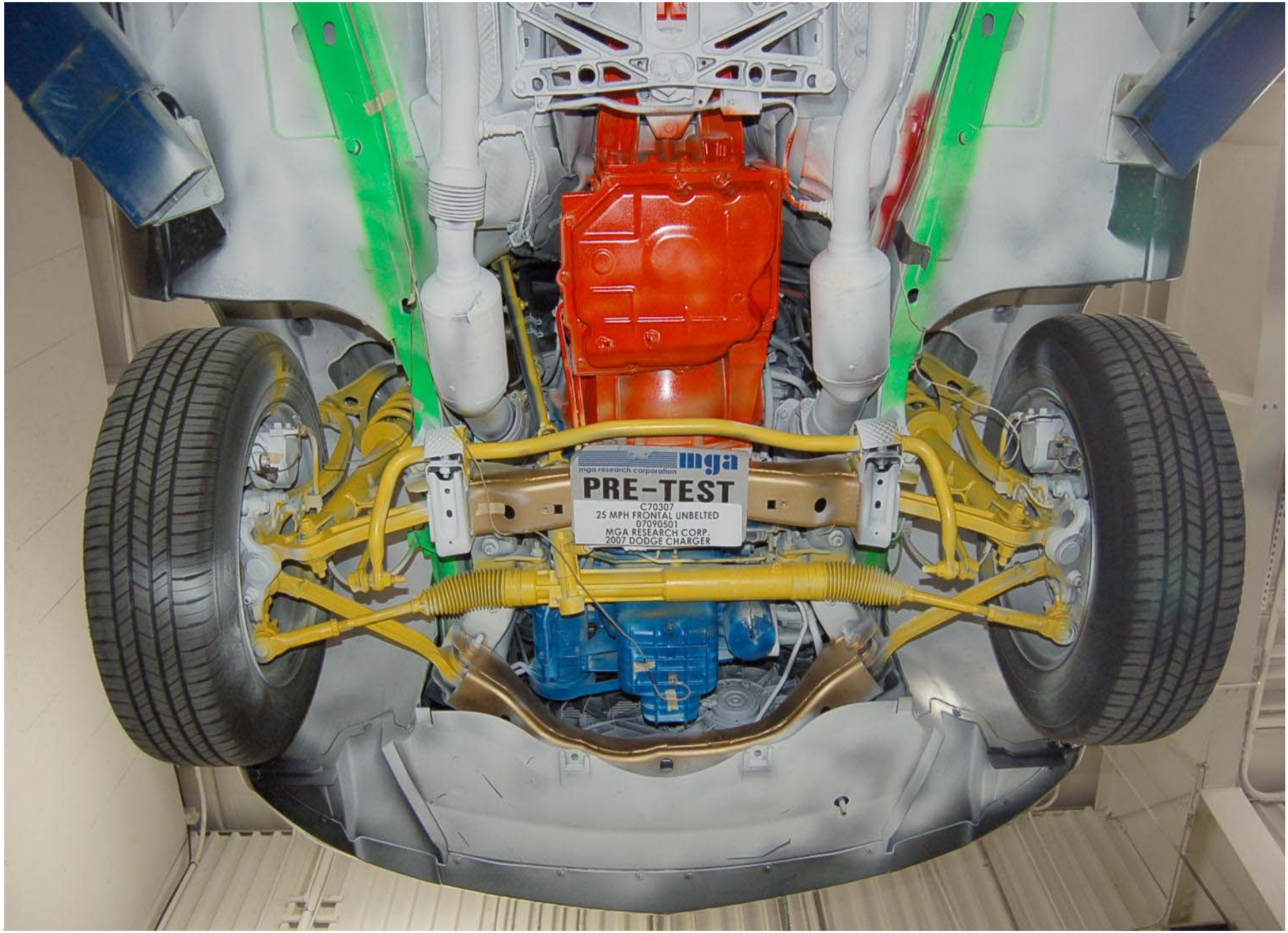
Post-Test Windshield View

Pre-Test Engine Compartment View

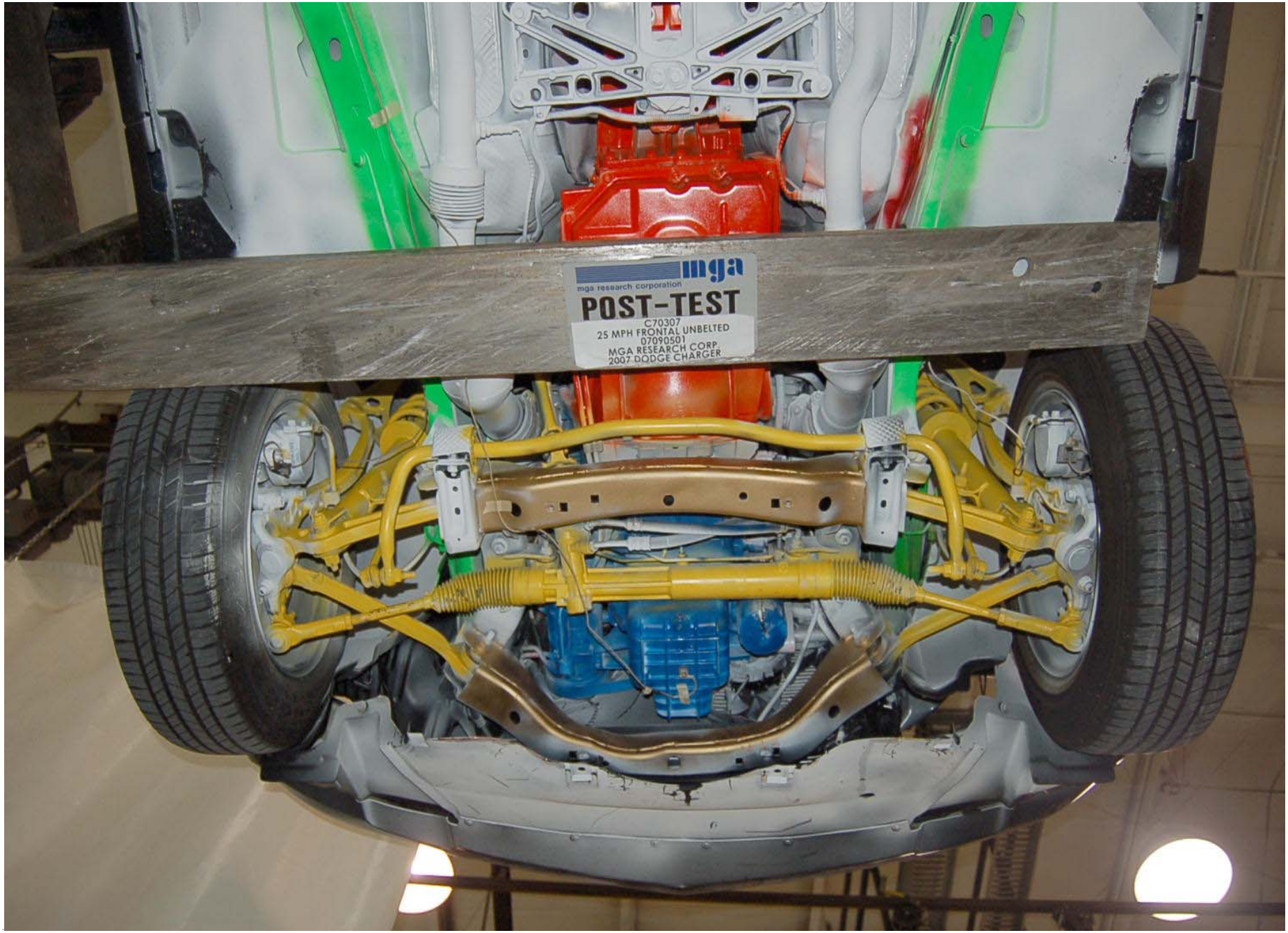
Post-Test Engine Compartment View

Pre-Test Fuel Filler Cap View

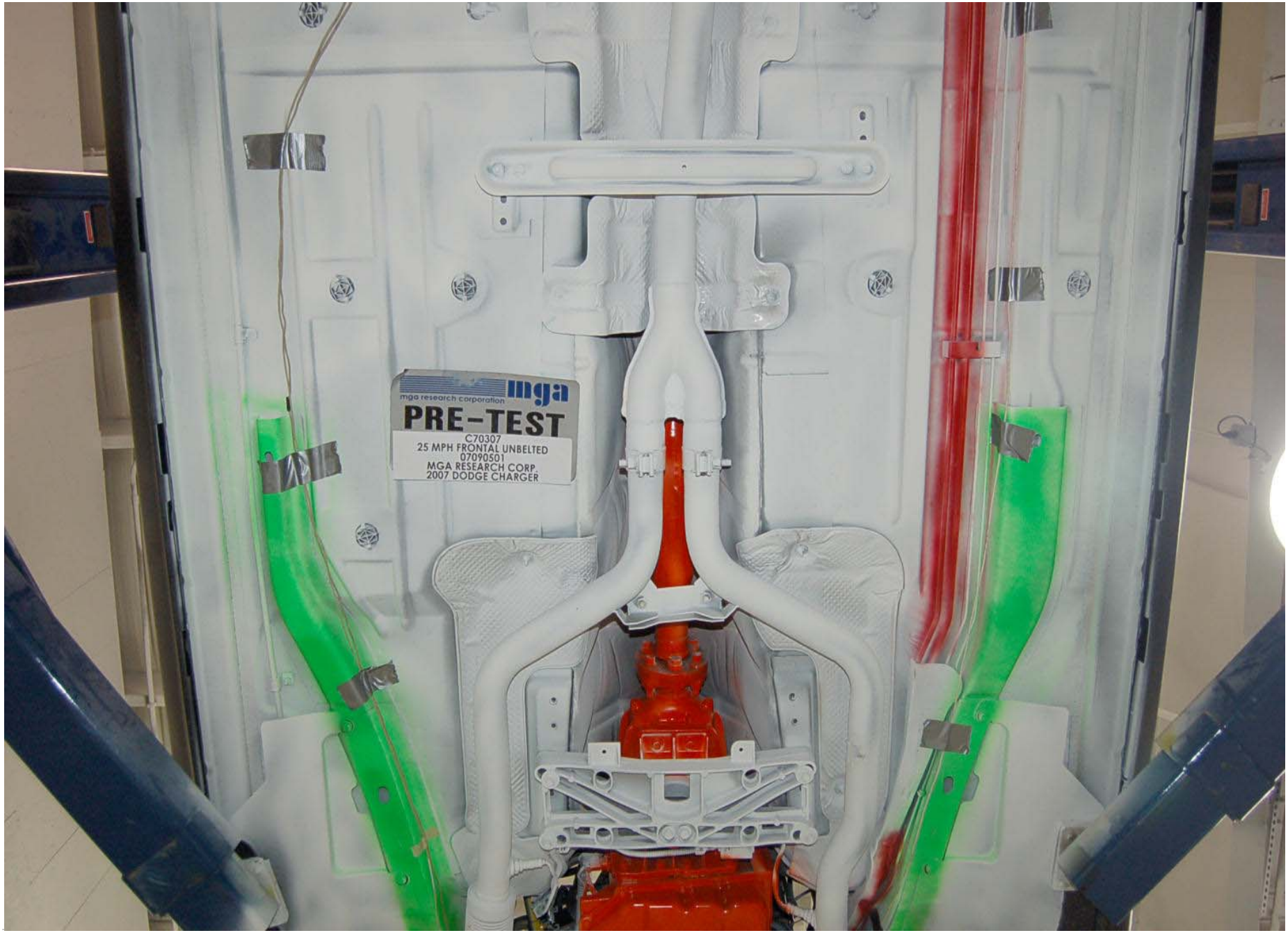
Post-Test Fuel Filler Cap View



Pre-Test Front Underbody View

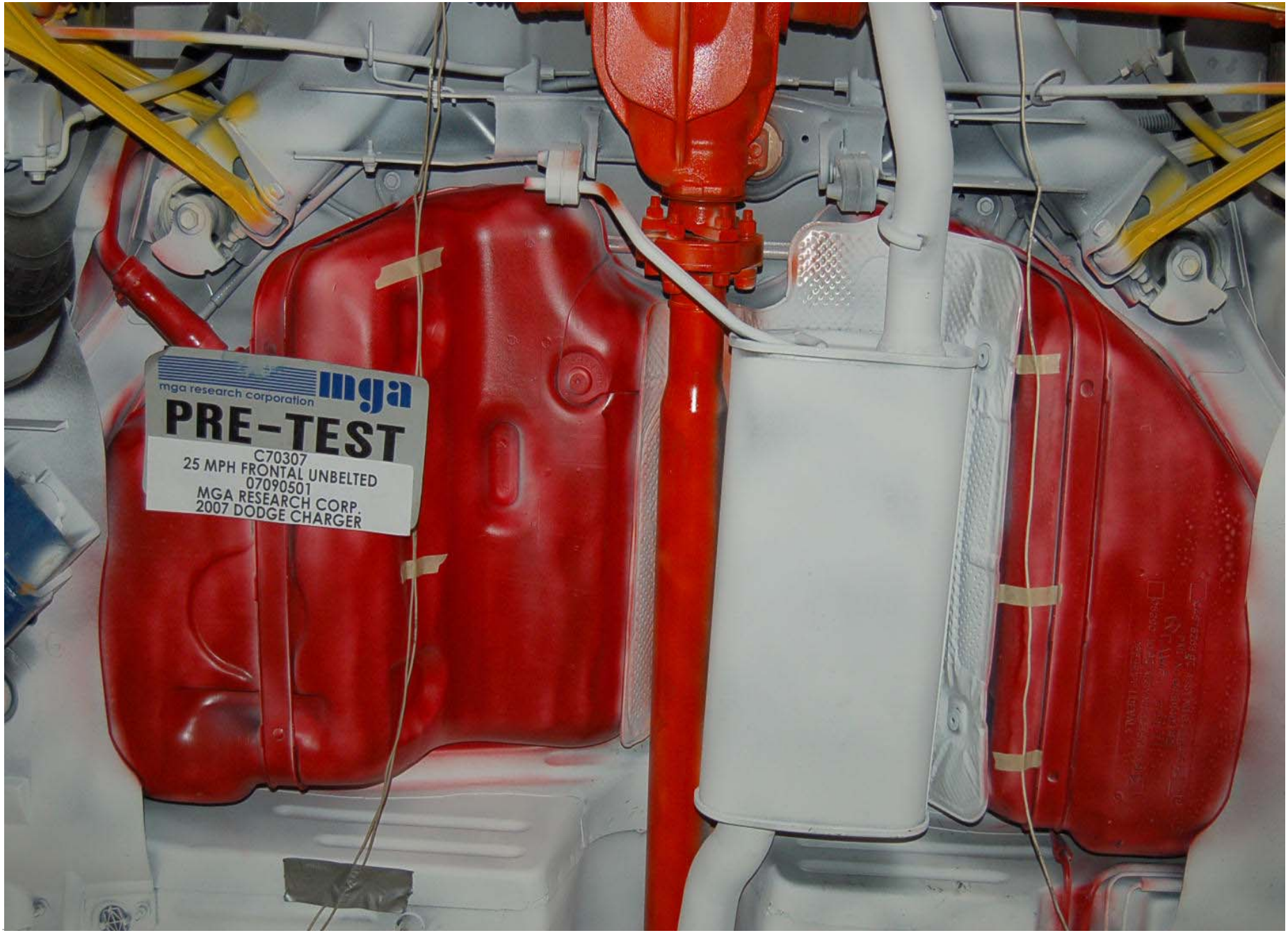


Post-Test Front Underbody View

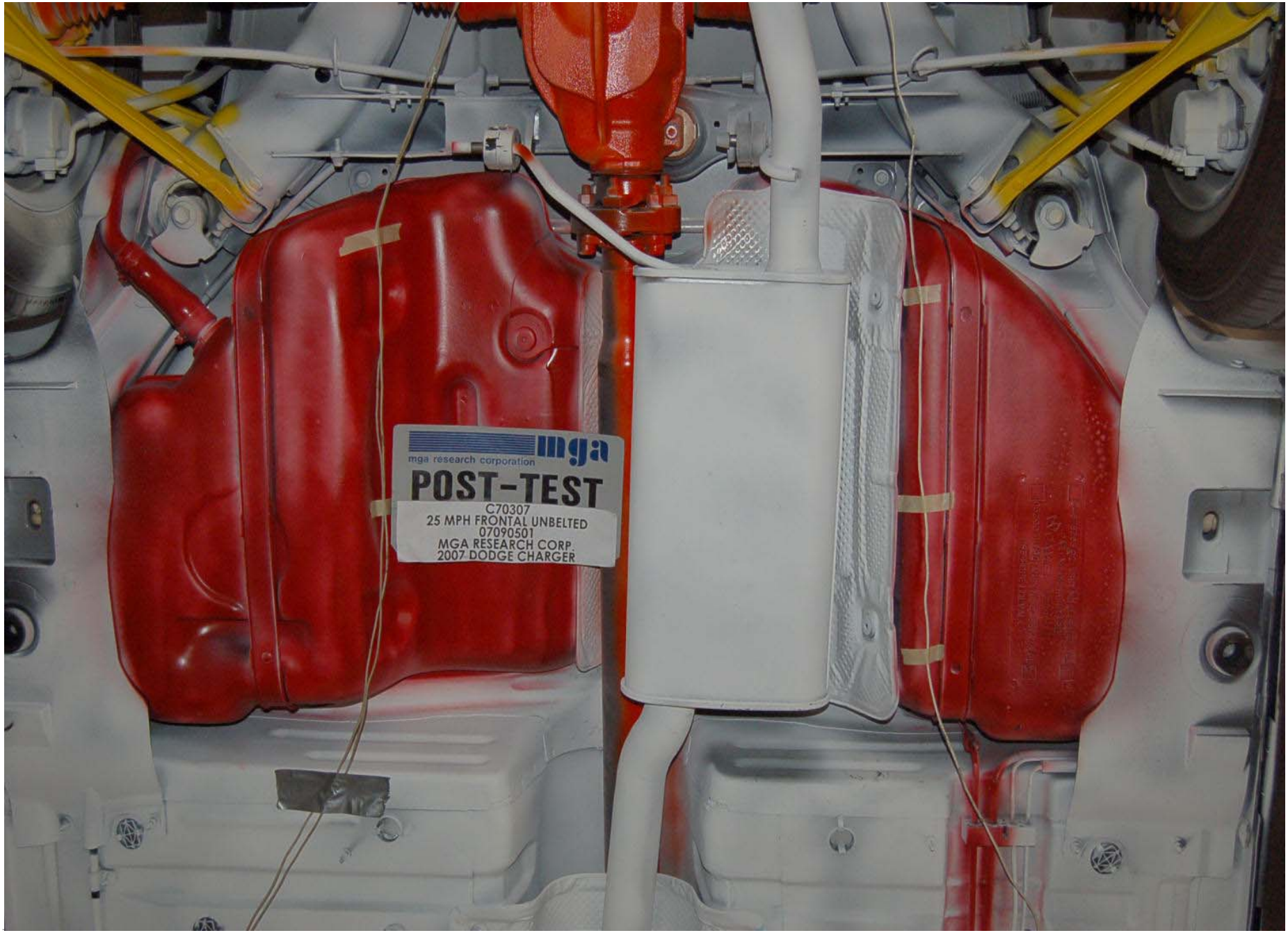


Pre-Test Mid Underbody View

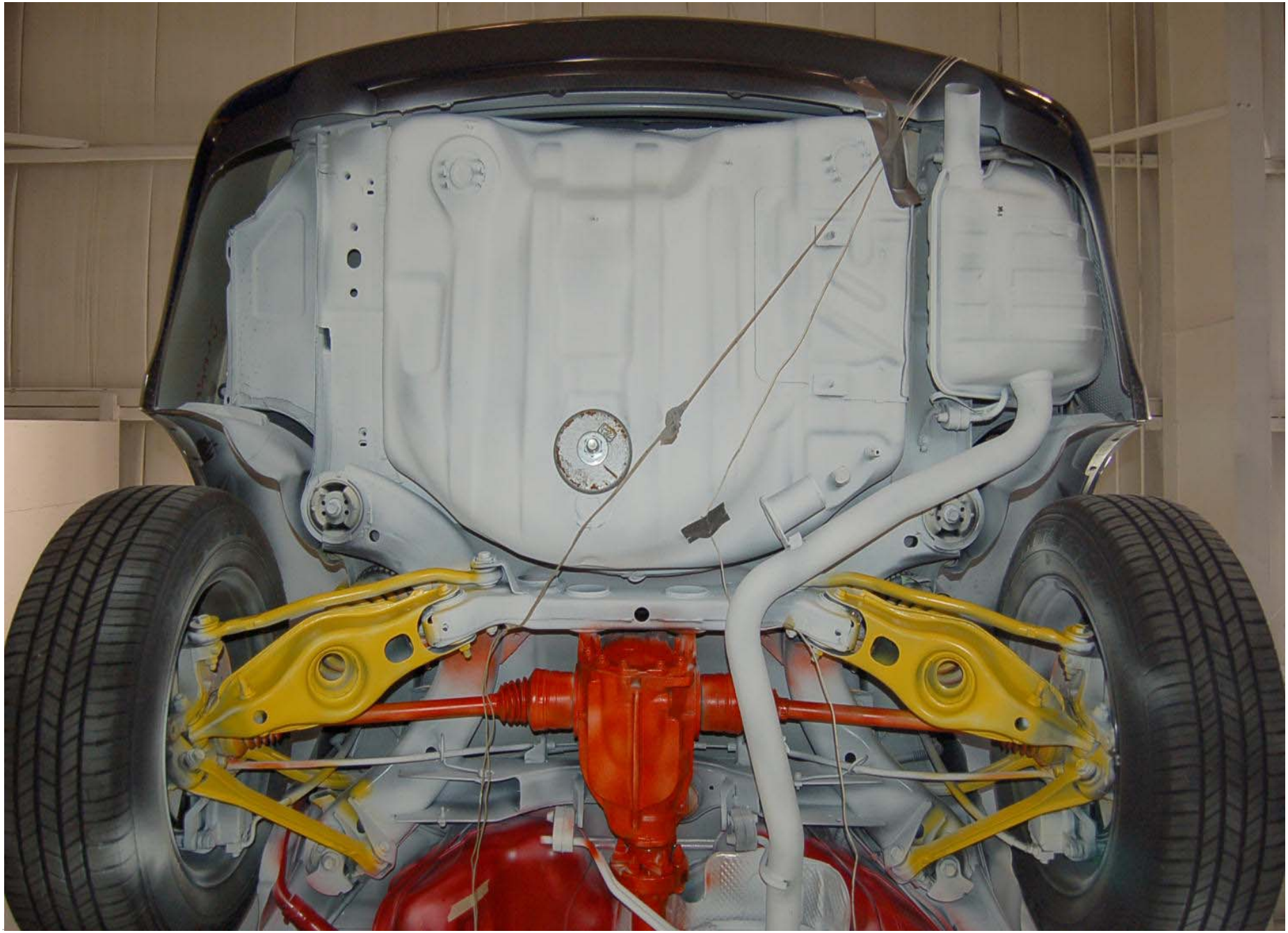
Post-Test Mid Underbody View



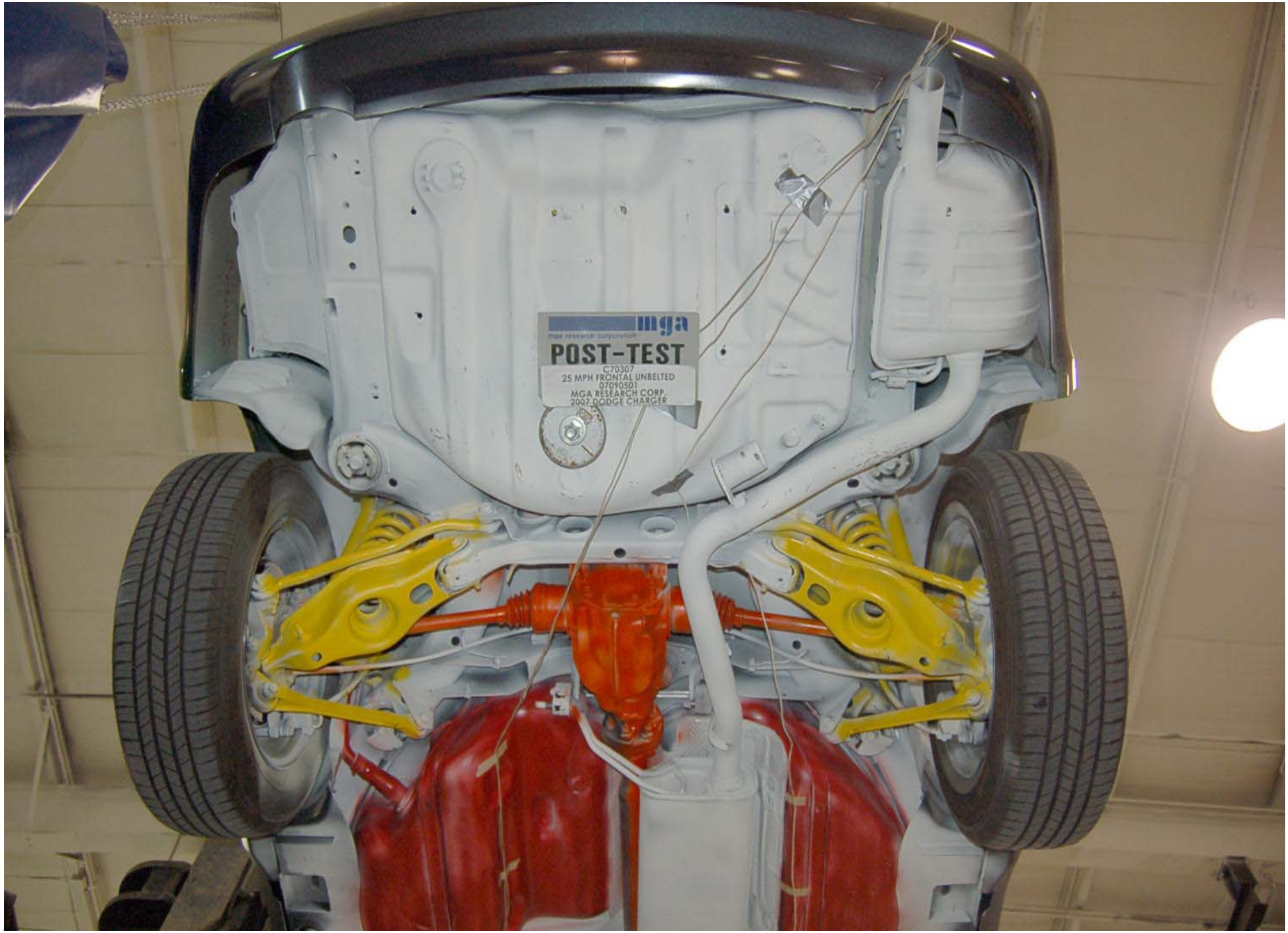
Pre-Test Fuel Tank View



Post-Test Fuel Tank 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

Post-Test Driver Dummy Seat Position

Pre-Test Driver Dummy Feet Position

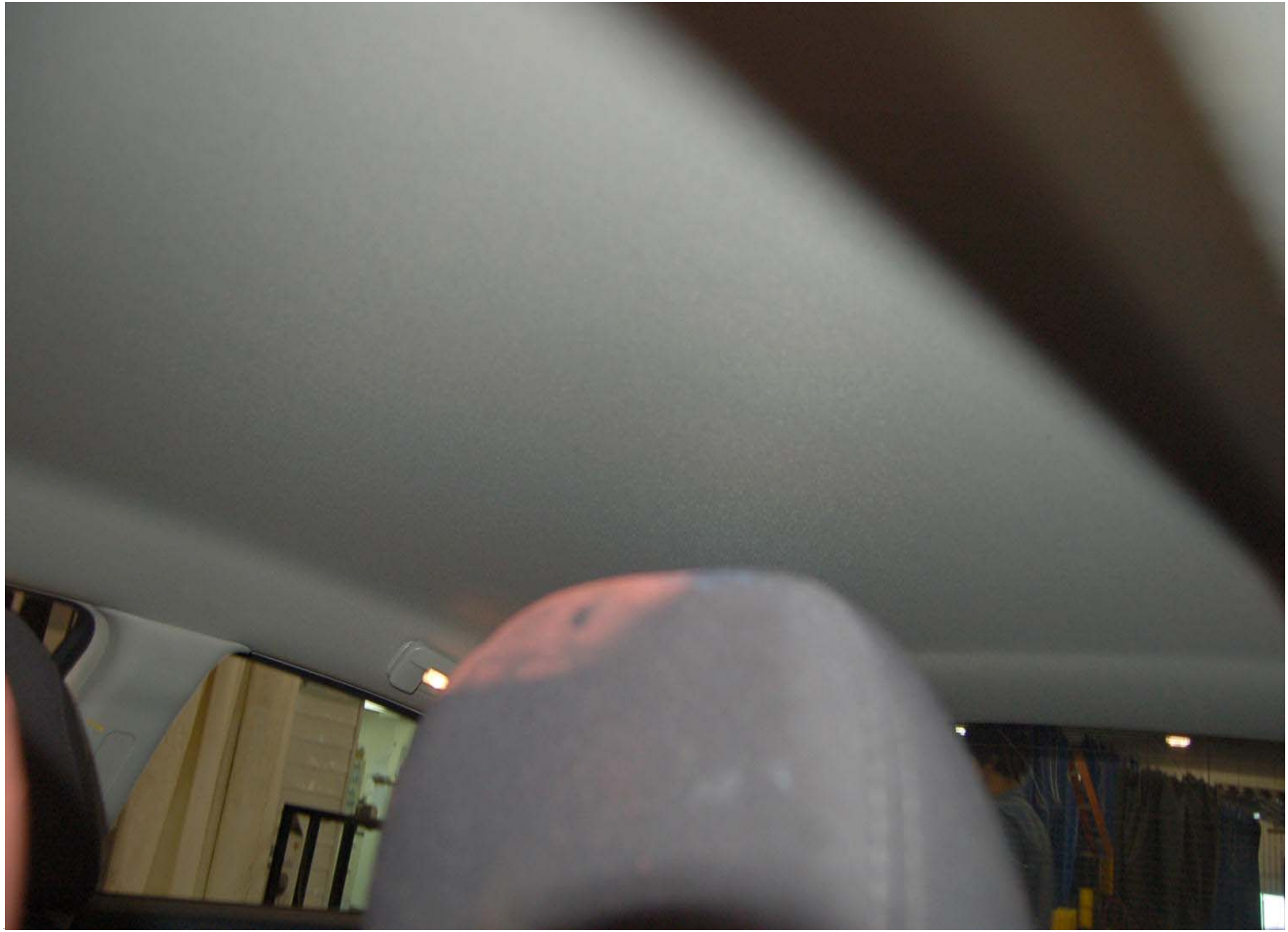
Post-Test Driver Dummy Feet Position

Pre-Test Driver Side Knee Bolster View

Post-Test Driver Side Knee Bolster View

Post-Test Driver Dummy Airbag Contact

Post-Test Driver Dummy Head Contact (visor)



Post-Test Driver Dummy Head Contact (head rest)

Post-Test Driver Dummy Knee Contact (left side)

Post-Test Driver Dummy Knee Contact (right side)

Pre-Test Passenger Dummy Front View (head position)

Post-Test Passenger Dummy Front View (head position)

Pre-Test Passenger Dummy Position Right Side View

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)

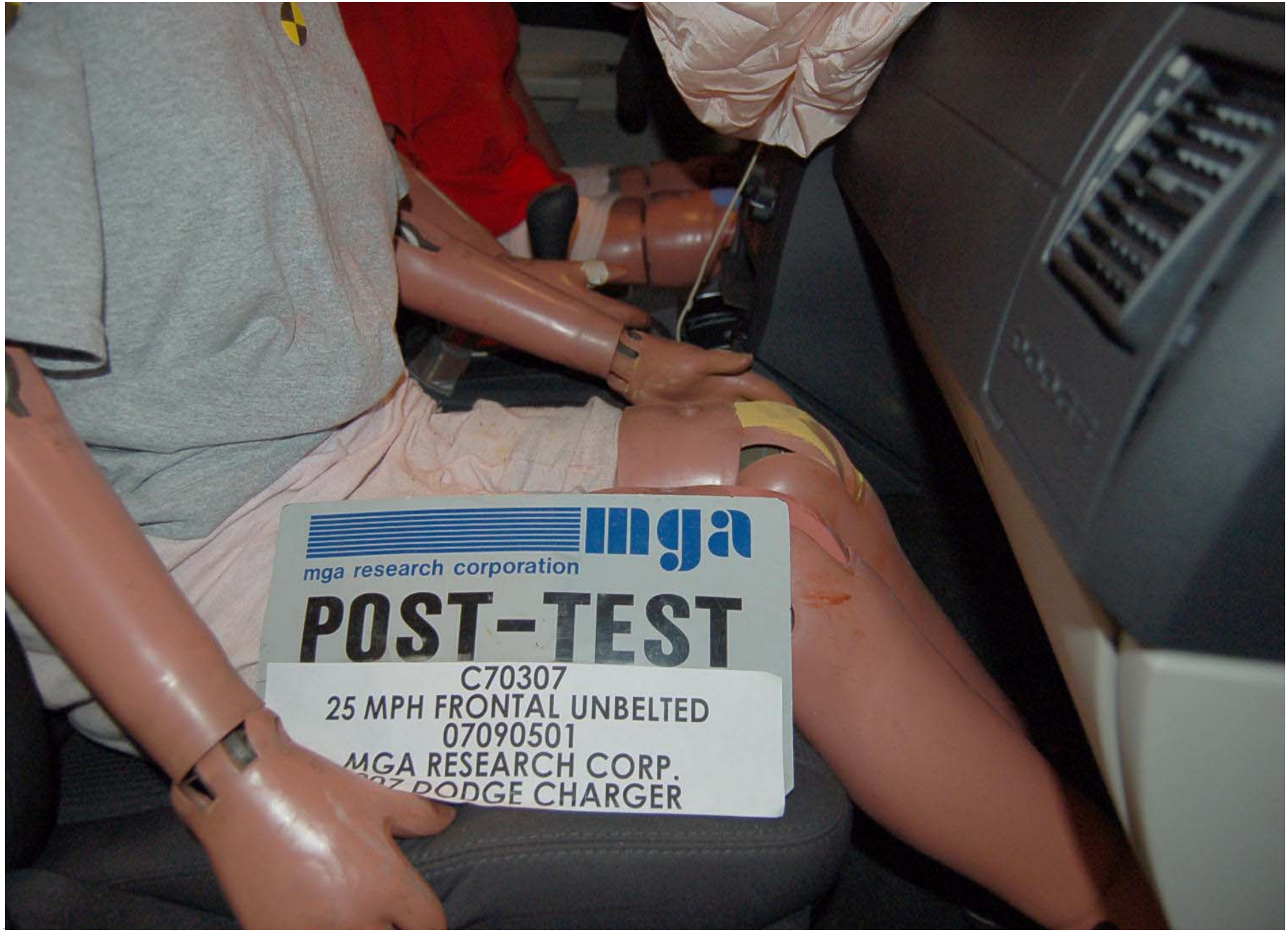
Pre-Test Passenger Dummy Seat Position

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

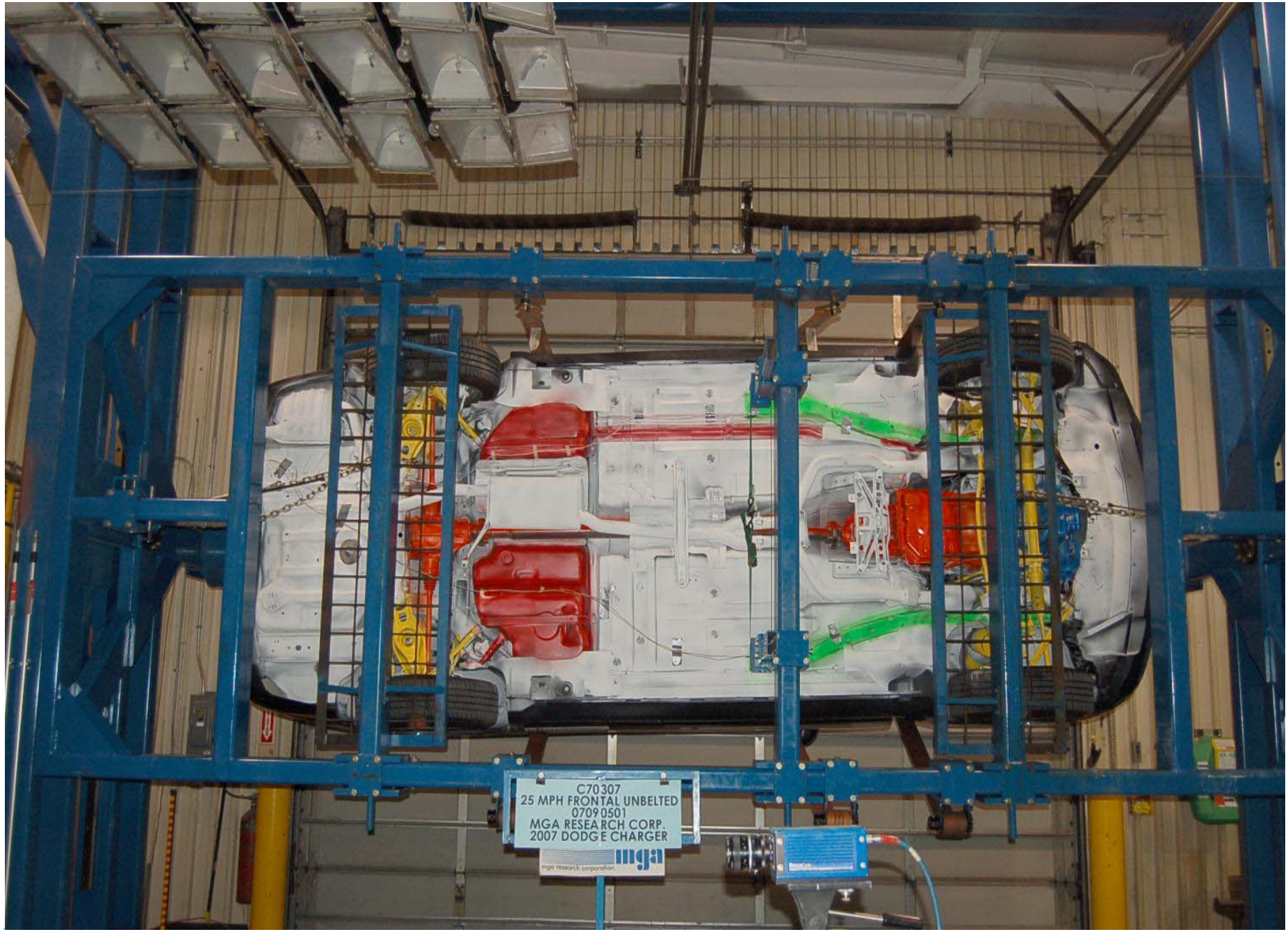


Post-Test Passenger Side Knee Bolster View

Post-Test Passenger Dummy Head Contact View (visor, header & Windshield)

Post-Test Passenger Dummy Knee Contact

Post-Test Passenger Dummy Airbag Contact

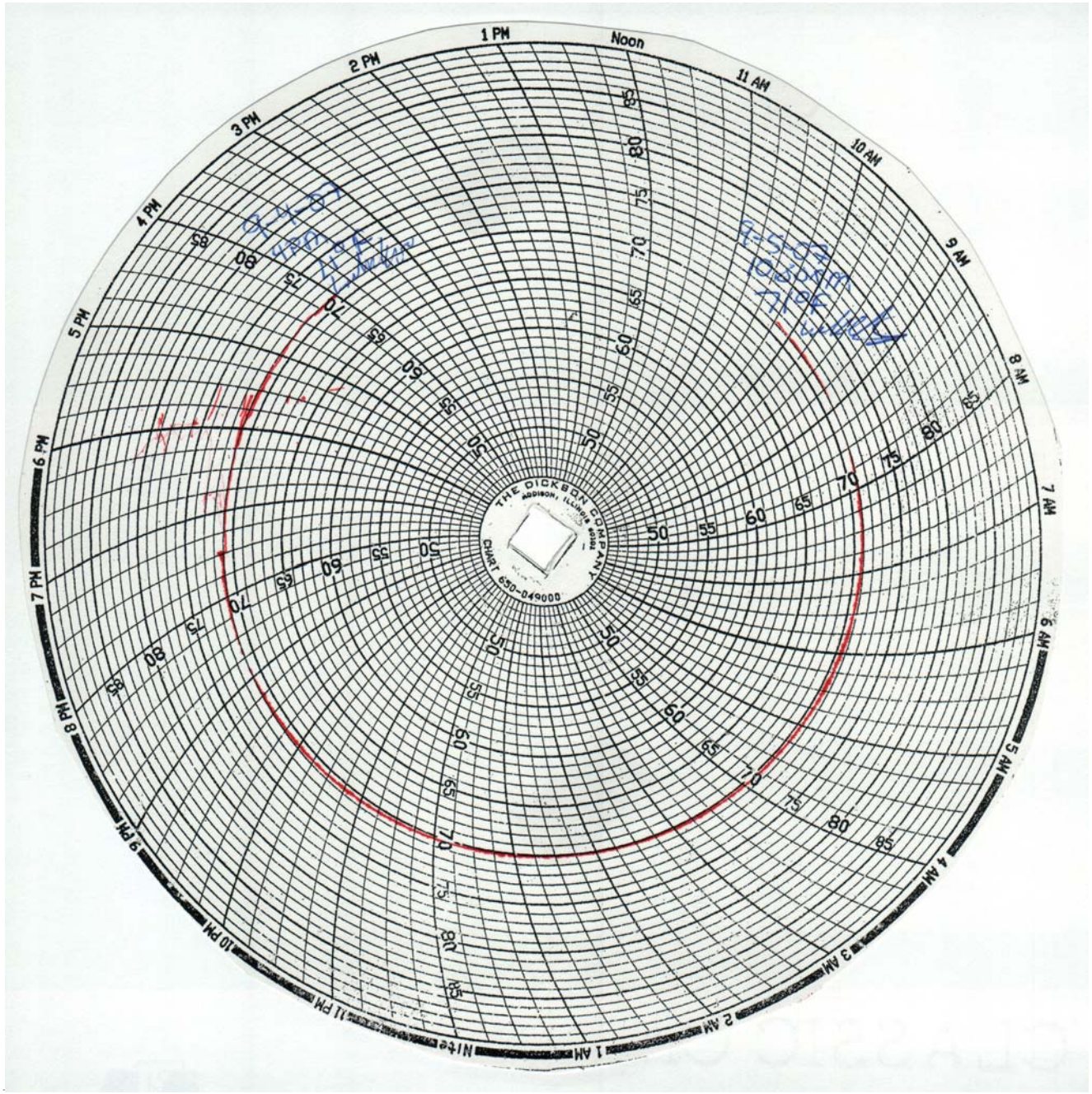


Rollover 90 Degrees

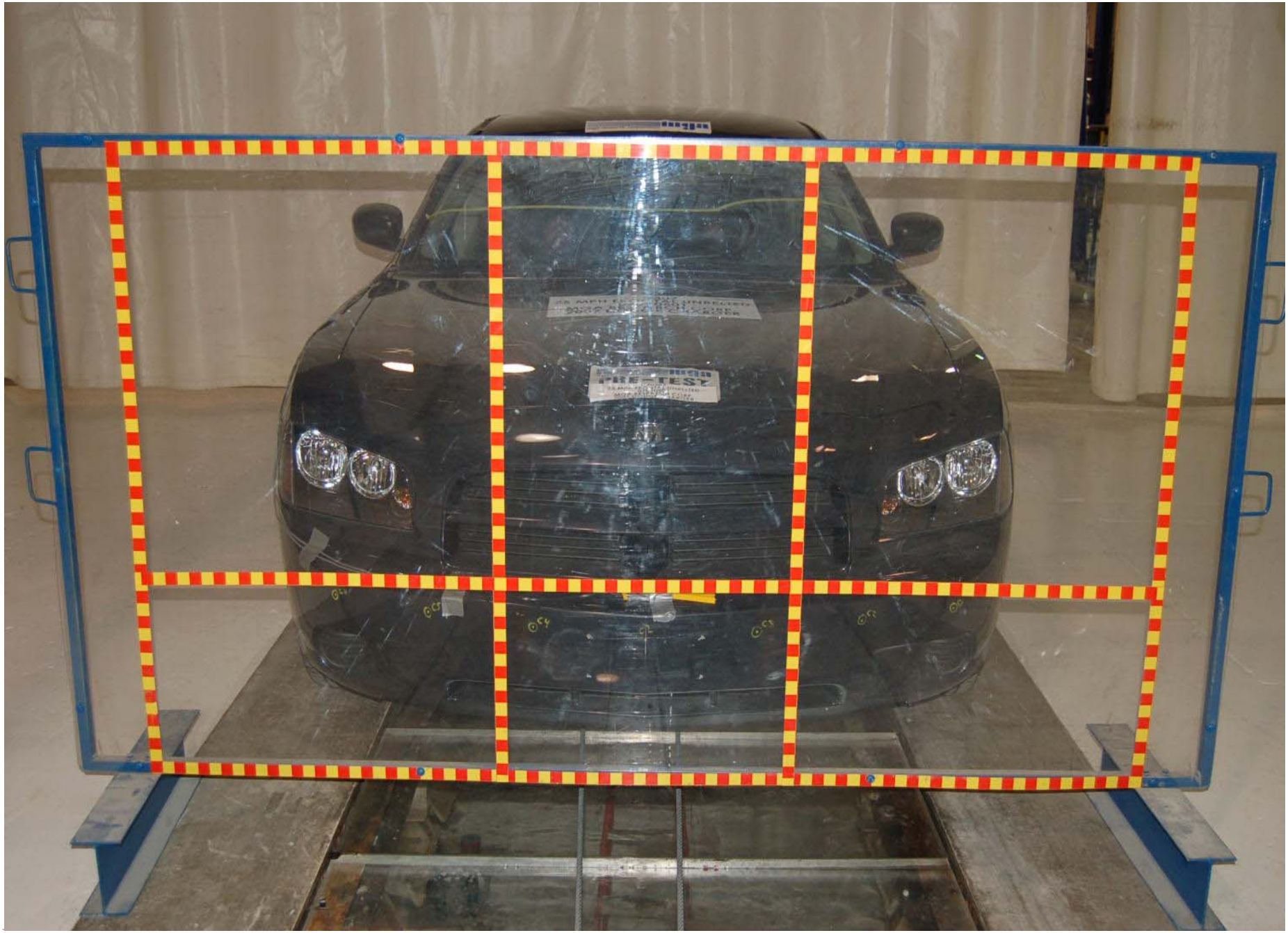
Rollover 180 Degrees

Rollover 270 Degrees

Rollover 360 Degrees



Temperature Plot



Vehicle in Relation to The Load Cell Grid

APPENDIX D

LOW RISK PHOTOGRAPHS

TABLE OF PHOTOGRAPHS

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

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

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

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

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

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

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

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

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

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

Post-Test 3YO P2 Passenger Dummy Airbag Right 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

Pre-Test 12 Mo Pass. Dummy Left Side View (Century Encore)

Post-Test 12 Mo Pass. Dummy Left Side View (Century Encore)

Pre-Test 12 Mo Pass. Dummy Right Side View (Century Encore)

Post-Test 12 Mo Pass. Dummy Right Side View (Century Encore)

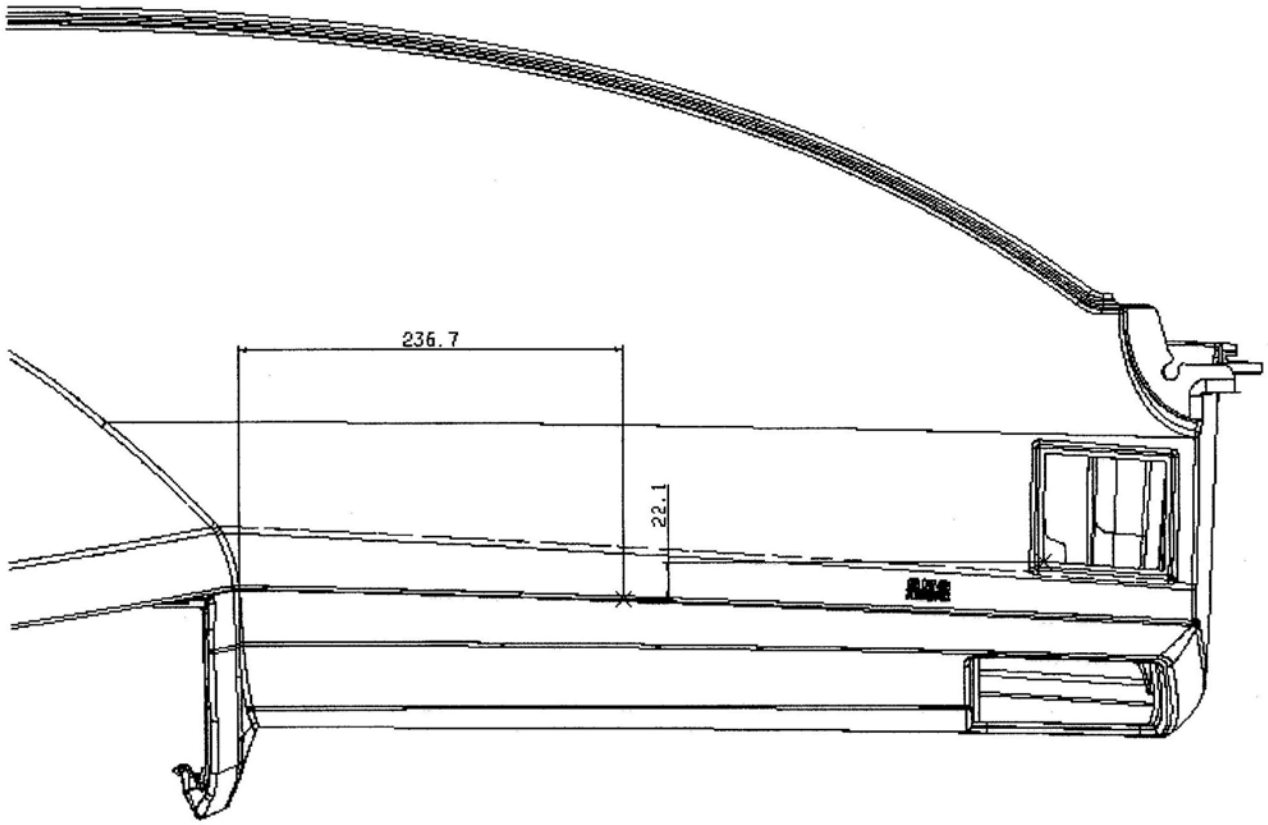
Pre-Test 12 Mo Pass. Dummy Left Side View (Britax handle W/Care)

Post-Test 12 Mo Pass. Dummy Left Side View (Britax handle W/Care)

Pre-Test 12 Mo Pass. Dummy Right Side View (Britax handle W/Care)

Post-Test 12 Mo Pass. Dummy Right Side View (Britax handle W/Care)

2007 LX (Dodge) Passenger Airbag OOP Set-up Point C



04LX DODGE PLAN VIEW

Passenger Geometric Center (2007 Dodge Charger)

APPENDIX E

INSTRUMENTATION CALIBRATION

INSTRUMENTS FOR DRIVER DUMMY NO. 510

	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Head X	F29-X46	Entran	03/21/07
Head Y	P52137	Endevco	05/10/07
Head Z	A11-Z02	Entran	03/21/07
Neck Load Cell	650	Denton	05/16/07
Chest X	P49480	Endevco	05/10/07
Chest Y	P52140	Endevco	05/14/07
Chest Z	P52142	Endevco	05/14/07
Chest Displacement	510	Servo	03/19/07
Left Femur Load Cell	9426	GSE	08/31/07
Right Femur Load Cell	9425	GSE	08/31/07

INSTRUMENTS FOR PASSENGER DUMMY NO. 511

	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Head X	P49523	Endevco	03/12/07
Head Y	D12-X28	Entran	03/12/07
Head Z	P49521	Endevco	03/12/07
Neck Load Cell	606	Denton	06/28/07
Chest X	G21-M14	Entran	05/17/07
Chest Y	G22-D16	Entran	05/17/07
Chest Z	P52144	Endevco	05/17/07
Chest Displacement	511	Servo	03/19/07
Left Femur Load Cell	86	Denton	08/31/07
Right Femur Load Cell	85	Denton	08/31/07

INSTRUMENTS FOR LOW RISK 5TH FEMALE DUMMY NO. 511 (P1 & P2)

	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Head X	P49523	Endevco	03/12/07
Head Y	D12-X28	Entran	03/12/07
Head Z	P49521	Endevco	03/12/07
Neck Load Cell	252	Denton	01/24/07
Chest X	G21-M14	Entran	05/17/07
Chest Y	G22-D16	Entran	05/17/07
Chest Z	P52144	Endevco	05/17/07
Chest Displacement	511	Servo	03/19/07
Left Femur Load Cell	1362	Denton	04/04/07
Right Femur Load Cell	1361	Denton	04/04/07

INSTRUMENTS FOR LOW RISK 3 YEAR OLD CHILD DUMMY NO. 032 (P2)

	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Head X	G22-D20	Entran	06/28/07
Head Y	A28-H08	Entran	06/28/07
Head Z	A27-Z04	Entran	06/28/07
Neck Load Cell	233	Denton	06/13/07
Chest X	AN8L6	Endevco	06/12/07
Chest Y	AHTB2	Endevco	06/12/07
Chest Z	A12-Z06	Entran	06/12/07
Chest Displacement	032	Servo	06/12/07

INSTRUMENTS FOR LOW RISK 6 YEAR OLD CHILD DUMMY NO. 159 (P2)

	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Head X	D12-X21	Entran	05/10/07
Head Y	C24-J04	Entran	06/29/07
Head Z	E20-R13	Entran	05/10/07
Neck Load Cell	1703	Denton	06/15/07
Chest X	P49456	Endevco	05/10/07
Chest Y	P49500	Endevco	05/10/07
Chest Z	P49471	Endevco	05/09/07
Chest Displacement	159	Servo	04/04/07

INSTRUMENTS FOR LOW RISK 12 MONTH OLD DUMMY NO. 083

(CENTURY ENCORE)

	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Head X	J14-J07	Entran	06/29/07
Head Y	J21-Z03	Entran	06/29/07
Head Z	J13-A23	Entran	06/29/07
Neck Load Cell	328	Denton	04/16/07
Chest X	A27-Z17	Entran	06/29/07
Chest Y	A27-Z02	Entran	06/29/07
Chest Z	AGAY0	Endevco	06/29/07

INSTRUMENTS FOR LOW RISK 12 MONTH OLD DUMMY NO. 082

(BRITAX HANDLE WITH CARE)

	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Head X	B05-J08	Entran	02/21/07
Head Y	A29-N17	Entran	02/21/07
Head Z	C24-A03	Entran	02/21/07
Neck Load Cell	202	Denton	03/08/07
Chest X	A12-Z15	Entran	05/01/07
Chest Y	J23-M06	Entran	06/28/07
Chest Z	A07-J06	Entran	05/01/07

VEHICLE INSTRUMENTS

	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Left Rear Seat Crossmember X	E05-Z14	Entran	05/17/07
Right Rear Seat Crossmember X	J17709	Endevco	05/14/07
Top of Engine X	J12462	Endevco	05/14/07
Bottom of Engine X	AHWK8	Endevco	06/27/07
Left Brake Caliper X	AP2D6	Endevco	05/14/07
Right Brake Caliper X	AJ8Y6	Endevco	07/24/07
Instrument Panel X	AN8D5	Endevco	07/24/07
Trunk Z	C29-L24	Entran	05/17/07