

REPORT NUMBER: 208-MGA-2013-013

**VEHICLE SAFETY COMPLIANCE TESTING
FOR
FMVSS 208, OCCUPANT CRASH PROTECTION
FMVSS 212, WINDSHIELD MOUNTING
FMVSS 219, WINDSHIELD INTRUSION (PARTIAL)
FMVSS 305, ELECTROLYTE SPILLAGE & ELECTRICAL SHOCK PROTECTION**

**FORD MOTOR CO.
2013 FORD FOCUS ELECTRIC PASSENGER CAR
NHTSA NO.: C20130200**

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



TEST DATES: JULY 22, 2013 – SEPTEMBER 30, 2013

FINAL REPORT DATE: DECEMBER 9, 2013

FINAL REPORT

**PREPARED FOR:
U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
OFFICE OF ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
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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 DTNH22-08-D-00086.

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FINAL REPORT ACCEPTED BY OVSC:

Accepted By: 

Acceptance Date: December 9, 2013

Technical Report Documentation Page

1. Report No. 208-MGA-2013-013		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle Final Report of FMVSS 208 Compliance Testing of a 2013 Ford Focus Electric NHTSA No.: C20130200				5. Report Date December 9, 2013	
				6. Performing Organization Code MGA	
7. Author(s) Jeff Lewandowski, Project Engineer				8. Performing Organization Report No. 208-MGA-2013-013	
9. Performing Organization Name and Address MGA Research Corporation 5000 Warren Road Burlington, WI 53105				10. Work Unit No.	
				11. Contract or Grant No. DTNH22-08-D-00086	
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 7/22/13 - 9/30/13	
				14. Sponsoring Agency Code NVS-220	
15. Supplementary Notes					
16. Abstract Compliance tests were conducted on the subject 2013 Ford Focus Electric in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP208-14 for the determination of FMVSS 208 compliance. Test failures identified were as follows: 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 305, "Electrolyte Spillage & Electrical Shock Protection"				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), NPO-411 1200 New Jersey Avenue, S.E. (Room E12-100) Washington, DC 20590	
19. Security Classification (of this report) Unclassified		20. Security Classification (of this page) Unclassified		21. No. of Pages 338	22. Price

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SECTION 1
PURPOSE OF COMPLIANCE TESTS

This Federal Motor Vehicle Safety Standard 208 compliance test is part of a program conducted for the National Highway Traffic Safety Administration (NHTSA) by MGA Research Corporation (MGA) under Contract No.: DTNH22-08-D-00086. The purpose of this test was to determine whether the subject vehicle, a 2013 Ford Focus Electric, NHTSA No.: C20130200, meets certain performance requirements of FMVSS 208, "Occupant Crash Protection"; FMVSS 212, "Windshield Mounting"; FMVSS 219, "Windshield Zone Intrusion"; and FMVSS 305, "Electric Powered Vehicles: Electrolyte Spillage and Electrical Shock Protection." The compliance test was conducted in accordance with OVSC Laboratory Test Procedure No.: TP208-14 dated April 16, 2008.

SECTION 2 TESTS PERFORMED

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance

NHTSA No.: C20130200
 Test Dates: 7/22/13 - 9/30/13

The following checked items indicate the tests that were performed:

- | | | |
|-------------------------------------|-----|---|
| <input checked="" type="checkbox"/> | 1. | Rear seating position seat belts |
| <input checked="" type="checkbox"/> | 2. | Air bag labels (S4.5.1) |
| <input checked="" type="checkbox"/> | 3. | Readiness indicator (S4.5.2) |
| <input checked="" type="checkbox"/> | 4. | Passenger air bag manual cut-off device (S4.5.4) |
| <input checked="" type="checkbox"/> | 5. | Lap belt lockability (S7.1.1.5) |
| <input checked="" type="checkbox"/> | 6. | Seat belt warning system (S7.3) |
| <input checked="" type="checkbox"/> | 7. | Seat belt contact force (S7.4.3) |
| <input checked="" type="checkbox"/> | 8. | Seat belt latch plate access (S7.4.4) |
| <input checked="" type="checkbox"/> | 9. | Seat belt retraction (S7.4.5) |
| <input checked="" type="checkbox"/> | 10. | Seat belt guides and hardware (S7.4.6) |
| <input checked="" type="checkbox"/> | 11. | Air bag suppression telltale (S19.2.2) |
| <input checked="" type="checkbox"/> | 12. | Suppression tests with 12-month-old CRABI dummy (Part 572, Subpart R) |
| <input checked="" type="checkbox"/> | 13. | Suppression tests with Newborn infant (Part 572, Subpart K) |
| <input checked="" type="checkbox"/> | 14. | Suppression tests with 3-year-old dummy |
| <input checked="" type="checkbox"/> | 15. | Suppression tests with 6-year-old dummy |
| <input checked="" type="checkbox"/> | 16. | Test of Reactivation of the passenger air bag system with an unbelted 5 th percentile female dummy |
| <input type="checkbox"/> | 17. | Low risk deployment test with 12-month-old dummy (Part 572, Subpart R) |
| <input type="checkbox"/> | 18. | Low risk deployment test with 3-year-old dummy (Part 572, Subpart P) |
| <input type="checkbox"/> | 19. | Low risk deployment test with 6-year-old dummy (Part 572, Subpart N) |
| <input checked="" type="checkbox"/> | 20. | Low risk deployment test with 5 th female dummy (Part 572, Subpart O) |
| <input checked="" type="checkbox"/> | 21. | Impact Tests |
| <input checked="" type="checkbox"/> | | Frontal Oblique |
| <input type="checkbox"/> | | Belted 50 th male dummy driver and passenger (0 to 48 kmph) (S5.1.1(a)) |
| <input type="checkbox"/> | | Unbelted 50 th male dummy driver and passenger (0 to 48 kmph) (S5.1.2(a)(1)) |
| <input checked="" type="checkbox"/> | | Unbelted 50 th male dummy driver and passenger (32 to 40 kmph) (S5.1.2(a)(1) or S5.1.2(b)) |
| <input type="checkbox"/> | | Frontal 0° |
| <input type="checkbox"/> | | Belted 50 th male dummy driver (0 to 48 kmph) (S5.1.1.(b)(1) or S5.1.1(a)) |
| <input type="checkbox"/> | | Belted 50 th male dummy passenger (0 to 48 kmph) (S5.1.1.(b)(1) or S5.1.1(a)) |
| <input type="checkbox"/> | | Belted 5 th female dummy driver (0 to 48 kmph) (S16.1(a)) |
| <input type="checkbox"/> | | Belted 5 th female dummy passenger (0 to 48 kmph) (S16.1(a)) |
| <input type="checkbox"/> | | Belted 50 th male dummy driver and passenger (0 to 56 kmph) (S5.1.1.(b)(2)) |
| <input type="checkbox"/> | | Unbelted 50 th male dummy driver and passenger (0 to 48 kmph) (S5.1.2(a)(1)) |
| <input type="checkbox"/> | | Unbelted 50 th male dummy driver (32 to 40 kmph) (S5.1.2.(a)(2) or S5.1.2(b)) |
| <input type="checkbox"/> | | Unbelted 50 th male dummy passenger (32 to 40 kmph) (S5.1.2.(a)(2) or S5.1.2(b)) |
| <input type="checkbox"/> | | Unbelted 5 th female dummy driver (32 to 40 kmph) (S16.1(b)) |
| <input type="checkbox"/> | | Unbelted 5 th female dummy passenger (32 to 40 kmph) (S16.1(b)) |
| <input type="checkbox"/> | | 40% Offset 0° Belted 5 th female dummy driver and passenger (0 to 40 kmph) (S18.1) |
| <input type="checkbox"/> | 22. | FMVSS 204 Indicant Test |
| <input checked="" type="checkbox"/> | 23. | FMVSS 212 Test |
| <input checked="" type="checkbox"/> | 24. | FMVSS 219 Indicant Test |
| <input type="checkbox"/> | 25. | FMVSS 301 Frontal Test |
| <input checked="" type="checkbox"/> | 26. | FMVSS 305 Frontal Indicant Test |

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

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

SECTION 3

INJURY RESULT SUMMARY FOR FMVSS 208 TESTS

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance

NHTSA No.: C20130200
 Test Date: 8/12/13

5th Percentile Female Low Risk Deployments

5th Percentile Female SN 124 Position 1 (Chin On Module) 8/12/13

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	700	62
Peak Nij (Nte)	1.0	0.7
Time (ms)	NA	47.1
Peak Nij (Ntf)	1.0	0.5
Time (ms)	NA	24.7
Peak Nij (Nce)	1.0	0.7
Time (ms)	NA	165.0
Peak Nij (Ncf)	1.0	0.2
Time (ms)	NA	275.0
Neck Tension	2070 N	1120
Neck Compression	2520 N	674
Chest g	60 g	19
Chest Displacement	52 mm	10
Left Femur	6805 N	141
Right Femur	6805 N	124

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

5th Percentile Female SN 124 Position 2 (Chin On Rim) 8/12/13

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	700	37
Peak Nij (Nte)	1.0	0.4
Time (ms)	NA	12.5
Peak Nij (Ntf)	1.0	0.3
Time (ms)	NA	28.4
Peak Nij (Nce)	1.0	0.1
Time (ms)	NA	175.6
Peak Nij (Ncf)	1.0	0.3
Time (ms)	NA	74.6
Neck Tension	2070 N	922
Neck Compression	2520 N	235
Chest g	60 g	20
Chest Displacement	52 mm	20
Left Femur	6805 N	152
Right Femur	6805 N	101

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: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance

NHTSA No.: C20130200
 Test Date: 9/30/13

40 kmph Frontal Crash

Impact Angle:	30° RH Oblique			
Belted Dummies:		Yes	X	No
Speed Range:		0 to 40 kmph	X	32 to 40 kmph
		0 to 48 kmph		0 to 56 kmph
Test Speed (kmph):	39.8	Test Weight (kg):	1828.8	
Driver Dummy:		5 th female	X	50 th male
Passenger Dummy:		5 th female	X	50 th male

50th Percentile Male Frontal Crash Test

Vehicles certified to S5.1.1(b)(1), S5.1.1(b)(2), S5.1.2(a)(2), or S5.1.2(b)

Injury Criteria	Max. Allowable Injury Assessment Values	Driver	Passenger
HIC15	700	31	256
N _{te}	1.0	0.2	0.1
N _{tf}	1.0	0.2	0.1
N _{ce}	1.0	0.1	0.2
N _{cf}	1.0	0.1	0.3
Neck Tension	4170 N	1130	226
Neck Compression	4000 N	395	1113
Chest g	60 g	31	26
Chest Displacement	63 mm	9	4
Left Femur	10,000 N	1774	4030
Right Femur	10,000 N	2170	4105

SECTION 4
DISCUSSION OF TESTS

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance

NHTSA No.: C20130200
Test Dates: 7/22/13 - 9/30/13

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

The 2013 Ford Focus Electric (C20130200) was tested to FMVSS 305 in conjunction with the FMVSS 208 frontal impact. The test was performed in accordance with the specifications of the Office of Vehicle Safety Compliance (OVSC) Test Procedures TP-305-00 to determine compliance to the requirements of Federal Motor Vehicle Safety Standards (FMVSS) 305, "Electric Powered Vehicles: Electrolyte Spillage and Electrical Shock Protection". This program is sponsored by the National Highway Traffic Safety Administration (NHTSA), under Contract No. DTNH22-06-C-00030.

Based on the test results, the 2013 Ford Focus Electric (C20130200) appears to meet the requirements of FMVSS 305 testing.

An assessment of FMVSS 212 and FMVSS 219 were done for informational use only.

There was no valid data after 36ms on the Right Brake Caliper (X) accelerometer during the frontal impact test.

SECTION 5
TEST DATA SHEETS

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance

NHTSA No.: C20130200
Test Dates: 7/22/13 - 9/30/13

DATA SHEET 1
COTR VEHICLE WORK ORDER

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance

NHTSA No.: C20130200
Test Dates: 7/22/13 - 9/30/13

COTR Signature: Brian Smith

Test to be performed for this vehicle are checked below:

- | | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | 1. Rear Seating Position Seat Belts |
| <input checked="" type="checkbox"/> | 2. Air Bag Labels (S4.5.1) |
| <input checked="" type="checkbox"/> | 3. Readiness Indicator (S4.5.2) |
| <input checked="" type="checkbox"/> | 4. Passenger Air Bag Manual Cut-off Device (S4.5.4) |
| <input checked="" type="checkbox"/> | 5. Lap Belt Lockability (S7.1.1.5) |
| <input checked="" type="checkbox"/> | 6. Seat Belt Warning System (S7.3) |
| <input checked="" type="checkbox"/> | 7. Seat Belt Contact Force (S7.4.3) |
| <input checked="" type="checkbox"/> | 8. Seat Belt Latch Plate Access (S7.4.4) |
| <input checked="" type="checkbox"/> | 9. Seat Belt Retraction (S7.4.5) |
| <input checked="" type="checkbox"/> | 10. Seat Belt Guides and Hardware (S7.4.6) |
| <input checked="" type="checkbox"/> | 11. Air bag suppression telltale (S19.2.2) |
| <input checked="" type="checkbox"/> | 12. Suppression tests with 12-month-old CRABI dummy (Part 572, Subpart R) using the following indicated child restraints (mid-height seat position): |

Section B – Rear Facing (unbelted and belted rear facing, unbelted forward facing)

<input type="checkbox"/>	Century Smart Fit 4543	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input checked="" type="checkbox"/>	Cosco Arriva 22-013	<input checked="" type="checkbox"/>	Full Rearward	<input checked="" type="checkbox"/>	Mid Position	<input checked="" type="checkbox"/>	Full Forward
<input type="checkbox"/>	Evenflo Discovery Adjust Right 212	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Graco Infant 8457	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input checked="" type="checkbox"/>	Graco Snugride	<input checked="" type="checkbox"/>	Full Rearward	<input checked="" type="checkbox"/>	Mid Position	<input checked="" type="checkbox"/>	Full Forward
<input checked="" type="checkbox"/>	Peg Perego Viaggio	<input checked="" type="checkbox"/>	Full Rearward	<input checked="" type="checkbox"/>	Mid Position	<input checked="" type="checkbox"/>	Full Forward

Section C – Convertible (unbelted and belted rear facing, unbelted and belted forward facing)

<input checked="" type="checkbox"/>	Britax Roundabout E9L02	<input checked="" type="checkbox"/>	Full Rearward	<input checked="" type="checkbox"/>	Mid Position	<input checked="" type="checkbox"/>	Full Forward
<input checked="" type="checkbox"/>	Cosco High Back Booster 22-209	<input checked="" type="checkbox"/>	Full Rearward	<input checked="" type="checkbox"/>	Mid Position	<input checked="" type="checkbox"/>	Full Forward
<input type="checkbox"/>	Cosco Summit Deluxe 22-262	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Cosco Touriva 02519	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input checked="" type="checkbox"/>	Evenflo Generations 352	<input checked="" type="checkbox"/>	Full Rearward	<input checked="" type="checkbox"/>	Mid Position	<input checked="" type="checkbox"/>	Full Forward
<input type="checkbox"/>	Evenflo Medallion 254	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Evenflo Tribute V 379	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input checked="" type="checkbox"/>	Graco ComfortSport	<input checked="" type="checkbox"/>	Full Rearward	<input checked="" type="checkbox"/>	Mid Position	<input checked="" type="checkbox"/>	Full Forward
<input type="checkbox"/>	Graco Platinum Cargo	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Graco Safeseat Step 2	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward

- | | |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | 13. Suppression tests with newborn infant (Part 572, Subpart K) using the following indicated child restraints (mid-height seat position). |
|-------------------------------------|--|

Section A – Car Bed (Belted)

<input checked="" type="checkbox"/>	Angel Guard Angel Ride	<input checked="" type="checkbox"/>	Full Rearward	<input checked="" type="checkbox"/>	Mid Position	<input checked="" type="checkbox"/>	Full Forward
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14. Suppression tests with 3-year-old dummy (Part 572, Subpart P) using the following indicated child restraints where a child restraint is required (mid-height seat position):

Section C – Convertible (Belted forward-facing)

<input checked="" type="checkbox"/>	Britax Roundabout E9L02	<input checked="" type="checkbox"/>	Full Rearward	<input checked="" type="checkbox"/>	Mid Position	<input checked="" type="checkbox"/>	Full Forward
<input checked="" type="checkbox"/>	Cosco High Back Booster 22-209	<input checked="" type="checkbox"/>	Full Rearward	<input checked="" type="checkbox"/>	Mid Position	<input checked="" type="checkbox"/>	Full Forward
<input type="checkbox"/>	Cosco Summit Deluxe 22-262	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Cosco Touriva 02519	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input checked="" type="checkbox"/>	Evenflo Generations 352	<input checked="" type="checkbox"/>	Full Rearward	<input checked="" type="checkbox"/>	Mid Position	<input checked="" type="checkbox"/>	Full Forward
<input type="checkbox"/>	Evenflo Medallion 254	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Evenflo Tribute V 379	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input checked="" type="checkbox"/>	Graco ComfortSport	<input checked="" type="checkbox"/>	Full Rearward	<input checked="" type="checkbox"/>	Mid Position	<input checked="" type="checkbox"/>	Full Forward
<input type="checkbox"/>	Graco Platinum Cargo	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Graco Safeseat Step 2	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward

Section D – Toddler/Belt Positioning Booster (Belted)

<input type="checkbox"/>	Britax Roadster 9004	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Cosco High Back Booster 22-209	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input checked="" type="checkbox"/>	Cosco Summit Deluxe 22-262	<input checked="" type="checkbox"/>	Full Rearward	<input checked="" type="checkbox"/>	Mid Position	<input checked="" type="checkbox"/>	Full Forward
<input type="checkbox"/>	Evenflo Right Fit 245	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Evenflo Generations 352	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input checked="" type="checkbox"/>	Graco Platinum Cargo	<input checked="" type="checkbox"/>	Full Rearward	<input checked="" type="checkbox"/>	Mid Position	<input checked="" type="checkbox"/>	Full Forward

15. Suppression tests with representative 3-year-old child using the following indicated child restraints where a child restraint is required (mid-height position). (Appendix H, Data Sheet 19H and 20H)

Section C – Convertible (Belted forward-facing)

<input type="checkbox"/>	Britax Roundabout E9L02	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Cosco High Back Booster 22-209	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Cosco Summit Deluxe 22-262	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Cosco Touriva 02519	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Evenflo Generations 352	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Evenflo Medallion 254	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Evenflo Tribute V 379	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Graco ComfortSport	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Graco Platinum Cargo	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Graco Safeseat Step 2	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward

Section D – Toddler/Belt Positioning Booster (Belted)

<input type="checkbox"/>	Britax Roadster 9004	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Cosco High Back Booster 22-209	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Cosco Summit Deluxe 22-262	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Evenflo Generations 352	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Evenflo Right Fit 245	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward
<input type="checkbox"/>	Graco Platinum Cargo	<input type="checkbox"/>	Full Rearward	<input type="checkbox"/>	Mid Position	<input type="checkbox"/>	Full Forward

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

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

- | | | |
|-------------------------------------|-----|--|
| <input type="checkbox"/> | 25. | Low risk deployment test with 3-year-old dummy (Part 572, Subpart P) in the following positions: |
| <input type="checkbox"/> | | Position 1 (rearmost, lowest seat position) |
| <input type="checkbox"/> | | Position 2 (mid-height seat position) |
| <input type="checkbox"/> | 26. | Low risk deployment test with 6-year-old dummy (Part 572, Subpart N) in the following positions: |
| <input type="checkbox"/> | | Position 1(rearmost, lowest seat position) |
| <input type="checkbox"/> | | Position 2 (mid-height seat position) |
| <input checked="" type="checkbox"/> | 27. | Low risk deployment test with 5 th female dummy (Part 572, Subpart O) in the following positions: |
| <input checked="" type="checkbox"/> | | Position 1 (mid-height seat position) |
| <input checked="" type="checkbox"/> | | Position 2 (mid-height seat position) |
| <input checked="" type="checkbox"/> | 28. | Impact Tests |
| <input checked="" type="checkbox"/> | | Frontal Oblique Impact Angle: 30° Test Speed: 39.8 kmph |
| <input type="checkbox"/> | | Belted 50 th male dummy driver and passenger (0 to 48 kmph) (S5.1.1(a)) |
| <input type="checkbox"/> | | Unbelted 50 th male dummy driver and passenger (0 to 48 kmph) (S5.1.2(a)(1)) |
| <input checked="" type="checkbox"/> | | Unbelted 50 th male dummy driver and passenger (32 to 40 kmph) (S5.1.2(a)(2) or S5.1.2(b)) |
| <input type="checkbox"/> | | Frontal 0° - Test Speed: |
| <input type="checkbox"/> | | Belted 50 th male dummy driver (0 to 48 kmph) (S5.1.1.(b)(1) or S5.1.1(a)) |
| <input type="checkbox"/> | | Belted 50 th male dummy passenger (0 to 48 kmph) (S5.1.1.(b)(1) or S5.1.1(a)) |
| <input type="checkbox"/> | | Belted 5 th female dummy driver (0 to 48 kmph) (S16.1(a)(1)) |
| <input type="checkbox"/> | | Belted 5 th female dummy passenger (0 to 48 kmph) (S16.1(a)(1)) |
| <input type="checkbox"/> | | Belted 5 th female dummy driver and passenger (0 to 56 kmph) (S16.1(a)(2)) |
| <input type="checkbox"/> | | Belted 50 th male dummy driver and passenger (0 to 56 kmph) (S5.1.1.(b)(2)) |
| <input type="checkbox"/> | | Unbelted 50 th male dummy driver and passenger (0 to 48 kmph) (S5.1.2(a) (1)) |
| <input type="checkbox"/> | | Unbelted 50 th male dummy driver (32 to 40 kmph) (S5.1.2.(a)(2) or S5.1.2(b)) |
| <input type="checkbox"/> | | Unbelted 50 th male dummy passenger (32 to 40 kmph) (S5.1.2.(a)(2) or S5.1.2(b)) |
| <input type="checkbox"/> | | Unbelted 5 th female dummy driver (32 to 40 kmph) (S16.1(b)) |
| <input type="checkbox"/> | | Unbelted 5 th female dummy passenger (32 to 40 kmph) (S16.1(b)) |
| <input type="checkbox"/> | | 40% Offset 0° Belted 5 th female dummy driver and passenger (0 to 40 kmph) (S18.1) Test Speed: |
| <input type="checkbox"/> | 29. | FMVSS 204 Indicant Test |
| <input checked="" type="checkbox"/> | 30. | FMVSS 212 Test |
| <input checked="" type="checkbox"/> | 31. | FMVSS 219 Indicant Test |
| <input type="checkbox"/> | 32. | FMVSS 301 Frontal Test |
| <input checked="" type="checkbox"/> | 33. | FMVSS 305 Indicant Test |

DATA SHEET 2
REPORT OF VEHICLE CONDITION

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance

NHTSA No.: C20130200
Test Dates: 7/22/13 - 9/30/13

CONTRACT NO.: DTNH22-08-D-00086

Date: 10/6/2013

FROM (Lab and rep name): MGA Research Corporation

TO: NHTSA, OVSC, NVS-220

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

MODEL YEAR/MAKE/MODEL/BODY STYLE: 2013 Ford Focus Electric Passenger Car

MANUFACTURE DATE: 12/12

NHTSA NO. C20130200

GVWR: 2085 kg (4597 lbs)

BODY COLOR: Candy Blue

GAWR (Fr): 934 kg (2060 lbs)

VIN: 1FADP3R48DL217777

GAWR (Rr): 1200 kg (2646 lbs)

ODOMETER READINGS: ARRIVAL (miles): 73 DATE: 6/19/13

COMPLETION (miles): 84 DATE: 9/30/13

PURCHASE PRICE: (\$) 41,690

DEALER'S NAME: Dealer Unknown; Received from General Testing Laboratories;
1633 Leedstown Rd., Colonial Beach, VA 22443

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

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

Comments: _____

REPORT OF VEHICLE CONDITION AT THE COMPLETION OF TESTING

LIST OF FMVSS TESTS PERFORMED BY THIS LAB: FMVSS 208, 212, 219, 301, 305

VEHICLE: 2013 Ford Focus Electric NHTSA NO.: C20130200

REMARKS:

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

Rear Floor Mats, Rear Headrests, Right Tail Light, Air Pump, Trunk Liner, Front Splash Guard

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: 10/6/2013

APPROVED BY: David Winkelbauer DATE: 10/6/2013

#####

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: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Chad Seebecker

NHTSA No.: C20130200
 Test Date: 9/30/13

Certification Label (Part 567)	
Manufacturer:	Ford Motor Co.
Date of Manufacture:	12/12
VIN:	1FADP3R48DL217777
Vehicle Certified As (Pass. Car/MPV/Truck/Bus):	Passenger Car
Front Axle GVWR:	934 kg (2060 lbs)
Rear Axle GVWR:	1200 kg (2646 lbs)
Total GVWR:	2085 kg (4597 lbs)

Tire Placard for Motor Vehicles with GVWR of 10,000 lb or Less and Passenger Cars (571.110)	
Vehicle Capacity Weight:	375 kg (827 lbs)
Designated Seating Capacity Front:	2
Designated Seating Capacity Rear:	3
Total Designated Seating Capacity:	5
Recommended Cold Tire Inflation Pressure Front:	260 kpa (38 psi)
Recommended Cold Tire Inflation Pressure Rear:	260 kpa (38 psi)
Recommended Tire Size:	P225/50 R17
Tire Size on Vehicle:	P225/50 R17

Signature: 

Date: 9/30/13

DATA SHEET 4
REAR SEATING POSITION SEAT BELTS

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance
Test Technician: Wayne Dahlke

NHTSA No.: C20130200
Test Date: 7/22/13

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

If NO, describe the seat belt installed, the seat location, and any other information about the seat that would explain why a Type 2 seat belt was not installed.

REMARKS:

Signature: Wayne Dahlke

Date: 7/22/13

DATA SHEET 5
AIR BAG LABELS (S4.5.1)

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Wayne Dahlke

NHTSA No.: C20130200
 Test Date: 7/22/13

1. Air Bag Maintenance Label and Owner's Manual Instructions: (S4.5.1(a))
- 1.1 Does the manufacturer recommend periodic maintenance or replacement of the air bag?
- Yes (Go to 1.2)
 No (Go to 2)
- 1.2 Does the vehicle have a label specifying air bag maintenance or replacement?
- Yes – Pass
 No – Fail
- 1.3 Does the label contain one of the following?
- Yes – Pass
 No – Fail
- Check applicable schedule:
 Schedule on label specifies month and year (Record date_____)
 Schedule on label specifies vehicle mileage (Record mileage_____)
 Schedule on label specifies interval measured from date on certification label (Record interval_____)
- 1.4 Is the label permanently affixed within the passenger compartment such that it cannot be removed without destroying or defacing the label or vehicle part? (3/19/01 legal interpretation to Todd Mitchell)
- Yes – Pass
 No – Fail
- 1.5 Is the label lettered in English?
- Yes – Pass
 No – Fail
- 1.6 Is the label in block capitals and numerals?
- Yes – Pass
 No – Fail
- 1.7 Are the letters and numerals at least 3/32 inches high?
- Yes – Pass
 No – Fail
- 1.8 Does the owner's manual set forth the recommended schedule for maintenance or replacement?
2. Does the owner's manual: (S4.5.1(f))
- 2.1 Include a description of the vehicle's air bag system in an easily understandable format?
- Yes – Pass
 No – Fail
- 2.2 Include a statement that the vehicle is equipped with an air bag and a lap/shoulder belt at the front outboard seating position?
- Yes – Pass
 No – Fail
- 2.3 Include a statement that the air bag is a supplemental restraint at the front outboard seating position?
- Yes – Pass
 No – Fail

- 2.4 Emphasize that all occupants, including the driver, should always wear their seat belts whether or not an air bag is also provided at their seating positions to minimize the risk of severe injury or death in the event of a crash?
 Yes – Pass
 No – Fail
- 2.5 Provide any necessary precautions regarding the proper positioning of occupants, including children, at seating positions equipped with air bags to ensure maximum safety protection for those occupants?
 Yes – Pass
 No – Fail
- 2.6 Explain that no objects should be placed over or near the air bag on the steering wheel or on the instrument panel, because any such objects could cause harm if the vehicle is in a crash severe enough to cause the air bag to inflate?
 Yes – Pass
 No – Fail
- 2.7 Is the vehicle certified to meet the requirements of S14.5, S15, S17, S19, S21, S23, and S25? (Obtain answer to this question from the COTR) (S4.5.1(f)(2))
 Yes – (Go to 2.7.1)
 No – (Go to 3.)
- 2.7.1 Explain the proper functioning of the advanced air bag system? (S4.5.1(f)(2))
 Yes – Pass
 No – Fail
- 2.7.2 Provide a summary of the actions that may affect the proper functioning of the system? (S4.5.1(f)(2))
 Yes – Pass
 No – Fail
- 2.7.3 Present and explain the main components of the advanced passenger air bag system? (S4.5.1(f)(2)(i))
 Yes – Pass
 No – Fail
- 2.7.4 Explain how the components function together as part of the advanced passenger air bag system? (S4.5.1(f)(2)(ii))
 Yes – Pass
 No – Fail
- 2.7.5 Contain the basic requirements for proper operation, including an explanation of the actions that may affect the proper functioning of the system? (S4.5.1(f)(2)(iii))
 Yes – Pass
 No – Fail
- 2.7.6 Is the vehicle certified to the requirements of S19.2, S21.2, or 23.2 (automatic suppression)?
 Yes, continue with 2.7.6
 No, go to 2.7.7
- 2.7.6.1 Contain a complete description of the passenger air bag suppression system installed in the vehicle, including a discussion of any suppression zone? (S4.5.1(f)(2)(iv))
 Yes – Pass
 No – Fail
- 2.7.6.2 Discuss the telltale light, specifying its location in the vehicle and explaining when the light is illuminated?
 Yes – Pass
 No – Fail

- 2.7.7 Explain the interaction of the advanced passenger air bag system with other vehicle components, such as seat belts, seats or other components? (S4.5.1(f)(2)(v))
- Yes – Pass
 No – Fail
- 2.7.8 Summarize the expected outcomes when child restraint systems, children and small teenagers or adults are both properly and improperly positioned in the passenger seat, including cautionary advice against improper placement of child restraint systems? (S4.5.1(f)(2)(vi))
- Yes – Pass
 No – Fail
- 2.7.9 Provide information on how to contact the vehicle manufacturer concerning modifications for persons with disabilities that may affect the advanced air bag system? (S4.5.1(f)(2)(vii))
- Yes – Pass
 No – Fail
3. Sun Visor Air Bag Warning Label (S4.5.1(b)): Vehicles certified to meet the requirements of S19, S21 and S23. (S4.5.1(b)(3))
- 3.1 Is the label permanently affixed (including permanent marking on the visor material or molding into the visor material) to either side of the sun visor at each front outboard seating position such that it cannot be removed without destroying or defacing the label or the sun visor? (S4.5.1(b)(3)) (3/19/01 legal interpretation to Todd Mitchell)
- Driver Side, Yes – Pass
 Driver Side, No – Fail
 Passenger Side, Yes – Pass
 Passenger Side, No – Fail

X

3.2 Does the label conform in content to the label shown in Figure 11 at each front outboard seating position? (S4.5.1(b)(2)) (Vehicles without back seats or the back seat is too small to accommodate a rear-facing child restraint may omit the statement: "Never put a rear-facing child seat in the front." (S4.5.1(b)(3)(v)))



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



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

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

X

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

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

X

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

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

- 3.5 Is the message area at least 30 cm²? (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 88 mm, Width 35 mm
 Passenger Side: Length 88 mm, Width 35 mm
 Driver actual message area 30.8 cm²
 Passenger actual message area 30.8 cm²
- Driver Side, Yes – Pass
 Driver Side, No – Fail
 Passenger Side, Yes – Pass
 Passenger Side, No – Fail
- 3.6 Is the pictogram black on a white background? (S4.5.1(b)(3)(iii))
- Driver Side, Yes – Pass
 Driver Side, No – Fail
 Passenger Side, Yes – Pass
 Passenger Side, No – Fail
- 3.7 Is the pictogram at least 30 mm in length? (S4.5.1(b)(3)(iii))
 Driver side: Length: 33 mm
 Passenger side: Length: 33 mm
- Driver Side, Yes – Pass
 Driver Side, No – Fail
 Passenger Side, Yes – Pass
 Passenger Side, No – Fail
- 3.8 Is the same side of the sun visor that contains the air bag warning label free of other information with the exception of the air bag maintenance label and/or the rollover-warning label? (S4.5.1(b)(5)(i))
- Driver Side, Yes – Pass
 Driver Side, No – Fail
 Passenger Side, Yes – Pass
 Passenger Side, No – Fail
- 3.9 Is the sun visor free of other information about air bags or the need to wear seat belts with the exception of the air bag alert label and/or the rollover-warning label? (S4.5.1(b)(5)(ii))
- Driver Side, Yes – Pass
 Driver Side, No – Fail
 Passenger Side, Yes – Pass
 Passenger Side, No – Fail
- 3.10 Does the driver side visor contain a rollover-warning label on the same side of the visor as the air bag warning label?
 ___ Yes (go to 3.10.1)
 No (go to 4., skipping 3.10.1 through 3.10.3)
- 3.10.1 Are both the rollover-warning label and the air bag warning label surrounded by a continuous solid-lined border?
 ___ Yes (go to 3.10.2 and skip 3.10.3)
 ___ No (go to 3.10.3 and skip 3.10.2)

- 3.10.2 Is the shortest distance from the border of the rollover label to the border of the air bag warning label at least 1 cm? (575.105 (d)(1)(iv)(B))
 _____ actual distance
 ___Yes-Pass ___No-FAIL
- 3.10.3 Is the shortest distance from any of the lettering or graphics on the rollover-warning label to any of the lettering or graphics of the air bag warning label at least 3 cm? (575.105 (d)(1)(iv)(A))
 _____ actual distance
 Yes-Pass ___No-FAIL
4. Air Bag Alert Label (S4.5.1(c) (A “Rollover Warning Label” or “Rollover Alert Label” may be on the same side of the driver’s sun visor as the “Air Bag Alert Label.” 575.105(d))
- 4.1 Is the Sun Visor Warning Label visible when the sun visor is in the stowed position?
 If yes for driver and passenger, go to 5.
 Driver Side, Yes
 Driver Side, No
 Passenger Side, Yes
 Passenger Side, No
- 4.2 Is the air bag alert label permanently affixed (including permanent marking on the visor material or molding into the visor material) to the sun visor at each front outboard seating position such that it cannot be removed without destroying or defacing the label or the sun visor? (S4.5.1(c)) (3/19/01 legal interpretation to Todd Mitchell)
 Driver Side, Yes – Pass
 Driver Side, No – Fail
 Passenger Side, Yes – Pass
 Passenger Side, No – Fail
- 4.3 Is the air bag alert label visible when the visor is in the stowed position? (S4.5.1(c))
 Driver Side, Yes – Pass
 Driver Side, No – Fail
 Passenger Side, Yes – Pass
 Passenger Side, No – Fail
- 4.4 Does the label conform in content to the label shown in Figure 6C? (S4.5.1(c))

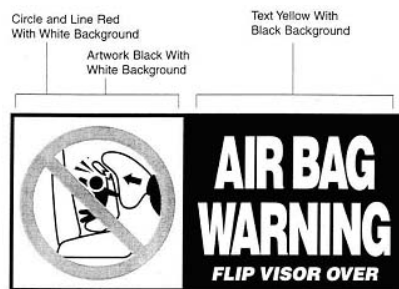


Figure 6C. Sun Visor Label Visible When Visor is in Up Position.

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

- 4.6 Is the message area at least 20 cm²? (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 _____ cm²
- Driver Side, Yes – Pass
 Driver Side, No – Fail
 Passenger Side, Yes – Pass
 Passenger Side, No – Fail
- 4.7 Is the pictogram black with a red circle and slash on a white background? (S4.5.1(c)(2))
- Driver Side, Yes – Pass
 Driver Side, No – Fail
 Passenger Side, Yes – Pass
 Passenger Side, No – Fail
- 4.8 Is the pictogram at least 20 mm in diameter? (S4.5.1(c)(2))
- Driver Side: Diameter _____ mm
 Passenger Side: Diameter _____ mm
- Driver Side, Yes – Pass
 Driver Side, No – Fail
 Passenger Side, Yes – Pass
 Passenger Side, No – Fail
5. Label on the Dashboard: Vehicles certified to meet the requirements of S19, S21 and S23?
- 5.1 Does the vehicle have a label on the dash or steering wheel hub? (S4.5.1(e)(3))
- Yes – Pass **The label was missing and it could not be determined when it was removed. Therefore it was not evaluated.**
 No – Fail
- 5.2 Is the label clearly visible from all front seating positions? (S4.5.1(e)(3))
- Yes – Pass
 No - Fail
- 5.3 Does the label conform in content to the label shown in Figure 12? (S4.5.1(e)(3))
Vehicles without back seats may omit the statement: “The back seat is the safest place for children.” Vehicles without back seats or too small to accommodate a rear-facing child restraint consistent with S4.5.4.1 as determined in DATA SHEET 7 may omit the statement “Never put a rear-facing child seat in the front.” (S4.5.1(e)(3)(iii))
- Yes – Pass
 No - Fail

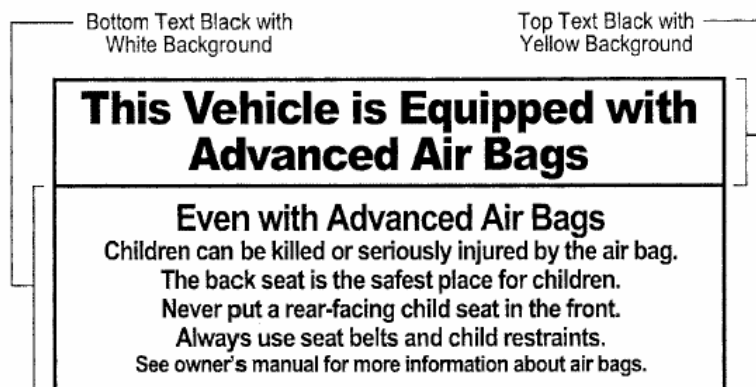


Figure 12. Removable Label on Dash.

- 5.4 Is the heading area yellow with black text? (S4.5.1(e)(3)(i))
 Yes – Pass
 No - Fail
- 5.5 Is the message white with black text? (S4.5.1(e)(3)(ii))
 Yes – Pass
 No - Fail
- 5.6 Is the message area at least 30 cm²? (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 __cm, Width __cm
Actual message area __ cm²
 Yes – Pass
 No - Fail

I certify that I have read and performed each instruction.

Signature: Wayne Gahlh

Date: 7/22/13

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

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance
Test Technician: Wayne Dahlke

NHTSA No.: C20130200
Test Date: 7/22/13

An occupant restraint system that deploys in the event of a crash shall have a monitoring system with a readiness indicator. A totally mechanical system is exempt from this requirement. (11/8/94 legal interpretation to Lawrence F. Hennegerger on behalf of Breed)

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

REMARKS:

I certify that I have read and performed each instruction.

Signature: Wayne Dahlke

Date: 7/22/13

DATA SHEET 7

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

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Wayne Dahlke

NHTSA No.: C20130200
 Test Date: 7/22/13

- 1. Is the vehicle equipped with an on-off switch that deactivates the air bag installed at the right front outboard seating position?
 Yes, go to 2
 No, this sheet is complete
- 2. Does the vehicle have any forward-facing rear designated seating positions? (S4.5.4.1(a))
 Yes, go to 3
 No, go to 4
- 3. Verification there is room for a child restraint in the rear seat behind the driver's seat. (S4.5.4.1(b))
- 3.1 Using all the controls that affect the fore-aft movement of the seat, move the seat to the rearmost position. Mark this position.
 N/A – the seat does not have fore-aft adjustment
- 3.2 Using all the controls that affect the fore-aft movement of the seat, move the seat to the foremost position. Mark this position.
 N/A – the seat does not have fore-aft adjustment
- 3.3 Move the seat to the middle of the foremost and rearmost positions. (S8.1.2)
 N/A – the seat does not have a fore-aft adjustment
- 3.4 If the driver's seat height is adjustable, use all the controls that affect height to put it in the lowest position while maintaining the middle fore-aft position. (S8.1.2)
 N/A – No seat height adjustment
- 3.5 Position the driver's seat adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)
 N/A – No lumbar adjustment
- 3.6 The driver's seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S4.5.4.1(b) and S8.1.3)
 N/A – No seat back angle adjustment
 Manufacturer's design driver's seat back angle _____
 Tested driver's seat back angle _____
- 3.7 Is the driver seat a bucket seat?
 ___ Yes, go to 3.7.1 and skip 3.7.2.
 ___ No, go to 3.7.2 and skip 3.7.1.
- 3.7.1 Bucket seats:
- 3.7.1.1 Locate and mark a vertical Plane B through the longitudinal centerline of the driver's seat cushion. The longitudinal centerline of a bucket seat cushion is determined at SgRP. (S16.3.1.10) (S4.5.4.1(b)(1))
- 3.7.1.2 Locate the longitudinal horizontal line in plane B that is tangent to the highest point of the rear seat cushion behind the driver's seat. Measure along this line from the front of the seat back of the rear seat to the rear of the seat back of the driver's seat.
 _____ mm distance
 ___ less than 720 mm – Pass
 ___ more than 720 mm – **FAIL**
 Go to 4
- 3.7.2 Bench seats (including split bench seats):
- 3.7.2.1 Locate and mark a vertical Plane B through the center of the steering wheel parallel to the vehicle longitudinal centerline. (S4.5.4.1(b)(2))

- 3.7.2.2 Locate the longitudinal horizontal line in plane B that is tangent to the highest point of the rear seat cushion. Measure along this line from the front of the seat back of the rear seat to the rear of the seat back of the front seat.
- ____ mm distance
- ____ less than 720 mm – Pass
- ____ more than 720 mm - **FAIL**
- Go to 4
4. Does the device turn the air bag on and off using the vehicle's ignition key? (S4.5.4.2)
- Yes – Pass
- No – Fail
5. Is the on-off device separate from the ignition switch? (S4.5.4.2)
- Yes – Pass
- No – Fail
6. Is there a telltale light that comes on when the passenger air bag is turned off? (S4.5.4.2)
- Yes – Pass
- No – Fail
7. Telltale light (S4.5.4.3)
- 7.1 Is the light yellow? S4.5.4.3(a)
- Yes – Pass
- No – Fail
- 7.2 Are the words "PASSENGER AIR BAG OFF" or "PASS AIR BAG OFF" (S4.5.4.3(b))
- 7.2.1 on the telltale?
- Yes – Pass, go to 7.3
- No – go to 7.2.2
- 7.2.2 within 25 mm of the telltale?
- Measurement from the edge of the telltale light (mm):
- Yes – Pass
- No – Fail
- 7.3 Does the telltale remain illuminated while the air bag is turned off? (S4.5.4.3(c)) (Leave the air bag off for 5 minutes.)
- Yes – Pass
- No – Fail
- 7.4 Is the telltale illuminated while the air bag is turned on? (S4.5.4.3(d))
- Yes – Fail
- No – Pass
- 7.5 Is the telltale combined with the air bag readiness indicator? (S4.5.4.3(e))
- Yes – Fail
- No – Pass
8. Owner's Manual
- 8.1 Does the owner's manual contain complete instructions on the operation of the on-off switch? (S4.5.4.4(a))
- Yes – Pass
- No – Fail

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

Yes – Pass

No – Fail

- 8.3 Does the owner's manual contain a warning about the safety consequences of using the on-off switch at other times?

Yes – Pass

No – Fail

REMARKS:

I certify that I have read and performed each instruction.

Signature: Wayne J. Ahl

Date: 7/22/13

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: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance
Test Technician: Wayne Dahlke

NHTSA No.: C20130200
Test Date: 7/22/13

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
- 1. Record test fore-aft seat position: **REAR**
(S7.1.1.5(c)(1)) (Any position is acceptable)
- 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))
 - Yes – Pass
 - No – Fail
- 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))
 - Yes – Pass
 - No – Fail
- 4. Place any adjustable seat belt anchorage in the lowest adjustment position.
 - N/A The anchorage is not adjustable.
- 5. Buckle the seat belt. (S7.1.1.5(c)(1))
- 6. Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))
- 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))
- 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?
 - Yes (go to 8.1)
 - No (go to 9)
- 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))
 - Yes – Pass
 - No – Fail
- 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))
- 10. Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))
 - Measured distance between A and B (inches): 88 inches

11. Readjust the belt system so that the webbing between points A and B is at $\frac{1}{2}$ the maximum length of the webbing. (S7.1.1.5(c)(3))
12. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))
Measured force application angle: 10 (spec. 5 - 15 degrees)
13. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4))
Measured distance between A and B: 44 inches
14. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))
Record onset rate: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))
Measured distance between A and B: 44 $\frac{1}{4}$ inches (S7.1.1.5(c)(6))
15. Let the seat belt webbing retract to its minimum length with the seat belt still buckled.
16. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))
Measured force application angle: 10 (spec. 5 - 15 degrees)
17. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4))
Measured distance between A and B: 25 inches
18. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))
Record onset rate: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))
Measured distance between A and B: 25 $\frac{3}{4}$ inches (S7.1.1.5(c)(6))
19. Subtract the measurement in 13 from the measurement in 14 and the measurement in 17 from the measurement in 18. Is the difference 2 inches or less for both?
(S7.1.1.5(c)(7))
 $14 - 13 = 44 \frac{1}{4} - 44 = \frac{1}{4}$ inch
 $18 - 17 = 25 \frac{3}{4} - 25 = \frac{3}{4}$ inch
- Yes – Pass
 No – Fail

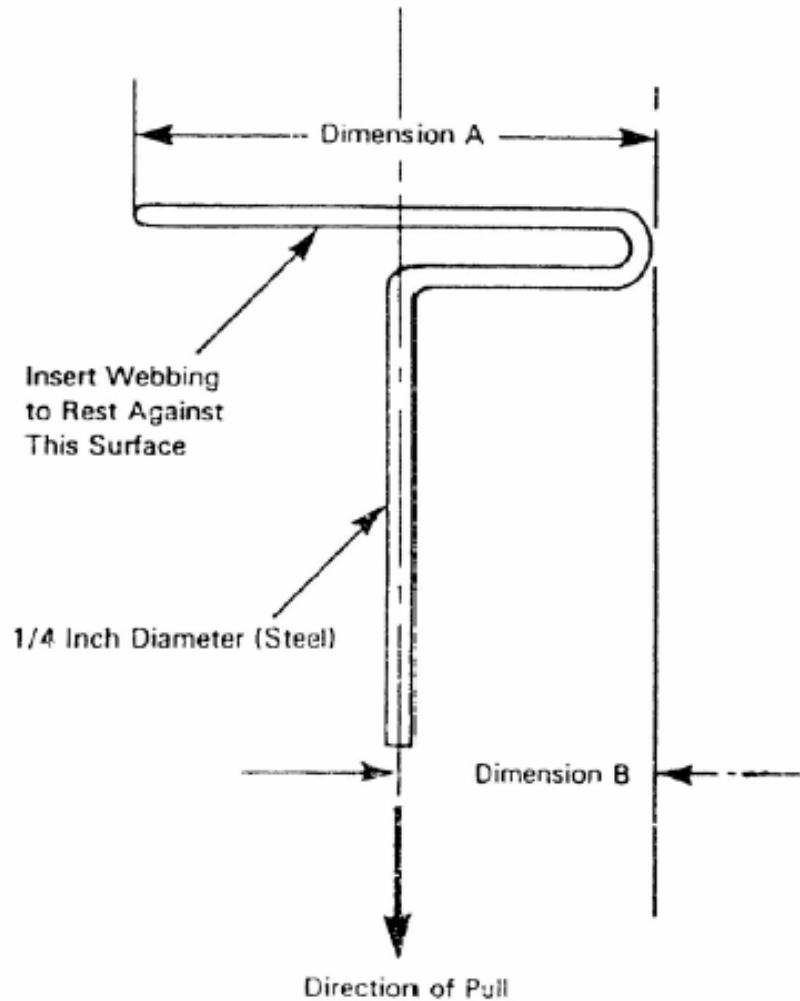
20. Subtract the measurement in 14 from the measurement in 10 and the measurement in 18 from the measurement in 10. Is the difference 3 inches or more for both?
(S7.1.1.5(c)(8))
- 10-14 = $88 - 44 \frac{1}{4} = 43 \frac{3}{4}$ inches;
- 10-18 = $88 - 25 \frac{3}{4} = 62 \frac{1}{4}$ inches
- Yes – Pass
- No – Fail

REMARKS:

Signature: Wayne Jahlh

Date: 7/22/13

I certify that I have read and performed each instruction.



Dimension A - Width of Webbing Plus 1/2 Inch

Dimension B - 1/2 of Dimension A

Figure 5. - Webbing Tension Pull Device

DATA SHEET 8

LAP BELT LOCKABILITY

Passenger cars, trucks, buses, and multipurpose passenger
Vehicles with a GVWR of 10,000 pounds or less. (S7.1.1.5)

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance
Test Technician: Wayne Dahlke

NHTSA No.: C20130200
Test Date: 7/22/13

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
- 1. Record test fore-aft seat position: **FIXED**
(S7.1.1.5(c)(1)) (Any position is acceptable)
- 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))
 - Yes – Pass
 - No – Fail
- 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))
 - Yes – Pass
 - No – Fail
- 4. Place any adjustable seat belt anchorage in the lowest adjustment position.
 - N/A The anchorage is not adjustable.
- 5. Buckle the seat belt. (S7.1.1.5(c)(1))
- 6. Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))
- 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))
- 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?
 - Yes (go to 8.1)
 - No (go to 9)
- 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))
 - Yes – Pass
 - No – Fail
- 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))
- 10. Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))
 - Measured distance between A and B (inches): 64

11. Readjust the belt system so that the webbing between points A and B is at $\frac{1}{2}$ the maximum length of the webbing. (S7.1.1.5(c)(3))
12. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))
Measured force application angle: 10 (spec. 5 - 15 degrees)
13. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4))
Measured distance between A and B: 38 $\frac{1}{2}$ inches
14. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))
Record onset rate: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))
Measured distance between A and B: 38 $\frac{1}{2}$ inches (S7.1.1.5(c)(6))
15. Let the seat belt webbing retract to its minimum length with the seat belt still buckled.
16. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))
Measured force application angle: 10 (spec. 5 - 15 degrees)
17. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4))
Measured distance between A and B: 13 inches
18. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))
Record onset rate: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))
Measured distance between A and B: 13 $\frac{1}{2}$ inches (S7.1.1.5(c)(6))
19. Subtract the measurement in 13 from the measurement in 14 and the measurement in 17 from the measurement in 18. Is the difference 2 inches or less for both?
(S7.1.1.5(c)(7))
14 - 13 = 38 $\frac{1}{2}$ - 38 $\frac{1}{2}$ = 0 inches;
18 - 17 = 13 $\frac{1}{2}$ - 13 = $\frac{1}{2}$ inches
- Yes – Pass
 No – Fail

20. Subtract the measurement in 14 from the measurement in 10 and the measurement in 18 from the measurement in 10. Is the difference 3 inches or more for both?
(S7.1.1.5(c)(8))

$10 - 14 = 64 - 38 \frac{1}{2} = 25 \frac{1}{2}$ inches;

$10 - 18 = 64 - 13 \frac{1}{2} = 50 \frac{1}{2}$ inches

Yes – Pass

No – Fail

REMARKS:

Signature: Wayne Gahl

Date: 7/22/13

I certify that I have read and performed each instruction.

DATA SHEET 8

LAP BELT LOCKABILITY

Passenger cars, trucks, buses, and multipurpose passenger
Vehicles with a GVWR of 10,000 pounds or less. (S7.1.1.5)

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance
Test Technician: Wayne Dahlke

NHTSA No.: C20130200
Test Date: 7/22/13

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
- 1. Record test fore-aft seat position: **FIXED**
(S7.1.1.5(c)(1)) (Any position is acceptable)
- 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))
 - Yes – Pass
 - No – Fail
- 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))
 - Yes – Pass
 - No – Fail
- 4. Place any adjustable seat belt anchorage in the lowest adjustment position.
 - N/A The anchorage is not adjustable.
- 5. Buckle the seat belt. (S7.1.1.5(c)(1))
- 6. Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))
- 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))
- 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?
 - Yes (go to 8.1)
 - No (go to 9)
- 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))
 - Yes – Pass
 - No – Fail
- 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))
- 10. Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))

Measured distance between A and B (inches): 60 1/2

11. Readjust the belt system so that the webbing between points A and B is at $\frac{1}{2}$ the maximum length of the webbing. (S7.1.1.5(c)(3))
12. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))
Measured force application angle: 10 (spec. 5 - 15 degrees)
13. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4))
Measured distance between A and B: $37\frac{3}{4}$ inches
14. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))
Record onset rate: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))
Measured distance between A and B: $38\frac{1}{4}$ inches (S7.1.1.5(c)(6))
15. Let the seat belt webbing retract to its minimum length with the seat belt still buckled.
16. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))
Measured force application angle: 10 (spec. 5 - 15 degrees)
17. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4))
Measured distance between A and B: $13\frac{1}{2}$ inches
18. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))
Record onset rate: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))
Measured distance between A and B: $13\frac{3}{4}$ inches (S7.1.1.5(c)(6))
19. Subtract the measurement in 13 from the measurement in 14 and the measurement in 17 from the measurement in 18. Is the difference 2 inches or less for both?
(S7.1.1.5(c)(7))
 $14 - 13 = \frac{38\frac{1}{4} - 37\frac{3}{4}}{1} = \frac{1}{2}$ inch
 $18 - 17 = \frac{13\frac{3}{4} - 13\frac{1}{2}}{1} = \frac{1}{4}$ inch
- Yes – Pass
 No – Fail

20. Subtract the measurement in 14 from the measurement in 10 and the measurement in 18 from the measurement in 10. Is the difference 3 inches or more for both?
(S7.1.1.5(c)(8))

$10-14 = 60 \frac{1}{2} - 38 \frac{1}{4} = 22 \frac{1}{4}$ inches;

$10-18 = 60 \frac{1}{2} - 13 \frac{3}{4} = 46 \frac{3}{4}$ inches

Yes – Pass

No – Fail

REMARKS:

Signature: Wayne J. Ahl

Date: 7/22/13

I certify that I have read and performed each instruction.

DATA SHEET 8

LAP BELT LOCKABILITY

Passenger cars, trucks, buses, and multipurpose passenger
Vehicles with a GVWR of 10,000 pounds or less. (S7.1.1.5)

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance
Test Technician: Wayne Dahlke

NHTSA No.: C20130200
Test Date: 7/22/13

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
- 1. Record test fore-aft seat position: **FIXED**
(S7.1.1.5(c)(1)) (Any position is acceptable)
- 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))
 - Yes – Pass
 - No – Fail
- 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))
 - Yes – Pass
 - No – Fail
- 4. Place any adjustable seat belt anchorage in the lowest adjustment position.
 - N/A The anchorage is not adjustable.
- 5. Buckle the seat belt. (S7.1.1.5(c)(1))
- 6. Locate a reference point A on the seat belt buckle. (S7.1.1.5(c)(2))
- 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))
- 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?
 - Yes (go to 8.1)
 - No (go to 9)
- 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))
 - Yes – Pass
 - No – Fail
- 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))
- 10. Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. (S7.1.1.5(c)(2))
 - Measured distance between A and B (inches): 64

11. Readjust the belt system so that the webbing between points A and B is at $\frac{1}{2}$ the maximum length of the webbing. (S7.1.1.5(c)(3))
12. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))
Measured force application angle: 10 (spec. 5 - 15 degrees)
13. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4))
Measured distance between A and B: 38 $\frac{1}{2}$ inches
14. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))
Record onset rate: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))
Measured distance between A and B: 39 inches (S7.1.1.5(c)(6))
15. Let the seat belt webbing retract to its minimum length with the seat belt still buckled.
16. To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane parallel to the longitudinal axis of the vehicle and passing through the seating reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (S7.1.1.5(c)(4))
Measured force application angle: 10 (spec. 5 - 15 degrees)
17. Measure the length between points A and B along the longitudinal centerline of the webbing while the preload is being applied. (S7.1.1.5(c)(4))
Measured distance between A and B: 12 $\frac{3}{4}$ inches
18. Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing sensitive emergency locking retractors are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (S7.1.1.5(c)(5))
Record onset rate: 15 lb/sec (spec. 10 to 50 lb/sec) (S7.1.1.5(c)(5))
Measured distance between A and B: 13 $\frac{1}{2}$ inches (S7.1.1.5(c)(6))
19. Subtract the measurement in 13 from the measurement in 14 and the measurement in 17 from the measurement in 18. Is the difference 2 inches or less for both?
(S7.1.1.5(c)(7))
 $14 - 13 = 39 - 38 \frac{1}{2} = \frac{1}{2}$ inch
 $18 - 17 = 13 \frac{1}{2} - 12 \frac{3}{4} = \frac{3}{4}$ inch
- Yes – Pass
 No – Fail

20. Subtract the measurement in 14 from the measurement in 10 and the measurement in 18 from the measurement in 10. Is the difference 3 inches or more for both?
(S7.1.1.5(c)(8))

10 - 14 = 64 - 39 = 25 inches;

10 - 18 = 64 - 13 1/2 = 50 1/2 inches

Yes – Pass

No – Fail

REMARKS:

Signature: Wayne J. Ahl

Date: 7/22/13

I certify that I have read and performed each instruction.

DATA SHEET 9

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



Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Wayne Dahlke

NHTSA No.: C20130200
 Test Date: 7/22/13

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

		Warning light	Warning light specification	Audible signal	Audible signal specification*
S7.3 (a)(1)	Belt stowed & key on or start	Item 8: <u>60 Seconds</u>	60 seconds minimum	Item 4: <u>6 Seconds</u>	4 to 8 seconds
S7.3 (a)(2)	Belt latched & key on or start	Item 12: <u>0 Seconds</u>	4 to 8 seconds		
	Belt stowed & key on or start	Item 8: <u>60 Seconds</u>	4 to 8 seconds	Item 4: <u>6 Seconds</u>	4 to 8 seconds

* 49 USCS @ 30124 does NOT allow an audible signal to operate for more than 8 seconds. A voluntary audible signal after the 4 to 8 second required signal may be provided. It must be differentiated from the required signal (5/25/2001 legal interpretation to Longacre and Associates).

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

I certify that I have read and performed each instruction.

Signature: Wayne Dahlke

Date: 7/22/13

DATA SHEET 10
BELT CONTACT FORCE (S7.4.3)

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Wayne Dahlke

NHTSA No.: C20130200
 Test Date: 7/22/13

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
------------------------------	---------------------

- | | | |
|-------------------------------------|----|---|
| <input checked="" type="checkbox"/> | 1. | Does the vehicle incorporate a webbing tension-relieving device? |
| | | <input type="checkbox"/> Yes (this form is complete) |
| | | <input checked="" type="checkbox"/> No (continue with this check sheet) |
- | | | |
|-------------------------------------|----|---|
| <input checked="" type="checkbox"/> | 2. | Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3) |
| | | <input checked="" type="checkbox"/> N/A – No lumbar adjustment |
- | | | |
|-------------------------------------|----|---|
| <input checked="" type="checkbox"/> | 3. | Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2) |
| | | <input checked="" type="checkbox"/> N/A – No additional support adjustment |
- | | | |
|-------------------------------------|----|--|
| <input checked="" type="checkbox"/> | 4. | Is the fore-aft position of the seat adjustable? |
| | | <input checked="" type="checkbox"/> No – go to 5 |
| | | <input type="checkbox"/> Yes – go to 4.1 |
- | | | |
|--------------------------|-----|---|
| <input type="checkbox"/> | 4.1 | Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. Mark this position. (8/31/95 legal interpretation to Hogan and Hartson) |
|--------------------------|-----|---|
- | | | |
|--------------------------|-----|--|
| <input type="checkbox"/> | 4.2 | Use all the seat controls that have any affects on the fore-aft movement of the seat to move the seat cushion to the foremost position. Mark this position. (8/31/95 legal interpretation to Hogan and Hartson) |
|--------------------------|-----|--|
- | | | |
|--------------------------|-----|---|
| <input type="checkbox"/> | 4.3 | Mark each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, mark each detent. For power seats, mark only the rearmost, middle and foremost positions. Label three of the positions with the following: F for foremost, M for mid-position (if there is no mid-position, label the closest adjustment position to the rear of the mid-point), and R for rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 4.1 and 4.2. (8/31/95 legal interpretation to Hogan and Hartson) |
|--------------------------|-----|---|
- | | | |
|--------------------------|-----|------------------------------------|
| <input type="checkbox"/> | 4.4 | Move the seat to the mid position. |
|--------------------------|-----|------------------------------------|
- | | | |
|--------------------------|-----|--|
| <input type="checkbox"/> | 4.5 | While maintaining the mid position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position. |
|--------------------------|-----|--|
- | | | |
|-------------------------------------|----|---|
| <input checked="" type="checkbox"/> | 5. | Is the seat back angle adjustable? |
| | | <input checked="" type="checkbox"/> No- go to 6 |
| | | <input type="checkbox"/> Yes- go to 5.1 |
- | | | |
|--------------------------|-----|---|
| <input type="checkbox"/> | 5.1 | Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a 50 th percentile adult male in the manner specified by the manufacturer. |
| | | <input type="checkbox"/> N/A – No seat back angle adjustment |
| | | <input type="checkbox"/> Manufacturer's design seat back angle: _____ |
| | | <input type="checkbox"/> Tested seat back angle: _____ |

6. Is the seat a bucket seat?
 Yes, go to 6.1 and skip 6.2
 No, go to 6.2 and skip 6.1
- 6.1 Bucket seats:
 Locate and mark the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- 6.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
 6.2.1 Driver Seat
 Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)
- 6.2.2 Front Outboard Passenger Seat
 Locate and **mark** the longitudinal centerline of the passenger seat cushion. The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)
 Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. _____
 Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. _____
- 6.2.3 Rear designated seating positions
 Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline.
7. Position the test dummies according to dummy position placement instructions in Appendix F. **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**
8. Fasten the seat belt latch.
9. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest.
10. Locate the point where the centerline of the upper torso belt webbing crosses the midsagittal line on the dummy's chest. At that point pull the belt webbing out 3 inches from the dummy's chest and release until it is within one inch from the dummy's chest. (S10.8) Using a force measuring gage with a full scale range of no more than 1.5 pounds, measure the contact force perpendicular to the dummy's chest exerted by the belt webbing.
 Contact Force (lb): **0.5**
 0.0 to 0.7 pounds – Pass
 Greater than 0.7 pounds - FAIL

REMARKS:

I certify that I have read and performed each instruction.

Signature: Wayne Jahlh

Date: 7/22/13

DATA SHEET 10
BELT CONTACT FORCE (S7.4.3)

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Wayne Dahlke

NHTSA No.: C20130200
 Test Date: 7/22/13

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
------------------------------	-----------------------

- | | | |
|-------------------------------------|----|---|
| <input checked="" type="checkbox"/> | 1. | Does the vehicle incorporate a webbing tension-relieving device? |
| | | <input type="checkbox"/> Yes (this form is complete) |
| | | <input checked="" type="checkbox"/> No (continue with this check sheet) |
- | | | |
|-------------------------------------|----|---|
| <input checked="" type="checkbox"/> | 2. | Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3) |
| | | <input checked="" type="checkbox"/> N/A – No lumbar adjustment |
- | | | |
|-------------------------------------|----|---|
| <input checked="" type="checkbox"/> | 3. | Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2) |
| | | <input checked="" type="checkbox"/> N/A – No additional support adjustment |
- | | | |
|-------------------------------------|----|--|
| <input checked="" type="checkbox"/> | 4. | Is the fore-aft position of the seat adjustable? |
| | | <input checked="" type="checkbox"/> No – go to 5 |
| | | <input type="checkbox"/> Yes – go to 4.1 |
- | | | |
|--------------------------|-----|---|
| <input type="checkbox"/> | 4.1 | Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. Mark this position. (8/31/95 legal interpretation to Hogan and Hartson) |
|--------------------------|-----|---|
- | | | |
|--------------------------|-----|--|
| <input type="checkbox"/> | 4.2 | Use all the seat controls that have any affects on the fore-aft movement of the seat to move the seat cushion to the foremost position. Mark this position. (8/31/95 legal interpretation to Hogan and Hartson) |
|--------------------------|-----|--|
- | | | |
|--------------------------|-----|---|
| <input type="checkbox"/> | 4.3 | Mark each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, mark each detent. For power seats, mark only the rearmost, middle and foremost positions. Label three of the positions with the following: F for foremost, M for mid-position (if there is no mid-position, label the closest adjustment position to the rear of the mid-point), and R for rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 4.1 and 4.2. (8/31/95 legal interpretation to Hogan and Hartson) |
|--------------------------|-----|---|
- | | | |
|--------------------------|-----|------------------------------------|
| <input type="checkbox"/> | 4.4 | Move the seat to the mid position. |
|--------------------------|-----|------------------------------------|
- | | | |
|--------------------------|-----|--|
| <input type="checkbox"/> | 4.5 | While maintaining the mid position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position. |
|--------------------------|-----|--|
- | | | |
|-------------------------------------|----|---|
| <input checked="" type="checkbox"/> | 5. | Is the seat back angle adjustable? |
| | | <input checked="" type="checkbox"/> No- go to 6 |
| | | <input type="checkbox"/> Yes- go to 5.1 |
- | | | |
|--------------------------|-----|---|
| <input type="checkbox"/> | 5.1 | Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a 50 th percentile adult male in the manner specified by the manufacturer. |
| | | <input type="checkbox"/> N/A – No seat back angle adjustment |
| | | <input type="checkbox"/> Manufacturer's design seat back angle: _____ |
| | | <input type="checkbox"/> Tested seat back angle: _____ |

6. Is the seat a bucket seat?
 Yes, go to 6.1 and skip 6.2
 No, go to 6.2 and skip 6.1
- 6.1 Bucket seats:
 Locate and mark the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- 6.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
 6.2.1 Driver Seat
 Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)
- 6.2.2 Front Outboard Passenger Seat
 Locate and **mark** the longitudinal centerline of the passenger seat cushion. The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)
 Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. _____
 Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. _____
- 6.2.3 Rear designated seating positions
 Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline.
7. Position the test dummies according to dummy position placement instructions in Appendix F. **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**
8. Fasten the seat belt latch.
9. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest.
10. Locate the point where the centerline of the upper torso belt webbing crosses the midsagittal line on the dummy's chest. At that point pull the belt webbing out 3 inches from the dummy's chest and release until it is within one inch from the dummy's chest. (S10.8) Using a force measuring gage with a full scale range of no more than 1.5 pounds, measure the contact force perpendicular to the dummy's chest exerted by the belt webbing.
 Contact Force (lb): **0.3**
 0.0 to 0.7 pounds – Pass
 Greater than 0.7 pounds - FAIL

REMARKS:

I certify that I have read and performed each instruction.

Signature: Wayne Jahlh

Date: 7/22/13

DATA SHEET 10
BELT CONTACT FORCE (S7.4.3)

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Wayne Dahlke

NHTSA No.: C20130200
 Test Date: 7/22/13

Test all Type 2 seat belts other than those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt.

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

- | | | |
|-------------------------------------|----|---|
| <input checked="" type="checkbox"/> | 1. | Does the vehicle incorporate a webbing tension-relieving device? |
| | | <input type="checkbox"/> Yes (this form is complete) |
| | | <input checked="" type="checkbox"/> No (continue with this check sheet) |
- | | | |
|-------------------------------------|----|---|
| <input checked="" type="checkbox"/> | 2. | Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3) |
| | | <input checked="" type="checkbox"/> N/A – No lumbar adjustment |
- | | | |
|-------------------------------------|----|---|
| <input checked="" type="checkbox"/> | 3. | Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2) |
| | | <input checked="" type="checkbox"/> N/A – No additional support adjustment |
- | | | |
|-------------------------------------|----|--|
| <input checked="" type="checkbox"/> | 4. | Is the fore-aft position of the seat adjustable? |
| | | <input checked="" type="checkbox"/> No – go to 5 |
| | | <input type="checkbox"/> Yes – go to 4.1 |
- | | | |
|--------------------------|-----|---|
| <input type="checkbox"/> | 4.1 | Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. Mark this position. (8/31/95 legal interpretation to Hogan and Hartson) |
|--------------------------|-----|---|
- | | | |
|--------------------------|-----|--|
| <input type="checkbox"/> | 4.2 | Use all the seat controls that have any affects on the fore-aft movement of the seat to move the seat cushion to the foremost position. Mark this position. (8/31/95 legal interpretation to Hogan and Hartson) |
|--------------------------|-----|--|
- | | | |
|--------------------------|-----|---|
| <input type="checkbox"/> | 4.3 | Mark each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, mark each detent. For power seats, mark only the rearmost, middle and foremost positions. Label three of the positions with the following: F for foremost, M for mid-position (if there is no mid-position, label the closest adjustment position to the rear of the mid-point), and R for rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 4.1 and 4.2. (8/31/95 legal interpretation to Hogan and Hartson) |
|--------------------------|-----|---|
- | | | |
|--------------------------|-----|------------------------------------|
| <input type="checkbox"/> | 4.4 | Move the seat to the mid position. |
|--------------------------|-----|------------------------------------|
- | | | |
|--------------------------|-----|--|
| <input type="checkbox"/> | 4.5 | While maintaining the mid position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position. |
|--------------------------|-----|--|
- | | | |
|-------------------------------------|----|---|
| <input checked="" type="checkbox"/> | 5. | Is the seat back angle adjustable? |
| | | <input checked="" type="checkbox"/> No- go to 6 |
| | | <input type="checkbox"/> Yes- go to 5.1 |
- | | | |
|--------------------------|-----|---|
| <input type="checkbox"/> | 5.1 | Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a 50 th percentile adult male in the manner specified by the manufacturer. |
| | | <input type="checkbox"/> N/A – No seat back angle adjustment |
| | | <input type="checkbox"/> Manufacturer's design seat back angle: _____ |
| | | <input type="checkbox"/> Tested seat back angle: _____ |

6. Is the seat a bucket seat?
 Yes, go to 6.1 and skip 6.2
 No, go to 6.2 and skip 6.1
- 6.1 Bucket seats:
 Locate and mark the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- 6.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
- 6.2.1 Driver Seat
 Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)
- 6.2.2 Front Outboard Passenger Seat
 Locate and **mark** the longitudinal centerline of the passenger seat cushion. The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)
 Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. _____
 Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. _____
- 6.2.3 Rear designated seating positions
 Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline.
7. Position the test dummies according to dummy position placement instructions in Appendix F. **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**
8. Fasten the seat belt latch.
9. Pull either 12 inches of belt webbing or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to return to the dummy's chest.
10. Locate the point where the centerline of the upper torso belt webbing crosses the midsagittal line on the dummy's chest. At that point pull the belt webbing out 3 inches from the dummy's chest and release until it is within one inch from the dummy's chest. (S10.8) Using a force measuring gage with a full scale range of no more than 1.5 pounds, measure the contact force perpendicular to the dummy's chest exerted by the belt webbing.
 Contact Force (lb): **0.5**
 0.0 to 0.7 pounds – Pass
 Greater than 0.7 pounds - FAIL

REMARKS:

I certify that I have read and performed each instruction.

Signature: Wayne J. Ahl

Date: 7/22/13

DATA SHEET 11
LATCH PLATE ACCESS (S7.4.4)

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Wayne Dahlke

NHTSA No.: C20130200
 Test Date: 7/22/13

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. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)
 - N/A – No lumbar adjustment
- 2. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
 - N/A – No additional support adjustment
- 3. Is the fore-aft position of the seat adjustable?
 - No – go to 4
 - Yes – go to 3.1
- 3.1 Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- 3.2 While maintaining the forward most position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.
- 4. Is the seat back angle adjustable?
 - No- go to 5
 - Yes- go to 4.1
- 4.1 Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a **50th percentile adult male** in the manner specified by the manufacturer.
 - N/A – No seat back angle adjustment
 - Manufacturer's design seat back angle: _____
 - Tested seat back angle: _____
- 5. Is the seat a bucket seat?
 - Yes, go to 5.1 and skip 5.2
 - No, go to 5.2 and skip 5.1
- 5.1 Bucket seats:
 Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- 5.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
 - 5.2.1 Driver Seat
 Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)

- 5.2.2 Front Outboard Passenger Seat
 Locate and **mark** the longitudinal centerline of the passenger seat cushion.
 The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)
- Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. _____
- Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. _____
6. Position the test dummy using the procedures in Appendix F. (Some modifications to the positioning procedure may need to be made because the seat is in the forward most position. Note on the Appendix F positioning check sheet any deviations necessary to position the Part 572, Subpart E dummy). **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**
7. Position the adjustable seat belt anchorage in the manufacturer's nominal design position for a 50th percentile adult male occupant.
8. Attach the inboard reach string to the base of the head following the instructions on Figure 3.
9. Attach the outboard reach string to the torso sheath following the instructions on Figure 3.
10. Place the latch plate in the stowed position.
11. Extend the inboard reach string in front of the dummy and then backward and outboard to the latch plate to generate arcs of the reach envelope of the test dummy's arms. Is the latch plate within the reach envelope?
- Yes – Pass
 No
12. Extend the outboard reach string in front of the dummy and then backward and outboard to the latch plate to generate arcs of the reach envelope of the test dummy's arms. Is the latch plate within the reach envelope?
- Yes – Pass
 No
13. Is the latch plate within the inboard (item 11) or outboard (item 12) reach envelope?
- Yes – Pass
 No – Fail
14. Using the clearance test block, specified in Figure 4, is there sufficient clearance between the vehicle seat and the side of vehicle interior to allow the test block to move unhindered to the latch plate or buckle?
- Yes – Pass
 No – Fail

REMARKS:

I certify that I have read and performed each instruction.

Signature: Wayne Gahl

Date: 7/22/13

DATA SHEET 12
SEAT BELT RETRACTION (S7.4.5)

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Wayne Dahlke

NHTSA No.: C20130200
 Test Date: 7/22/13

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
------------------------------	---

- | | |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | 1. Is the vehicle a passenger car or walk-in van-type vehicle? |
| | <input checked="" type="checkbox"/> Yes, this form is complete
<input type="checkbox"/> No |
- | | |
|--------------------------|--|
| <input type="checkbox"/> | 2. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3) |
| | <input type="checkbox"/> N/A – No lumbar adjustment |
- | | |
|--------------------------|--|
| <input type="checkbox"/> | 3. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2) |
| | <input type="checkbox"/> N/A – No additional support adjustment |
- | | |
|--------------------------|---|
| <input type="checkbox"/> | 4. Is the fore-aft position of the seat adjustable? |
| | <input type="checkbox"/> No – go to 5
<input type="checkbox"/> Yes – go to 4.1 |
- | | |
|--------------------------|---|
| <input type="checkbox"/> | 4.1 Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. Mark this position. (8/31/95 legal interpretation to Hogan and Hartson) |
|--------------------------|---|
- | | |
|--------------------------|--|
| <input type="checkbox"/> | 4.2 Use all the seat controls that have any affects on the fore-aft movement of the seat to move the seat cushion to the foremost position. Mark this position. (8/31/95 legal interpretation to Hogan and Hartson) |
|--------------------------|--|
- | | |
|--------------------------|---|
| <input type="checkbox"/> | 4.3 Mark each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, mark each detent. For power seats, mark only the rearmost, middle and foremost positions. Label three of the positions with the following: F for foremost, M for mid-position (if there is no mid-position, label the closest adjustment position to the rear of the mid-point), and R for rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 4.1 and 4.2. (8/31/95 legal interpretation to Hogan and Hartson) |
|--------------------------|---|
- | | |
|--------------------------|--|
| <input type="checkbox"/> | 4.4 Move the seat to the mid position. |
|--------------------------|--|
- | | |
|--------------------------|--|
| <input type="checkbox"/> | 4.5 While maintaining the mid position, move the seat to its lowest position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position. |
|--------------------------|--|
- | | |
|--------------------------|---|
| <input type="checkbox"/> | 5. Is the seat back angle adjustable? |
| | <input type="checkbox"/> No- go to 6
<input type="checkbox"/> Yes- go to 5.1 |
- | | |
|--------------------------|---|
| <input type="checkbox"/> | 5.1 Set and mark seat back angle, if adjustable, at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. |
| | <input type="checkbox"/> N/A – No seat back angle adjustment |
| | <input type="checkbox"/> Manufacturer's design seat back angle: _____ |
| | <input type="checkbox"/> Tested seat back angle: _____ |
- | | |
|--------------------------|---|
| <input type="checkbox"/> | 6. Is the seat a bucket seat? |
| | <input type="checkbox"/> Yes, go to 6.1 and skip 6.2
<input type="checkbox"/> No, go to 6.2 and skip 6.1 |

- 6.1 Bucket Seats:
Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
- 6.2 Bench seats (complete ONLY the one that is applicable to the seat being tested):
- 6.2.1 Driver Seat
Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)
- 6.2.2 Front Outboard Passenger Seat
Locate and **mark** the longitudinal centerline of the passenger seat cushion. The longitudinal centerline is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel. (S10.4.1.1)
- Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. _____
- Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. _____
7. Position the Part 572 Subpart E test dummy according to dummy position placement instructions in Appendix F. **Complete the Appendix F check sheets, but include them in the test report ONLY if there is a test failure.**
8. Fasten the seat belt around the dummy.
9. Remove all slack from the lap belt portion. (S10.9)
- N/A, the seat does not have a fore-aft adjustment
10. Pull the upper torso webbing out of the retractor and allow it to retract; repeat this four times. (S10.9)
11. Apply a 2 to 4 pound tension load to the lap belt. (S10.9)
- Pound load applied:**
12. Is the belt system equipped with a tension relieving device?
- ___ Yes, continue
- ___ No, go to 14
13. Introduce the maximum amount of slack into the upper torso belt that is recommended by the vehicle manufacturer in the vehicle owner's manual. (S10.9).
14. Check the statement that applies to this test vehicle:
- 14.1 The torso and lap belt webbing of the seat belt system automatically retracts to a stowed position when the adjacent vehicle door is in an open position and the seat belt latch plate is released.
- Yes – Pass go to 16
- No – go to 14.2
- 14.2 The torso and lap belt webbing of the seat belt system automatically retracts when the seat belt latch plate is released.
- Yes – Pass go to 15
- No – go to 14.3
- 14.3 Neither 14.1 nor 14.2 apply.
- Fail
15. With the webbing and hardware in the stowed position are the webbing and hardware prevented from being pinched when the door is closed?
- Yes – Pass
- No – Fail

16. If this test vehicle has an open body (without doors) and has a belt system with a tension relieving device, does the belt system fully retract when the tension-relieving device is deactivated?

N/A – Not an open body vehicle

Yes – Pass

No – Fail

REMARKS:

Signature: Wayne Gahlh

Date: 7/22/13

I certify that I have read and performed each instruction.

DATA SHEET 13

SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Wayne Dahlke

NHTSA No.: C20130200
 Test Date: 7/22/13

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**

- | | | | | | |
|-------------------------------------|-----|--|--|--|--|
| <input checked="" type="checkbox"/> | 1. | Is the seat cushion movable so that the seat back serves a function other than seating? (S7.4.6.1(b)) | | | |
| | | <input type="checkbox"/> Yes, this form is complete | <input checked="" type="checkbox"/> No, go to 2 | | |
| <input checked="" type="checkbox"/> | 2. | Is the seat removable? (S7.4.6.1(b)) | | | |
| | | <input type="checkbox"/> Yes, this form is complete | <input checked="" type="checkbox"/> No, go to 3 | | |
| <input checked="" type="checkbox"/> | 3. | Is the seat movable so that the space formerly occupied by the seat can be used for a secondary function? (S7.4.6.1(b)) | | | |
| | | <input checked="" type="checkbox"/> Yes, this form is complete | <input type="checkbox"/> No, go to 4 | | |
| <input type="checkbox"/> | 4. | Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back? (S7.4.6.1(a)) | | | |
| | | <input type="checkbox"/> Yes, go to 5 | <input type="checkbox"/> No, this form is complete | | |
| <input type="checkbox"/> | 5. | Does one of the following three parts, the seat belt latch plate, the buckle, or the seat belt webbing, stay on top of or above the seat cushion under normal conditions (i.e., conditions other than when belt hardware is intentionally pushed behind the seat by a vehicle occupant)? (S7.4.6.1(a)) | | | |
| | | <input type="checkbox"/> Yes – Pass | <input type="checkbox"/> No – Fail | | |
| | | Identify the part(s) on top or above the seat. | | | |
| | | <input type="checkbox"/> Seat belt latch plate | <input type="checkbox"/> Buckle | <input type="checkbox"/> Seat belt webbing | |
| <input type="checkbox"/> | 6. | Are the remaining two seat belt parts accessible under normal conditions? | | | |
| | | <input type="checkbox"/> Yes – Pass | <input type="checkbox"/> No – Fail | | |
| <input type="checkbox"/> | 7. | The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the belt is completely retracted or, if the belt is nonretractable, the belt is unlatched. (S7.4.6.2) | | | |
| | | <input type="checkbox"/> Yes – Pass | <input type="checkbox"/> No – Fail | | |
| <input type="checkbox"/> | 8. | The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat is moved to any position to which it is designed to be adjusted. (S7.4.6.2) | | | |
| | | <input type="checkbox"/> Yes – Pass | <input type="checkbox"/> No – Fail | | |
| <input type="checkbox"/> | 9. | The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat back, if foldable, is folded forward as far as possible and then moved backward into position. (S7.4.6.2) | | | |
| | | <input type="checkbox"/> Yes – Pass | <input type="checkbox"/> No – Fail | | |
| <input type="checkbox"/> | 10. | Is the inboard receptacle end of the seat belt assembly, installed in the front outboard designated seating position, accessible with the center armrest in any position to which it can be adjusted (without moving the armrest)? (S7.4.6.2) | | | |
| | | <input type="checkbox"/> Yes – Pass | <input type="checkbox"/> No – Fail | <input type="checkbox"/> N/A – Rear seat | |

REMARKS:

Signature: Wayne Dahlke

Date: 7/22/13

I certify that I have read and performed each instruction.

DATA SHEET 13

SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Wayne Dahlke

NHTSA No.: C20130200
 Test Date: 7/22/13

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**

- | | | | | |
|-------------------------------------|----|---|-------------------------------------|-------------|
| <input checked="" type="checkbox"/> | 1. | Is the seat cushion movable so that the seat back serves a function other than seating? (S7.4.6.1(b)) | | |
| | | <input type="checkbox"/> Yes, this form is complete | <input checked="" type="checkbox"/> | No, go to 2 |
- | | | | | |
|-------------------------------------|----|---|-------------------------------------|-------------|
| <input checked="" type="checkbox"/> | 2. | Is the seat removable? (S7.4.6.1(b)) | | |
| | | <input type="checkbox"/> Yes, this form is complete | <input checked="" type="checkbox"/> | No, go to 3 |
- | | | | | |
|-------------------------------------|----|---|--------------------------|-------------|
| <input checked="" type="checkbox"/> | 3. | Is the seat movable so that the space formerly occupied by the seat can be used for a secondary function? (S7.4.6.1(b)) | | |
| | | <input checked="" type="checkbox"/> Yes, this form is complete | <input type="checkbox"/> | No, go to 4 |
- | | | | | |
|--------------------------|----|---|--------------------------|---------------------------|
| <input type="checkbox"/> | 4. | Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back? (S7.4.6.1(a)) | | |
| | | <input type="checkbox"/> Yes, go to 5 | <input type="checkbox"/> | No, this form is complete |
- | | | | | |
|--------------------------|----|--|---------------------------------|--|
| <input type="checkbox"/> | 5. | Does one of the following three parts, the seat belt latch plate, the buckle, or the seat belt webbing, stay on top of or above the seat cushion under normal conditions (i.e., conditions other than when belt hardware is intentionally pushed behind the seat by a vehicle occupant)? (S7.4.6.1(a)) | | |
| | | <input type="checkbox"/> Yes – Pass | <input type="checkbox"/> | No – Fail |
| | | Identify the part(s) on top or above the seat. | | |
| | | <input type="checkbox"/> Seat belt latch plate | <input type="checkbox"/> Buckle | <input type="checkbox"/> Seat belt webbing |
- | | | | | |
|--------------------------|----|---|--------------------------|-----------|
| <input type="checkbox"/> | 6. | Are the remaining two seat belt parts accessible under normal conditions? | | |
| | | <input type="checkbox"/> Yes – Pass | <input type="checkbox"/> | No – Fail |
- | | | | | |
|--------------------------|----|--|--------------------------|-----------|
| <input type="checkbox"/> | 7. | The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the belt is completely retracted or, if the belt is nonretractable, the belt is unlatched. (S7.4.6.2) | | |
| | | <input type="checkbox"/> Yes – Pass | <input type="checkbox"/> | No – Fail |
- | | | | | |
|--------------------------|----|---|--------------------------|-----------|
| <input type="checkbox"/> | 8. | The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat is moved to any position to which it is designed to be adjusted. (S7.4.6.2) | | |
| | | <input type="checkbox"/> Yes – Pass | <input type="checkbox"/> | No – Fail |
- | | | | | |
|--------------------------|----|---|--------------------------|-----------|
| <input type="checkbox"/> | 9. | The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat back, if foldable, is folded forward as far as possible and then moved backward into position. (S7.4.6.2) | | |
| | | <input type="checkbox"/> Yes – Pass | <input type="checkbox"/> | No – Fail |
- | | | | | |
|--------------------------|-----|---|--------------------------|-----------------|
| <input type="checkbox"/> | 10. | Is the inboard receptacle end of the seat belt assembly, installed in the front outboard designated seating position, accessible with the center armrest in any position to which it can be adjusted (without moving the armrest)? (S7.4.6.2) | | |
| | | <input type="checkbox"/> Yes – Pass | <input type="checkbox"/> | No – Fail |
| | | <input type="checkbox"/> | <input type="checkbox"/> | N/A – Rear seat |

REMARKS:

Signature: Wayne Dahlke

Date: 7/22/13

I certify that I have read and performed each instruction.

DATA SHEET 13

SEAT BELT GUIDES AND HARDWARE (S7.4.6)

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance
Test Technician: Wayne Dahlke

NHTSA No.: C20130200
Test Date: 7/22/13

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

- 1. Is the seat cushion movable so that the seat back serves a function other than seating? (S7.4.6.1(b))
2. Is the seat removable? (S7.4.6.1(b))
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))
4. Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back? (S7.4.6.1(a))
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))
6. Are the remaining two seat belt parts accessible under normal conditions?
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)
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)
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)
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)

REMARKS:

Signature: Wayne Dahlke

Date: 7/22/13

I certify that I have read and performed each instruction.

DATA SHEET 15

H-POINT DETERMINATION FOR 50TH PERCENTILE MALE DUMMY

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance
Test Technician: Alex Vanderheyden

NHTSA No.: C20130200
Test Date: 9/30/13

Driver Designated Seating Position Passenger Designated Seating Position

1. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)
 N/A – No lumbar adjustment
2. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
 N/A – No additional support adjustment
3. Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
4. Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the foremost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
5. **Mark** each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, **mark** each detent. For power seats, **mark** only the rearmost, middle, and foremost positions. Label three of the positions with the following: F for foremost, M for mid-position (if there is no mid-position, label the closest adjustment position to the rear of the mid-point), and R for rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 3 and 4. (8/31/95 legal interpretation to Hogan and Hartson)
6. Move the seat to the mid position.
7. While maintaining the mid position, move the seat to its lowest position. **Mark** the height position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.
8. Visually **mark** the seat back angle, if adjustable, at the manufacturer's nominal design riding position for a **50th percentile adult male** in the manner specified by the manufacturer.
 N/A – No seat back angle adjustment
Manufacturer's design seat back angle 12.0° on Headrest Post
9. Is the seat a bucket seat?
 Yes, go to 10 and skip 11
 No, go to 11 and skip 10
10. 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. (S10.4.1.2 and S16.3.1.10)

11. Bench seats (complete ONLY the one that is applicable to the seat being marked):
- 11.1 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. (S10.4.1.1)
- 11.2 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. (S10.4.1.1)
Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. _____
Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. _____
12. Place a 910 mm² piece of muslin cotton cloth over the seat area. (The muslin cloth shall be comparable to 48 threads/in² and density of 2.85 lb/yd.) Tuck the muslin cloth in a sufficient amount to prevent hammocking of the material.
13. Place the seat and back assembly of the H-Point machine at the centerline of the seat as determined in item 10 or 11.
14. Install the lower leg, and foot segments.
15. Set the length of the lower leg segment at 16.3 inches and the length of the thigh bar at 15.8 inches.
16. Leg and foot placement.
- 16.1 Driver Designated Seating Position.
- 16.1.1 Insert the pin so that the foot angle is never less than 87 degrees.
- 16.1.2 Place the right foot on the undepressed accelerator pedal with the sole of the foot on the pedal and the heel as far forward as allowable. Do not place the heel on the toe board.
- 16.1.3 Adjust the left leg to be the same distance from H-point machine centerline as the right leg.
- 16.1.4 With the T-bar level, place the left foot on the toe board with the rearmost point of the heel resting on the floor pan as close as possible to the point of intersection of the planes described by the toe board and the floor pan and not on the wheel well projection. If the foot cannot be positioned on the toe board, set it on the floor pan.
- Foot on toe board.
 Foot on floor pan.
- 16.2 Passenger Designated Seating Position.
- 16.2.1 Insert the pin so that the foot angle is never less than 87 degrees.
- 16.2.2 Space the lower legs 10.6 inches apart, equally spaced about the centerline of the H-point machine.

- 16.2.3 With the T-bar level, place the left foot on the toe board with the rearmost point of the heel resting on the floor pan as close as possible to the point of intersection of the planes described by the toe board and the floor pan and not on the wheel well projection. If the foot cannot be positioned on the toe board, set it on the floor pan.
- Foot on toe board.
 - Foot on floor pan.
- 16.2.4 With the T-bar level, place the right foot on the toe board with the rearmost point of the heel resting on the floor pan as close as possible to the point of intersection of the planes described by the toe board and the floor pan and not on the wheel well projection. If the foot cannot be positioned on the toe board, set it on the floor pan.
- Foot on toe board.
 - Foot on floor pan.
17. Apply the lower leg weights.
18. Apply the thigh weights.
19. Tilt the back pan forward against the forward stop and draw the H-point machine away from the seatback using the T-bar.
20. Repositioning the back pan.
- 20.1 Allow the H-point machine to slide rearward until a forward horizontal restraining load on the T-bar is no longer required due to the seat pan contacting the seat back.
- The seat pan does not slide rearward. Go to 20.2
- 20.2 Slide the H-point machine rearward by a horizontal rearward load applied at the T-bar until the seat pan contacts the seat back.
21. Apply a 10 kg load at the intersection of the hip angle quadrant and the T-bar housing along a line from the above intersection to a point just above the thigh bar housing.
22. Again apply a 10 kg load at the intersection of the hip angle quadrant and the T-bar housing along a line from the above intersection to a point just above the thigh bar housing.
23. Carefully return the back pan to the seat back.
24. Install the right and left buttock weights.
25. Install the eight torso weights alternately the installation between right and left.
26. Tilt the back pan forward until the stop is contacted.
27. Rock the H-point from side to side over a 10 degree arc (5 degrees to each side of the vertical centerline) for three complete cycles. Restrain the T-bar during rocking so that the seat pan does not change position. Minimize any inadvertent exterior loads applied in a vertical or fore-aft direction. The feet are free to move during this rocking motion.
28. Without applying a forward or lateral load lift the right foot off the floor the minimum amount necessary until no additional forward foot movement is obtained.
29. Lower the right foot until the heel is in contact with the floor pan and the ball of the foot is in contact with the floor, toe board, or undepressed accelerator pedal.

- X 30. Without applying a forward or lateral load lift the left foot off the floor the minimum amount necessary until no additional forward foot movement is obtained.
- X 31. Lower the left foot until the heel is in contact with the floor pan and the ball of the foot is in contact with the floor or toe board.
- X 32. Is the seat pan level?
 ___ Yes. Go to 34
 X No. Go to 33
- X 33. Apply a sufficient lateral load to the top of the seatback pan to level the H-point machine seat pan on the seat.
- X 34. Holding the T-bar to prevent the H-point from sliding forward on the seat cushion, return the seatback pan to the seatback.
- X 35. Holding the T-bar to prevent the H-point from sliding forward on the seat cushion, apply sufficient rearward force perpendicular to the back angle bar just above the torso weights to increase the hip angle 3 degrees. Minimize the exterior downward or side forces applied to the H-point machine. Release the force. Repeat this step until the hip angle readout is identical. Complete as many force applications as necessary and record the results in the following table:

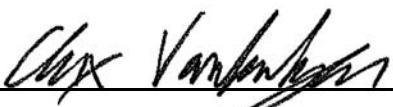
Force Application	Hip Angle
1	95
2	96
3	96
4	
5	

- X 36. Is the H-point machine level?
 X Yes, go to 37.
 ___ No, relevel. Go back to item 26 and repeat using a new data sheet.

X₃₇. Record the H-point location.
Describe and mark the measuring reference point.

Driver H-Point	
HP to Floor Z	246
HP to Hinge X	719
HP to Sill Y	265
HP to Striker X	178
HP to Dash X	436
HP to Header Z	769

H-Point Machine	
Left Knee	124
Right Knee	126
Left Foot Angle	111°
Right Foot Angle	87°
Left Leg	150
Right Leg	120
Hip Angle	96°
Back Angle	23°

Signature: 

Date: 9/30/13

I certify that I have read and performed each instruction.

DATA SHEET 15

H-POINT DETERMINATION FOR 50TH PERCENTILE MALE DUMMY

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance
Test Technician: Tim Bratz

NHTSA No.: C20130200
Test Date: 9/30/13

Driver Designated Seating Position Passenger Designated Seating Position

1. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)
 N/A – No lumbar adjustment
2. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
 N/A – No additional support adjustment
3. Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
4. Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the foremost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
5. **Mark** each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, **mark** each detent. For power seats, **mark** only the rearmost, middle, and foremost positions. Label three of the positions with the following: F for foremost, M for mid-position (if there is no mid-position, label the closest adjustment position to the rear of the mid-point), and R for rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 3 and 4. (8/31/95 legal interpretation to Hogan and Hartson)
6. Move the seat to the mid position.
7. While maintaining the mid position, move the seat to its lowest position. **Mark** the height position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.
8. Visually **mark** the seat back angle, if adjustable, at the manufacturer's nominal design riding position for a **50th percentile adult male** in the manner specified by the manufacturer.
 N/A – No seat back angle adjustment
Manufacturer's design seat back angle 12.0° on Headrest Post
9. Is the seat a bucket seat?
 Yes, go to 10 and skip 11
 No, go to 11 and skip 10
10. 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. (S10.4.1.2 and S16.3.1.10)

11. Bench seats (complete ONLY the one that is applicable to the seat being marked):
- 11.1 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. (S10.4.1.1)
- 11.2 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. (S10.4.1.1)
Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. _____
Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. _____
12. Place a 910 mm² piece of muslin cotton cloth over the seat area. (The muslin cloth shall be comparable to 48 threads/in² and density of 2.85 lb/yd.) Tuck the muslin cloth in a sufficient amount to prevent hammocking of the material.
13. Place the seat and back assembly of the H-Point machine at the centerline of the seat as determined in item 10 or 11.
14. Install the lower leg, and foot segments.
15. Set the length of the lower leg segment at 16.3 inches and the length of the thigh bar at 15.8 inches.
16. Leg and foot placement.
- 16.1 Driver Designated Seating Position.
- 16.1.1 Insert the pin so that the foot angle is never less than 87 degrees.
- 16.1.2 Place the right foot on the undepressed accelerator pedal with the sole of the foot on the pedal and the heel as far forward as allowable. Do not place the heel on the toe board.
- 16.1.3 Adjust the left leg to be the same distance from H-point machine centerline as the right leg.
- 16.1.4 With the T-bar level, place the left foot on the toe board with the rearmost point of the heel resting on the floor pan as close as possible to the point of intersection of the planes described by the toe board and the floor pan and not on the wheel well projection. If the foot cannot be positioned on the toe board, set it on the floor pan.
 Foot on toe board.
 Foot on floor pan.
- 16.2 Passenger Designated Seating Position.
- 16.2.1 Insert the pin so that the foot angle is never less than 87 degrees.
- 16.2.2 Space the lower legs 10.6 inches apart, equally spaced about the centerline of the H-point machine.

- X 16.2.3 With the T-bar level, place the left foot on the toe board with the rearmost point of the heel resting on the floor pan as close as possible to the point of intersection of the planes described by the toe board and the floor pan and not on the wheel well projection. If the foot cannot be positioned on the toe board, set it on the floor pan.
- X Foot on toe board.
 - Foot on floor pan.
- X 16.2.4 With the T-bar level, place the right foot on the toe board with the rearmost point of the heel resting on the floor pan as close as possible to the point of intersection of the planes described by the toe board and the floor pan and not on the wheel well projection. If the foot cannot be positioned on the toe board, set it on the floor pan.
- X Foot on toe board.
 - Foot on floor pan.
- X 17. Apply the lower leg weights.
- X 18. Apply the thigh weights.
- X 19. Tilt the back pan forward against the forward stop and draw the H-point machine away from the seatback using the T-bar.
- X 20. Repositioning the back pan.
- X 20.1 Allow the H-point machine to slide rearward until a forward horizontal restraining load on the T-bar is no longer required due to the seat pan contacting the seat back.
- The seat pan does not slide rearward. Go to 20.2
- 20.2 Slide the H-point machine rearward by a horizontal rearward load applied at the T-bar until the seat pan contacts the seat back.
- X 21. Apply a 10 kg load at the intersection of the hip angle quadrant and the T-bar housing along a line from the above intersection to a point just above the thigh bar housing.
- X 22. Again apply a 10 kg load at the intersection of the hip angle quadrant and the T-bar housing along a line from the above intersection to a point just above the thigh bar housing.
- X 23. Carefully return the back pan to the seat back.
- X 24. Install the right and left buttock weights.
- X 25. Install the eight torso weights alternately the installation between right and left.
- X 26. Tilt the back pan forward until the stop is contacted.
- X 27. Rock the H-point from side to side over a 10 degree arc (5 degrees to each side of the vertical centerline) for three complete cycles. Restrain the T-bar during rocking so that the seat pan does not change position. Minimize any inadvertent exterior loads applied in a vertical or fore-aft direction. The feet are free to move during this rocking motion.
- X 28. Without applying a forward or lateral load lift the right foot off the floor the minimum amount necessary until no additional forward foot movement is obtained.
- X 29. Lower the right foot until the heel is in contact with the floor pan and the ball of the foot is in contact with the floor, toe board, or undepressed accelerator pedal.

- X 30. Without applying a forward or lateral load lift the left foot off the floor the minimum Amount necessary until no additional forward foot movement is obtained.
- X 31. Lower the left foot until the heel is in contact with the floor pan and the ball of the foot is In contact with the floor or toe board.
- X 32. Is the seat pan level?
 Yes. Go to 34
 No. Go to 33
33. Apply a sufficient lateral load to the top of the seatback pan to level the H-point machine seat pan on the seat.
- X 34. Holding the T-bar to prevent the H-point from sliding forward on the seat cushion, return the seatback pan to the seatback.
- X 35. Holding the T-bar to prevent the H-point from sliding forward on the seat cushion, apply sufficient rearward force perpendicular to the back angle bar just above the torso weights to increase the hip angle 3 degrees. Minimize the exterior downward or side forces applied to the H-point machine. Release the force. Repeat this step until the hip angle readout is identical. Complete as many force applications as necessary and record the results in the following table:

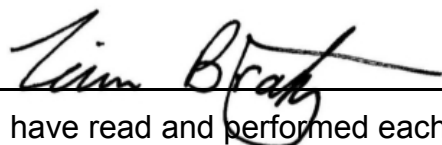
Force Application	Hip Angle
1	94
2	94
3	
4	
5	

- X 36. Is the H-point machine level?
 Yes, go to 37.
 No, relevel. Go back to item 26 and repeat using a new data sheet.

X₃₇. Record the H-point location.
Describe and mark the measuring reference point.

Passenger H-Point	
HP to Floor Z	217
HP to Hinge X	741
HP to Sill Y	225
HP to Striker X	157
HP to Dash X	458
HP to Header Z	766

H-Point Machine	
Left Knee	115
Right Knee	115
Left Foot Angle	101°
Right Foot Angle	103°
Left Leg	135
Right Leg	100
Hip Angle	94°
Back Angle	24°

Signature: 

Date: 9/30/13

I certify that I have read and performed each instruction.

DATA SHEET 16

AIR BAG SUPPRESSION TELLTALE (S19.2.2)

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance
Test Technician: Jeff Lewandowski

NHTSA No.: C20130200
Test Date: 7/23/13

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

Signature: Jeff Lewandowski

Date: 7/23/13

I certify that I have read and performed each instruction.

DATA SHEET 17 SUMMARY

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

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	12 Month Old	DUMMY SERIAL NO.:	062

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

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

Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.0° on Headrest Post
 Manufacturer's specified anchorage position: Uppermost
 Tested anchorage position: Uppermost

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

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted Rear Facing	Forward	N/A	Won't Fit
	Middle	128	Suppressed
	Rearward	129	Suppressed
Unbelted Rear Facing	Forward	N/A	Won't Fit
	Middle 14*	N/A	Suppressed
	Rearward	N/A	Suppressed
Unbelted Forward Facing	Forward 11*	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed

* The CRS would not fit in this Forward or Middle Seat Slide position. If there is a number in the Seat Slide column, it indicates the fore-aft detent position with respect to the foremost position. (1 = Full Forward; 26 = Full Rearward; 26 total Seat Slide detents)

DATA SHEET 17 SUMMARY

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

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	12 Month Old	DUMMY SERIAL NO.:	062

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

Base: __On X Off __N/A-Constraint does not have a removable base

Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.0° on Headrest Post
 Manufacturer's specified anchorage position: Uppermost
 Tested anchorage position: Uppermost

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

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted Rear Facing	Forward	N/A	Won't Fit
	Middle 15*	130	Suppressed
	Rearward	132	Suppressed
Unbelted Rear Facing	Forward	N/A	Won't Fit
	Middle 17*	N/A	Suppressed
	Rearward	N/A	Suppressed
Unbelted Forward Facing	Forward 8*	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed

* The CRS would not fit in this Forward or Middle Seat Slide position. If there is a number in the Seat Slide column, it indicates the fore-aft detent position with respect to the foremost position. (1 = Full Forward; 26 = Full Rearward; 26 total Seat Slide detents)

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

DATA SHEET 17 SUMMARY

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

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	12 Month Old	DUMMY SERIAL NO.:	062

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

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

Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.0° on Headrest Post
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0
 Tested anchorage position: 0 of 4; Upper-most defined as 0

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

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted Rear Facing	Forward 8*	129	Suppressed
	Middle	129	Suppressed
	Rearward	130	Suppressed
Unbelted Rear Facing	Forward 9*	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed
Unbelted Forward Facing	Forward 9*	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed

* The CRS would not fit in this Forward Seat Slide position. If there is a number in the Seat Slide column, it indicates the fore-aft detent position with respect to the foremost position. (1 = Full Forward; 26 = Full Rearward; 26 total Seat Slide detents)

DATA SHEET 17 SUMMARY

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

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	12 Month Old	DUMMY SERIAL NO.:	062

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

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

Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.0° on Headrest Post
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0
 Tested anchorage position: 0 of 4; Upper-most defined as 0

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

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted Rear Facing	Forward 12*	129	Suppressed
	Middle	128	Suppressed
	Rearward	133	Suppressed
Unbelted Rear Facing	Forward	N/A	Won't Fit
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed
Unbelted Forward Facing	Forward	N/A	Won't Fit
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed

* The CRS would not fit in this Forward Seat Slide position. If there is a number in the Seat Slide column, it indicates the fore-aft detent position with respect to the foremost position. (1 = Full Forward; 26 = Full Rearward; 26 total Seat Slide detents)

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

DATA SHEET 17 SUMMARY

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

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	12 Month Old	DUMMY SERIAL NO.:	062

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

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

Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.0° on Headrest Post
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0
 Tested anchorage position: 0 of 4; Upper-most defined as 0

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

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted Rear Facing	Forward 7*	131	Suppressed
	Middle	132	Suppressed
	Rearward	127	Suppressed
Unbelted Rear Facing	Forward 8*	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed
Unbelted Forward Facing	Forward 8*	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed

* The CRS would not fit in this Forward Seat Slide position. If there is a number in the Seat Slide column, it indicates the fore-aft detent position with respect to the foremost position. (1 = Full Forward; 26 = Full Rearward; 26 total Seat Slide detents)

DATA SHEET 17 SUMMARY

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

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	12 Month Old	DUMMY SERIAL NO.:	062

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

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

Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.0° on Headrest Post
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0
 Tested anchorage position: 0 of 4; Upper-most defined as 0

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

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted Rear Facing	Forward 12*	133	Suppressed
	Middle	128	Suppressed
	Rearward	127	Suppressed
Unbelted Rear Facing	Forward	N/A	Won't Fit
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed
Unbelted Forward Facing	Forward 11*	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed

* The CRS would not fit in this Forward Seat Slide position. If there is a number in the Seat Slide column, it indicates the fore-aft detent position with respect to the foremost position. (1 = Full Forward; 26 = Full Rearward; 26 total Seat Slide detents)

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

DATA SHEET 17 SUMMARY

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

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	12 Month Old	DUMMY SERIAL NO.:	062

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

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

Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.0° on Headrest Post
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0
 Tested anchorage position: 0 of 4; Upper-most defined as 0

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

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted Forward Facing	Forward	130	Suppressed
	Middle	129	Suppressed
	Rearward	130	Suppressed
Unbelted Forward Facing	Forward	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed
Belted Rear Facing	Forward 10*	133	Suppressed
	Middle	128	Suppressed
	Rearward	128	Suppressed
Unbelted Rear Facing	Forward 11*	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed

* The CRS would not fit in this Forward Seat Slide position. If there is a number in the Seat Slide column, it indicates the fore-aft detent position with respect to the foremost position. (1 = Full Forward; 26 = Full Rearward; 26 total Seat Slide detents)

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

DATA SHEET 17 SUMMARY

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

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	12 Month Old	DUMMY SERIAL NO.:	062

CHILD RESTRAINT NAME:	Cosco
CHILD RESTRAINT MODEL:	High Back Booster 22-209
DATE OF MANUFACTURE:	10-07-2008

Base: __On __Off X N/A-Restraint does not have a removable base

Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.0° on Headrest Post
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0
 Tested anchorage position: 0 of 4; Upper-most defined as 0

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

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted Forward Facing	Forward	131	Suppressed
	Middle	128	Suppressed
	Rearward	132	Suppressed
Unbelted Forward Facing	Forward	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed
Unbelted Rear Facing	Forward	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed

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

The Cosco High Back Booster 22-209 Does Not Have A Rear Facing Belt Path.

DATA SHEET 17 SUMMARY

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

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	12 Month Old	DUMMY SERIAL NO.:	062

CHILD RESTRAINT NAME:	Evenflo
CHILD RESTRAINT MODEL:	Generations 352
DATE OF MANUFACTURE:	10-05-2006

Base: __On __Off X N/A-Restraint does not have a removable base

Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.0° on Headrest Post
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0
 Tested anchorage position: 0 of 4; Upper-most defined as 0

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

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted Forward Facing	Forward	132	Suppressed
	Middle	128	Suppressed
	Rearward	130	Suppressed
Unbelted Forward Facing	Forward	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed
Unbelted Rear Facing	Forward	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed

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

The Evenflo Generations 352 Does Not Have A Rear Facing Belt Path.

DATA SHEET 17 SUMMARY

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

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	12 Month Old	DUMMY SERIAL NO.:	062

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

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

Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.0° on Headrest Post
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0
 Tested anchorage position: 0 of 4; Upper-most defined as 0

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

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted Forward Facing	Forward 8*	131	Suppressed
	Middle	130	Suppressed
	Rearward	131	Suppressed
Unbelted Forward Facing	Forward 10*	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed
Belted Rear Facing	Forward 9*	130	Suppressed
	Middle	127	Suppressed
	Rearward	127	Suppressed
Unbelted Rear Facing	Forward 12*	N/A	Suppressed
	Middle	N/A	Suppressed
	Rearward	N/A	Suppressed

* The CRS would not fit in this Forward Seat Slide position. If there is a number in the Seat Slide column, it indicates the fore-aft detent position with respect to the foremost position. (1 = Full Forward; 26 = Full Rearward; 26 total Seat Slide detents)

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

DATA SHEET 18 SUMMARY

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

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	Newborn Infant	DUMMY SERIAL NO.:	003

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

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

Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.0° on Headrest Post
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0
 Tested anchorage position: 0 of 4; Upper-most defined as 0

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

Test Summary

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

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

DATA SHEET 19 SUMMARY

Suppression Test Using 3 Year Old Dummy And Booster Seats (Part 572, Subpart P)
Section D Forward Facing Belt Positioning Booster

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	3 Year Old	DUMMY SERIAL NO.:	032

BOOSTER SEAT NAME:	Cosco
BOOSTER SEAT MODEL:	Summit Deluxe High Back Booster 22-262
DATE OF MANUFACTURE:	8-9-2007

Manufacturer's design seat back angle:	<u>12.0° on Headrest Post</u>
Tested seat back angle:	<u>12.0° on Headrest Post</u>
Manufacturer's specified anchorage position:	<u>0 of 4; Upper-most defined as 0</u>
Tested anchorage position:	<u>0 of 4; Upper-most defined as 0</u>

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted Forward Facing Without Harness	Forward	12	Suppressed
	Middle	14	Suppressed
	Rearward	17	Suppressed
Belted Forward Facing Cinched With Harness	Forward	128	Suppressed
	Middle	128	Suppressed
	Rearward	130	Suppressed

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

DATA SHEET 19 SUMMARY

Suppression Test Using 3 Year Old Dummy And Booster Seats (Part 572, Subpart P)
Section D Forward Facing Toddler Belt Positioning Booster Seat

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	3 Year Old	DUMMY SERIAL NO.:	032

BOOSTER SEAT NAME:	Graco
BOOSTER SEAT MODEL:	Platinum Cargo
DATE OF MANUFACTURE:	6-24-2008

Manufacturer's design seat back angle:	<u>12.0° on Headrest Post</u>
Tested seat back angle:	<u>12.0° on Headrest Post</u>
Manufacturer's specified anchorage position:	<u>0 of 4; Upper-most defined as 0</u>
Tested anchorage position:	<u>0 of 4; Upper-most defined as 0</u>

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted Forward Facing Without Harness	Forward	16	Suppressed
	Middle	15	Suppressed
	Rearward	11	Suppressed
Belted Forward Facing Cinched With Harness	Forward	127	Suppressed
	Middle	129	Suppressed
	Rearward	127	Suppressed

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

DATA SHEET 20 SUMMARY

Suppression Test Using 3 Year Old Dummy And Convertible Restraints (Part 572, Subpart P)
Section C Forward Facing Convertible CRS

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	3 Year Old	DUMMY SERIAL NO.:	032

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

Manufacturer's design seat back angle:	<u>12.0° on Headrest Post</u>
Tested seat back angle:	<u>12.0° on Headrest Post</u>
Manufacturer's specified anchorage position:	<u>0 of 4; Upper-most defined as 0</u>
Tested anchorage position:	<u>0 of 4; Upper-most defined as 0</u>

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted	Forward	129	Suppressed
	Middle	128	Suppressed
	Rearward	131	Suppressed

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

DATA SHEET 20 SUMMARY

Suppression Test Using 3 Year Old Dummy And Convertible Restraints (Part 572, Subpart P)
Section C Forward Facing Convertible CRS

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	3 Year Old	DUMMY SERIAL NO.:	032

CHILD RESTRAINT NAME:	Cosco
CHILD RESTRAINT MODEL:	High Back Booster 22-209
DATE OF MANUFACTURE:	10-07-2008

Manufacturer's design seat back angle:	<u>12.0° on Headrest Post</u>
Tested seat back angle:	<u>12.0° on Headrest Post</u>
Manufacturer's specified anchorage position:	<u>0 of 4; Upper-most defined as 0</u>
Tested anchorage position:	<u>0 of 4; Upper-most defined as 0</u>

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted Forward Facing Without Harness	Forward	10	Suppressed
	Middle	14	Suppressed
	Rearward	15	Suppressed
Belted Forward Facing Cinched With Harness	Forward	129	Suppressed
	Middle	131	Suppressed
	Rearward	131	Suppressed

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

DATA SHEET 20 SUMMARY

Suppression Test Using 3 Year Old Dummy And Convertible Restraints (Part 572, Subpart P)
Section C Forward Facing Convertible CRS

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	3 Year Old	DUMMY SERIAL NO.:	032

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

Manufacturer's design seat back angle:	<u>12.0° on Headrest Post</u>
Tested seat back angle:	<u>12.0° on Headrest Post</u>
Manufacturer's specified anchorage position:	<u>0 of 4; Upper-most defined as 0</u>
Tested anchorage position:	<u>0 of 4; Upper-most defined as 0</u>

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted Forward Facing Without Harness	Forward	10	Suppressed
	Middle	11	Suppressed
	Rearward	17	Suppressed
Belted Forward Facing Cinched With Harness	Forward	127	Suppressed
	Middle	128	Suppressed
	Rearward	128	Suppressed

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

DATA SHEET 20 SUMMARY

Suppression Test Using 3 Year Old Dummy And Convertible Restraints (Part 572, Subpart P)
Section C Forward Facing Convertible CRS

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	3 Year Old	DUMMY SERIAL NO.:	032

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

Manufacturer's design seat back angle:	<u>12.0° on Headrest Post</u>
Tested seat back angle:	<u>12.0° on Headrest Post</u>
Manufacturer's specified anchorage position:	<u>0 of 4; Upper-most defined as 0</u>
Tested anchorage position:	<u>0 of 4; Upper-most defined as 0</u>

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted	Forward 5*	129	Suppressed
	Middle	131	Suppressed
	Rearward	131	Suppressed

* The CRS would not fit in this Forward Seat Slide position. If there is a number in the Seat Slide column, it indicates the fore-aft detent position with respect to the foremost position. (1 = Full Forward; 26 = Full Rearward; 26 total Seat Slide detents)

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

DATA SHEET 21 SUMMARY

Suppression Test Using An Unbelted 3 Year Old Dummy (Part 572, Subpart P)
No CRS

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	3 Year Old	DUMMY SERIAL NO.:	032

Test Summary

Position	Seat Slide	Seat Back Angle *	Result
Position 1 Sitting on seat with back against seat back	Forward	12.0° on HRP	Suppressed
	Middle	12.0° on HRP	Suppressed
	Rearward	12.0° on HRP	Suppressed
Position 2 Sitting on seat with back against reclined seat back	Forward	37.0° on HRP	Suppressed
	Middle	37.0° on HRP	Suppressed
	Rearward	37.0° on HRP	Suppressed
Position 3 Sitting on seat with back not against seat back	Forward	12.0° on HRP	Suppressed
	Middle	12.0° on HRP	Suppressed
	Rearward	12.0° on HRP	Suppressed
Position 4 Sitting on seat edge, spine vertical, hands at dummy's sides	Forward	12.0° on HRP	Suppressed
	Middle	12.0° on HRP	Suppressed
	Rearward	12.0° on HRP	Suppressed
Position 5 Standing on seat, facing forward	Forward	12.0° on HRP	Suppressed
	Middle	12.0° on HRP	Suppressed
	Rearward	12.0° on HRP	Suppressed
Position 6 Kneeling on seat, facing forward	Forward	12.0° on HRP	Suppressed
	Middle	12.0° on HRP	Suppressed
	Rearward	12.0° on HRP	Suppressed
Position 7 Kneeling on seat, facing rearward	Forward	12.0° on HRP	Suppressed
	Middle	12.0° on HRP	Suppressed
	Rearward	12.0° on HRP	Suppressed
Position 8 Lying on seat. (Three designated seating positions only)	N/A	N/A	N/A
	N/A	N/A	N/A
	N/A	N/A	N/A

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

* The manufacturer's design seat back angle was 12.0° on the Headrest Post (HRP). When the vehicle passenger seat was reclined 25° the seat back angle on the HRP was 37.0°.

DATA SHEET 22 SUMMARY

Suppression Test Using 6 Year Old Dummy And Booster Seats (Part 572, Subpart N)
Section D Forward Facing Toddler Belt Positioning Booster Seat

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	6 Year Old	DUMMY SERIAL NO.:	153

CHILD RESTRAINT NAME:	Cosco
CHILD RESTRAINT MODEL:	Summit Deluxe High Back Booster 22-262
DATE OF MANUFACTURE:	8-9-2007

Manufacturer's design seat back angle: 12.0° on Headrest Post
Tested seat back angle: 12.0° on Headrest Post
Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0
Tested anchorage position: 0 of 4; Upper-most defined as 0

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted	Forward	17	Suppressed
	Middle	15	Suppressed
	Rearward	12	Suppressed

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

DATA SHEET 22 SUMMARY

Suppression Test Using 6 Year Old Dummy And Booster Seats (Part 572, Subpart N)
Section D Forward Facing Toddler Belt Positioning Booster Seat

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	6 Year Old	DUMMY SERIAL NO.:	153

CHILD RESTRAINT NAME:	Graco
CHILD RESTRAINT MODEL:	Platinum Cargo
DATE OF MANUFACTURE:	6-24-2008

Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.0° on Headrest Post
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0
 Tested anchorage position: 0 of 4; Upper-most defined as 0

Test Summary

Seat Belt	Seat Slide	Cinch Load (N)	Result
Belted	Forward	18	Suppressed
	Middle	10	Suppressed
	Rearward	13	Suppressed

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

DATA SHEET 23 SUMMARY

Suppression Tests Using an Unbelted 6 Year Old Dummy (Part 572, Subpart N) (S24.2.1)
No CRS

NHTSA NO.:	C20130200	TEST DATE:	7/23/13
LABORATORY:	MGA	TECHNICIAN(S):	JL
DUMMY TYPE:	6 Year Old	DUMMY SERIAL NO.:	153

Test Summary

Position	Seat Slide	Seat Back Angle *	Result
Position 1 Sitting on seat with back against seat back	Forward	12.0° on HRP	Suppressed
	Middle	12.0° on HRP	Suppressed
	Rearward	12.0° on HRP	Suppressed
Position 2 Sitting on seat with back against reclined seat back	Forward	37.0° on HRP	Suppressed
	Middle	37.0° on HRP	Suppressed
	Rearward	37.0° on HRP	Suppressed
Position 3 Sitting on seat edge, spine vertical, hands at dummy's sides	Forward	12.0° on HRP	Suppressed
	Middle	12.0° on HRP	Suppressed
	Rearward	12.0° on HRP	Suppressed
Position 4 Sitting on seat with back against seat back then leaning on the door	Forward	12.0° on HRP	Suppressed
	Middle	12.0° on HRP	Suppressed
	Rearward	12.0° on HRP	Suppressed

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

* The manufacturer's design seat back angle was 12.0° on the Headrest Post (HRP). When the vehicle passenger seat was reclined 25° the seat back angle on the HRP was 37.0°.

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.:	C20130200	TEST DATE:	8/12/13
LABORATORY:	MGA	TECHNICIAN(S):	WD / BR
DUMMY TYPE:	5 th Percentile Female	DUMMY SERIAL NO.:	124

Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.0° on Headrest Post
 Tested seat position: Full Aft

 Tested steering wheel angle: 22.8°
 Thorax cavity angle: 28.7°
 Bottom of chin height: 7 mm Above Plane F Module Height

Air Bag Deployment Timing

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

5th Percentile Female SN 124 Position 1 (Chin On Module) 8/12/13

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	700	62
Peak Nij (Nte)	1.0	0.7
Time (ms)	NA	47.1
Peak Nij (Ntf)	1.0	0.5
Time (ms)	NA	24.7
Peak Nij (Nce)	1.0	0.7
Time (ms)	NA	165.0
Peak Nij (Ncf)	1.0	0.2
Time (ms)	NA	275.0
Neck Tension	2070 N	1120
Neck Compression	2520 N	674
Chest g	60 g	19
Chest Displacement	52 mm	10
Left Femur	6805 N	141
Right Femur	6805 N	124

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

The original equipment air bag, the original equipment steering wheel, and steering column were used for this deployment.

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.:	C20130200	TEST DATE:	8/12/13
LABORATORY:	MGA	TECHNICIAN(S):	WD / BR
DUMMY TYPE:	5 th Percentile Female	DUMMY SERIAL NO.:	124

Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.0° on Headrest Post
 Tested seat position: Full Aft

Tested steering wheel angle: 22.8°
 Thorax cavity angle: 28.7°
 Chin Point height: 0 mm - At Steering Wheel Target
Note: The chin on rim steering wheel target is 10 mm below the highest point on the steering wheel.

Air Bag Deployment Timing

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

5th Percentile Female SN 124 Position 2 (Chin On Rim) 8/12/13

Injury Criteria	Max. Allowable Injury Assessment Values	Measured Value
HIC15	700	37
Peak Nij (Nte)	1.0	0.4
Time (ms)	NA	12.5
Peak Nij (Ntf)	1.0	0.3
Time (ms)	NA	28.4
Peak Nij (Nce)	1.0	0.1
Time (ms)	NA	175.6
Peak Nij (Ncf)	1.0	0.3
Time (ms)	NA	74.6
Neck Tension	2070 N	922
Neck Compression	2520 N	235
Chest g	60 g	20
Chest Displacement	52 mm	20
Left Femur	6805 N	152
Right Femur	6805 N	101

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

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

DATA SHEET 32

VEHICLE WEIGHT, FUEL TANK, AND ATTITUDE DATA

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Chad Seebecker

NHTSA No.: C20130200
 Test Date: 9/30/13

IMPACT ANGLE:	30° Right Oblique					
BELTED DUMMIES (YES/NO):	No					
TEST SPEED:	X	32 to 40 kmph		0 to 48 kmph		0 to 56 kmph
DRIVER DUMMY:			5 th female	X		50 th male
PASSENGER DUMMY:			5 th female	X		50 th male

- | | | |
|----|-----|---|
| X | 1. | Fill the transmission with transmission fluid to the satisfactory range. |
| NA | 2. | Drain fuel from vehicle. |
| NA | 3. | Run the engine until fuel remaining in the fuel delivery system is used and the engine stops. |
| NA | 4. | Record the useable fuel tank capacity supplied by the COTR. |
| NA | | Useable Fuel Tank Capacity supplied by COTR: Not Applicable Electric Vehicle . |
| NA | 5. | Record the fuel tank capacity supplied in the owner's manual. |
| NA | | Useable Fuel Tank Capacity in owner's manual: Not Applicable Electric Vehicle . |
| NA | 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. |
| NA | | Amount Added: Not Applicable Electric Vehicle |
| NA | 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:	38 psi	LF:	38 psi	RR:	38 psi	LR:	38 psi
Owner's manual pressure:	RF:	38 psi	LF:	38 psi	RR:	38 psi	LR:	38 psi
Actual inflated pressure:	RF:	38 psi	LF:	38 psi	RR:	38 psi	LR:	38 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):	388.7	Right Rear (kg):	430.0
Left Front (kg):	419.1	Left Rear (kg):	406.4
Total Front (kg):	807.8	Total Rear (kg):	836.4
% Total Weight:	49.1	% Total Weight:	50.9
UVW = TOTAL FRONT PLUS TOTAL REAR (KG):	1644.2		

- | | | |
|---|------|--|
| 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:	682	LF:	688	RR:	679	LR:	672
-----	-----	-----	-----	-----	-----	-----	-----

14. Calculate the Rated Cargo and Luggage Weight (RCLW): 35 kg
- 14.1 Does the vehicle have the vehicle capacity weight (VCW) on the certification label or tire placard?
- Yes, go to 14.3
- No, go to 14.2
- 14.2 VCW = Gross Vehicle Weight - UVW

$$VCW = \underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

- 14.3 VCW = 375 kg (827 lbs)
- 14.4 Does the certification or tire placard contain the Designated Seating Capacity (DSC)?

- Yes, go to 14.6
- No, go to 14.5 and skip 14.6

14.5 DSC = Total number of seat belt assemblies = _____

14.6 DSC = 5

14.7 RCLW = VCW - (68 kg x DSC) = 375 kg - (68 kg x 5) = 35 kg

14.8 Is the vehicle certified as a truck, MPV or bus (see the certification label on the door jamb)?

Yes, if the calculated RCLW is greater than 136 kg, use 136 kg as the RCLW. (S8.1.1)

No, use the RCLW calculated in 14.7

15. Fully Loaded Weight (100% fuel fill): 1835.3 kg

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

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

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

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

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

Right Front (kg):	429.1	Right Rear (kg):	485.8
Left Front (kg):	457.7	Left Rear (kg):	462.7
Total Front (kg):	886.8	Total Rear (kg):	948.5
% Total Weight:	48.3	% Total Weight:	51.7
% GVW	57.2	% GVW	54.5
(% GVW = Axle GVW divided by Vehicle GVW)			
Fully Loaded Weight = Total Front Plus Total Rear (kg):			1835.3

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

16.1 Place the vehicle on a level surface.

16.2 Measure perpendicular to the level surface to the 4 points marked on the body (see 13.1 above) and record the measurements

RF: 672 LF: 675 RR: 660 LR: 663

17. Drain the fuel system

NA 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.

NA Fuel tank capacity x .94 = 0 liters (0 gallons) Not Applicable Electric Vehicle

NA Amount added: 0 liters (0 gallons) Not Applicable Electric Vehicle

NA 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)

$$\underline{1835.2 \text{ kg}} = \underline{1644.2 \text{ kg}} + \underline{35.0 \text{ kg}} + \underline{156.0 \text{ kg}}$$

X 20.2 Test Weight Range = Calculated Weight (- 4.5 kg, - 9 kg.)

$$\text{Max. Test Weight} = \text{Calculated Test Weight} - 4.5 \text{ kg} = \underline{1830.7 \text{ kg}}$$

$$\text{Min. Test Weight} = \text{Calculated Test Weight} - 9 \text{ kg} = \underline{1826.2 \text{ kg}}$$

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:

Rear Floor Mats, Rear Headrests, Right Tail Light, Air Pump, Trunk Liner, Front Splash Guard

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.

X N/A

Weight of Ballast:

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):	431.8	Right Rear (kg):	469.9
Left Front (kg):	471.7	Left Rear (kg):	455.4
Total Front (kg):	903.5	Total Rear (kg):	925.3
% Total Weight:	49.4	% Total Weight:	50.6
% GVW	44.8	% Total Weight:	57.6
(% GVW = Axle GVW divided by Vehicle GVW)			
TOTAL FRONT PLUS TOTAL REAR (kg):			1828.8

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:	674	LF:	676	RR:	666	LR:	663
-----	-----	-----	-----	-----	-----	-----	-----

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

RF:	682	LF:	688	RR:	679	LR:	672
-----	-----	-----	-----	-----	-----	-----	-----

AS TESTED:

RF:	674	LF:	676	RR:	666	LR:	663
-----	-----	-----	-----	-----	-----	-----	-----

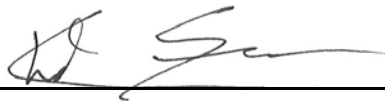
FULLY LOADED:

RF:	672	LF:	675	RR:	660	LR:	663
-----	-----	-----	-----	-----	-----	-----	-----

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

- Yes
- No, explain why not.

REMARKS:

Signature:  Date: 9/30/13

I certify that I have read and performed each instruction.

DATA SHEET 33

VEHICLE ACCELEROMETER LOCATION AND MEASUREMENT

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Chad Seebecker

NHTSA No.: C20130200
 Test Date: 9/30/13

IMPACT ANGLE:	30° Right Oblique					
BELTED DUMMIES (YES/NO):	No					
TEST SPEED:	X	32 to 40 kmph		0 to 48 kmph		0 to 56 kmph
DRIVER DUMMY:			5 th female	X		50 th male
PASSENGER DUMMY:			5 th female	X		50 th male

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

REMARKS:

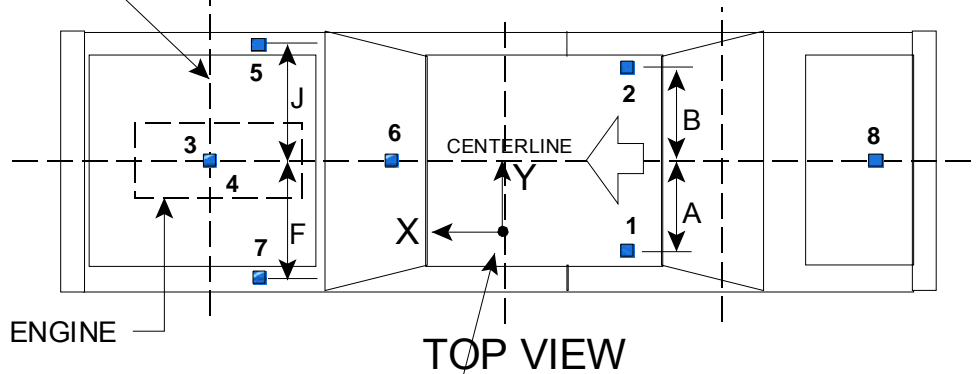
I certify that I have read and performed each instruction.

Signature: 

Date: 9/30/13

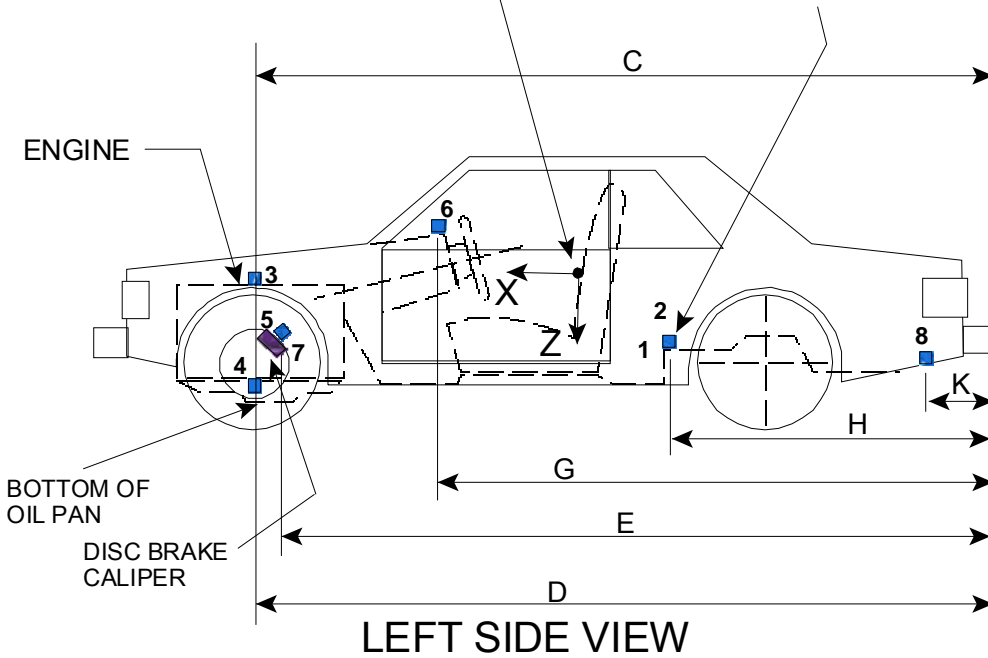
VEHICLE ACCELEROMETER LOCATION AND DATA SUMMARY

CENTERLINE OF FRONT WHEELS



ACCELEROMETER COORDINATE SYSTEM (POSITIVE DIRECTION SHOWN)

REAR SEAT CUSHION ASSY. FRONT ATTACHMENT BRACKET SUPPORT



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

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

VEHICLE ACCELEROMETER LOCATION AND MEASUREMENTS

<u>DIMENSION</u>	<u>LENGTH (mm)</u>	
<u>PRETEST VALUES</u>		
<u>A</u> (LH Rear Seat Xmbr)	365	
<u>B</u> (RH Rear Seat Xmbr)	358	
<u>C</u> (Engine Top)	3732	
<u>D</u> (Engine Bottom)	3439	
<u>E</u> (Caliper)	Right Side: 3503	Left Side: 3503
<u>F</u> (Left Caliper)	726	
<u>G</u> (IP)	3077	
<u>H</u> (Seat)	1754	
<u>J</u> (Right Caliper)	726	
<u>K</u> (Trunk)	241	
<u>POST TEST VALUES</u>		
<u>A</u> (LH Rear Seat Xmbr)	365	
<u>B</u> (RH Rear Seat Xmbr)	358	
<u>C</u> (Engine Top)	3628	
<u>D</u> (Engine Bottom)	3354	
<u>E</u> (Caliper)	Right Side: 3426	Left Side: 3498
<u>F</u> (Left Caliper)	759	
<u>G</u> (IP)	3077	
<u>H</u> (Seat)	1754	
<u>J</u> (Right Caliper)	759	
<u>K</u> (Trunk)	241	

DATA SHEET 34
PHOTOGRAPHIC TARGETS

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Chad Seebecker


NHTSA No.: C20130200
 Test Date: 9/30/13

IMPACT ANGLE:	30° Right Oblique		
BELTED DUMMIES (YES/NO):	No		
TEST SPEED:	X 32 to 40 kmph	0 to 48 kmph	0 to 56 kmph
DRIVER DUMMY:		5 th female	X 50 th male
PASSENGER DUMMY:		5 th female	X 50 th male

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

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

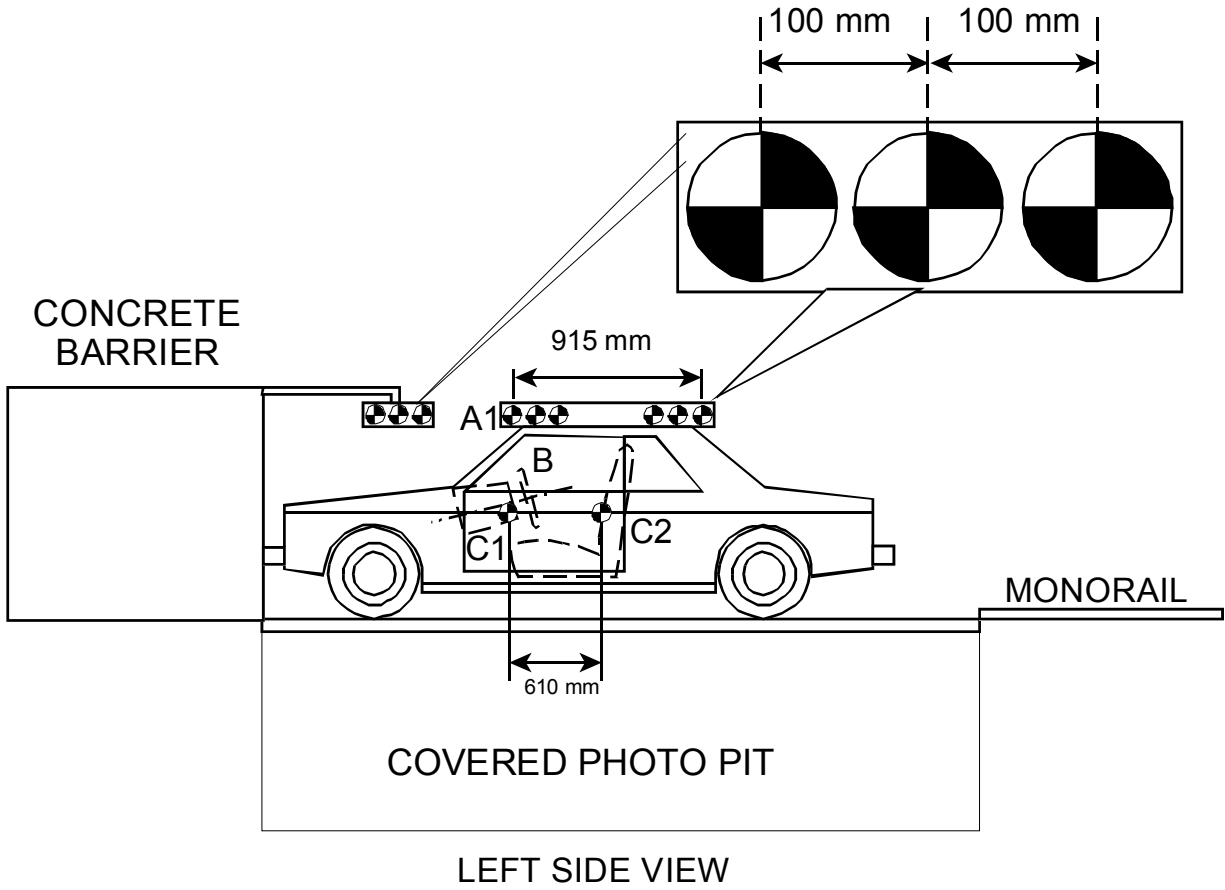
REMARKS:

Signature: 

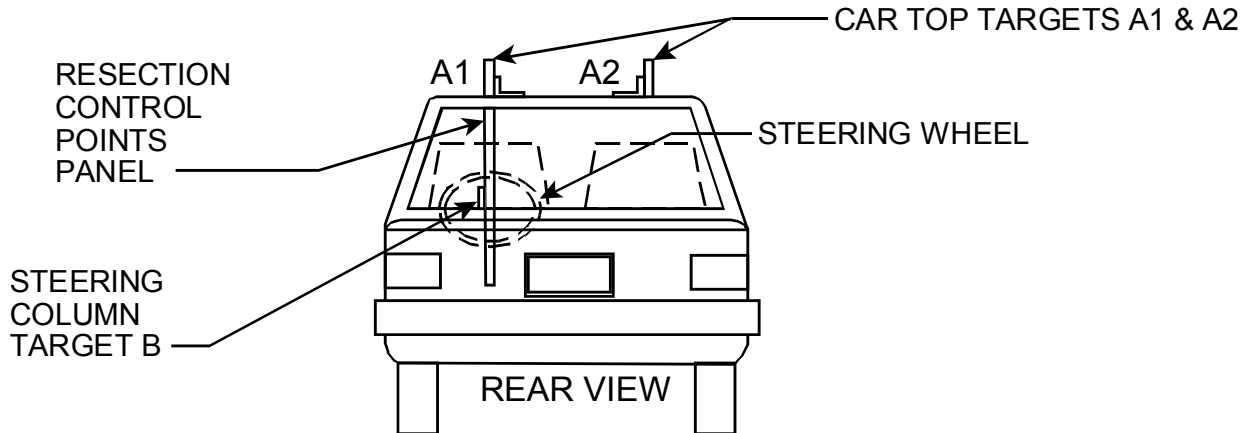
Date: 9/30/13

I certify that I have read and performed each instruction.

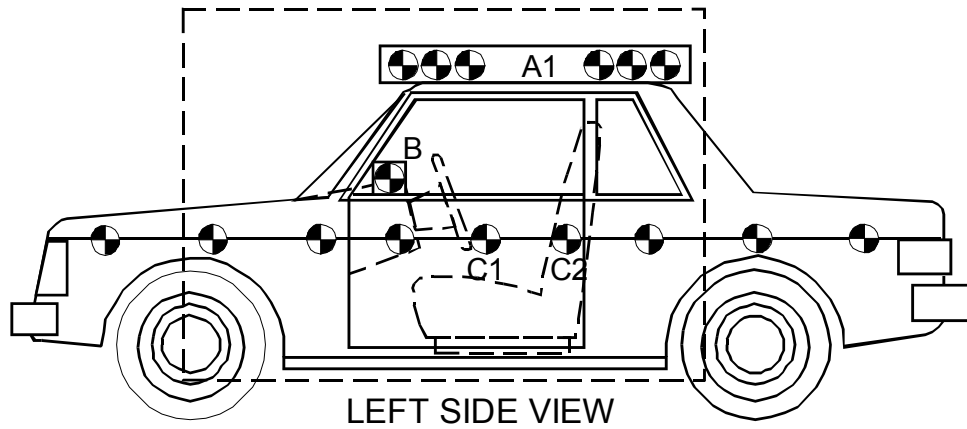
REFERENCE PHOTO TARGETS



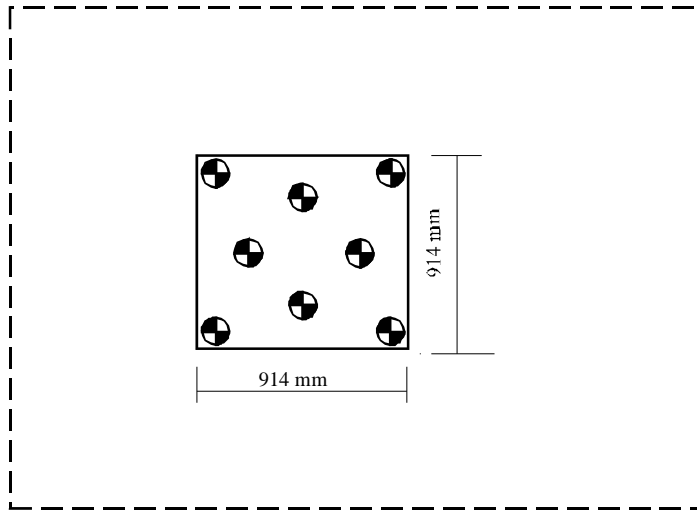
RESECTION PANEL TARGETING ALIGNMENT



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



PRE-RUN STEERING COLUMN HIGH SPEED CAMERA VIEW



LEFT SIDE VIEW

DATA SHEET 35
CAMERA LOCATIONS

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance

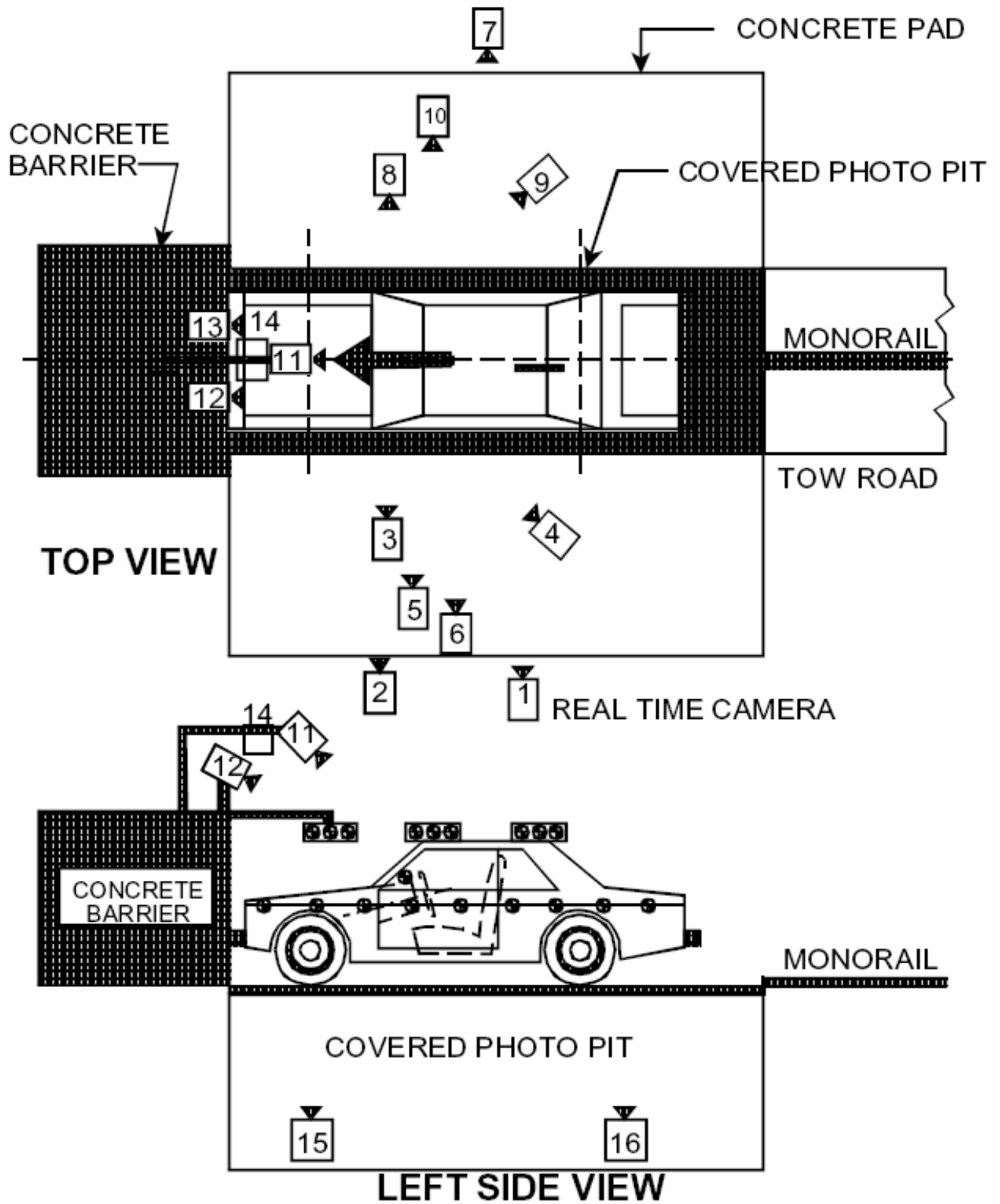
NHTSA No.: C20130200
Test Date: 9/30/13
Time: 11:20 AM

CAMERA NO.	VIEW	CAMERA POSITIONS (mm) *			LENS (mm)	SPEED (fps)
		X	Y	Z		
1	Real Time Left Side View				13	30
2	Left Side View (Barrier face to front seat backs)	520	-5890	1210	24	1000
3	Left Side View (Driver)	1320	-7030	1760	35	1000
4	Left Side View (B-post aimed toward center of steering wheel)	4710	-5270	1940	50	1000
5	Left Side View (Steering Column)	110	-4950	1160	24	1000
6	Left Side View (Steering Column)	90	-4970	760	24	1000
7	Right Side View (Overall)	1930	5690	1210	20	1000
8	Right Side View (Passenger)	1390	6380	1850	35	1000
9	Right Side View (Angle)	4230	4640	1960	50	1000
10	Right Side View (Front door)	1220	4450	1180	24	1000
11	Front View Windshield	-1710	0	2810	24	1000
12	Front View Driver	-1420	-450	2030	12.5	1000
13	Front View Passenger	-1420	450	2030	12.5	1000
14	Overhead Barrier Impact View	1020	0	4910	14	1000
15	Pit Camera Engine View	410	0	-3150	24	1000
16	Pit Camera Fuel Tank View	2180	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 F

DUMMY POSITIONING PROCEDURES FOR DRIVER TEST DUMMY CONFORMING TO SUBPART E OF PART 572

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Alex Vanderheyden

NHTSA No.: C20130200
 Test Date: 9/30/13

IMPACT ANGLE:	30° Right Oblique					
BELTED DUMMIES (YES/NO):	No					
TEST SPEED:	X	32 to 40 kmph		0 to 48 kmph		0 to 56 kmph
DRIVER DUMMY:			5 th female		X	50 th male
PASSENGER DUMMY:			5 th female		X	50 th male

- X 1. Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)
X N/A – No lumbar adjustment
- X 2. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (S16.2.10.2)
X N/A – No additional support adjustment
- X 3. Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- X 4. Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the foremost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- X 5. **Mark** each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, **mark** each detent. For power seats, **mark** only the rearmost, middle, and foremost positions. Label three of the positions with the following: F for foremost, M for mid-position (if there is no mid-position, label the closest adjustment position to the rear of the mid-point), and R for rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 3 and 4. (8/31/95 legal interpretation to Hogan and Hartson)
- X 6. Move the seat to the mid position.
- X 7. While maintaining the mid position, move the seat to its lowest position. **Mark** the height position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.
 N/A- No cushion angle adjustment
 Manufacturer's seat cushion angle: Lowest Height
 Tested seat cushion angle: 17.3°, Lowest Height
- X 8. Visually **mark** the seat back angle, if adjustable, at the manufacturer's nominal design riding position for a **50th percentile adult male** in the manner specified by the manufacturer.
 N/A – No seat back angle adjustment
 Manufacturer's design seat back angle: 12.0° on Headrest Post
 Tested seat back angle: 12.5° on Headrest Post

9. Is the seat a bucket seat?
 Yes, go to 10 and skip 11
 No, go to 11 and skip 10
10. Bucket seats:
Locate and **mark** the longitudinal centerline of the seat cushion. The intersection of the vertical longitudinal plane that passes through the SgRP and the seat cushion upper surface determines the longitudinal centerline of a bucket seat cushion. (S10.4.1.2 and S16.3.1.10)
11. Bench seats:
Locate and **mark** the longitudinal line on the seat cushion that marks the intersection of the vertical longitudinal plane through the centerline of the steering wheel and the seat cushion upper surface. (S10.4.1.1)
12. If adjustable, set the head restraint at the full up position. (S8.1.3) If there are adjustments other than vertical, adjust them as recommended by the manufacturer.
 N/A – No head restraint adjustment
13. Place any adjustable seat belt anchorages at the vehicle manufacturer's nominal design position for a 50th percentile adult male occupant (S8.1.3)
 N/A – No adjustable upper seat belt anchorage
Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0
Tested anchorage position: 0 of 4; Upper-most defined as 0
14. Place adjustable pedals in the full forward position.
 N/A – the pedals are not adjustable.
15. Is the steering wheel adjustable up and down and/or in and out?
 Yes – go to 16
 No – go to 19
16. Find and **mark** each up and down position. Label three of the positions with the following: H for highest, M for mid-position (if there is no mid-position, label the next lowest adjustment position), and L for lowest.
 N/A – steering wheel is not adjustable up and down
17. Find and **mark** 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.
18. Set the steering wheel hub at the geometric center of the full range of driving positions including any telescoping positions.
19. Place the dummy in the seat such that the midsagittal plane is coincident with the longitudinal seat cushion markings as determined in item 10 or 11 and the upper torso rests against the seat back. (S10.4.1.1 & S10.4.1.2)
20. Rest the thighs on the seat cushion. (S10.5)

21. Position the H-point of the dummy within 0.5 inch of the vertical dimension and 0.5 inch of the horizontal dimension of a point 0.25 inch below the H-point determined in Data Sheet 15. (S10.4.2.1) Then measure the pelvic angle with respect to the horizontal using the pelvic angle gage. Adjust the dummy position until these three measurements are within the specifications. (S10.4.2.1 and S10.4.2.2)

0.315" horizontal inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)

0.433" vertical inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)

23.0° pelvic angle (20° to 25°)

22. Is the head level within $\pm 0.5^\circ$? (S10.1)

Yes, go to 23

No, go to 22.1

22.1 Adjust the position of the H-point. (S10.1)

22.2 Is the head level within $\pm 0.5^\circ$? (S10.1)

Yes, record the following, then go to 23. No, go to 22.3

horizontal inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)

vertical inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)

pelvic angle (20° to 25°)

22.3 Adjust the pelvic angle. (S10.1)

22.4 Is the head level within $\pm 0.5^\circ$? (S10.1)

Yes, record the following, then go to 23. No, go to 22.3

horizontal inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)

vertical inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)

pelvic angle (20° to 25°)

22.5 Adjust the neck bracket of the dummy the minimum amount necessary from the nonadjusted "0" setting until the head is level within $\pm 0.5^\circ$. (S10.1) Record the following, then go to 23. (Adjusted 1 Notch Rear)

0.394" horizontal inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)

0.183" vertical inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)

24.1° pelvic angle (20° to 25°)

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

10.6" measured distance (10.6 inches) (S10.5)

24. Can the right foot be placed on the accelerator?

Yes, go to 24.1 and skip 24.2

No, go to 24.2

24.1. To the extent practicable keep the right thigh and the leg in a vertical plane (S10.5) while resting the foot on the undepressed accelerator pedal with the rearmost point of the heel on the floor pan in the plane of the pedal. (S10.6.1.1)

24.2 Initially set the foot perpendicular to the leg and then place it as far forward as possible in the direction of the pedal centerline with the rearmost point of the heel resting on the floor pan. (S10.6.1.1)

24.2.1 Move the adjustable pedal to its most rearward position or until the right foot is flat on the pedal, whichever occurs first. (S10.6.1.1)

N/A – the accelerator pedal is not adjustable

25. Does the vehicle have a foot rest?

Yes, go to 25.1

No, go to 25.2

25.1 With the left thigh and leg in a vertical plane, place the left foot on the foot rest with the heel resting on the floor pan. (S10.6.1.2)

25.1.1 Is the left foot elevated above the right foot?

Yes, go to 25.2 and position the foot off the foot rest

No, go to 26

25.2 Check the ONLY one of the following that applies

The left foot reaches the toeboard without adjusting the foot or leg. To the extent practicable keep the left thigh and the leg in a vertical longitudinal plane (S10.5) and place the foot on the toeboard, skip 25.3 (S10.6.1.2)

The left foot reaches the toeboard but contacts the brake or clutch pedal and must be rotated to avoid pedal contact. To the extent practicable keep the left thigh and the leg in a vertical longitudinal plane (S10.5) and place the foot on the toeboard. The foot was rotated about the leg to avoid pedal contact, skip 25.3 (S10.6.1.2)

The left foot reaches the toeboard but contacts the brake or clutch pedal and the foot and leg must be rotated to avoid pedal contact. To the extent practicable keep the left thigh and the leg in a vertical longitudinal plane (S10.5) and place the foot on the toeboard. The foot was rotated about the leg and the leg was rotated outboard about the hip the minimum distance necessary to avoid pedal contact, skip 12.3 (S10.6.1.2)

N/A – the foot does not reach the toeboard, go to 25.3

25.3 Check the ONLY one of the following that applies

The left foot did not contact the brake or clutch pedal. To the extent practicable keep the left thigh and the leg in a vertical longitudinal plane (S10.5). Set the foot perpendicular to the leg and place it as far forward as possible with the heel resting on the floor pan. (S10.6.1.2)

The left foot did contact the brake or clutch pedal and the foot was rotated to avoid contact. To the extent practicable keep the left thigh and the leg in a vertical longitudinal plane (S10.5). Set the foot perpendicular to the leg and place it as far forward as possible with the heel resting on the floor pan and rotate the foot the minimum amount to avoid pedal contact. (S10.6.1.2)

The left foot did contact the brake or clutch pedal and the foot was rotated about the leg and the leg was rotated outboard about the hip the minimum distance necessary to avoid pedal contact. Set the foot perpendicular to the leg and place it as far forward as possible with the heel resting on the floor pan and rotate the foot about the leg and the thigh and leg outboard about the hip the minimum distance necessary to avoid pedal contact. (S10.6.1.2)

26. Place the right upper arm adjacent to the torso with the centerline as close to a vertical plane as possible. (S10.2.1)

27. Is the driver seat belt used for this test?

Yes, continue

No, go to 28

27.1 Fasten the seat belt around the dummy.

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

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

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

pound load applied

27.5 Is the belt system equipped with a tension-relieving device?

Yes, continue

No, go to 28


27.6 Introduce the maximum amount of slack into the upper torso bet that is recommended by the vehicle manufacturer in the vehicle owner's manual. (S10.9).

28. Place the left upper arm adjacent to the torso with the centerline as close to a vertical plane as possible. (S10.2.1)

29. Place the right hand with the palm in contact with the steering wheel at the rim's horizontal centerline and with the thumb over the steering wheel. (S10.3.1)

30. Place the left hand with the palm in contact with the steering wheel at the rim's horizontal centerline and with the thumb over the steering wheel. (S10.3.1)

31. Tape the thumb of each hand to the steering wheel by using masking tape with a width of 0.25 inch. The length of the tape shall only be enough to go around the thumb and steering wheel one time.

Signature: 

Date: 9/30/13

I certify that I have read and performed each instruction.

DATA SHEET 36
APPENDIX F
DUMMY POSITIONING PROCEDURES FOR PASSENGER TEST DUMMY
CONFORMING TO SUBPART E OF PART 572

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Tim Bratz

NHTSA No.: C20130200
 Test Date: 9/30/13

IMPACT ANGLE:	30° Right Oblique					
BELTED DUMMIES (YES/NO):	No					
TEST SPEED:	X	32 to 40 kmph		0 to 48 kmph		0 to 56 kmph
DRIVER DUMMY:			5 th female	X		50 th male
PASSENGER DUMMY:			5 th female	X		50 th male

- X 1. The seat is a bench seat for which the adjustments have already been made for the driver and there are no independent adjustments that can be made for the passenger. Go to 12.
X N/A- the passenger seat adjusts independently of the driver seat.
- 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. Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- X 5. Use all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the foremost position. **Mark** this position. (8/31/95 legal interpretation to Hogan and Hartson)
- X 6. **Mark** each fore-aft position so that there is a visual indication when the seat is at a particular position. For manual seats, **mark** each detent. For power seats, **mark** only the rearmost, middle, and foremost positions. Label three of the positions with the following: F for foremost, M for mid-position (if there is no mid-position, label the closest adjustment position to the rear of the mid-point), and R for rearmost. Determine the mid fore-aft seat position based on the foremost and rearmost positions determined in items 3 and 4. (8/31/95 legal interpretation to Hogan and Hartson)
- X 7. Move the seat to the mid position.
- X 8. While maintaining the mid position, move the seat to its lowest position. **Mark** the height position. For seats with adjustable seat cushions, use the manufacturer's recommended seat cushion angle for determining the lowest height position.
X N/A- No cushion angle adjustment
 Manufacturers seat cushion angle: Fixed
 Tested seat cushion angle: Fixed

9. Visually **mark** the seat back angle, if adjustable, at the manufacturer's nominal design riding position for a **50th percentile adult male** in the manner specified by the manufacturer.
 N/A – No seat back angle adjustment
 Manufacturer's design seat back angle: 12.0° on Headrest Post
10. Is the seat a bucket seat?
 Yes, go to 11 and skip 12
 No, go to 12 and skip 11
11. 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. (S10.4.1.2 and S16.3.1.10)
12. Bench seats:
 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. (S10.4.1.1)
 Record the distance from the longitudinal centerline of the vehicle to the center of the steering wheel. _____
 Record the distance from the longitudinal centerline of the vehicle to the longitudinal centerline of the seat cushion. _____
13. If adjustable, set the head restraint at the full up position. (S8.1.3) If there are adjustments other than vertical, adjust them as recommended by the manufacturer.
 N/A – No head restraint adjustment
14. Place any adjustable seat belt anchorages at the vehicle manufacturer's nominal design position for a 50th percentile adult male occupant (S8.1.3)
 N/A – No adjustable upper seat belt anchorage
 Manufacturer's specified anchorage position: 0 of 4; Upper-most defined as 0
 Tested anchorage position: 0 of 4; Upper-most defined as 0
15. Place the dummy in the seat such that the midsagittal plane is coincident with the longitudinal seat cushion markings as determined in item 11 or 12 and the upper torso rests against the seat back. (S10.4.1.1 & S10.4.1.2)
16. Rest the thighs on the seat cushion. (S10.5)
17. Position the H-point of the dummy within 0.5 inch of the vertical dimension and 0.5 inch of the horizontal dimension of a point 0.25 inch below the H-point determined by using the equipment and procedures specified in SAE J826 (APR 1980). (S10.4.2.1) Then measure the pelvic angle with respect to the horizontal using the pelvic angle gage. Adjust the dummy position until these three measurements are within the specifications. (S10.4.2.1 and S10.4.2.2)
0.079" horizontal inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)
0.354" vertical inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)
22.7° pelvic angle (20° to 25°)
18. Is the head level within $\pm 0.5^\circ$? (S10.1)
 Yes, go to 19
 No, go to 18.1

18.1 Adjust the position of the H-point. (S10.1 and S10.4.2.1)

18.2 Is the head level within $\pm 0.5^\circ$? (S10.1)

Yes, record the following, then go to 19. No, go to 18.3

0.197" horizontal inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)

0.368" vertical inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)

24.4° pelvic angle (20° to 25°)

18.3 Adjust the pelvic angle. (S10.1)

18.4 Is the head level within $\pm 0.5^\circ$? (S10.1)

Yes, record the following, then go to 19. No, go to 18.5

horizontal inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)

vertical inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)

pelvic angle (20° to 25°)(S10.4.2.2)

18.5 Adjust the neck bracket of the dummy the minimum amount necessary from the nonadjusted "0" setting until the head is level within $\pm 0.5^\circ$. (S10.1) Record the following, then go to 19.

horizontal inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)

vertical inches from the point 0.25 below the determined H-point (0.5" max.) (S10.4.2.1)

pelvic angle (20° to 25°)(S10.4.2.2)

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

10.6" measured distance (10.6 inches) (S10.5)

20. Check the only one of the following that applies:

To the extent practicable keep the left thigh and leg in a vertical plane and the right thigh and leg in a vertical plane, place the feet on the toeboard with the heels resting on the floor pan as close as possible to the intersection of the floor pan and toeboard.

The feet cannot be placed flat on the toeboard. To the extent practicable keep the left thigh and leg in a vertical plane and the right thigh and leg in a vertical plane, set the feet perpendicular to the legs and place them as far forward as possible with the heels resting on the floor pan.

The vehicle has a wheelhouse projection. To the extent practicable keep the left thigh and leg in a vertical plane and the right thigh and leg in a vertical plane, set the feet perpendicular to the legs and place them as far forward as possible with the heels resting on the floor pan. Do not set the feet on the wheelhouse projection.

The vehicle has a wheelhouse projection and the feet cannot be placed on the toeboard. To the extent practicable keep the left thigh and leg in a vertical plane and the right thigh and leg in a vertical plane, set the feet perpendicular to the legs and place them as far forward as possible with the heel resting on the floor pan. Do not set the feet on the wheelhouse projection.

21. Place the left upper arm in contact with the seat back and side of the torso. (S10.2.2)

22. Is the passenger seat belt used for this test?

Yes, continue

No, go to 23

22.1 Fasten the seat belt around the dummy.

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

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

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

22.5 Is the belt system equipped with a tension relieving device?

Yes, continue

No, go to 23

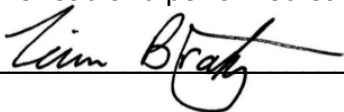
22.6 Introduce the maximum amount of slack into the upper torso belt that is recommended by the vehicle manufacturer in the vehicle owner's manual. (S10.9). Go to 23.

23. Place the right upper arm in contact with the seat back and side of the torso. (S10.2.2)

24. Place the left hand palm in contact with the outside of the left thigh and the little finger in contact with the seat cushion. (S10.3.2)

25. Place the right hand palm in contact with the outside of the right thigh and the little finger in contact with the seat cushion. (S10.3.2)

I certify that I have read and performed each instruction.

Signature: 

Date: 9/30/13

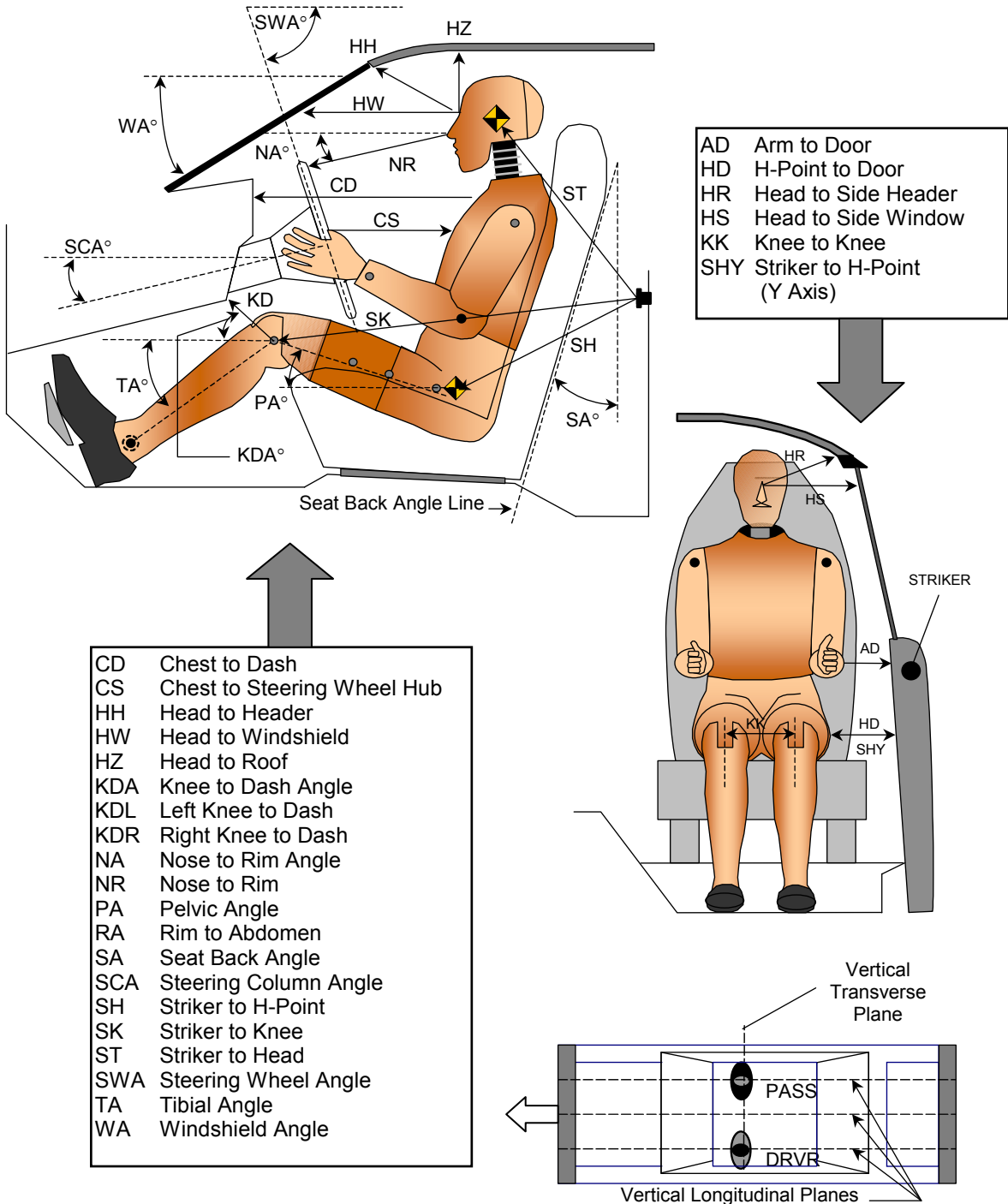
DATA SHEET 37

DUMMY MEASUREMENTS

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Tim Bratz

NHTSA No.: C20130200
 Test Date: 9/30/13

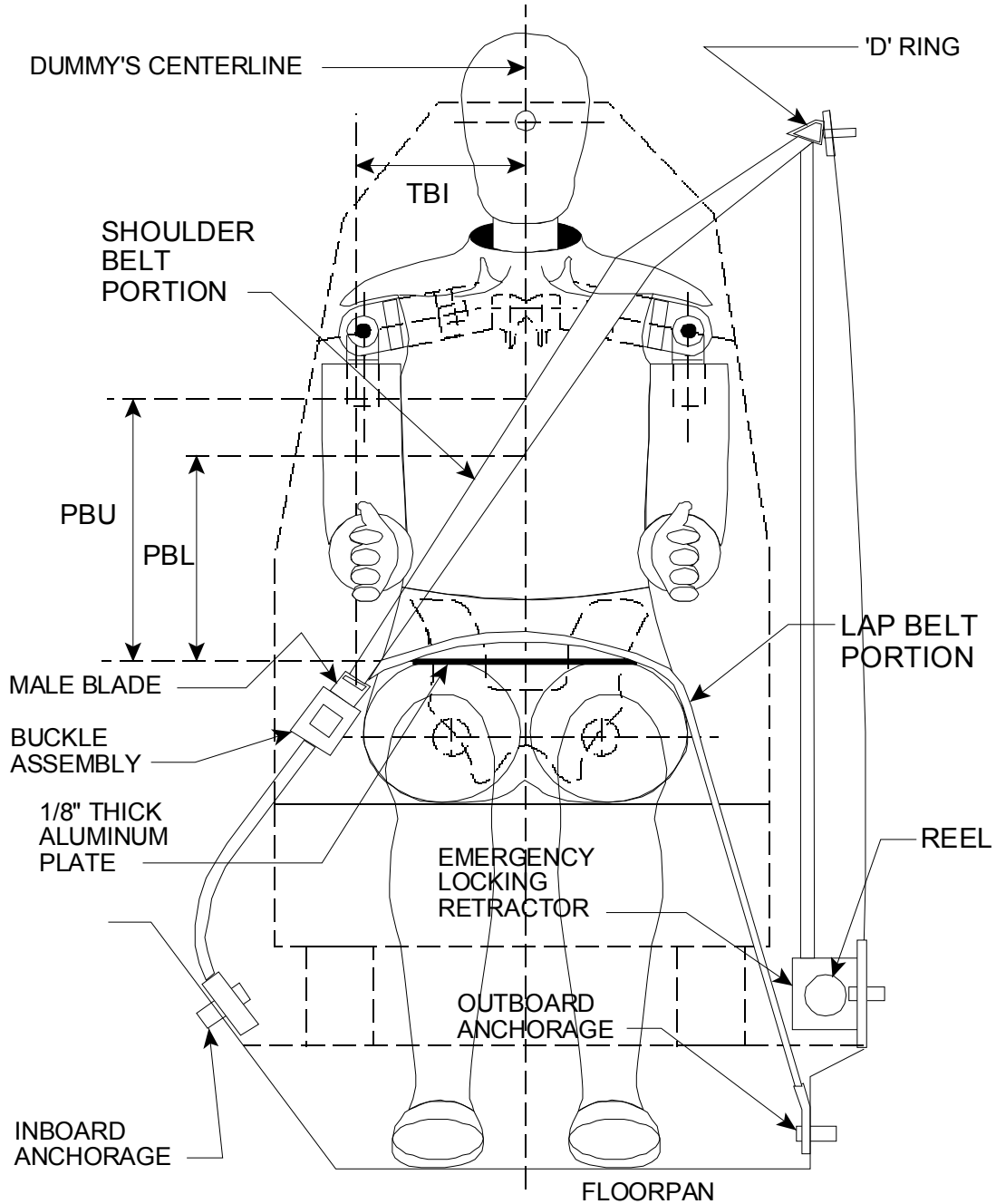
DUMMY MEASUREMENTS FOR FRONT SEAT OCCUPANTS



TEST DUMMY POSITION MEASUREMENTS

Code	Measurement Description	Driver SN 401		Passenger SN 403	
		Length (mm)	Angle (°)	Length (mm)	Angle (°)
WA	Windshield Angle		19.7		
SWA	Steering Wheel Angle		65.9		
SCA	Steering Column Angle		24.1		
SA	Seat Back Angle (On Headrest Post)		12.5		12.0
HZ	Head to Roof (Z)	197		186	
HH	Head to Header	352	27.3	338	24.0
HW	Head to Windshield	747	0.0	734	0.0
HR	Head to Side Header (Y)	222		219	
NR	Nose to Rim	410	7.6		
CD	Chest to Dash	567		488	
CS	Chest to Steering Hub	356	1.1		
RA	Rim to Abdomen	217	0.0		
KDL	Left Knee to Dash	210	36.0	134	
KDR	Right Knee to Dash	177		161	29.7
PA	Pelvic Angle		24.1		24.0
TA	Tibia Angle		49.0		47.5
KK	Knee to Knee (Y)	345		268	
SK	Striker to Knee	512	88.0	529	90.5
ST	Striker to Head	497	11.2	507	4.2
SH	Striker to H-Point	223	140.1	189	121.9
SHY	Striker to H-Point (Y)	300		270	
HS	Head to Side Window	328		438	
HD	H-Point to Door (Y)	152		242	
AD	Arm to Door (Y)	145		60	
AA	Ankle to Ankle	320		250	

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: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Tim Bratz

NHTSA No.: C20130200
 Test Date: 9/30/13

IMPACT ANGLE:	30° Right Oblique					
BELTED DUMMIES (YES/NO):	No					
TEST SPEED:	<input checked="" type="checkbox"/>	32 to 40 kmph	<input type="checkbox"/>	0 to 48 kmph	<input type="checkbox"/>	0 to 56 kmph
DRIVER DUMMY:			5 th female	<input checked="" type="checkbox"/>	50 th male	
PASSENGER DUMMY:			5 th female	<input checked="" type="checkbox"/>	50 th male	

- 1. Vehicle underbody painted.
- 2. The speed measuring devices are in place and functioning.
- 3. The speed measuring devices are 1.0 m from the barrier (spec. 1.5 m) and 30 cm from the barrier (spec. is 30 cm)
- 4. Convertible top is in the closed position.
 N/A, not a convertible
- 5. Instrumentation and wires are placed so motion of dummies during impact is not affected.
- 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.

260 kpa front left tire 260 kpa specified on tire placard or in owner information
260 kpa front right tire 260 kpa specified on tire placard or in owner information
260 kpa rear left tire 260 kpa specified on tire placard or in owner information
260 kpa rear right tire 260 kpa specified on tire placard or in owner information
- 7. Time zero contacts on barrier in place.
- 8. Pre test zero and shunt calibration adjustments performed and recorded.
- 9. Dummy temperature meets requirements of section 12.2 of the test procedure.
- 10. Vehicle hood closed and latched.
- 11. Transmission placed in neutral.
- 12. Parking brake off.
- 13. Are the heads still level?
 Yes, go to 14
 No, Adjust dummy so that head is at the angle recorded in the Appendix F or G data sheets and then continue.
- 14. Ignition in the ON position.
- 15. Doors closed and latched but not locked.
- 16. Post test zero and shunt calibration checks performed and recorded.
- 17. Actual test speed 39.8 kmph
- 18. Vehicle rebound from the barrier 31 cm
- 19. Describe whether the doors open after the test and what method is used to open the doors.
 Left Front Door: Door remained closed and latched; Door opened without tools.
 Right Front Door: Door remained closed and latched; Door opened without tools.
 Left Rear Door: Door remained closed and latched; Door opened without tools.
 Right Rear Door: Door remained closed and latched; Door opened without tools.

20. Describe the contact points of the dummy with the interior of the vehicle.
- Driver Dummy: Head to Air Bag, Visor and Rear View Mirror; Chest to Air Bag; Knees to Knee Restraint.
 - Passenger Dummy: Head to Air Bag, Headliner and Visor; Chest to Air Bag; Knees to Glovebox.

REMARKS:

Signature: 

Date: 9/30/13

I certify that I have read and performed each instruction.

DATA SHEET 40

ACCIDENT INVESTIGATION MEASUREMENTS

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Chad Seebecker

NHTSA No.: C20130200
 Test Date: 9/30/13

IMPACT ANGLE:	30° Right Oblique					
BELTED DUMMIES (YES/NO):	No					
TEST SPEED:	X	32 to 40 kmph		0 to 48 kmph		0 to 56 kmph
DRIVER DUMMY:			5 th female	X		50 th male
PASSENGER DUMMY:			5 th female	X		50 th male

Vehicle Year/Make/Model/Body Style:	2013 Ford Focus Electric Passenger Car
VIN:	1FADP3R48DL217777
Wheelbase:	2650 mm
Build Date:	12/12
Vehicle Size Category:	3
Test Weight:	1828.8 kg
Front Overhang:	938 mm
Overall Width:	1782 mm
Overall Length Center:	4394 mm

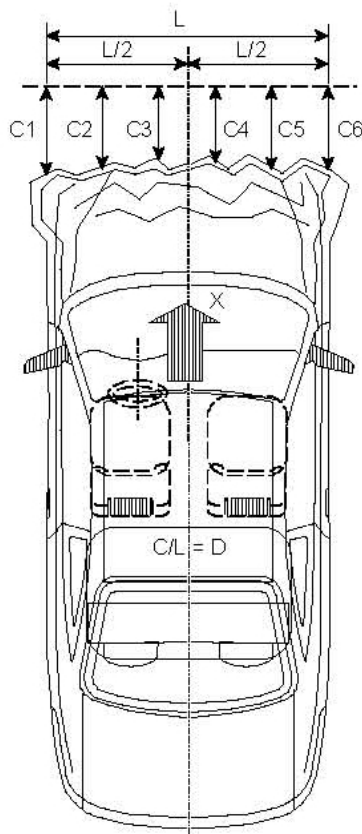
Accelerometer Data	
Location:	As per measurements on Data Sheet 33
Linearity:	>99.9%

Integration Algorithm:	Trapezoidal
Vehicle Impact Speed:	39.8 kmph
Time of Separation:	199.2 ms
Velocity Change:	42.4 kmph

CRUSH PROFILE

Collision Deformation Classification: 01FDEW3
 Midpoint of Damage: Vehicle Longitudinal Centerline
 Damage Region Length (mm): 1178
 Impact Mode: Frontal Barrier

No.	Measurement Description	Units	Pre-Test	Post-Test	Difference
C1	Crush zone 1 at left side	mm	4232	4228	4
C2	Crush zone 2 at left side	mm	4318	4218	100
C3	Crush zone 3 at left side	mm	4354	4211	143
C4	Crush zone 4 at right side	mm	4354	4065	289
C5	Crush zone 5 at right side	mm	4318	3954	364
C6	Crush zone 6 at right side	mm	4232	3812	420



REMARKS:

Signature: 

Date: 9/30/13

I certify that I have read and performed each instruction.

DATA SHEET 41
WINDSHIELD MOUNTING (FMVSS 212)

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Chad Seebecker

NHTSA No.: C20130200
 Test Date: 9/30/13

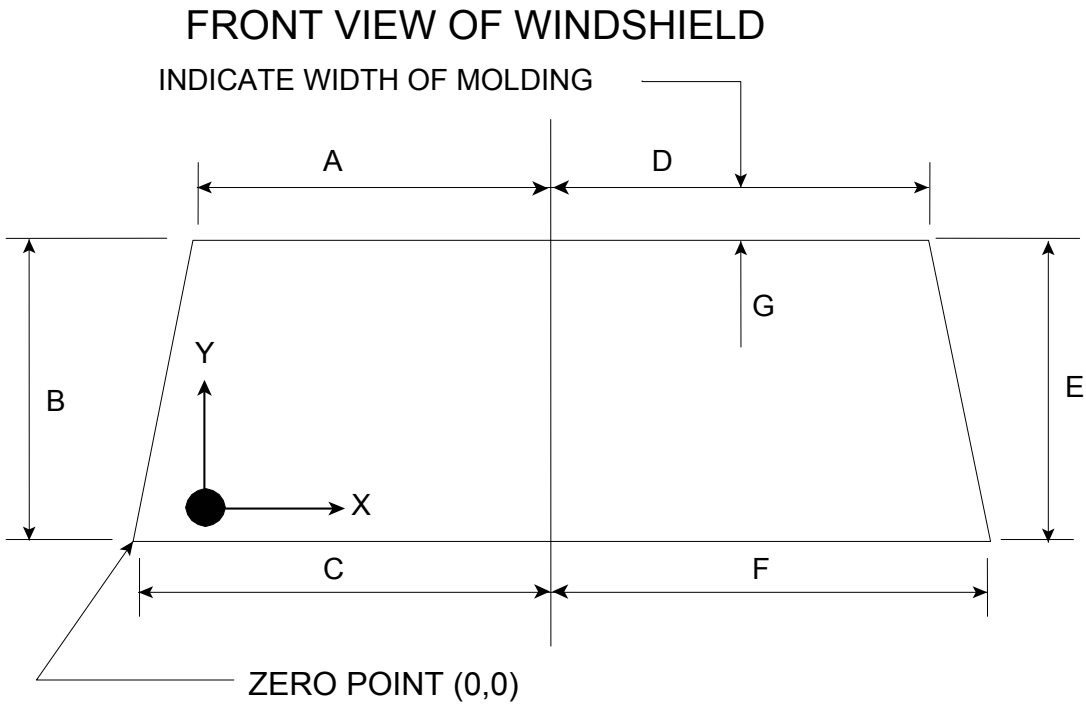
IMPACT ANGLE:	30° Right Oblique					
BELTED DUMMIES (YES/NO):	NO					
TEST SPEED:	<input checked="" type="checkbox"/>	32 to 40 kmph	<input type="checkbox"/>	0 to 48 kmph	<input type="checkbox"/>	0 to 56 kmph
DRIVER DUMMY:			5 th female	<input checked="" type="checkbox"/>	50 th male	
PASSENGER DUMMY:			5 th female	<input checked="" type="checkbox"/>	50 th male	

1. Pre-Crash
- 1.1 Describe from visual inspection how the windshield is mounted and describe any trim material.
- Retained with glue, rubber and plastic trim
- 1.2 Mark the longitudinal centerline of the windshield.
- 1.3 Measure pre-crash A, B, and C for the left side and record in the chart below.
- 1.4 Measure pre-crash C, D, and E for the right side and record in the chart below.
- 1.5 Measure from the edge of the retainer or molding to the edge of the windshield.
- Dimension G (mm): 27 mm
2. Post Crash
- 2.1 Can a single thickness of copier type paper (as small a piece as necessary) slide between the windshield and the vehicle body?
- No - Pass. Skip to the table of measurements, complete it by repeating the pre-crash measurements in the post crash column, and calculate the retention percentage, which will be 100%.
- Yes, go to 2.2
- 2.2 Visibly mark the beginning and end of the portions of the periphery where the paper slides between the windshield and the vehicle body.
- 2.3 Measure and record post-crash A, B, C, D, E, and F such that the measurements do not include any of the parts of the windshield where the paper slides between the windshield and the vehicle body.
- 2.4 Calculate and record the percent retention for the right and left side of the windshield.
- 2.5 Is total right side percent retention less than 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	586	586	100%
	B	908	908	100%
	C	735	735	100%
	Total	2229	2229	100%
Right Side	D	586	586	100%
	E	908	908	100%
	F	735	735	100%
	Total	2229	2229	100%

Indicate area of mounting failure: NONE



REMARKS:

Signature: 

Date: 9/30/13

I certify that I have read and performed each instruction.

DATA SHEET 42
WINDSHIELD ZONE INTRUSION (FMVSS 219)

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Chad Seebecker

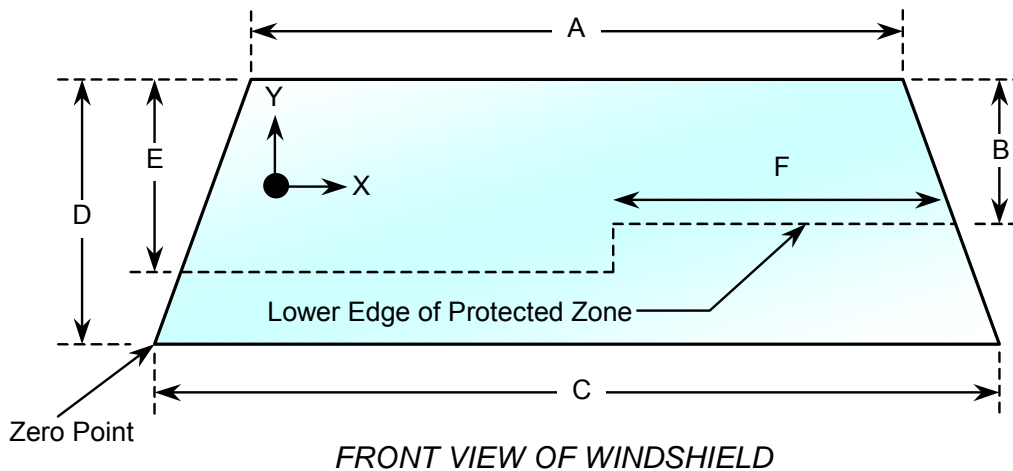
NHTSA No.: C20130200
 Test Date: 9/30/13

IMPACT ANGLE:	30° Right Oblique			
BELTED DUMMIES (YES/NO):	No			
TEST SPEED:	X	32 to 40 kmph		0 to 56 kmph
DRIVER DUMMY:		5 th female	X	50 th male
PASSENGER DUMMY:		5 th female	X	50 th male

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

- 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.



WINDSHIELD DIMENSIONS

Item	Units	Value
A	mm	1172
B	mm	502
C	mm	1470
D	mm	908
E	mm	571
F	mm	485

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: 9/30/13

FMVSS 305
ELECTRIC POWERED VEHICLES: ELECTROLYTE
SPILLAGE AND ELECTRICAL SHOCK PROTECTION

This electric vehicle, a 2013 Ford Focus Electric (NHTSA No. C20130200), in conjunction with the FMVSS 208, was tested to FMVSS 305.

The test was performed in accordance with the specifications of the Office of Vehicle Safety Compliance (OVSC) Test Procedures TP-305-01 to determine compliance to the requirements of Federal Motor Vehicle Safety Standards (FMVSS) 305, "Electric Powered Vehicles: Electrolyte Spillage and Electrical Shock Protection".

Based on the test results, the 2013 Ford Focus Electric appears to meet the requirements of FMVSS 305 testing.

If a measured voltage was zero and resulted in a division by zero "Zero Volts" was reported. This condition is considered being compliant as stated in TP-305-01 12.4 F.

This program is sponsored by the National Highway Traffic Safety Administration (NHTSA), under Contract No. DTNH22-06-C-00030.

The following data sheets document the results of the FMVSS 305 test.

DATA SHEET 1
ELECTRIC VEHICLE PROPULSION SYSTEM

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance
Test Technician: Tim Bratz

NHTSA No.: C20130200
Test Date: 9/30/13

VEHICLE PROPULSION SYSTEM

Type of Electric Vehicle (Electric/Hybrid):	Battery Electric Vehicle
Propulsion Battery Type:	Lithium-Ion (Li-Ion) Battery
Nominal Voltage (V):	300-350 V
Physical Location of Automatic Propulsion Battery Disconnect:	Internal to Upper and Lower Battery Packs
Auxiliary Battery Type:	12 V Lead Acid Battery Located Under Forward Hood

DATA SHEET 2

**ELECTRIC ENERGY STORAGE CONVERSION / DEVICE SYSTEM DATA
(COTR SUPPLIED DATA)**

Electrolyte Fluid Type:	Non-Aqueous Electrolyte	
Electrolyte Fluid Specific Gravity:	1.23 g/cc	
Electrolyte Kinematic Viscosity (centistokes):	2.44 St	
Electrolyte Fluid Color:	Clear	
Electric Energy Storage/Conversion System Coolant Type, Color, Specific Gravity (if applicable):	50% Water / 50% Ethylene Glycol	
Location of Battery Modules:	X	Inside Passenger Compartment
	X	Outside Passenger Compartment
		Inside Passenger Compartment (Upper Pack, Upper Array) Outside Passenger Compartment (Lower Pack, Lower Array)
Electric Energy Storage/Conversion System State of Charge:	X	Maximum State of Charge
		Range of Normal Operating Voltage
Maximum	350 V	
Test Voltage - No less than 95% of maximum State of Charge:	No Less Than 332.5V	
Range of Normal Operating Voltage:	NA	
Test Voltage – Within Normal Operative Voltage Range:	NA	
Test Vehicle Equipped with Electrical Isolation Monitoring	Not Stated	

VEHICLE CHASSIS GROUND POINT(S) LOCATION(S)

Details of Vehicle Chassis Ground Point(s) & Location(s)	Vehicle Ground is Located at a Mounting Screw on the Right Rear Side of the Vehicle
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ELECTRIC ENERGY STORAGE/CONVERSION TEST POINTS

Details of Electric Energy Storage/Conversion System Test Points:	Positive Test Point - Upper Pack Under HV Terminal Block At Terminal marked "+" Negative Test Point - Lower Pack At Passenger Side Contactor, Car Forward Terminal
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DATA SHEET 3

PRE-IMPACT ELECTRIC ISOLATION MEASUREMENTS & CALCULATIONS

Test Vehicle: 2013 Ford Focus Electric
Test Program: FMVSS 208 Compliance
Test Technician: Tim Bratz

NHTSA No.: C20130200
Test Date: 9/30/13

VOLTMETER INFORMATION

Make:	Fluke
Model:	177
Serial Number:	17210161
Internal Impedance Value (M Ω):	> 10 M Ω < 100 pF
Resolution (V):	.001 Volts
Last Calibration Date:	04/12/2013

ELECTRIC ENERGY STORAGE/CONVERSION SYSTEM VOLTAGE

Measurement shall be made with Energy Storage/Conversion System connected to the vehicle propulsion system, and the vehicle in the "ready-to-drive" (propulsion system energized) position.

If voltage measurement is not at the voltage or within the normal operating voltage range specified by the manufacturer, the battery must be charged.

Vb (V):	349.8
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ELECTRIC ENERGY STORAGE/CONVERSION SYSTEM TO VEHICLE CHASSIS

Vehicle chassis point(s) determined and supplied to contractor by COTR.

V1 (V):	39.3
V2 (V):	36.7

ELECTRIC ENERGY STORAGE / CONVERSION SYSTEM TO VEHICLE CHASSIS ACROSS RESISTOR

The known resistance R_o (in ohms) should be approximately 500 times the normal operating voltage of the vehicle (in volts) per SAE J1766.

R_o (Ω):	173,300 Ω
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V1' (V) Pre-Impact:	9.2
V2' (V) Pre-Impact:	8.7

DATA SHEET 3 (CONTINUED)

PRE-IMPACT ELECTRICAL ISOLATION MEASUREMENTS & CALCULATIONS

ELECTRICAL ISOLATION MEASUREMENT

Note: If measured voltage is zero and results in a division by zero, record "Zero Volts". This "zero voltage" condition is considered as being compliant.

V1' (V):	9.2
$R_{i1} = R_o (1 + V_2/V_1) [(V_1 - V_1')/V_1']$	
Ri1 (Ω):	1,096,474
V2' (V):	8.7
$R_{i2} = R_0 (1 + V_1/V_2) [(V_2 - V_2')/V_2']$	
Ri2 (Ω):	1,155,008
Ri = The lesser of Ri1 and Ri2	
Ri Pre-Test (Ω):	1,096,474
Ri/Vb (Ω/V):	3135
Minimum Electrical Isolation Value is 500 Ω/V	

Note: Measurements completed within 15 minutes prior to impact.

Is the measured Electrical Isolation Value:	Yes, Pass	No, Fail
≥500 Ω/V without electrical isolation monitoring	X	
≥100 Ω/V with electrical isolation monitoring		

**DATA SHEET 4
POST-IMPACT DATA**

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Tim Bratz

NHTSA No.: C20130200
 Test Date: 9/30/13

VOLTMETER INFORMATION

Make:	Fluke
Model:	177
Serial Number:	17210161
Internal Impedance Value (MΩ):	> 10 MΩ < 100 pF
Nominal Propulsion Battery Voltage (Vb) (V):	349.8
Resolution (V):	.001 Volts
NOTE: Record V1, V2, V1', V2' voltage measurements at a minimum of 5 seconds after impact.	

**ELECTRIC ENERGY STORAGE/CONVERSION SYSTEM
VOLTAGE LOCATION OF MEASUREMENT**

Measurement is made from the side of the automatic disconnect connected to the electric powertrain.

Vb (V):	0.8
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ELECTRIC ENERGY STORAGE/CONVERSION SYSTEM VOLTAGE

V1 =	0.1	V	Impact Time:	0	Minutes	48	s
V2 =	0.3	V	Impact Time:	0	Minutes	55	s
V1' =	0.03	V	Impact Time:	0	Minutes	59	s
V2' =	0.02	V	Impact Time:	1	Minutes	11	s

ELECTRICAL ISOLATION MEASUREMENT

Note: If measured voltage is zero and results in a division by zero, record "Zero Volts". This "zero voltage" condition is considered as being compliant.

$Ri1 = Ro (1 + V2/V1) [(V1-V1')/V1']$							
Ri1 =	1,617,467	Ω	Impact Time:	0	Minutes	48	s
$Ri2 = Ro (1 + V1/V2) [(V2-V2')/V2']$							
Ri2 =	3,234,933	Ω	Impact Time:	0	Minutes	55	s
Ri = The lesser of Ri1 and Ri2							
Ri =	1,617,467	Ω	Impact Time:	0	Minutes	48	s
Ri/Vb = electrical Isolation Value/Nominal Battery Voltage							
Minimum Electrical Value is 500 Ω/V							
Ri/Vb =	4624	Ω/V	Impact Time:	0	Minutes	48	s

Is the measured Electrical Isolation Value:	Yes, Pass	No, Fail
≥500 Ω/V without electrical isolation monitoring	X	
≥100 Ω/V with electrical isolation monitoring		

DATA SHEET 4 (CONTINUED)

POST-IMPACT DATA

ELECTRIC ENERGY STORAGE/CONVERSION DEVICE

	Inside Passenger Compartment	Outside Passenger Compartment
Location of Electric Energy Storage/Conversion Device:	X	X

Inside Passenger Compartment - (Upper Pack, Upper Array)
 Outside Passenger Compartment - (Lower Pack, Lower Array)

	Yes, Pass	No, Fail
All Components of Electrical Energy Storage/Conversion Device remained attached to the vehicle with at least one mounting location.	X	

Describe Electric Energy Storage/Conversion Device movement within the passenger compartment [Supply photographs as appropriate]:
Not Applicable

	Yes, Fail	No, Pass
Has the Electric Energy Storage/Conversion Device moved within the passenger compartment?		X

Describe intrusion of an outside Electric Energy Storage/Conversion Device into the passenger compartment [Supply photographs as appropriate]:
No Movement

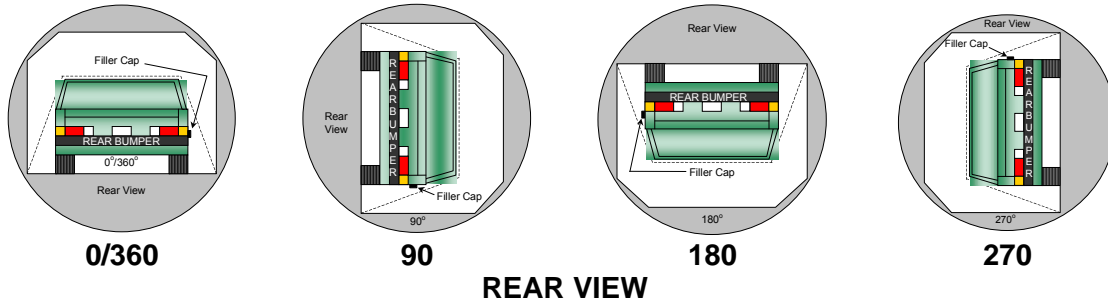
	Yes, Fail	No, Pass
Has an outside Electric Energy Storage/Conversion Device intruded into the passenger compartment?		X

	Yes, Fail	No, Pass
Is Electric Energy Storage/Conversion Device electrolyte spillage visible in the passenger compartment?		X

DATA SHEET 5
STATIC ROLLOVER TEST DATA

Test Vehicle: 2013 Ford Focus Electric
 Test Program: FMVSS 208 Compliance
 Test Technician: Tim Bratz

NHTSA No.: C20130200
 Test Date: 9/30/13



**DETERMINATION OF ELECTRIC ENERGY STORAGE / CONVERSION DEVICE
ELECTROLYTE COLLECTION TIME PERIOD**

Rollover Stage	Rotation Time (spec. 1-3 min)				FMVSS 301 Hold Time		Total Time				Next Whole Minute Interval	
0° - 90°	1	minutes	52	seconds	5	minutes	6	minutes	52	seconds	7	minutes
90° - 180°	1	minutes	54	seconds	5	minutes	6	minutes	54	seconds	7	minutes
180° - 270°	1	minutes	51	seconds	5	minutes	6	minutes	51	seconds	7	minutes
270° - 360°	1	minutes	55	seconds	5	minutes	6	minutes	55	seconds	7	minutes

**ACTUAL TEST VEHICLE ELECTRIC ENERGY STORAGE/CONVERSION DEVICE
ELECTROLYTE SPILLAGE**

Rollover Stage	Electric Energy Storage/Conversion Device Electrolyte Spillage (L)	Spillage Location
0° to 90°	0	Not Applicable
90° to 180°	0	Not Applicable
180° to 270°	0	Not Applicable
270° to 360°	0	Not Applicable

Total Spillage: 0 L

	Yes, Fail	No, Pass
Is the total spillage of Electric Energy Storage/Conversion Device electrolyte greater than 5.0 Liters?		X
Is Electric Energy Storage/Conversion Device electrolyte spillage visible in the passenger compartment?		X

DATA SHEET 5 (CONTINUED)
STATIC ROLLOVER TEST DATA

VOLTMETER INFORMATION

Make:	Fluke
Model:	177
Serial Number:	17210161
Internal Impedance Value (MΩ):	> 10 MΩ < 100 pF
Nominal Electric Energy Storage/Conversion Device Voltage (Vb) (V):	349.8

Record V1, V2, V1', V2' voltage measurements at the start of each successive increment of 90°, 180°, 270°, and 360° of the static rollover test.

ELECTRICAL ISOLATION MEASUREMENT

V1 =	0.2	V	0°	Time:		Minutes		s
V1 =	0.2	V	90°	Time:	2	Minutes	20	s
V1 =	0.2	V	180°	Time:	2	Minutes	22	s
V1 =	0.2	V	270°	Time:	2	Minutes	14	s
V1 =	0.2	V	360°	Time:	2	Minutes	15	s
V2 =	0.3	V	0°	Time:		Minutes		s
V2 =	0.3	V	90°	Time:	2	Minutes	30	s
V2 =	0.3	V	180°	Time:	2	Minutes	32	s
V2 =	0.3	V	270°	Time:	2	Minutes	19	s
V2 =	0.3	V	360°	Time:	2	Minutes	25	s
V1' =	0.03	V	0°	Time:		Minutes		s
V1' =	0.03	V	90°	Time:	2	Minutes	37	s
V1' =	0.03	V	180°	Time:	2	Minutes	39	s
V1' =	0.03	V	270°	Time:	2	Minutes	24	s
V1' =	0.03	V	360°	Time:	2	Minutes	38	s
V2' =	0.03	V	0°	Time:		Minutes		s
V2' =	0.03	V	90°	Time:	2	Minutes	44	s
V2' =	0.03	V	180°	Time:	2	Minutes	44	s
V2' =	0.03	V	270°	Time:	2	Minutes	30	s
V2' =	0.03	V	360°	Time:	2	Minutes	43	s
Vb =	0.8	V	0°	Time:		Minutes		s
Vb =	0.8	V	90°	Time:	2	Minutes	09	s
Vb =	0.8	V	180°	Time:	2	Minutes	12	s
Vb =	0.8	V	270°	Time:	2	Minutes	02	s
Vb =	0.8	V	360°	Time:	2	Minutes	05	s

DATA SHEET 5 (CONTINUED)
STATIC ROLLOVER TEST DATA

ELECTRICAL ISOLATION CALCULATION

Note: If measured voltage is zero and results in a division by zero, record "Zero Volts". This "zero voltage" condition is considered as being compliant.

$R_{i1} = R_o (1 + V_2/V_1) [(V_1 - V_1')/V_1']$								
Ri1 =	2,455,083	Ω	0°	Time:		Minutes		s
Ri1 =	2,455,083	Ω	90°	Time:	2	Minutes	20	s
Ri1 =	2,455,083	Ω	180°	Time:	2	Minutes	22	s
Ri1 =	2,455,083	Ω	270°	Time:	2	Minutes	14	s
Ri1 =	2,455,083	Ω	360°	Time:	2	Minutes	15	s
$R_{i2} = R_o (1 + V_1/V_2) [(V_2 - V_2')/V_2']$								
Ri2 =	2,599,500	Ω	0°	Time:		Minutes		s
Ri2 =	2,599,500	Ω	90°	Time:	2	Minutes	30	s
Ri2 =	2,599,500	Ω	180°	Time:	2	Minutes	32	s
Ri2 =	2,599,500	Ω	270°	Time:	2	Minutes	19	s
Ri2 =	2,599,500	Ω	360°	Time:	2	Minutes	25	s
Ri = The lesser of Ri1 and Ri2								
Ri =	2,455,083	Ω	0°	Time:		Minutes		s
Ri =	2,455,083	Ω	90°	Time:	2	Minutes	20	s
Ri =	2,455,083	Ω	180°	Time:	2	Minutes	22	s
Ri =	2,455,083	Ω	270°	Time:	2	Minutes	14	s
Ri =	2,455,083	Ω	360°	Time:	2	Minutes	15	s
Ri/Vb = Electrical Isolation Value/Nominal Battery Voltage Minimum Electrical Isolation Value is 500 Ω /V								
Ri/Vb =	7,019	Ω/V	0°	Time:		Minutes		s
Ri/Vb =	7,019	Ω/V	90°	Time:	2	Minutes	20	s
Ri/Vb =	7,019	Ω/V	180°	Time:	2	Minutes	22	s
Ri/Vb =	7,019	Ω/V	270°	Time:	2	Minutes	14	s
Ri/Vb =	7,019	Ω/V	360°	Time:	2	Minutes	15	s

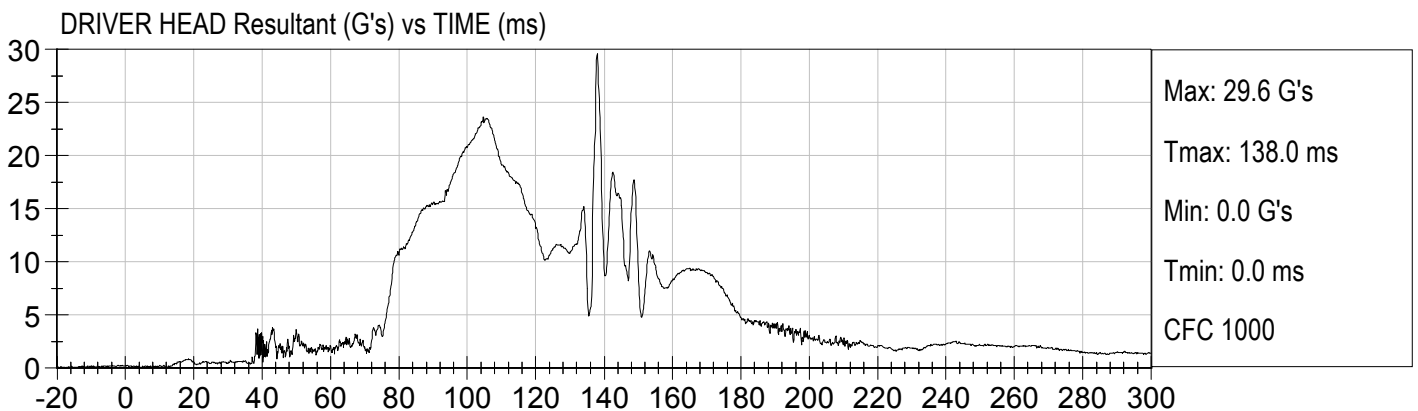
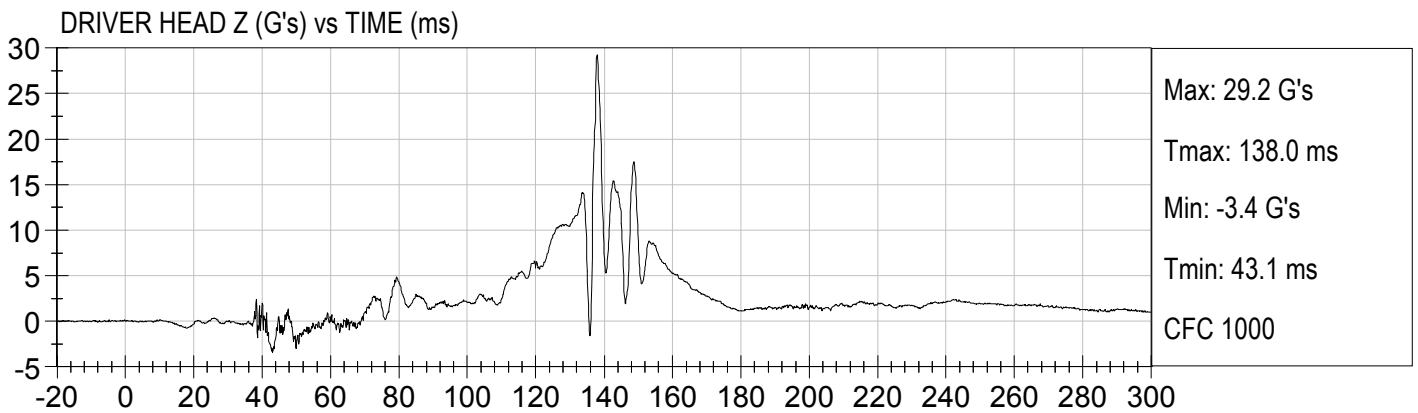
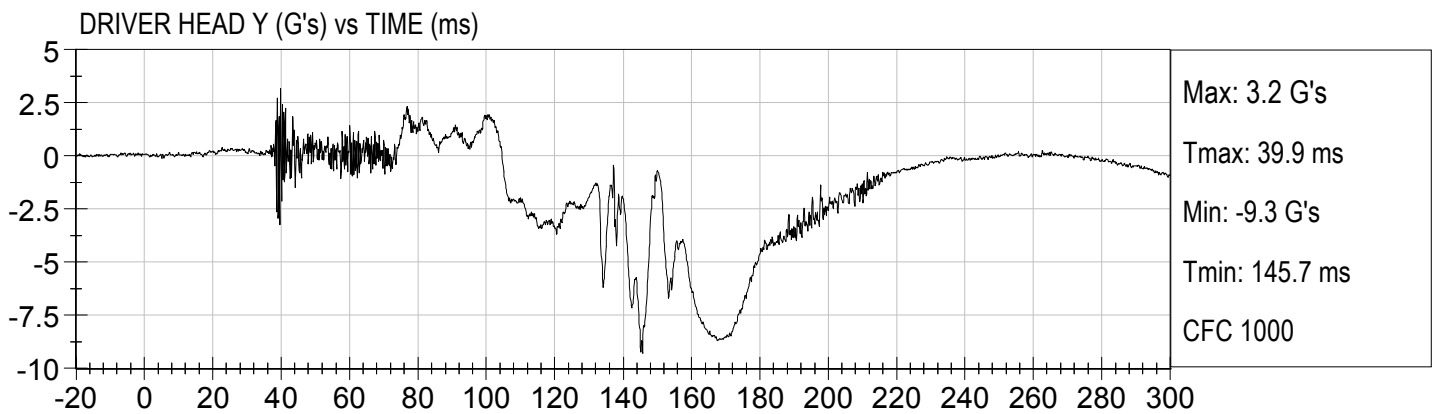
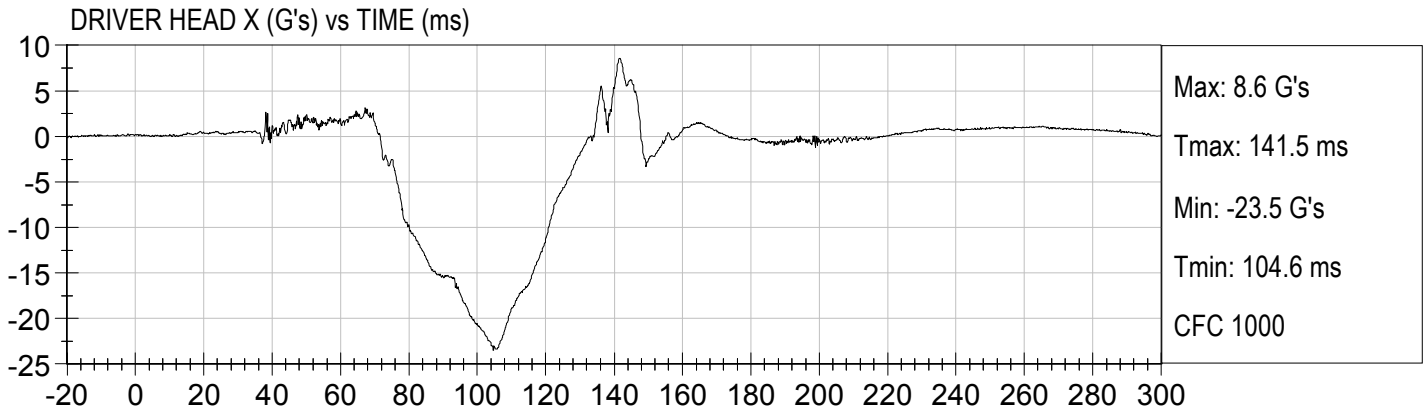
Is the measured Electrical Isolation Value:	Yes, Pass	No, Fail
≥500 Ω/V without electrical isolation monitoring	X	
≥100 Ω/V with electrical isolation monitoring		

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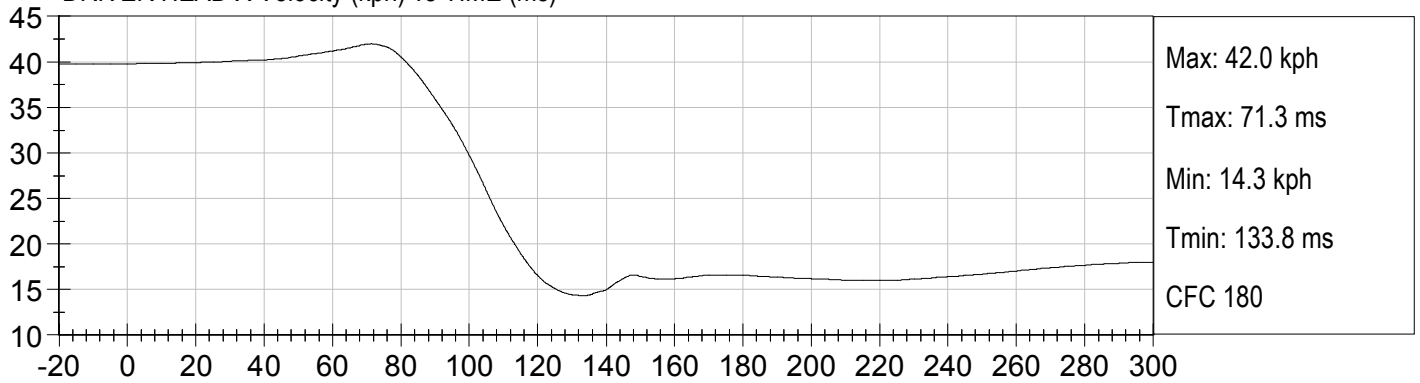
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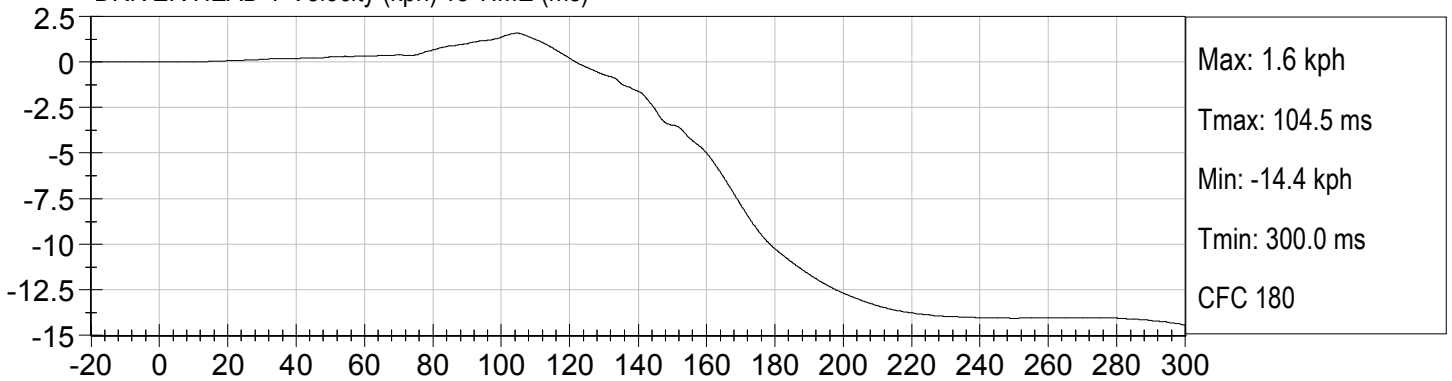




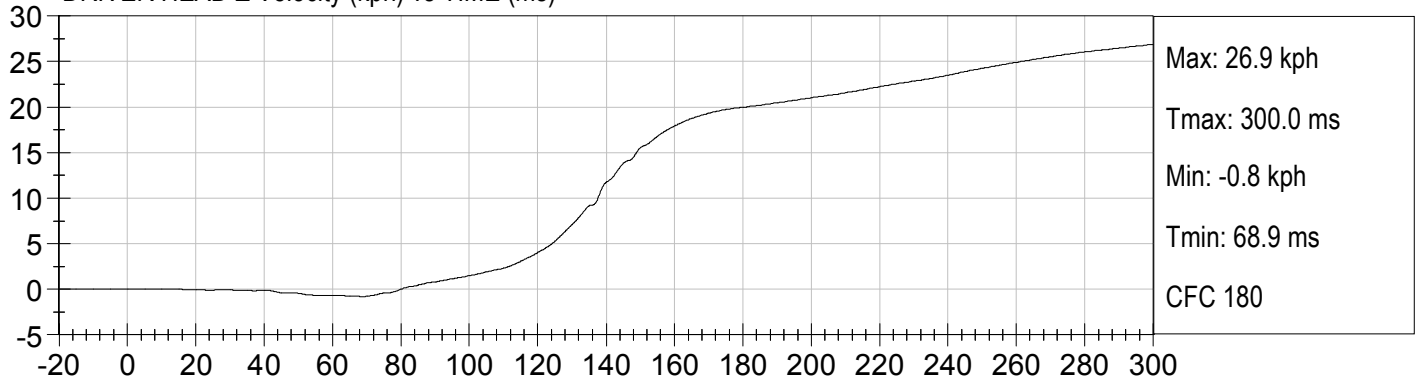
DRIVER HEAD X Velocity (kph) vs TIME (ms)

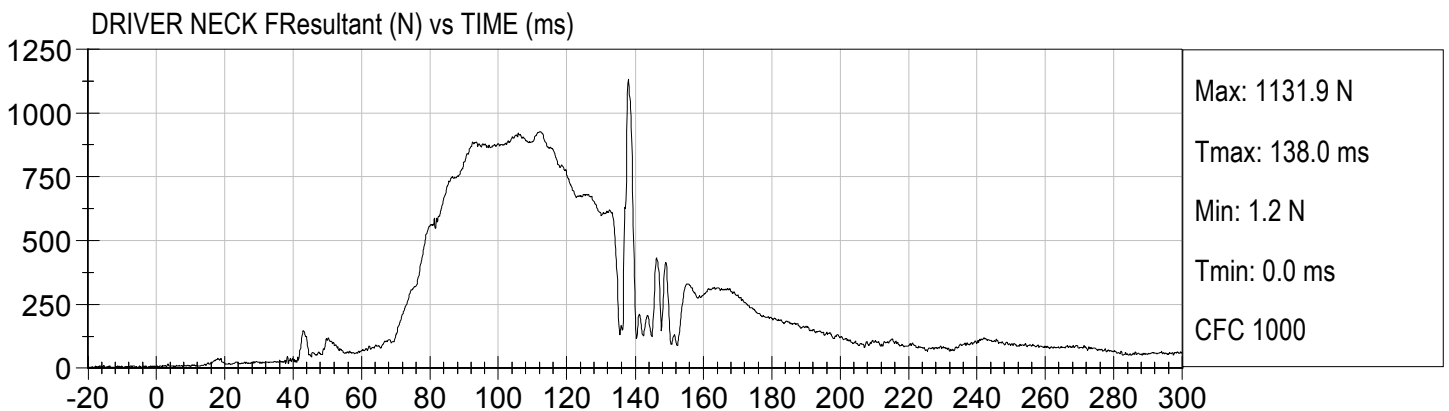
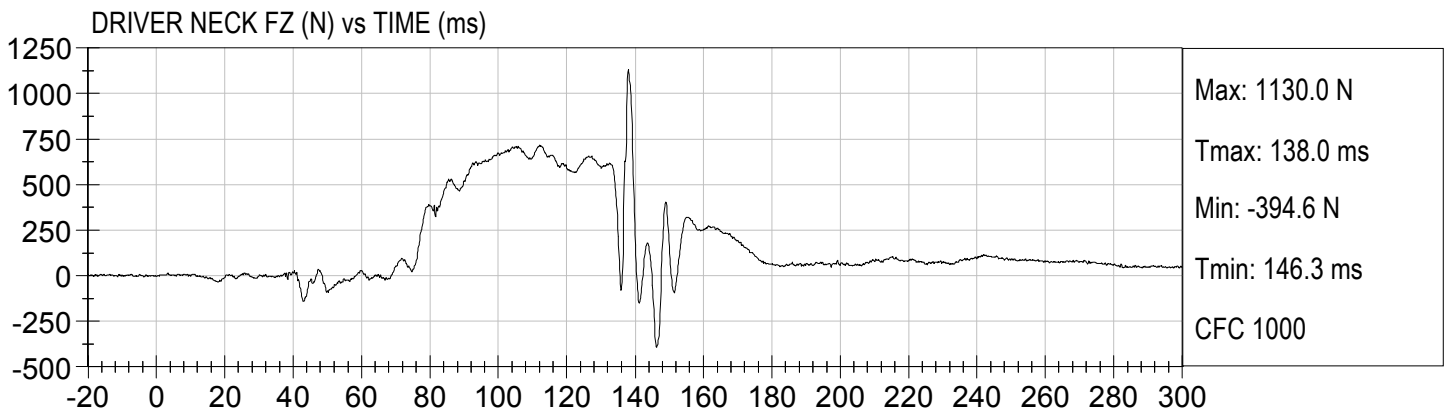
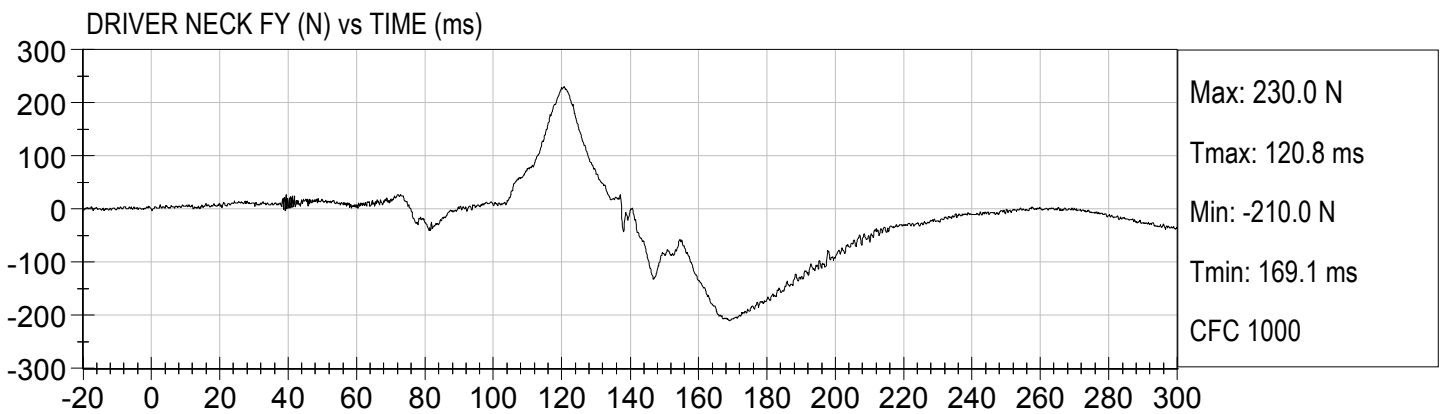
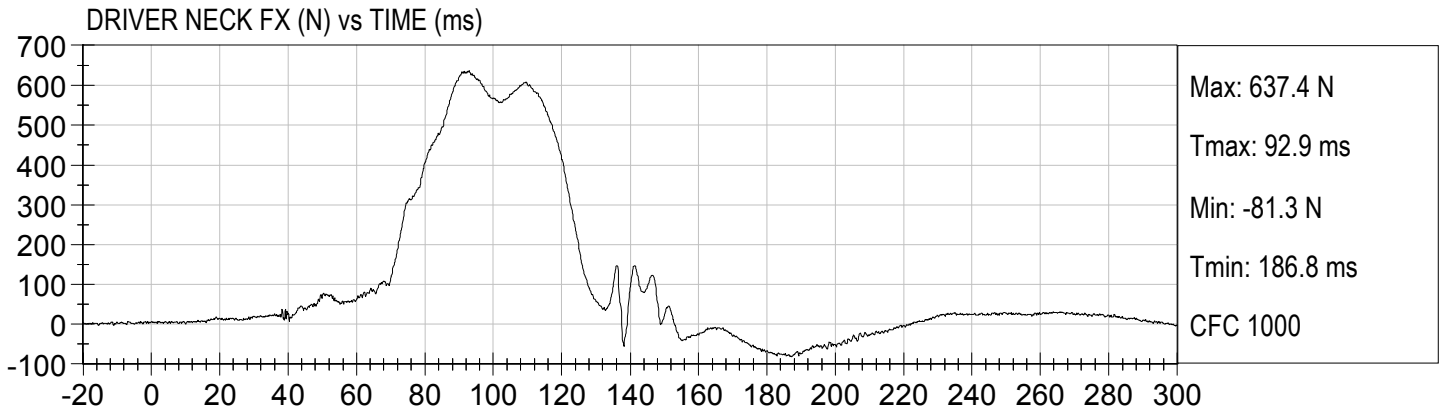


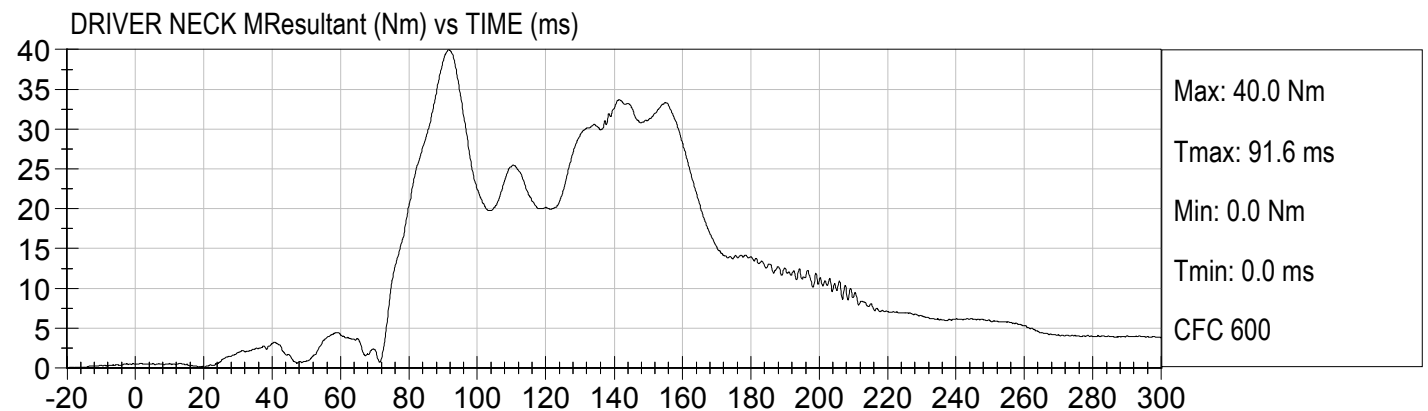
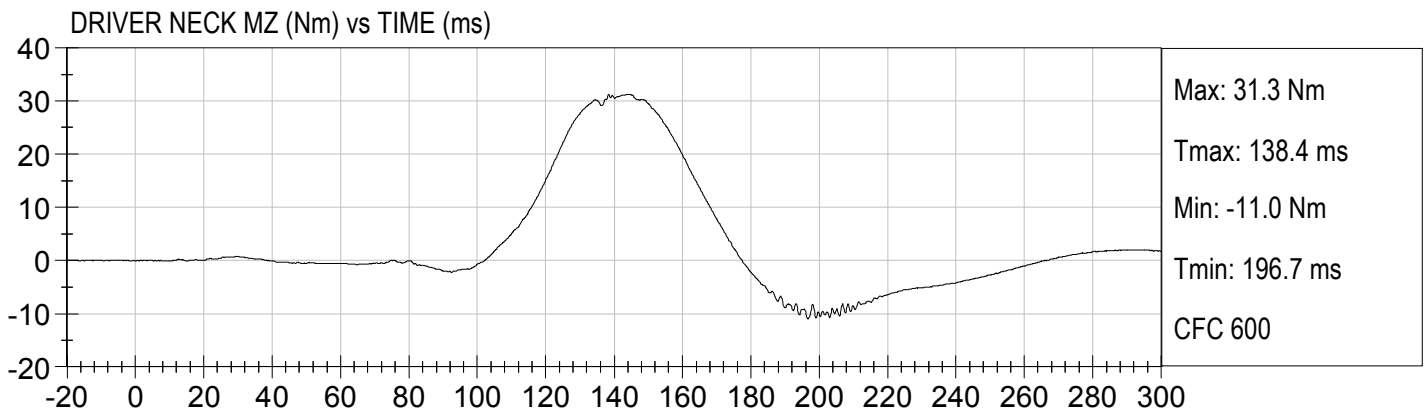
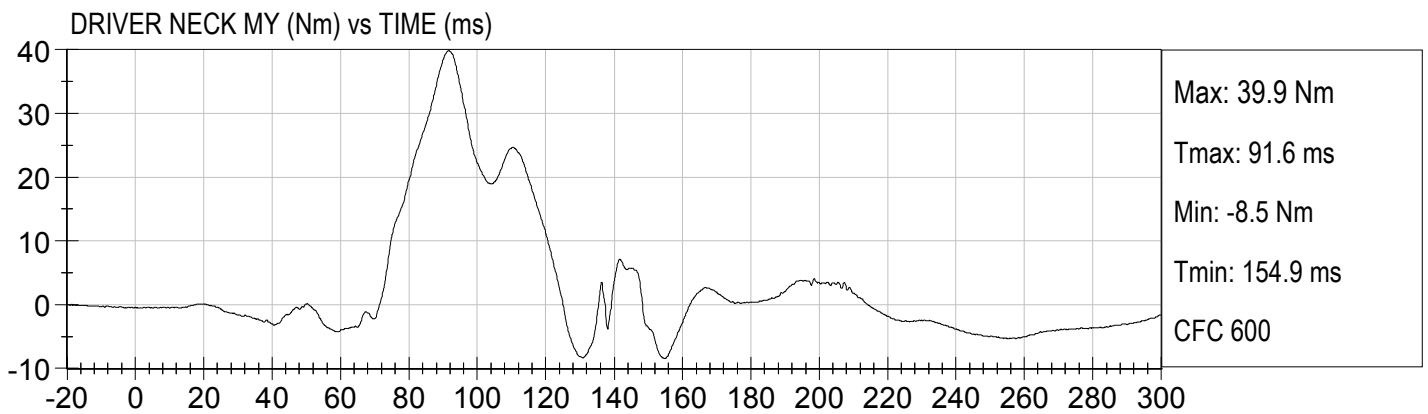
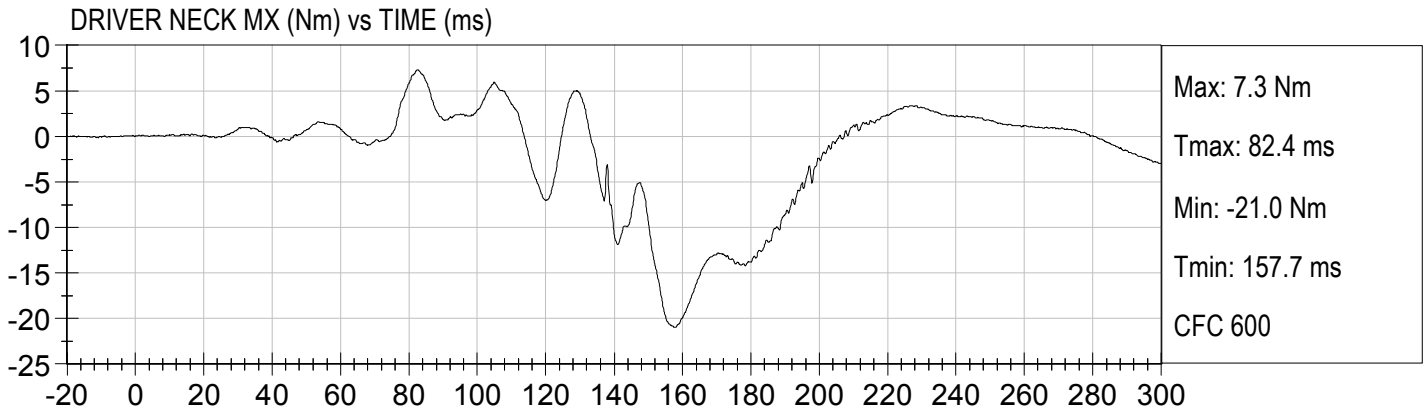
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DRIVER HEAD Z Velocity (kph) vs TIME (ms)

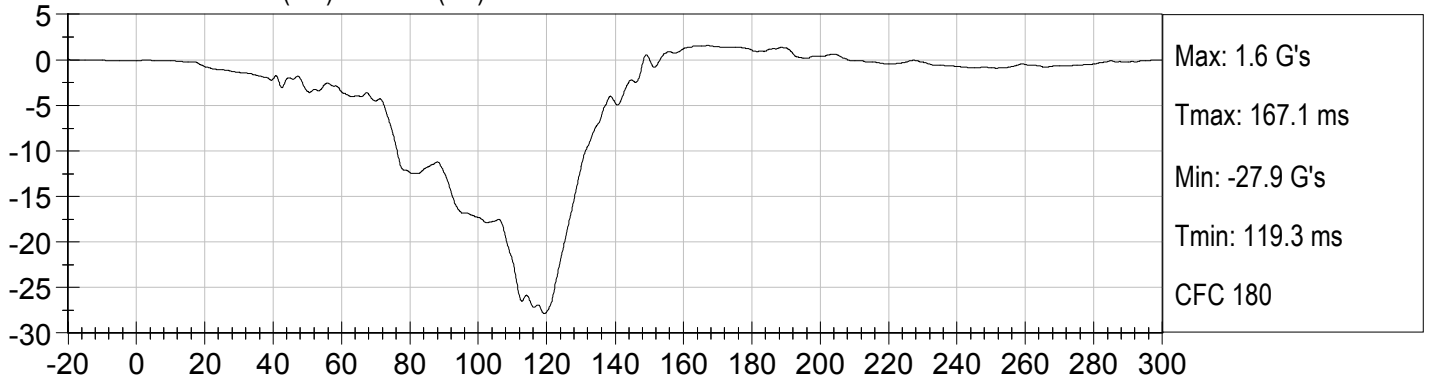




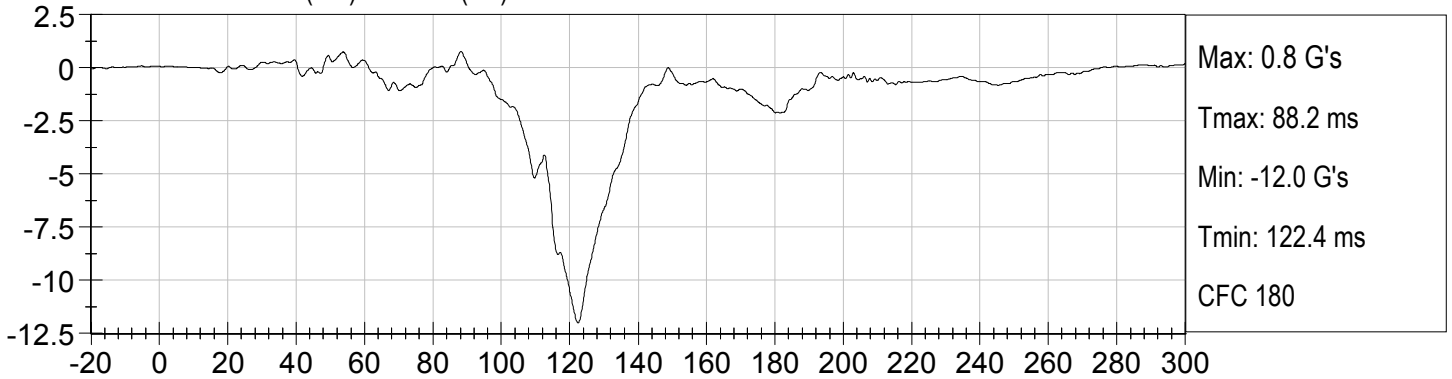




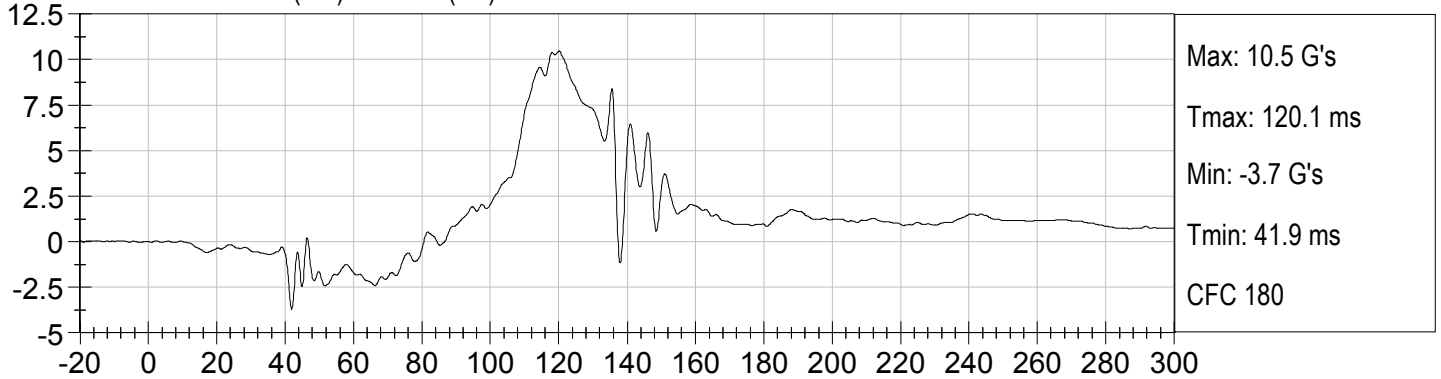
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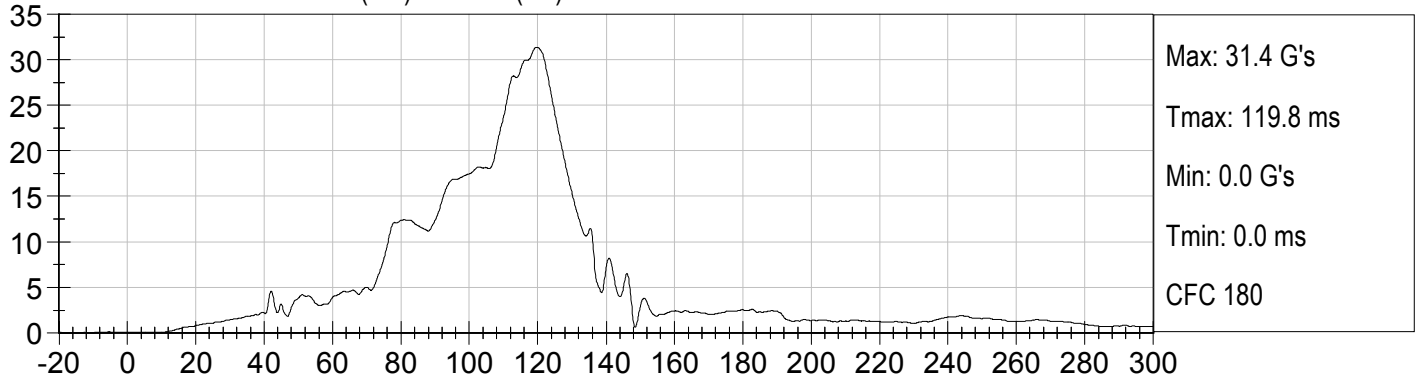
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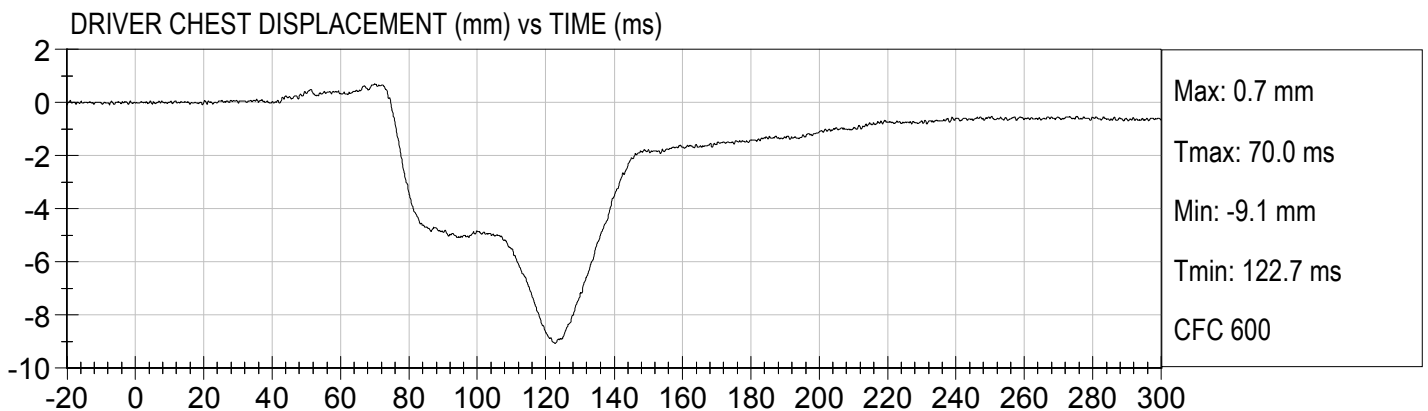
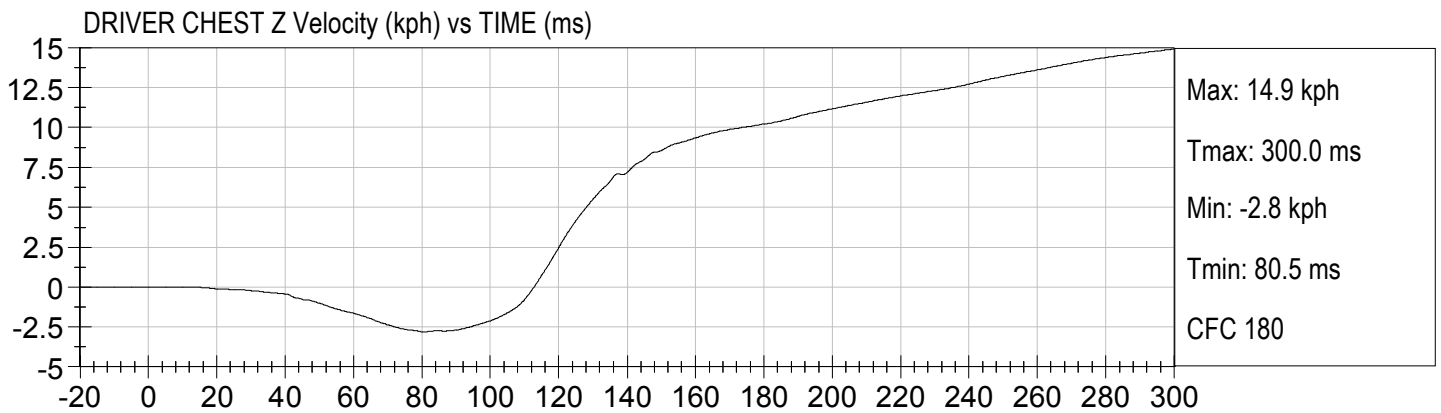
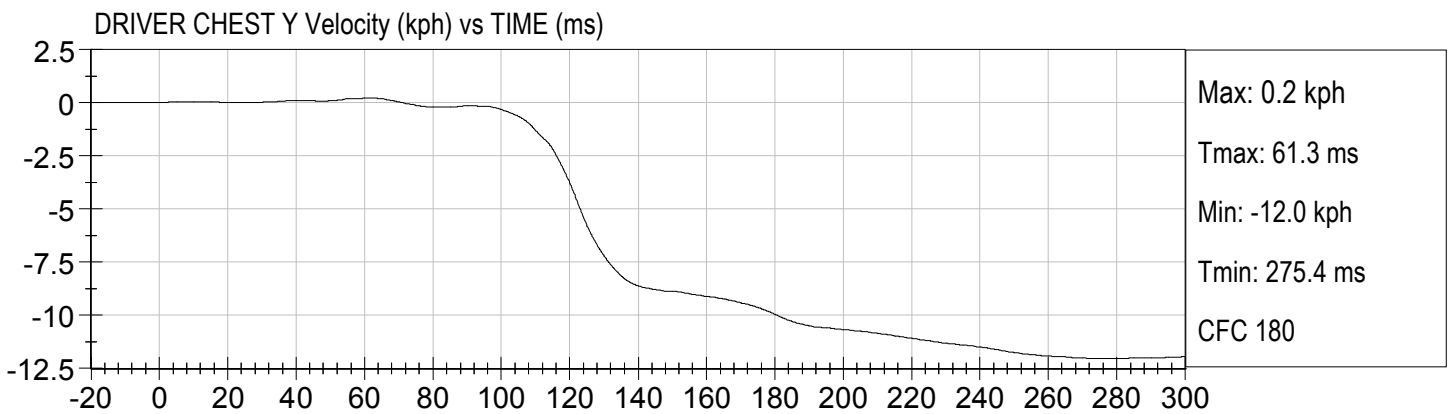
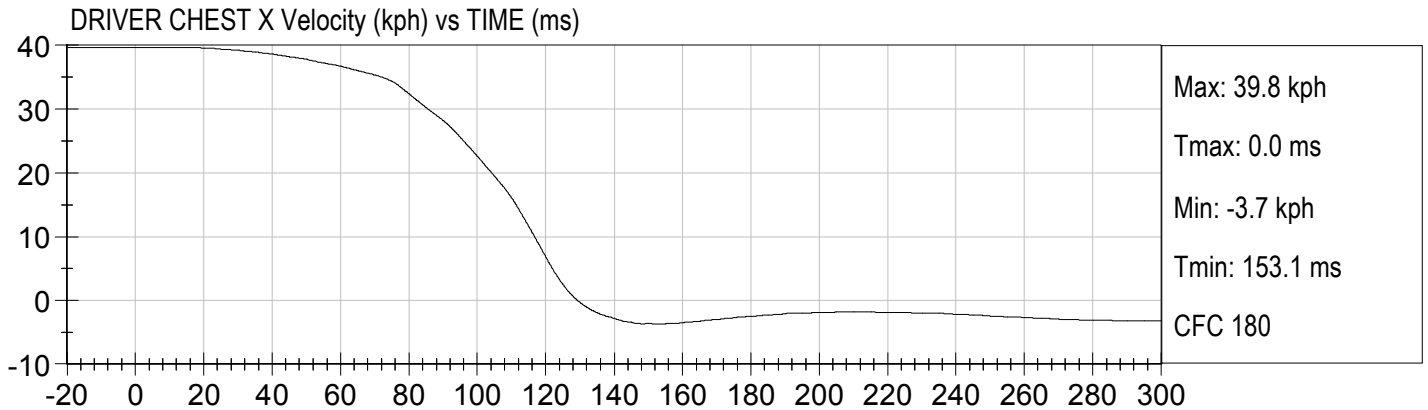


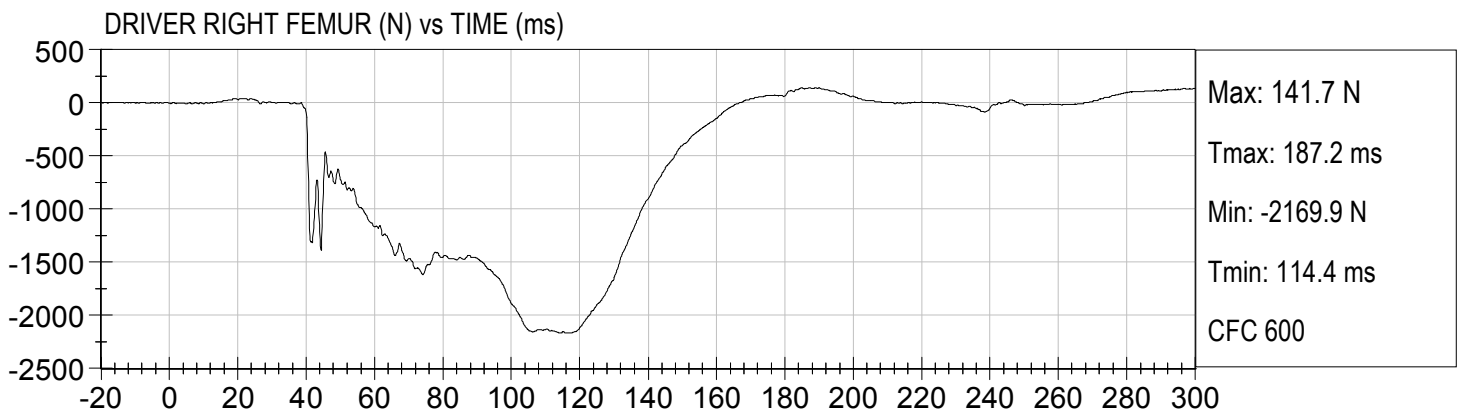
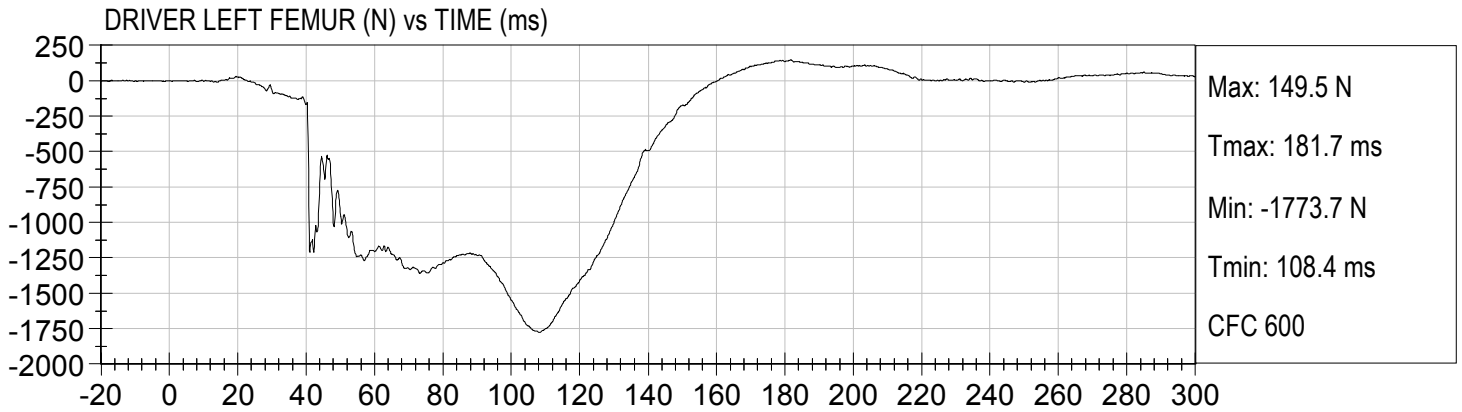
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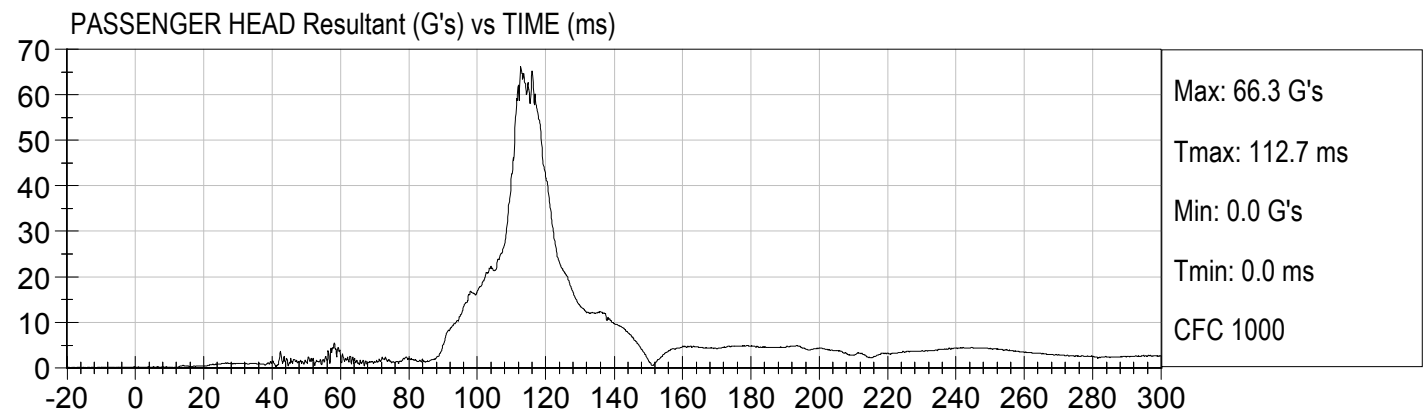
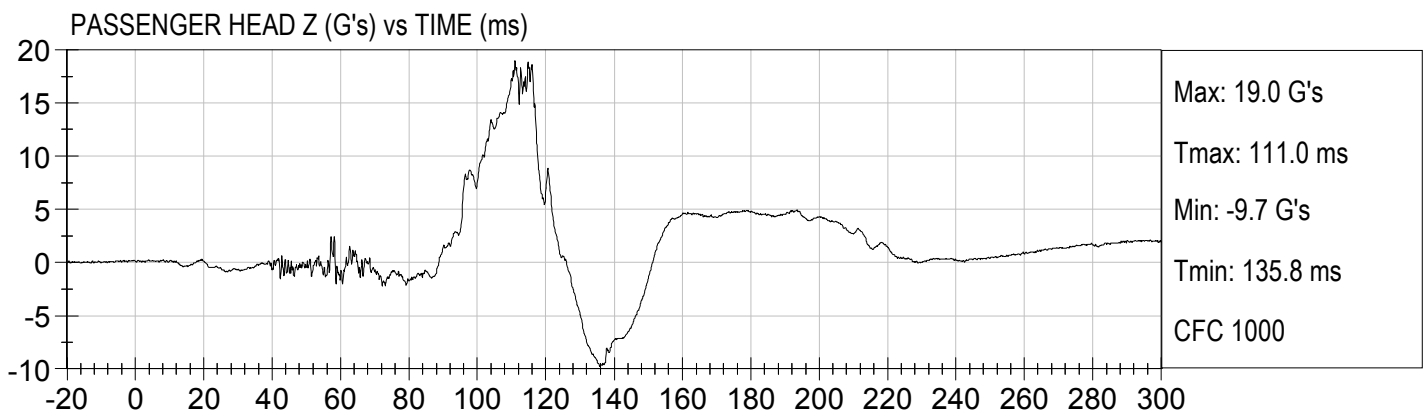
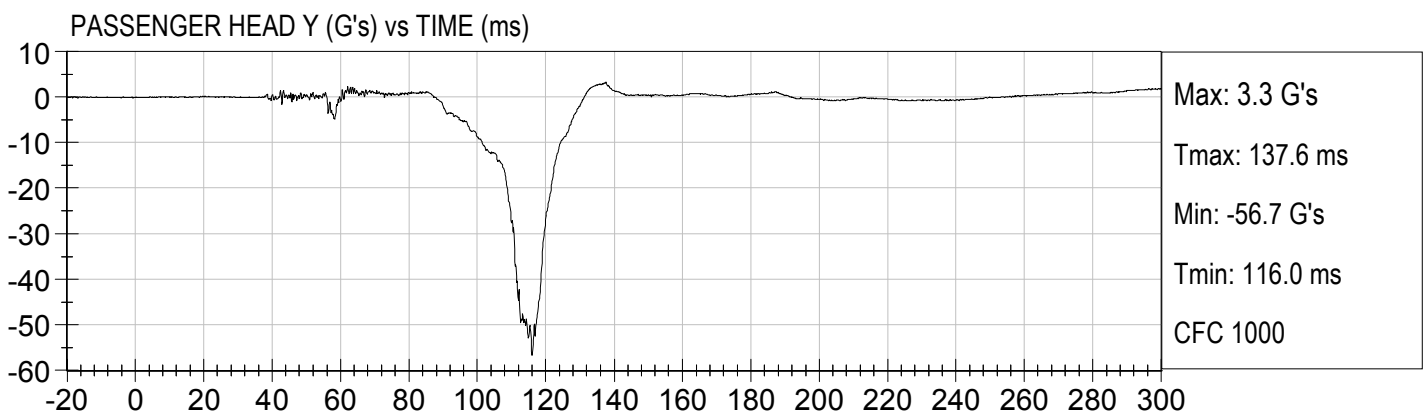
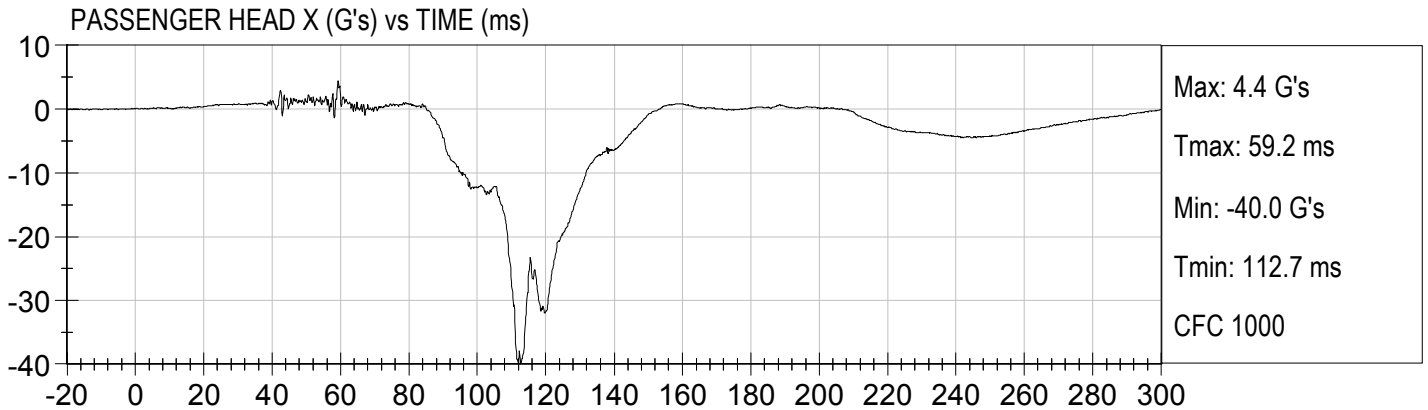


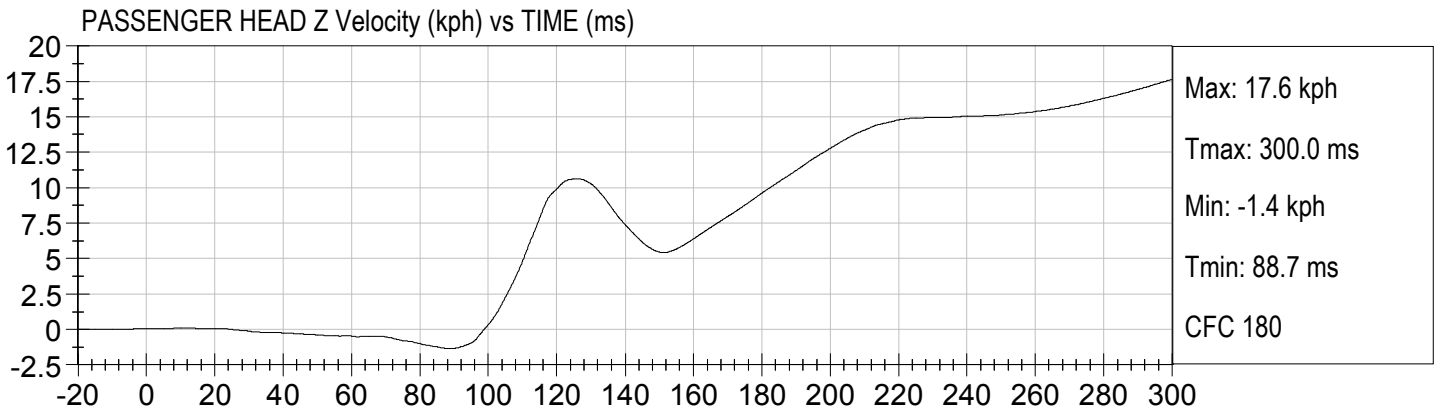
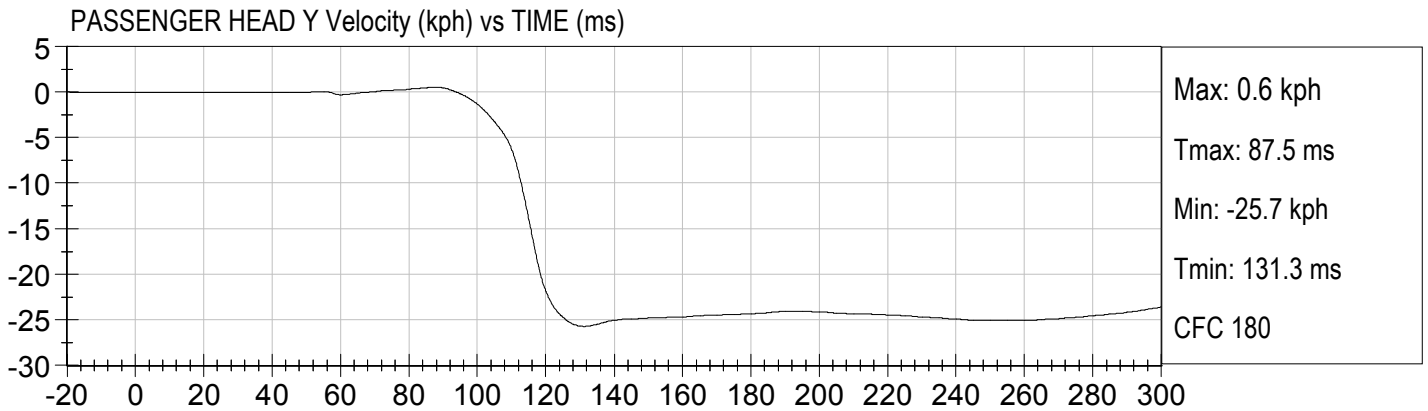
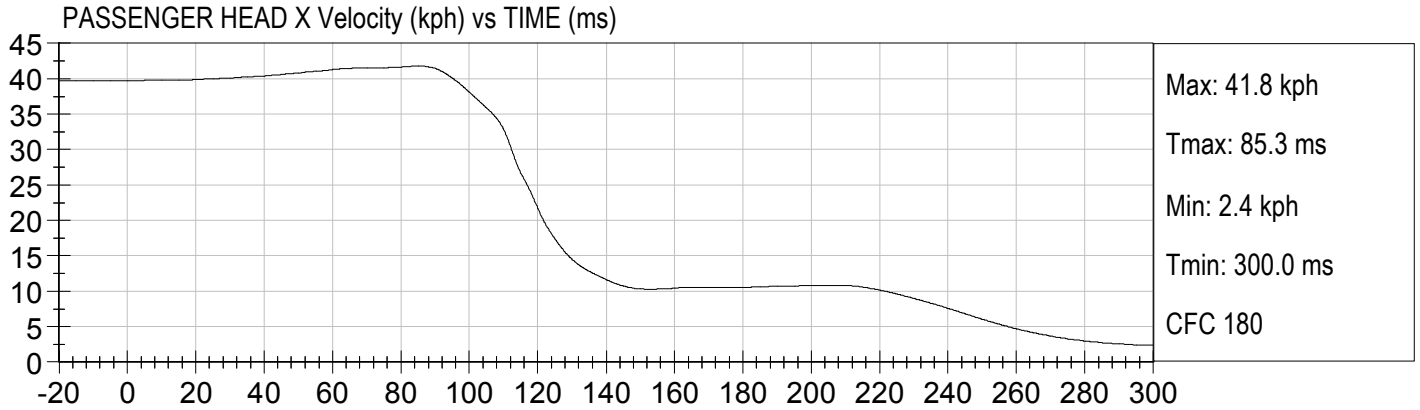
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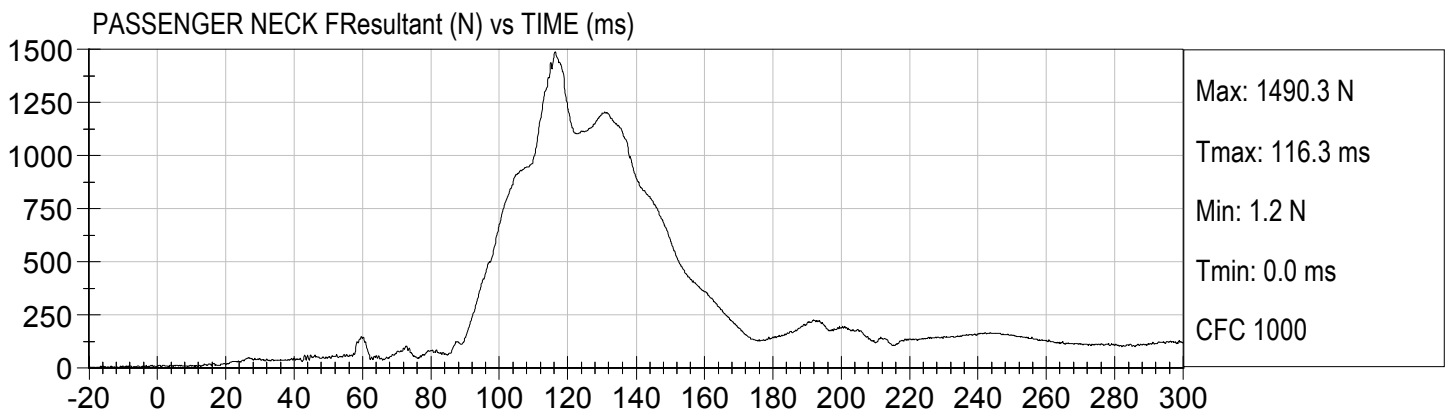
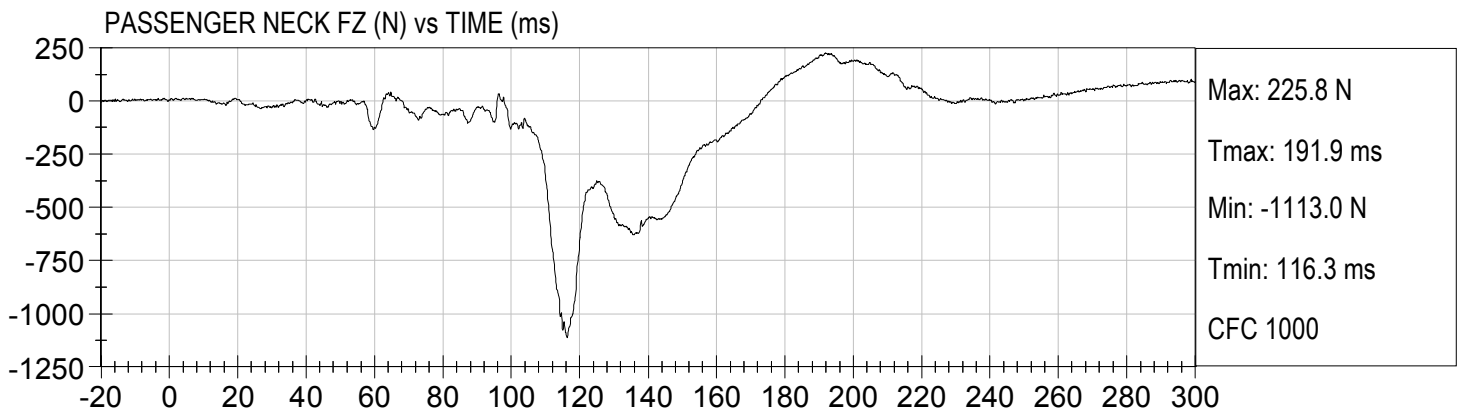
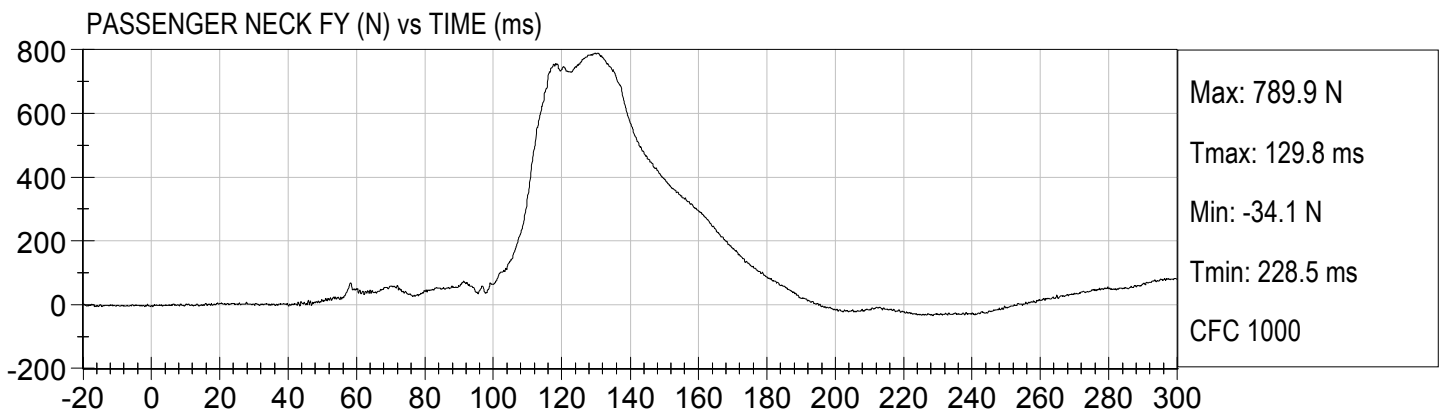
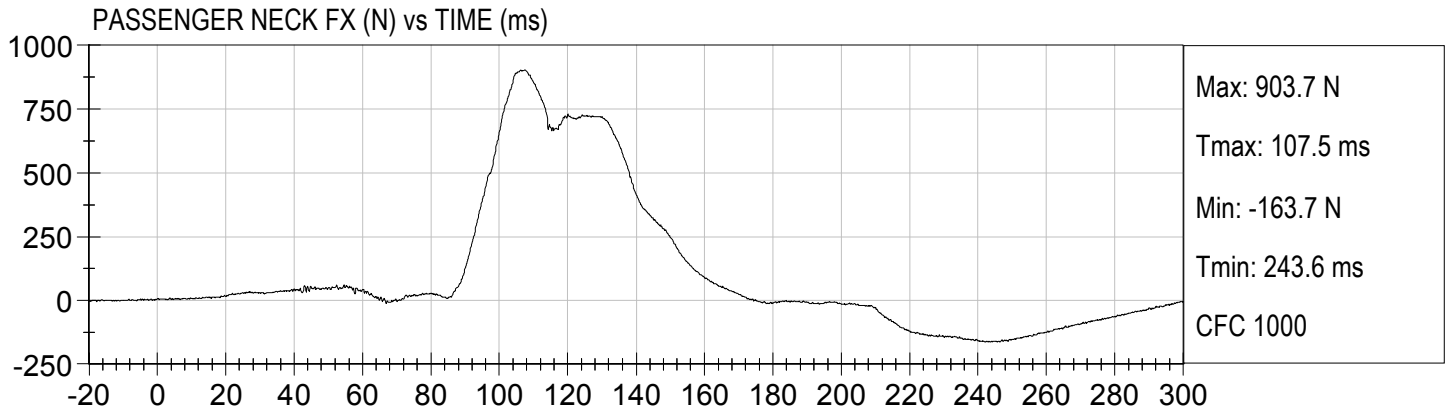


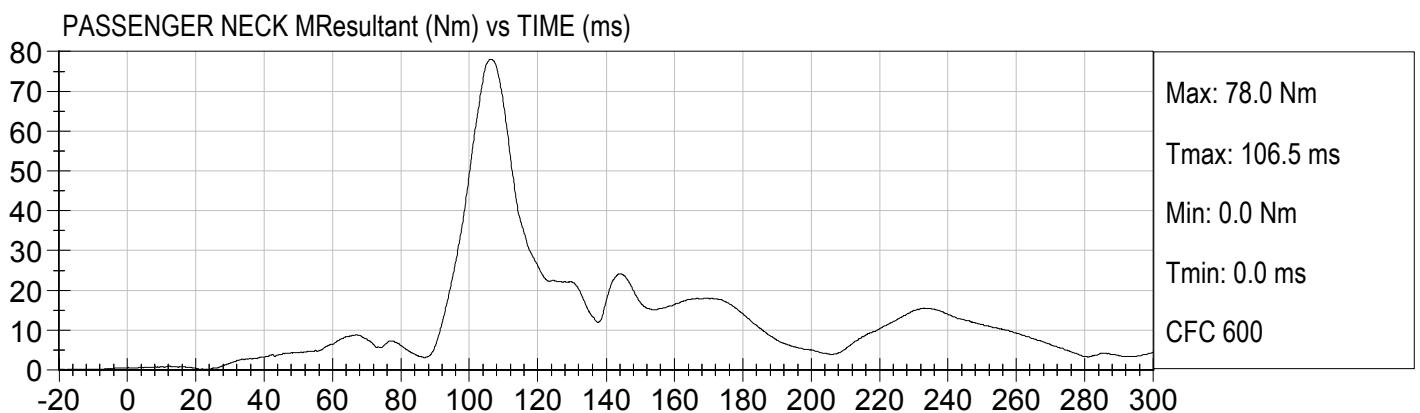
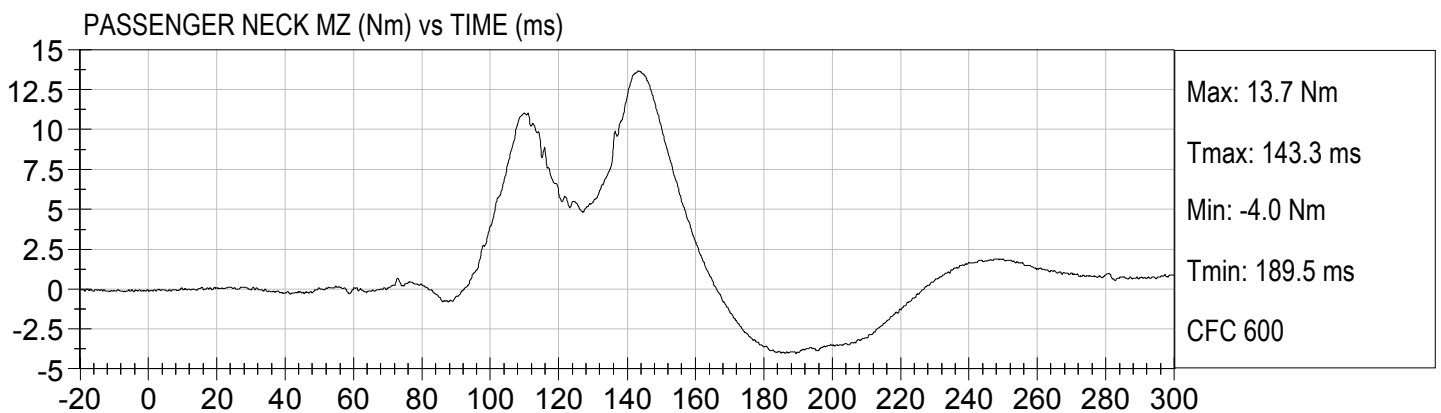
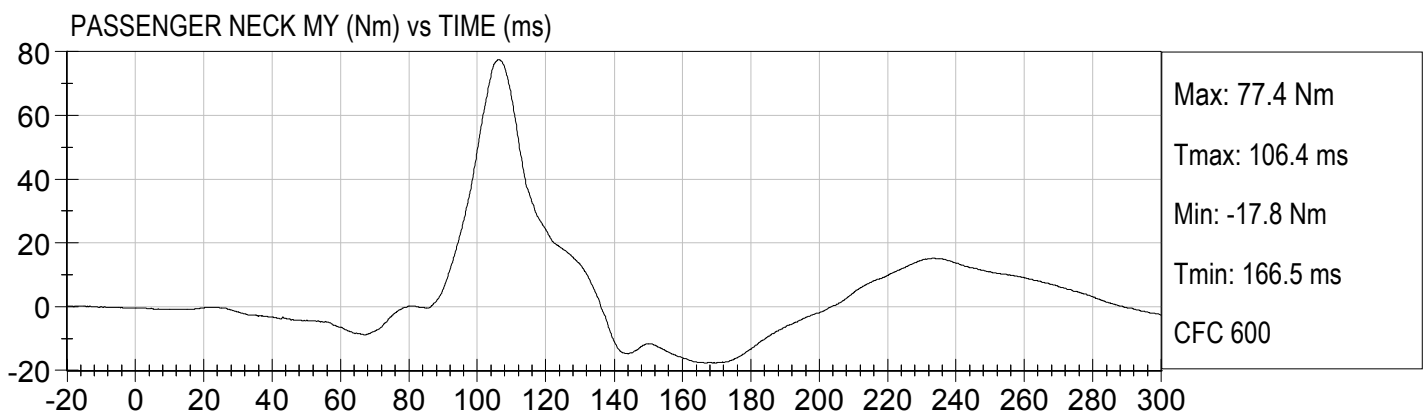
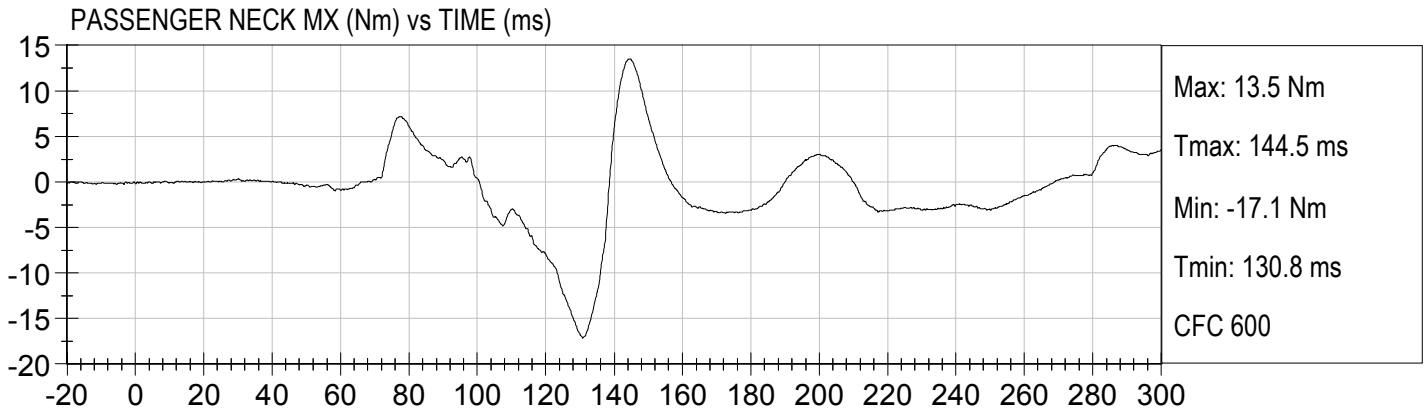






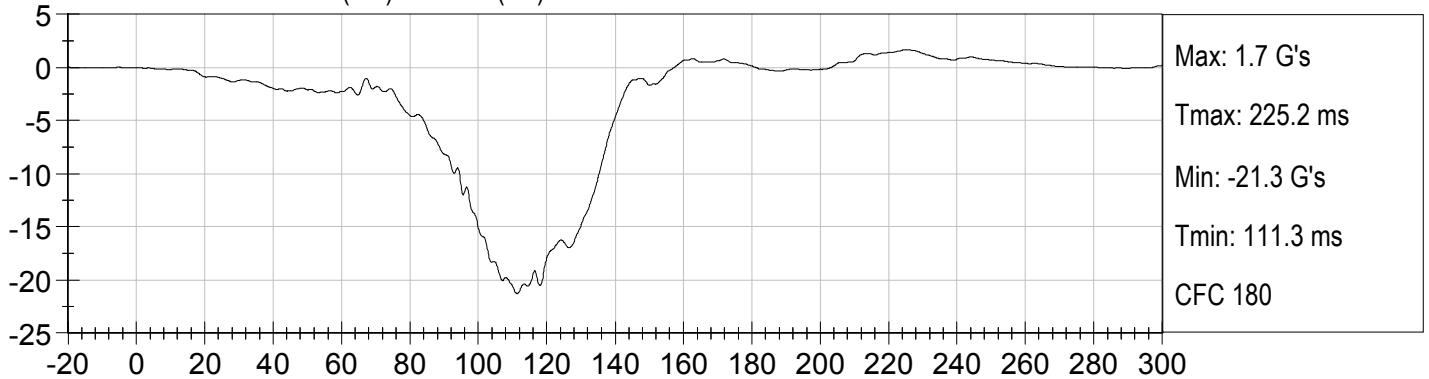




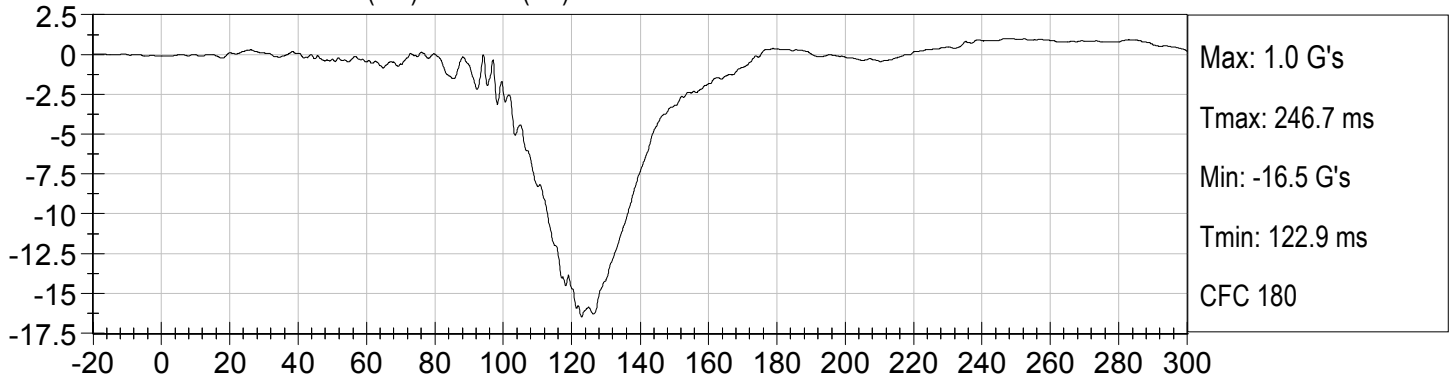




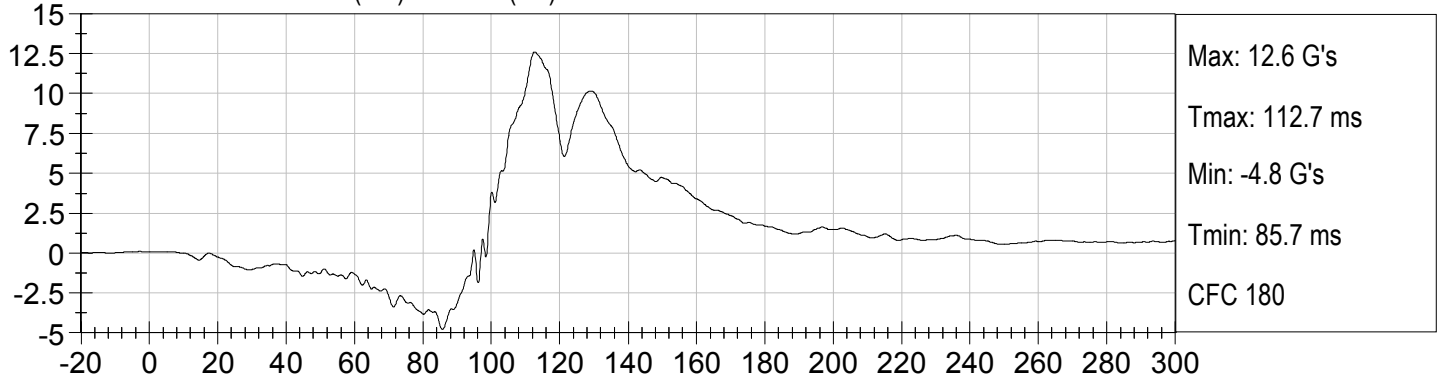
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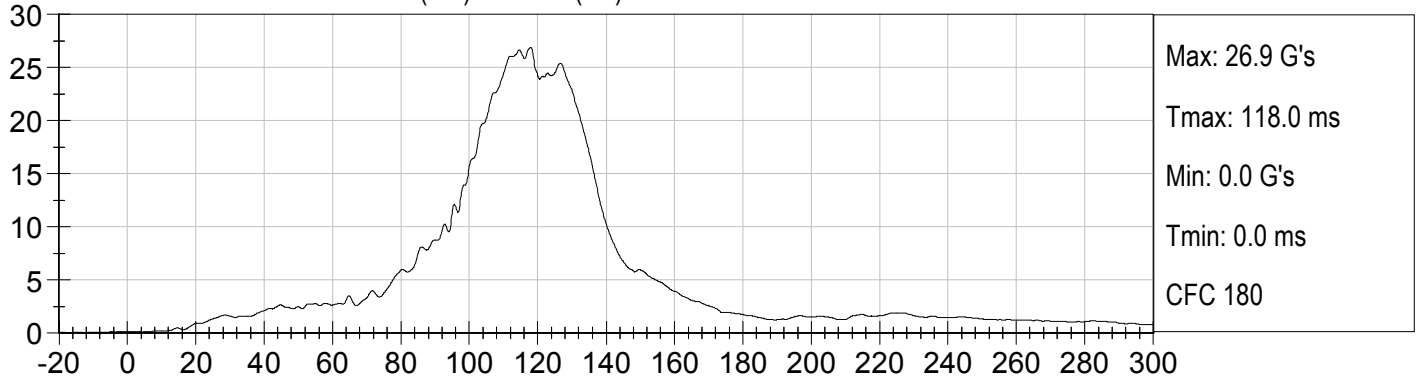
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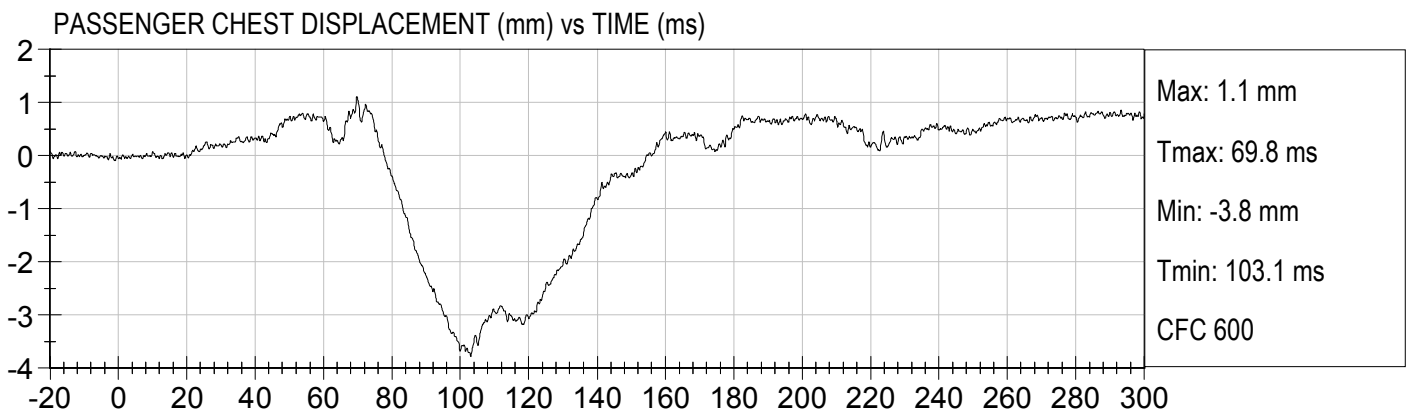
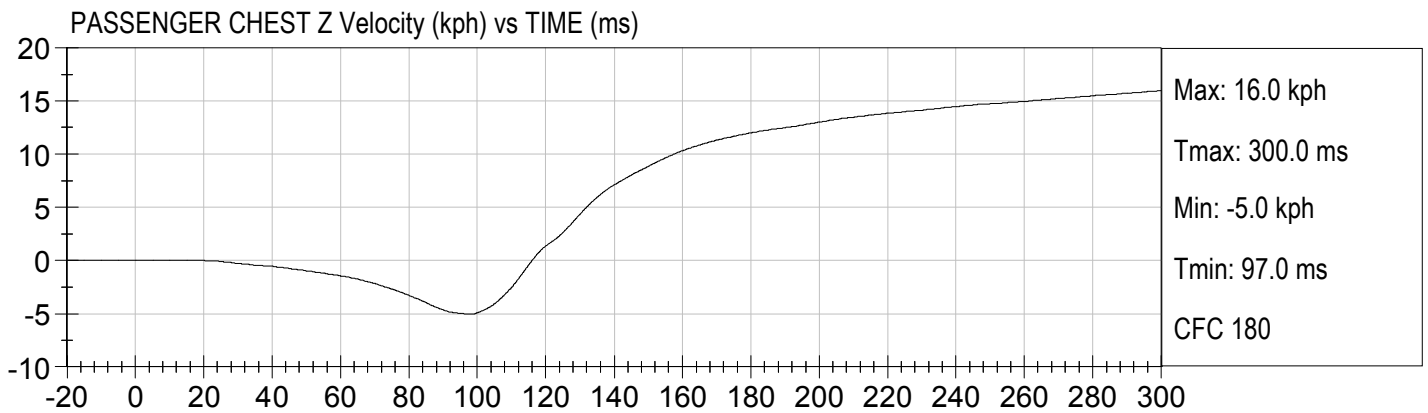
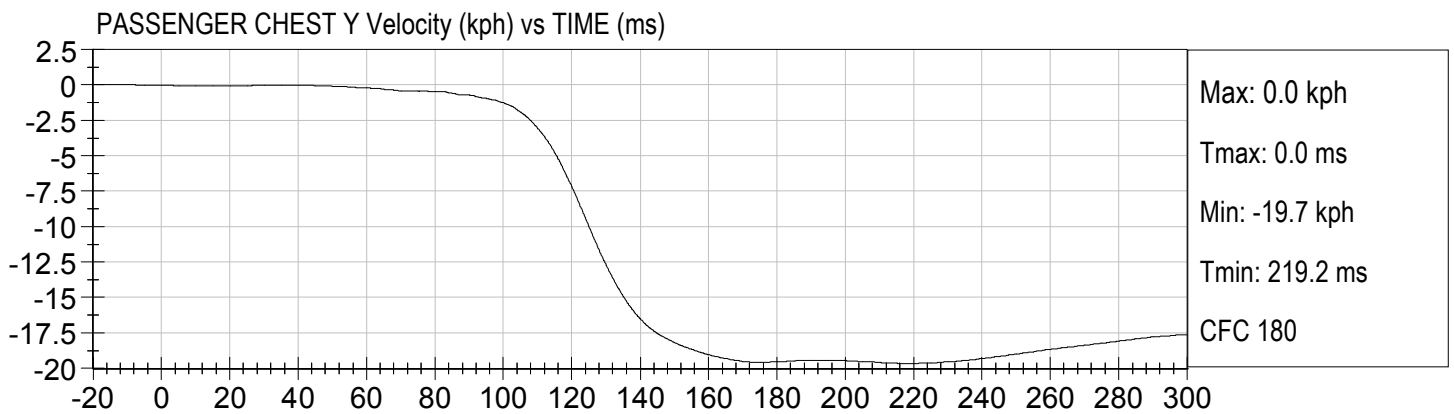
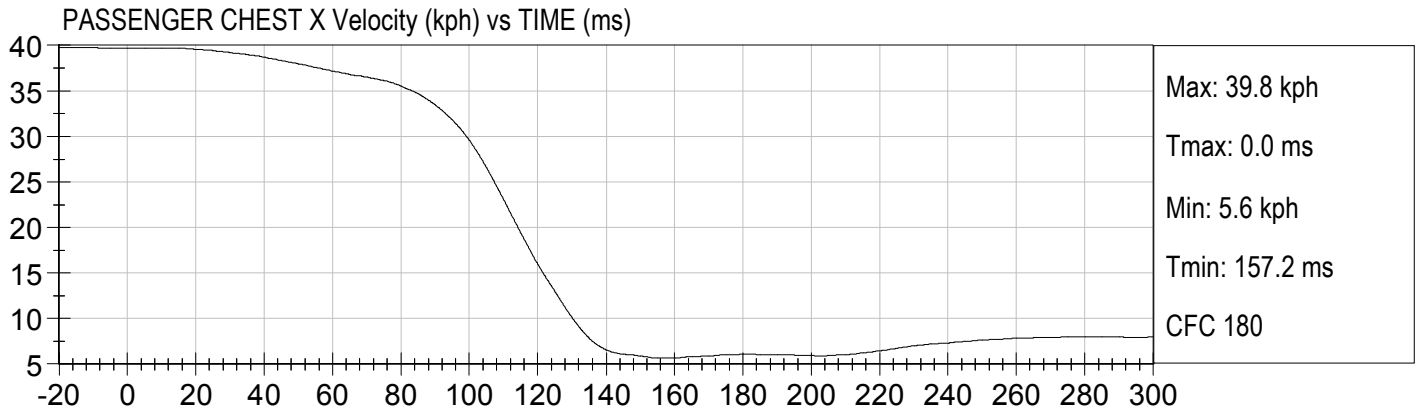


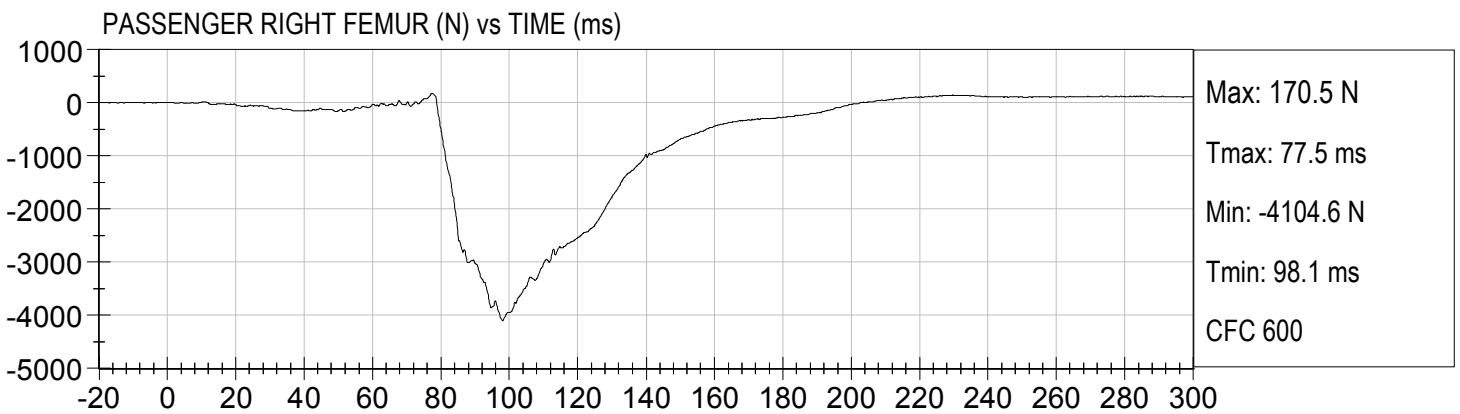
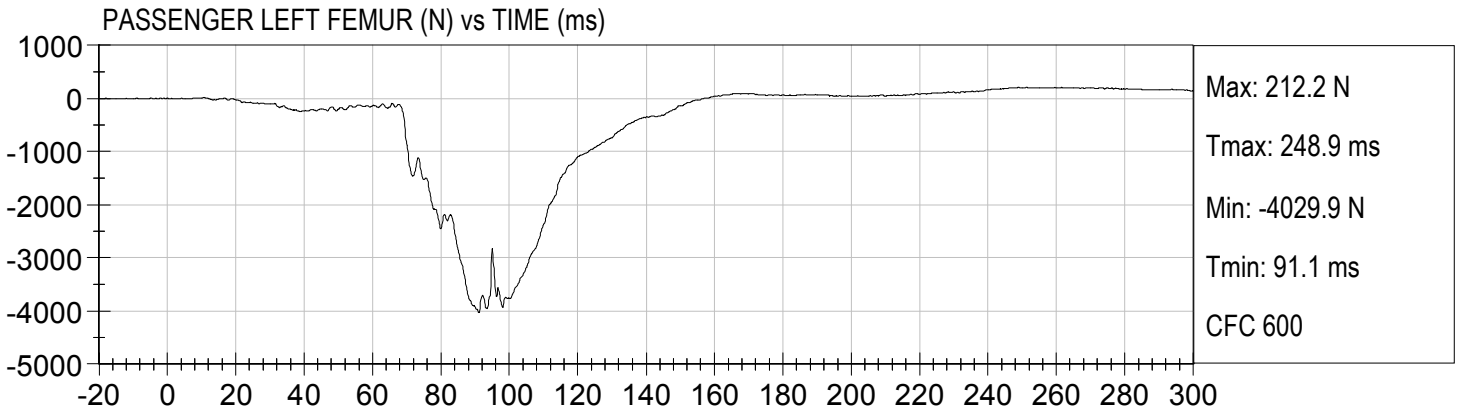
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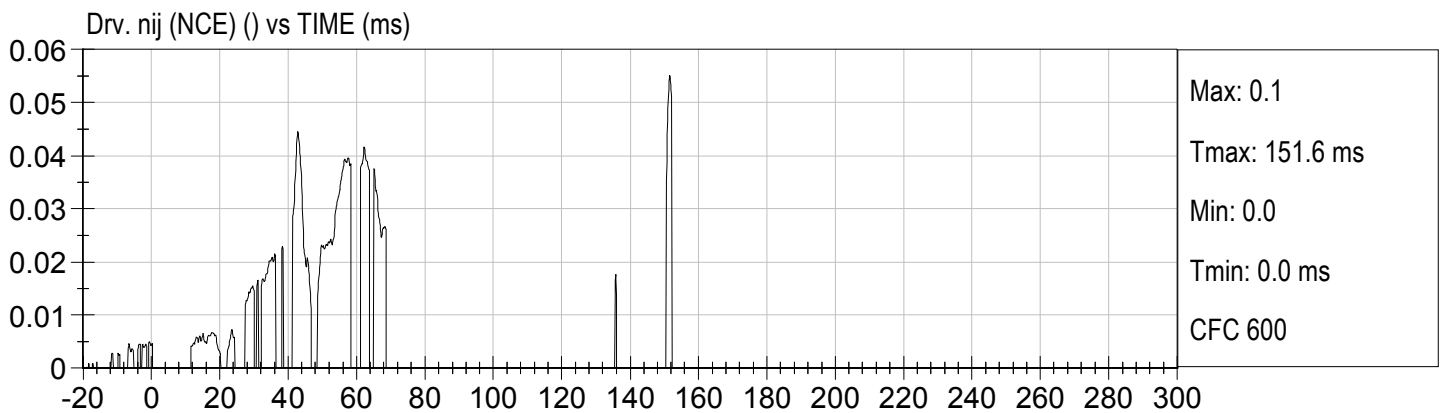
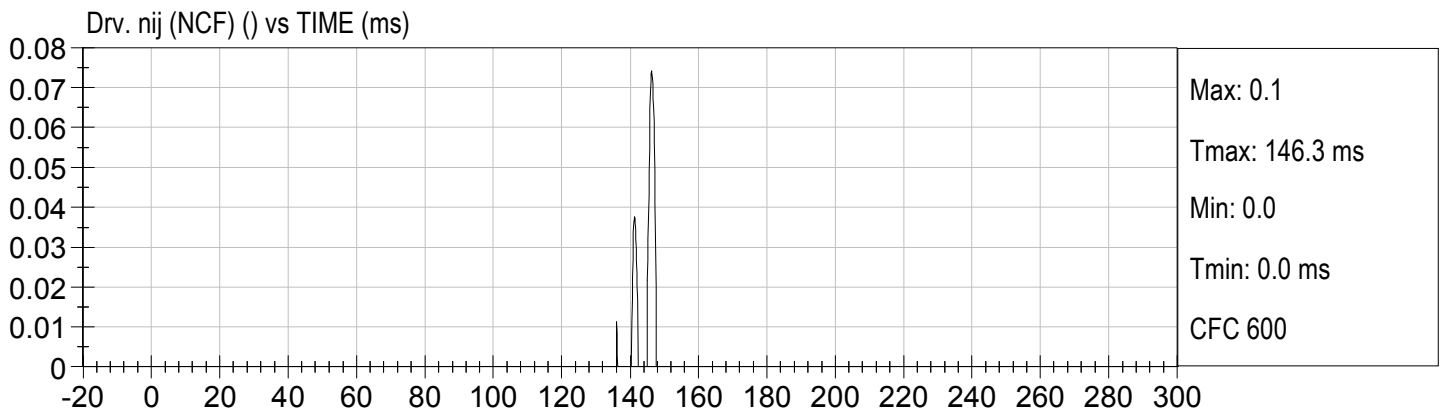
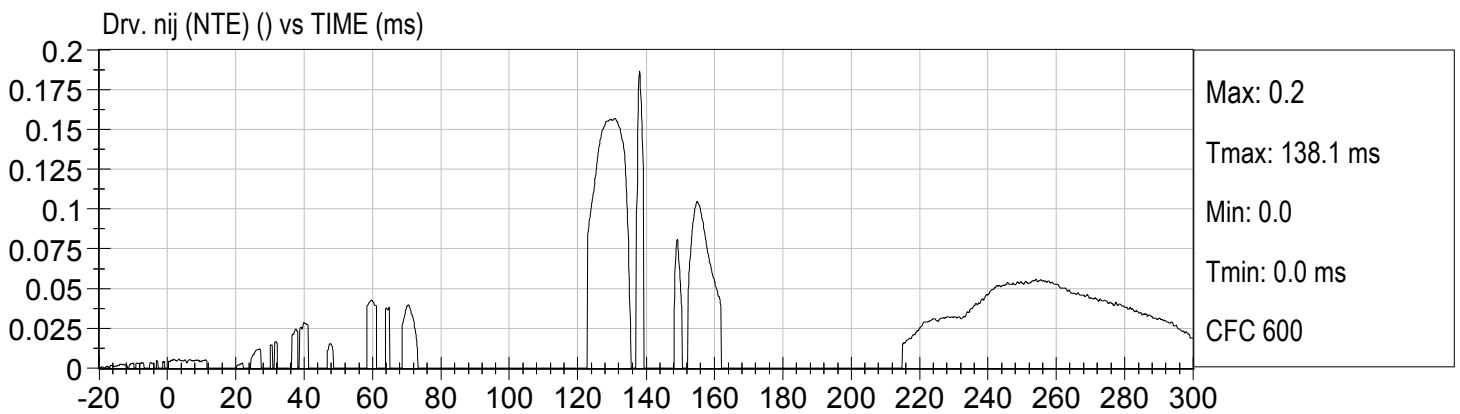
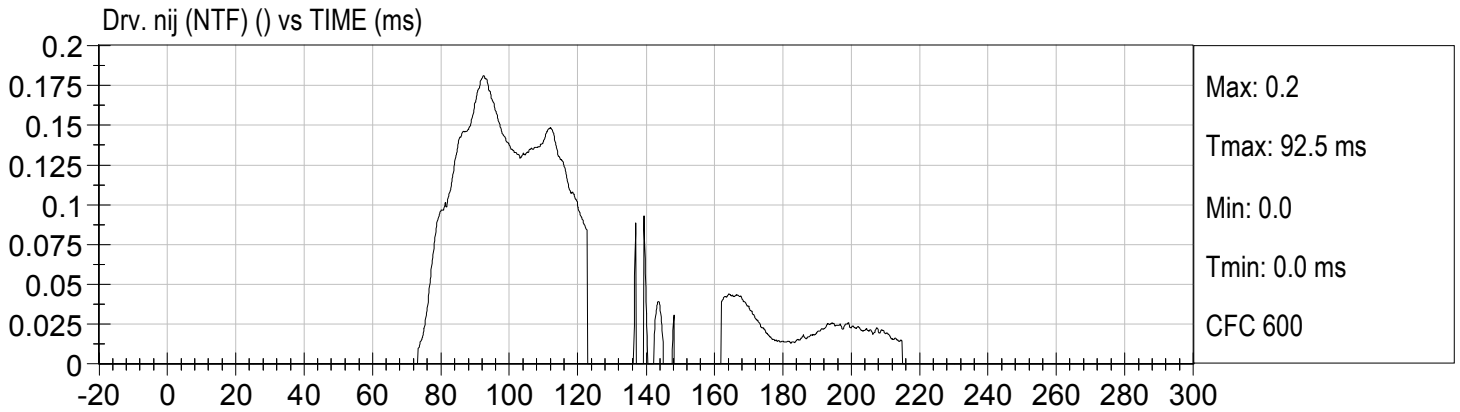


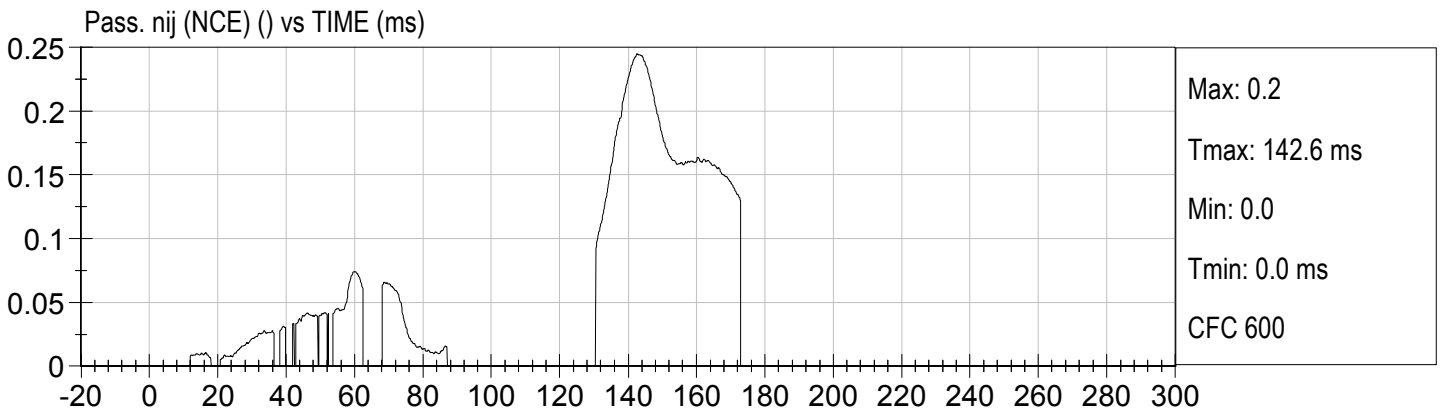
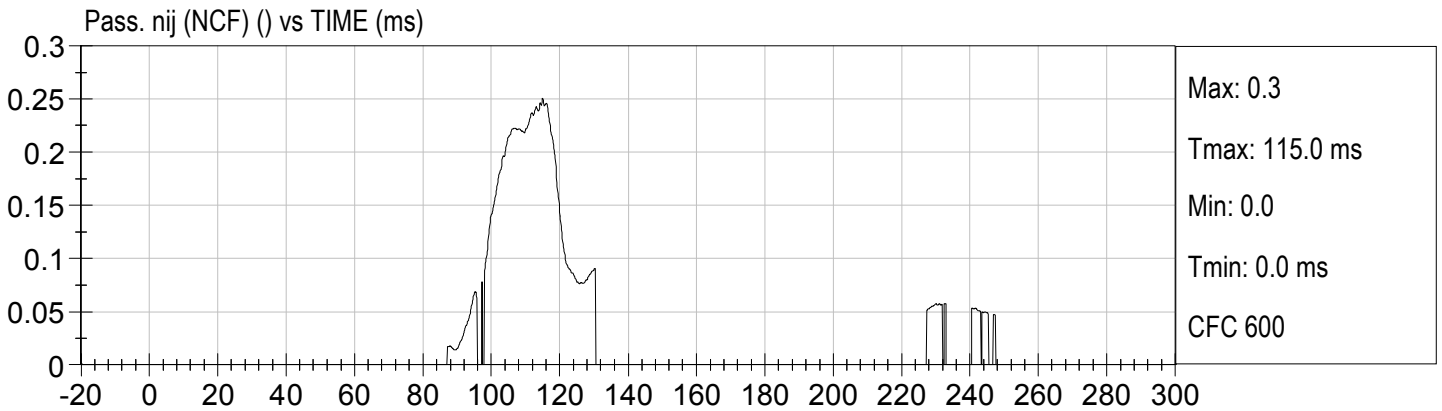
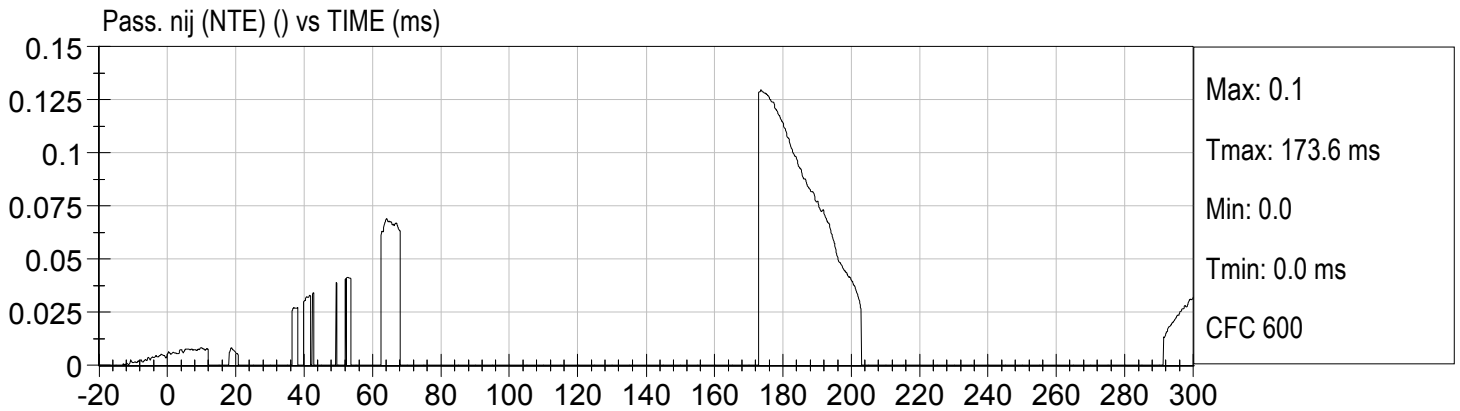
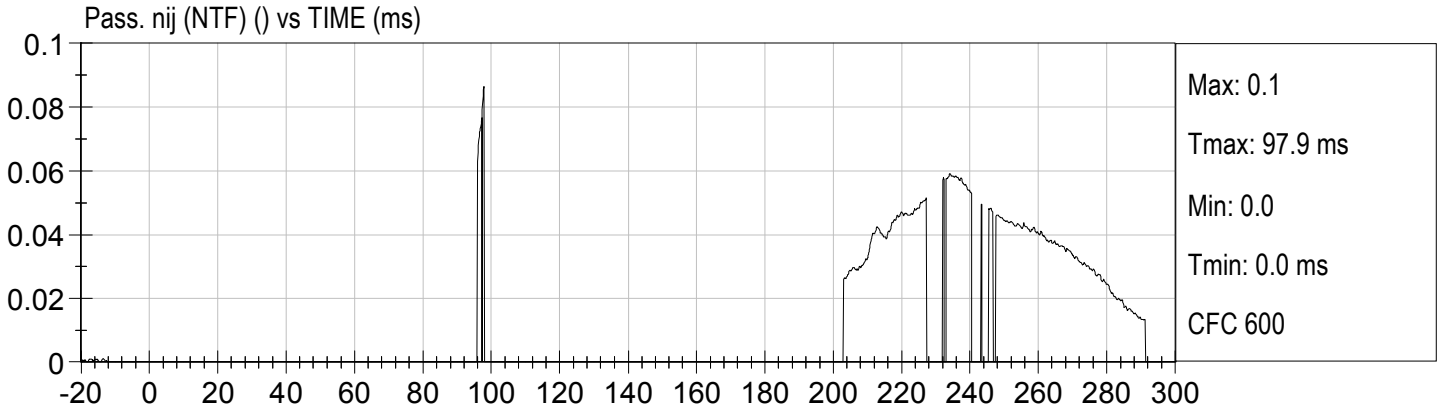
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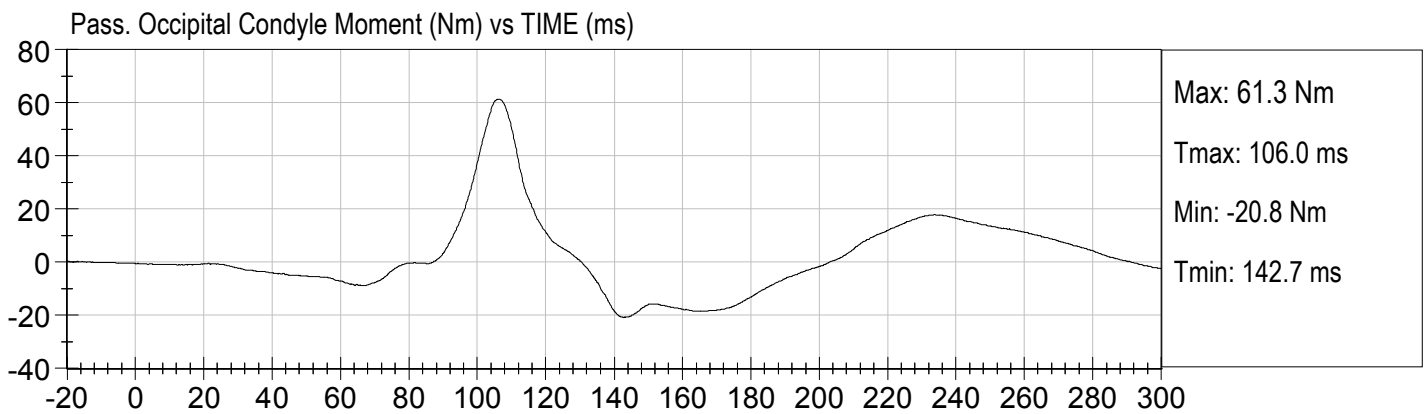
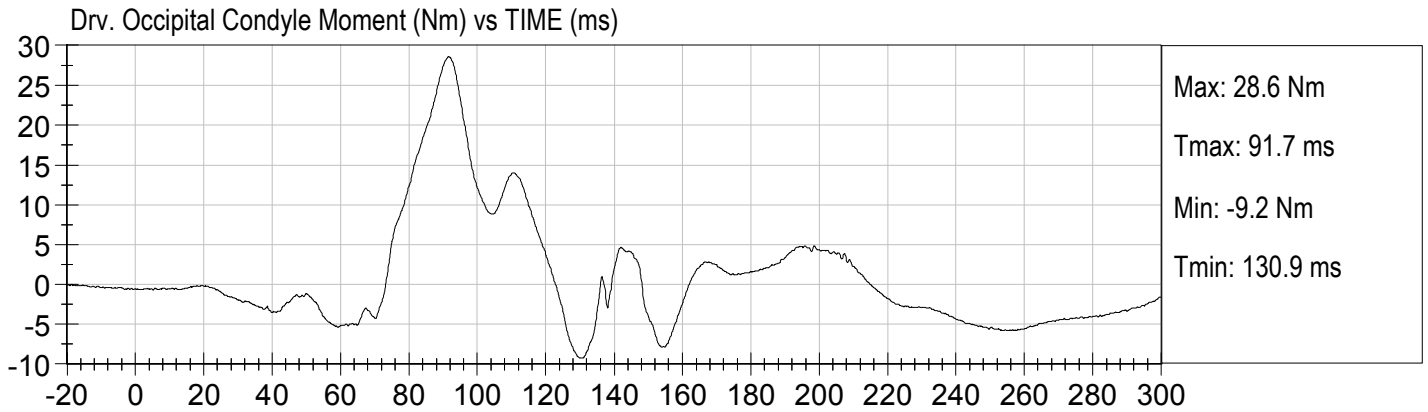


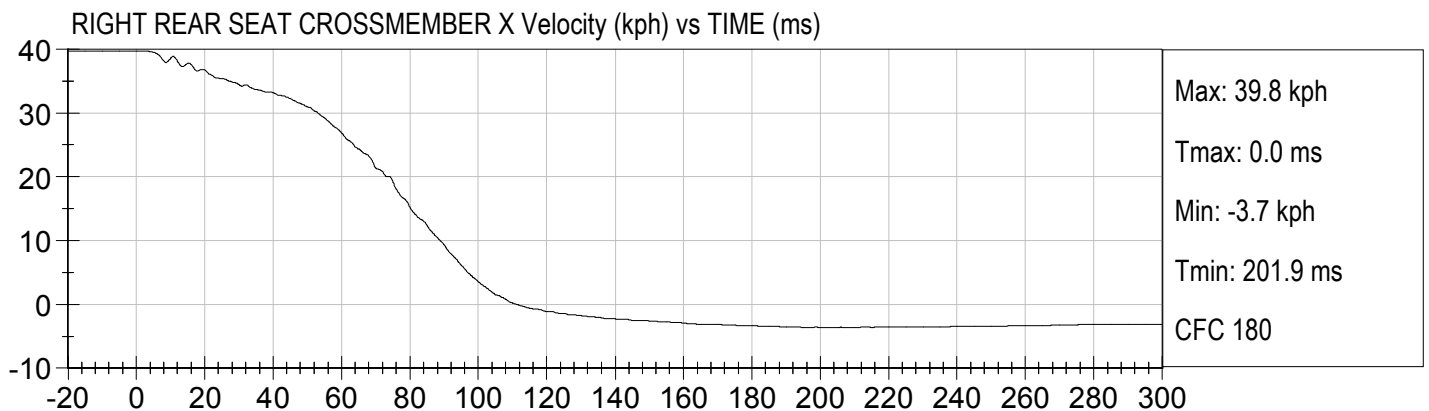
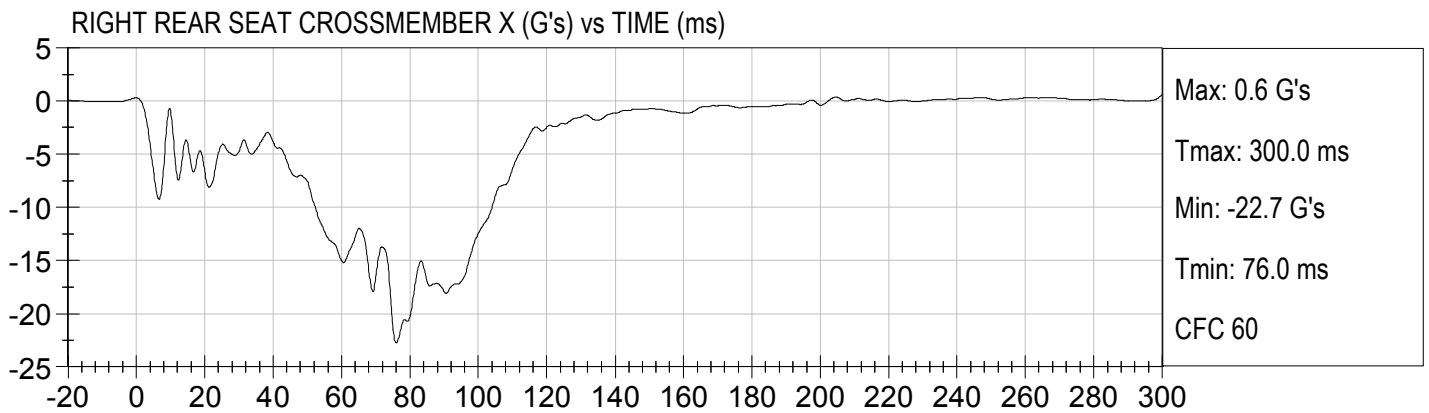
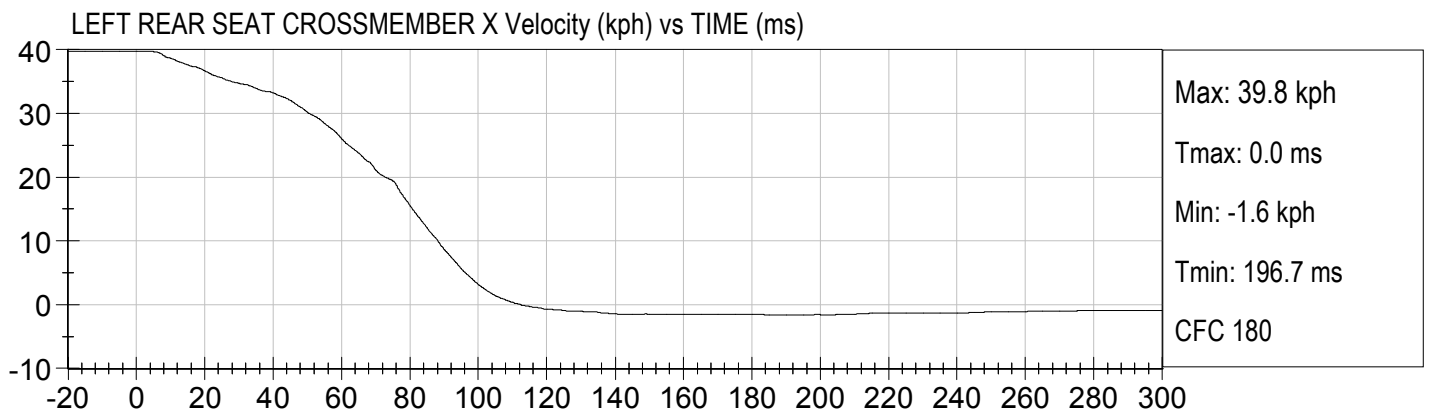
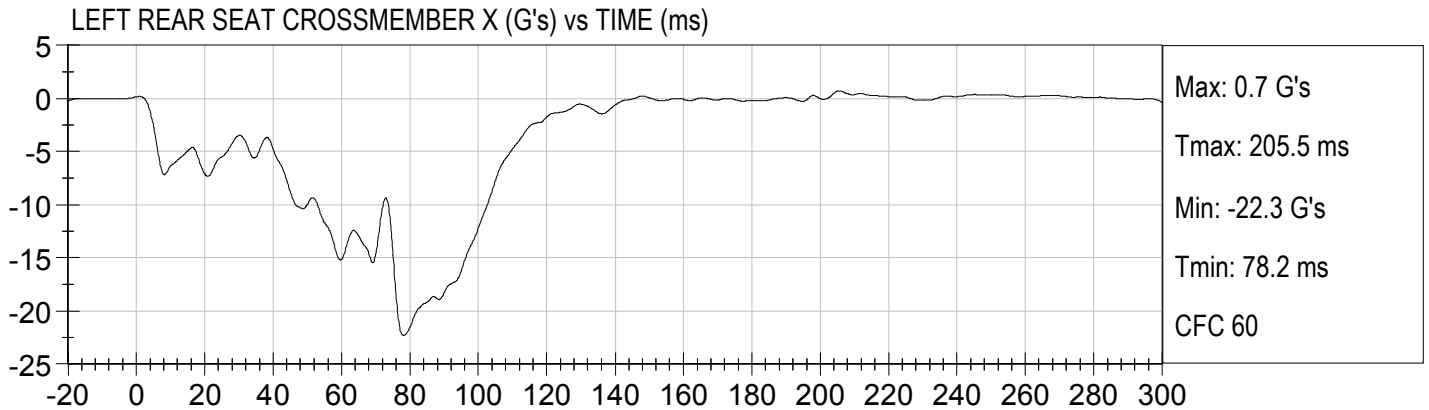


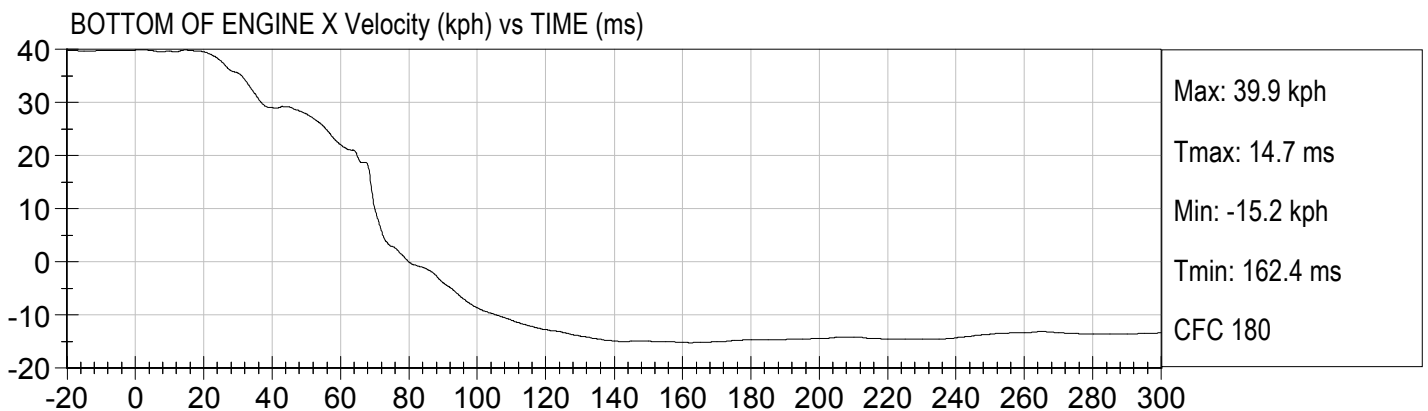
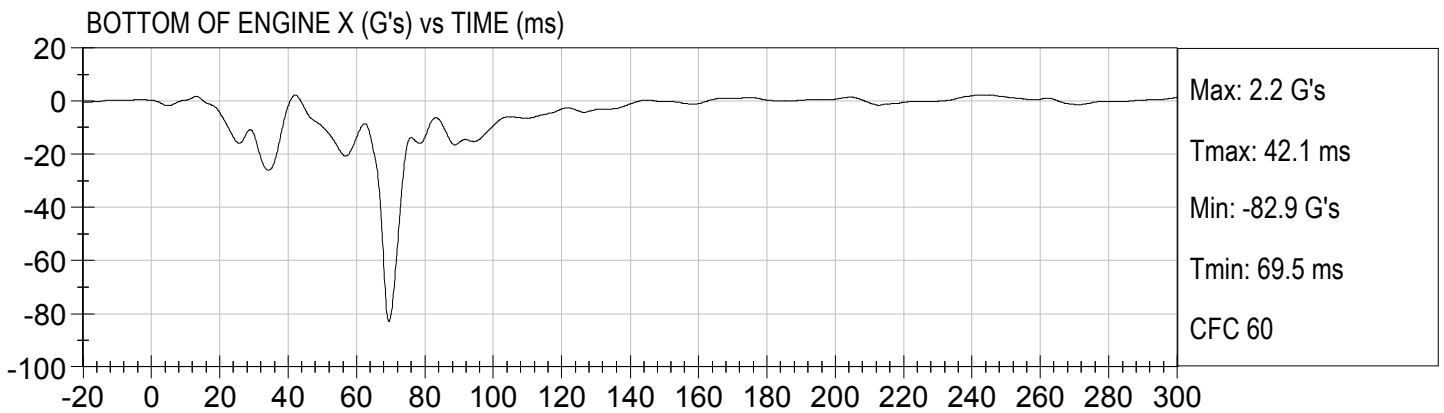
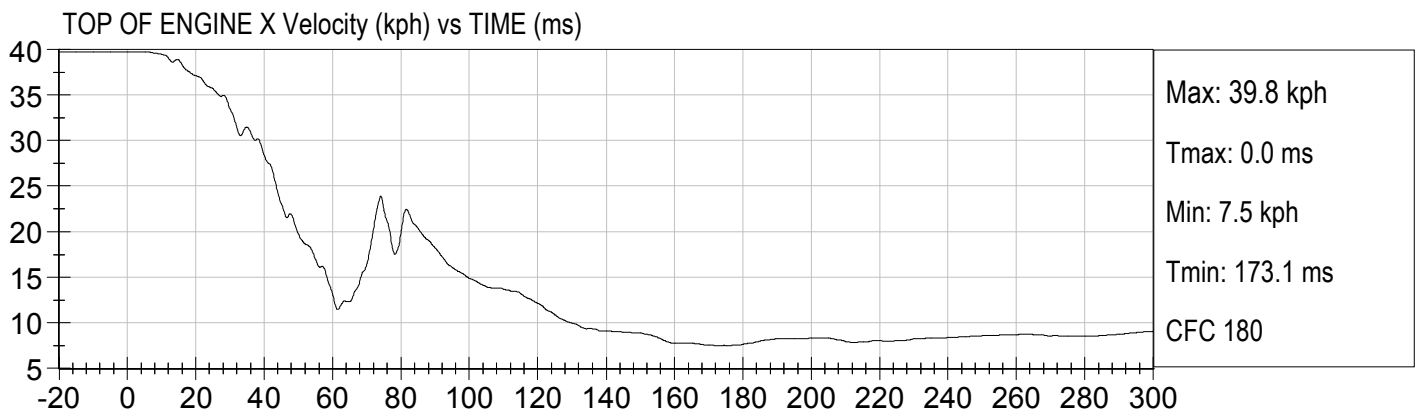
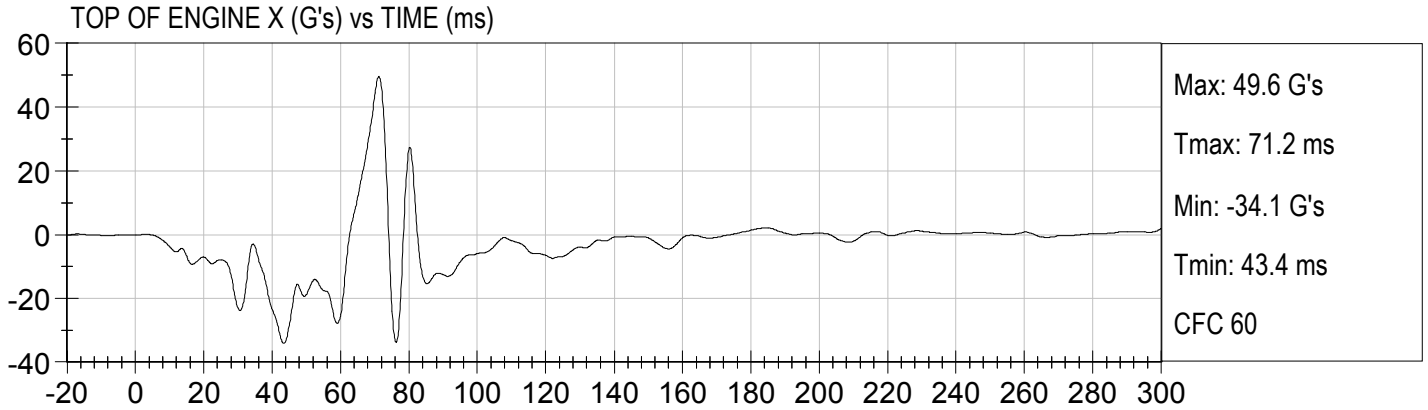


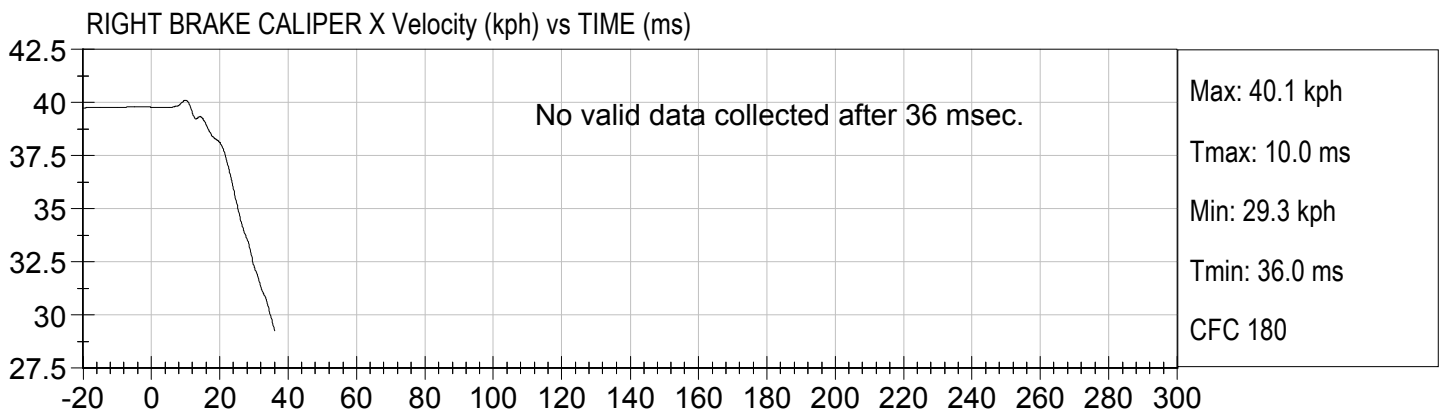
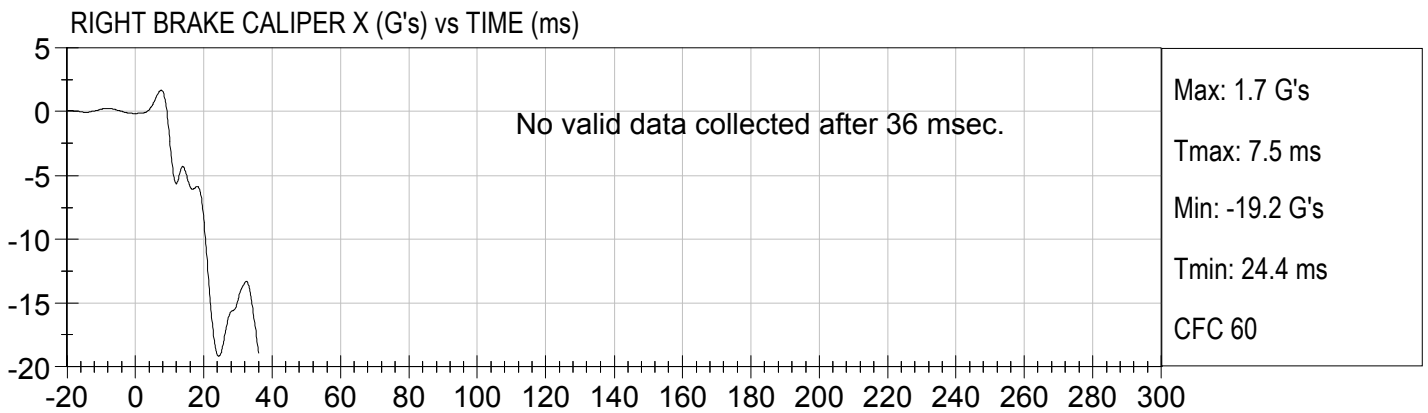
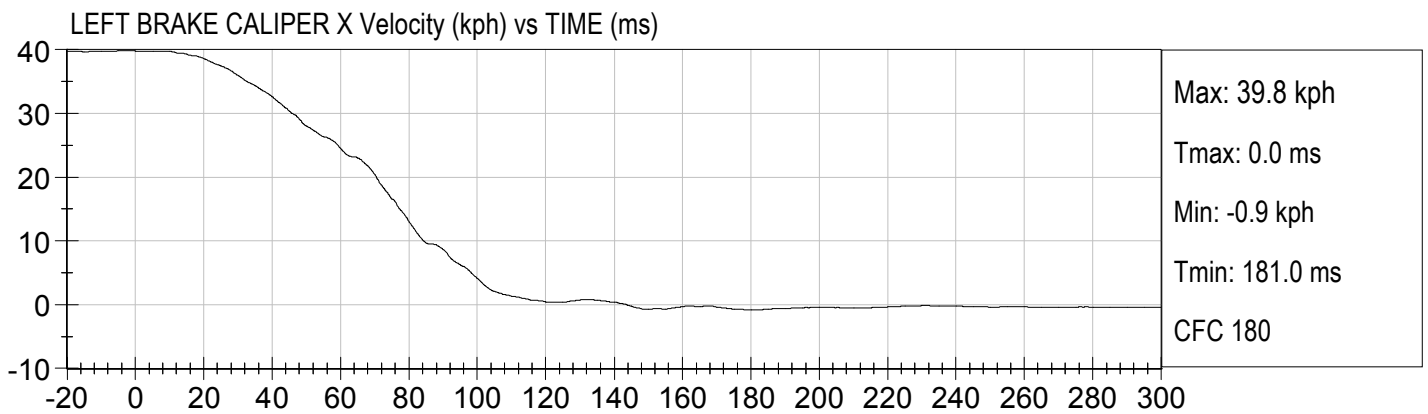
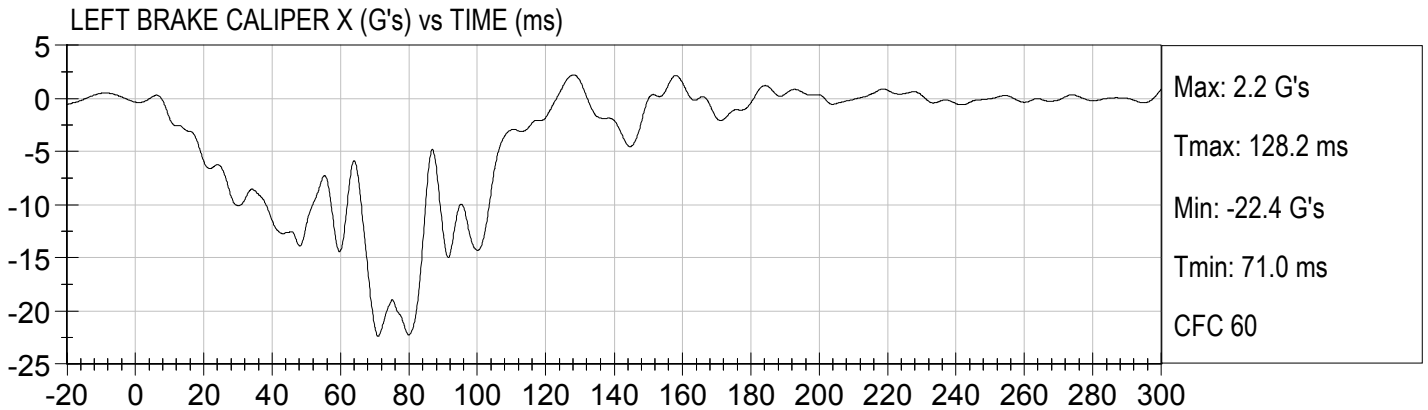


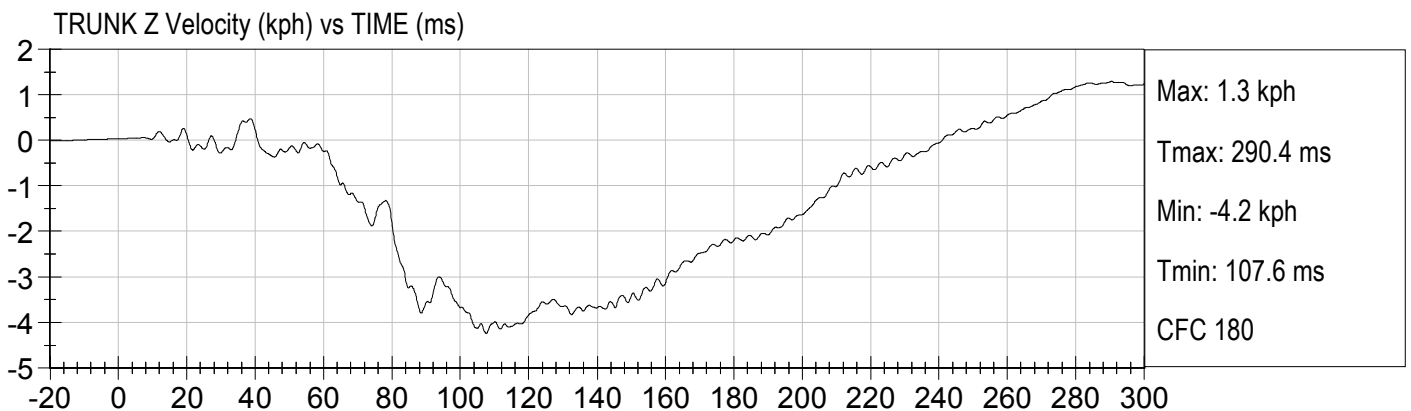
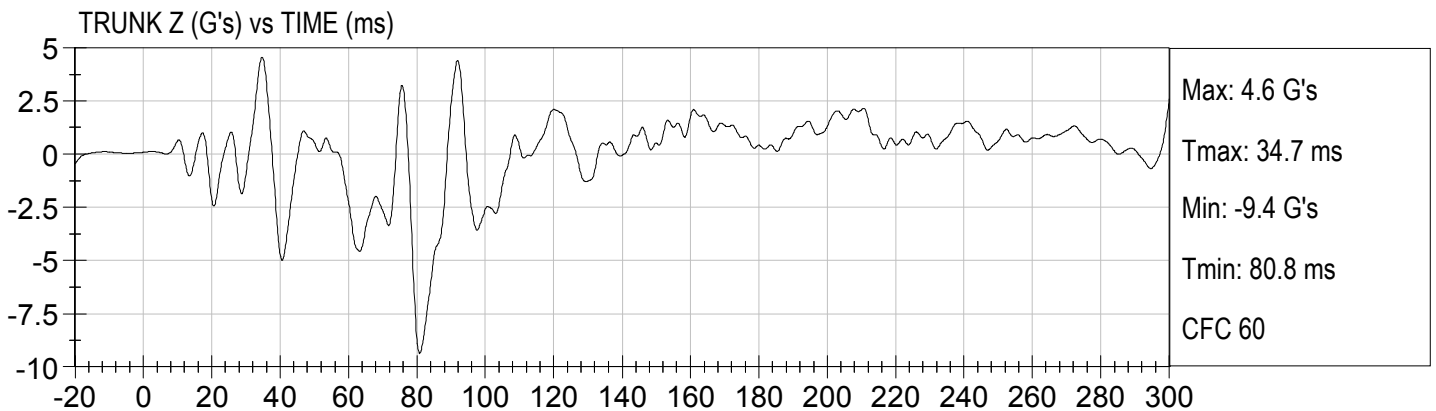
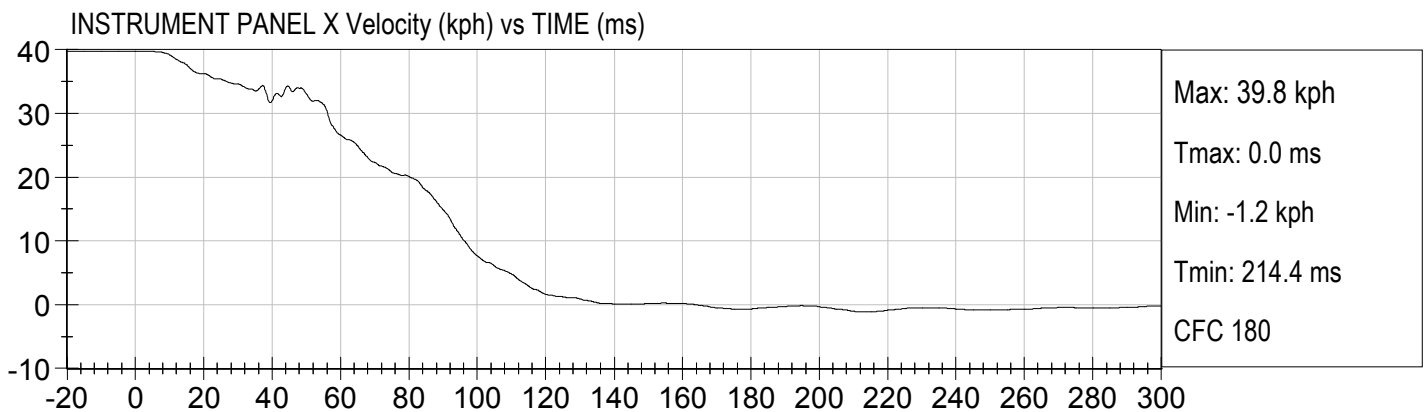
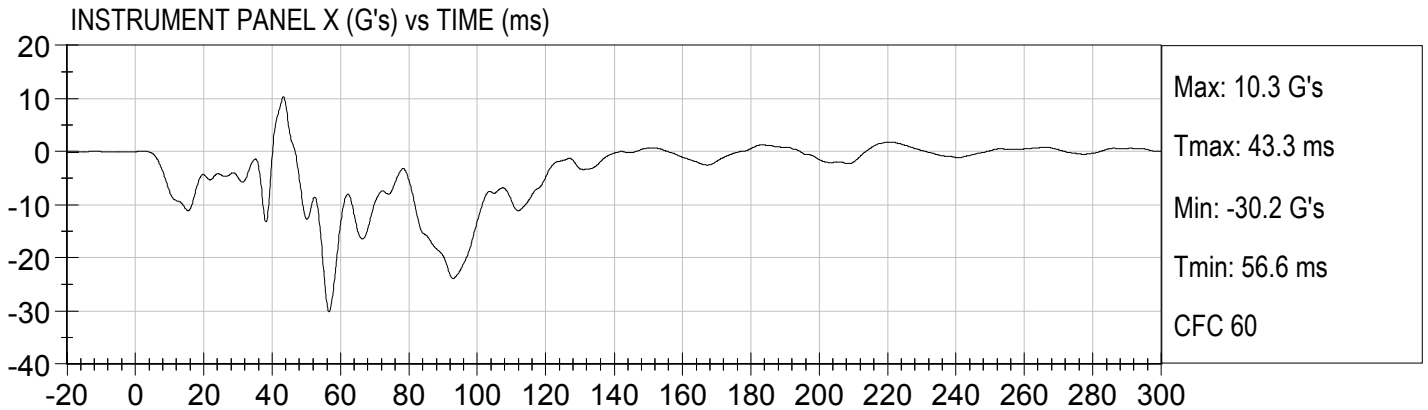












APPENDIX B

LOW RISK TEST DATA

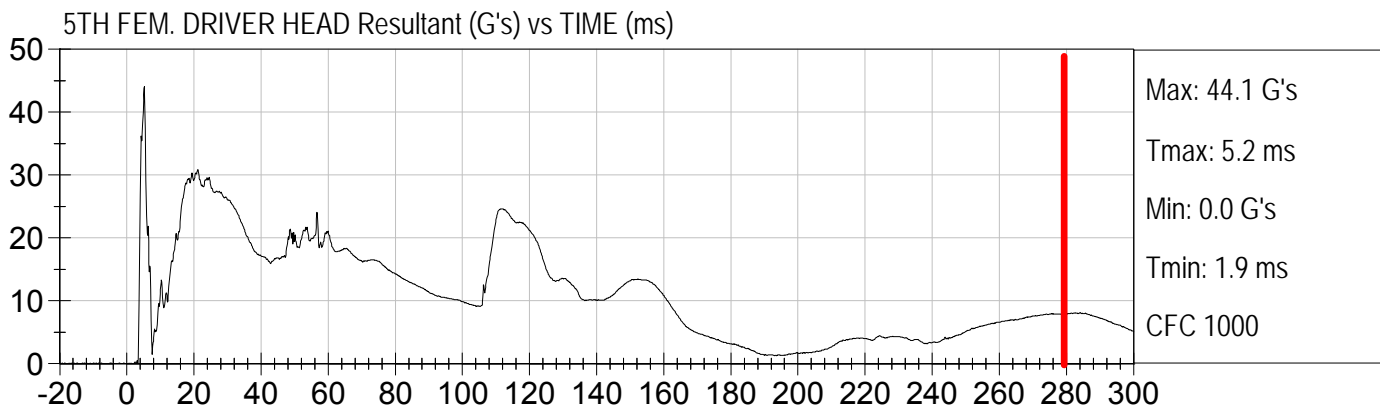
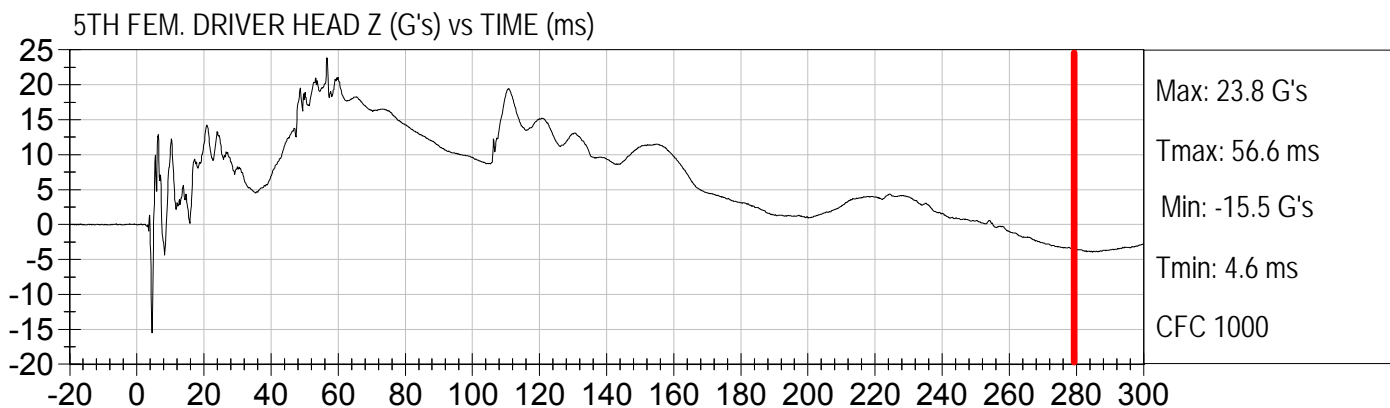
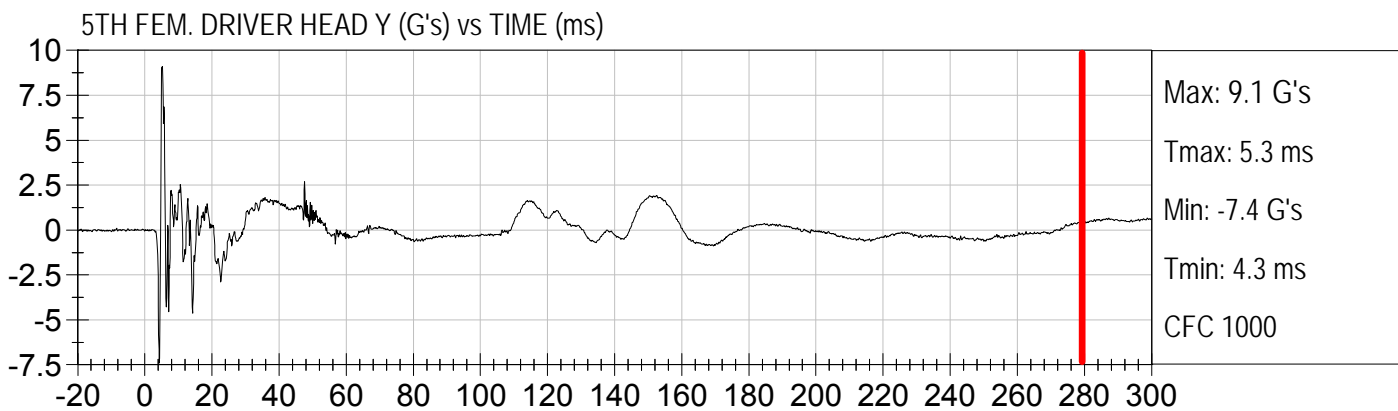
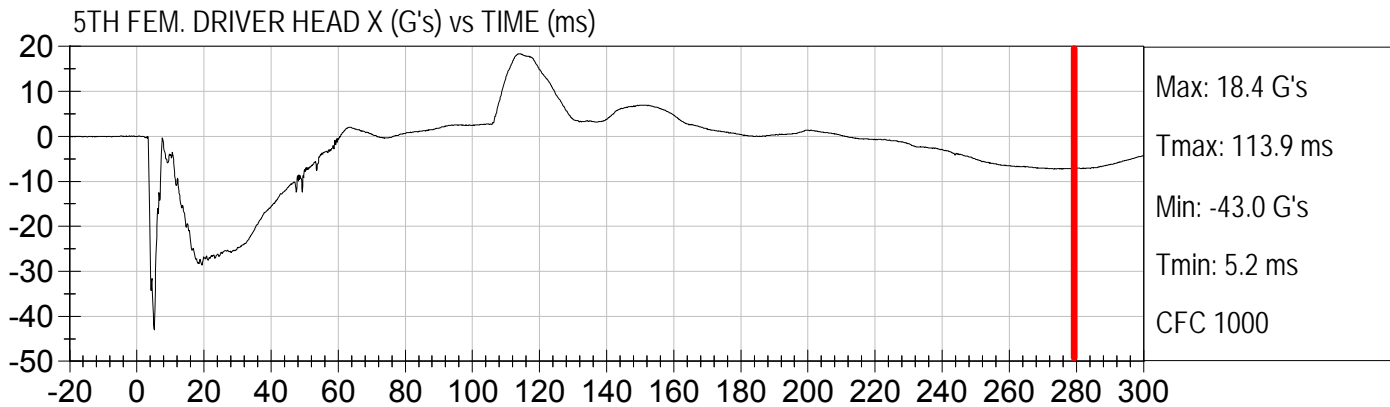
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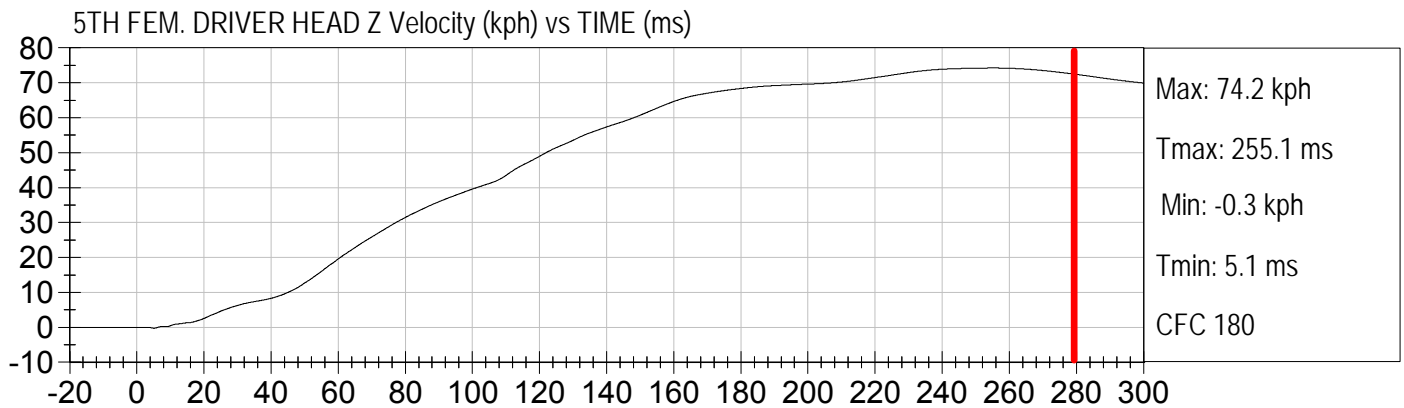
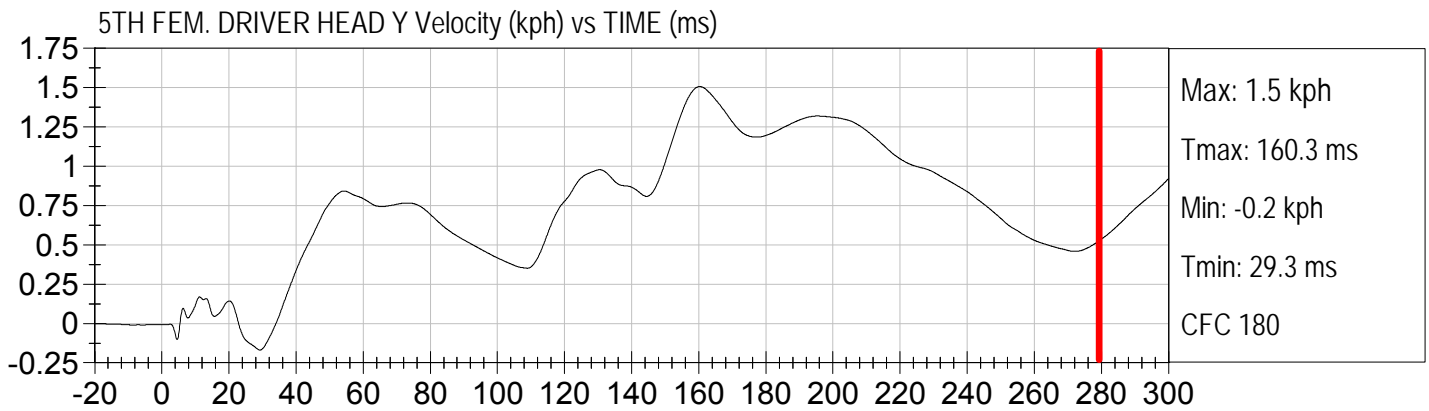
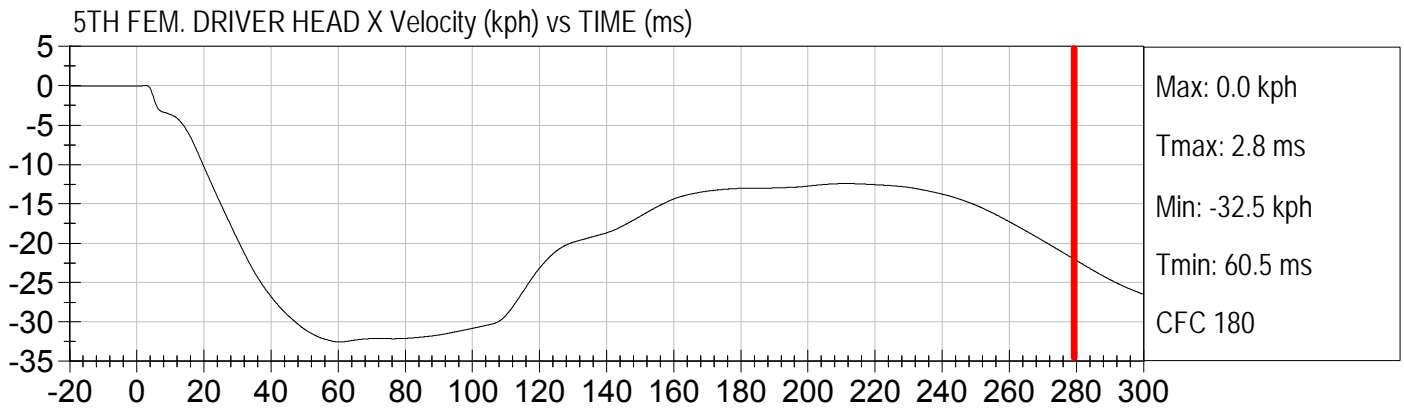


Injury Values Calculated between 0ms and 275ms



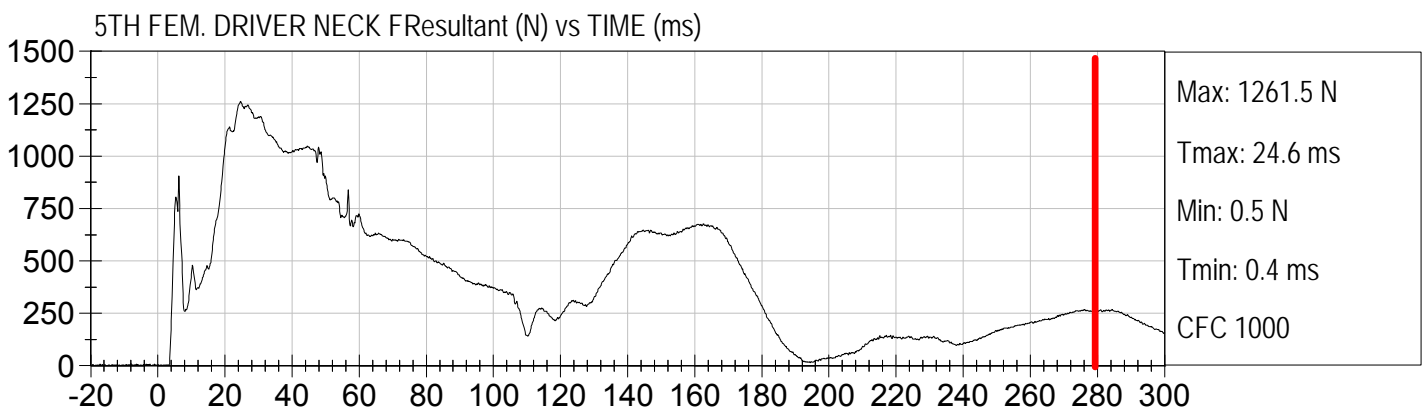
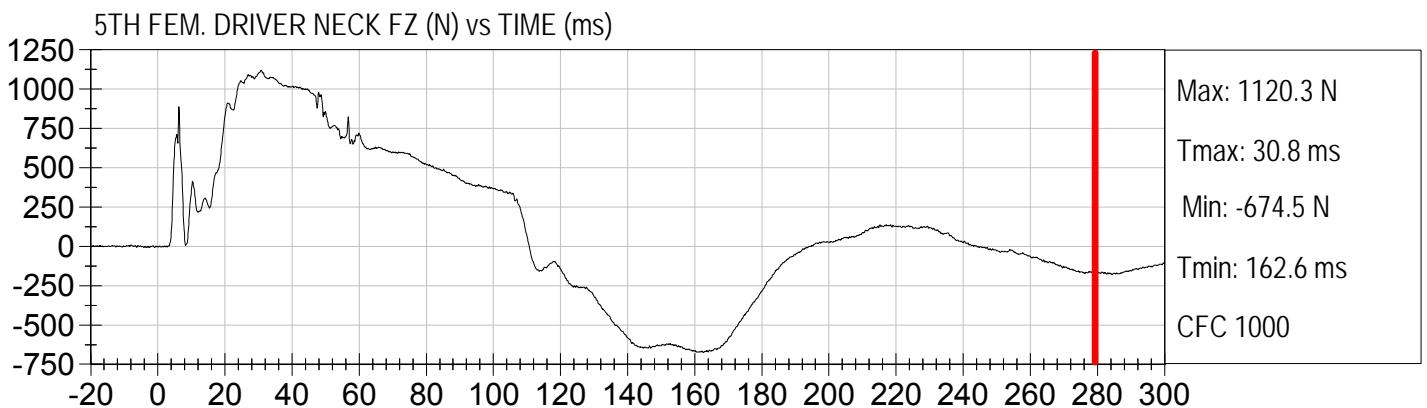
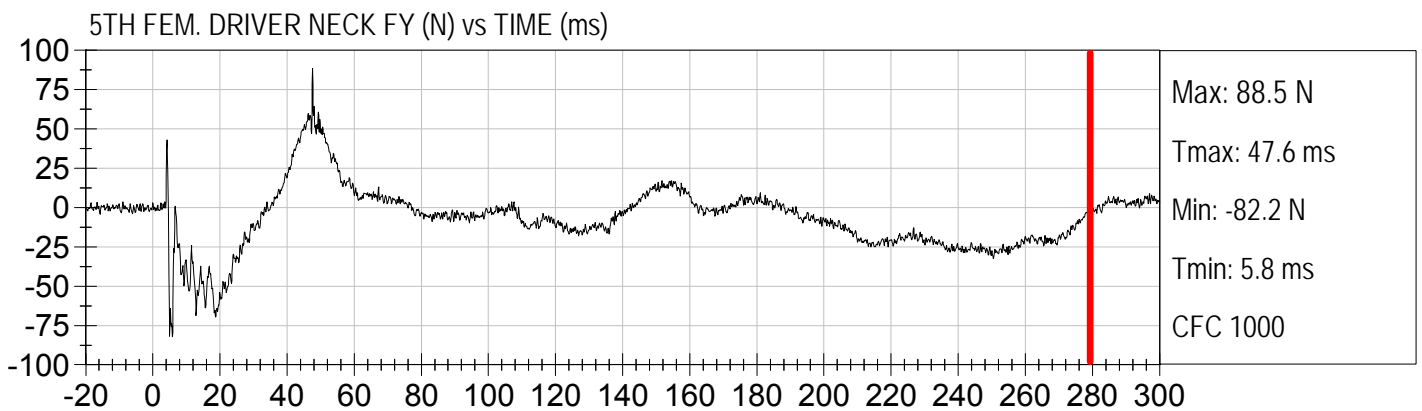
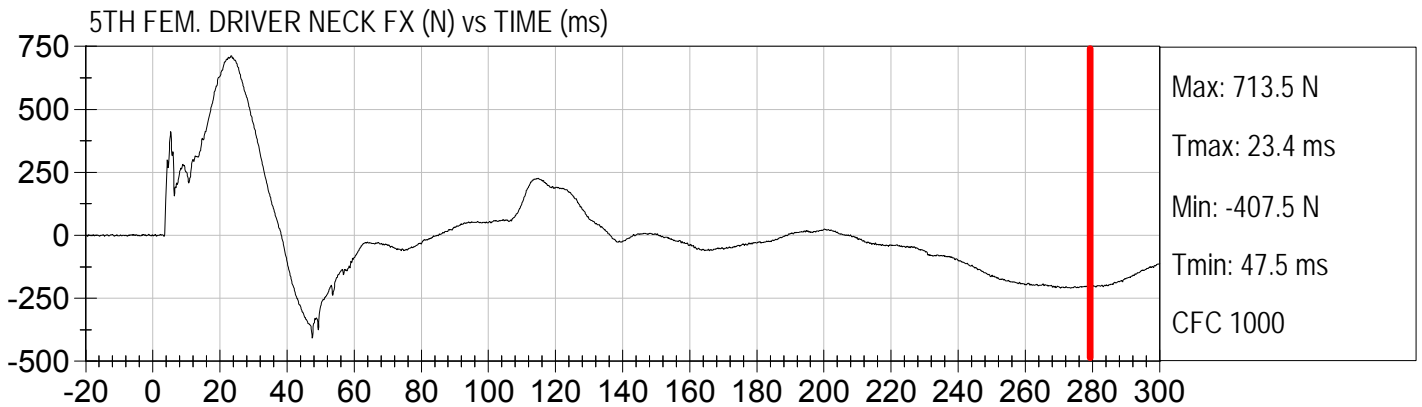


Injury Values Calculated between 0ms and 275ms



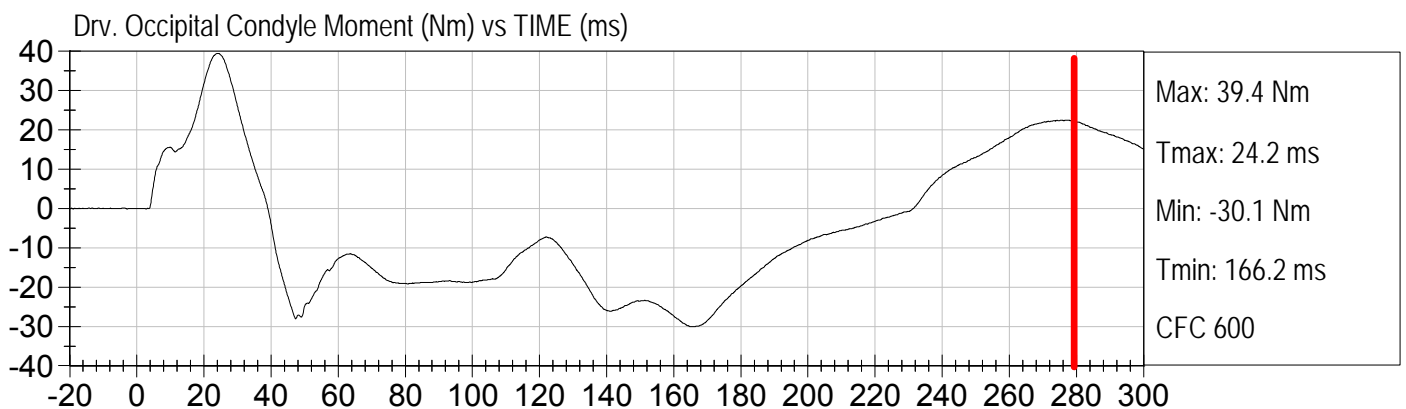
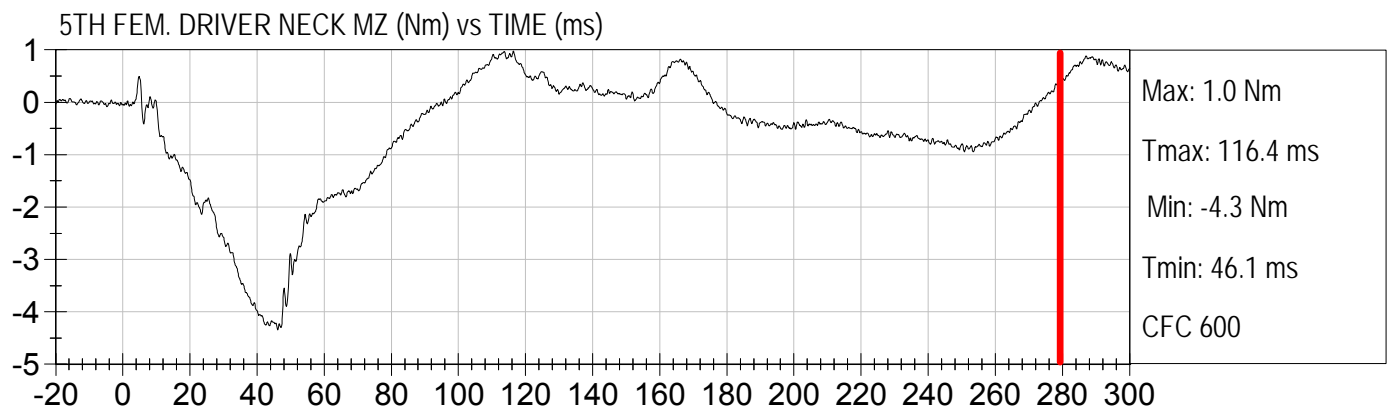
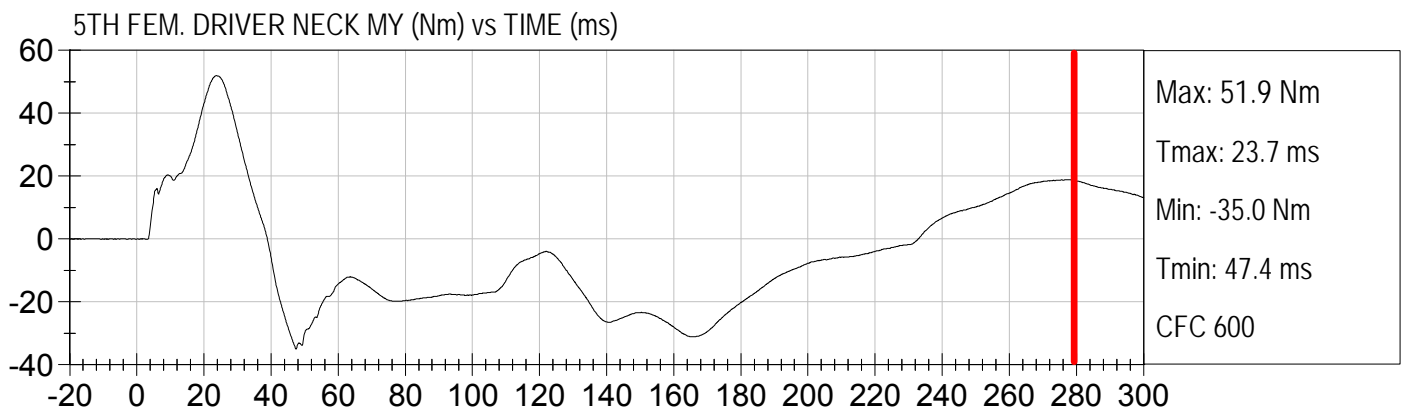
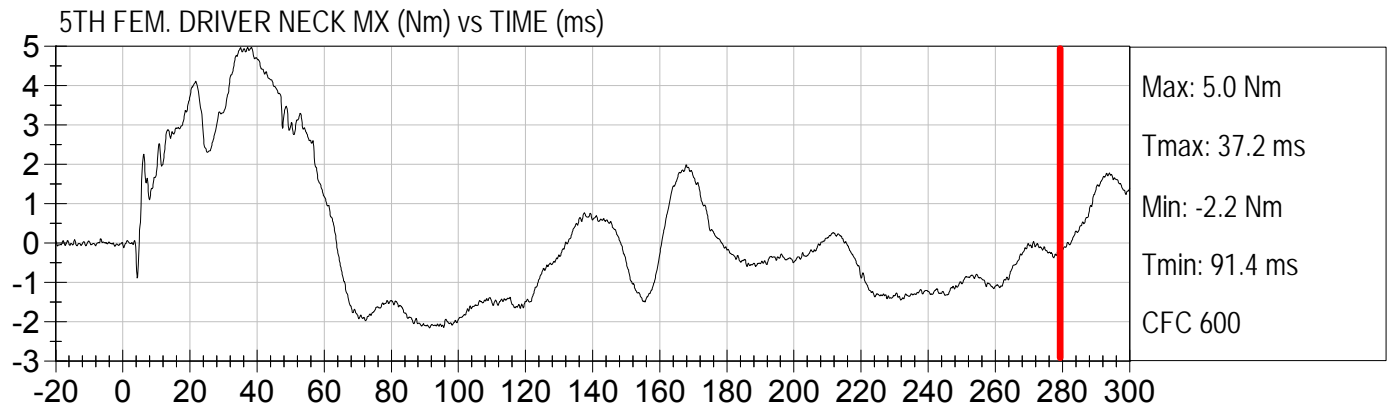


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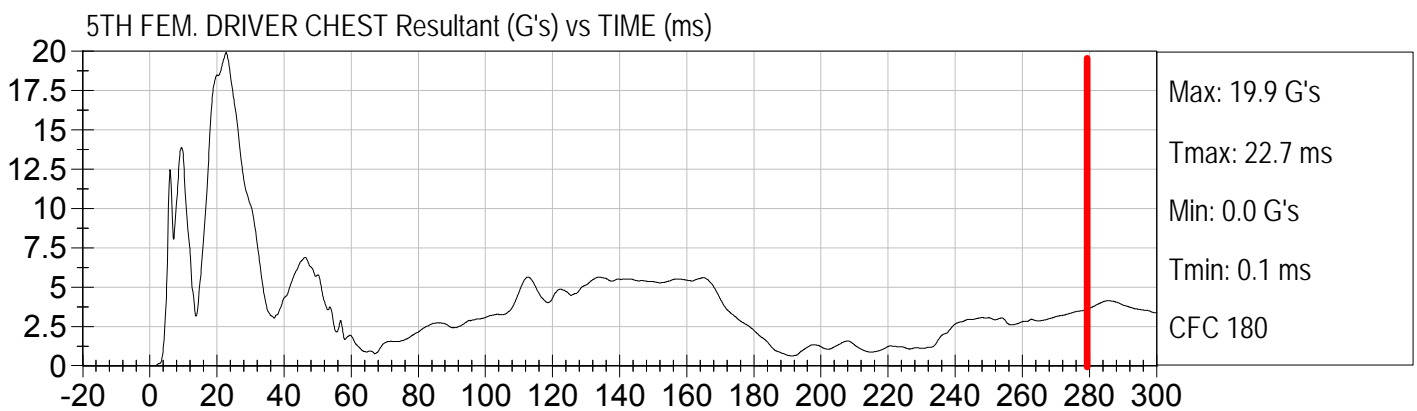
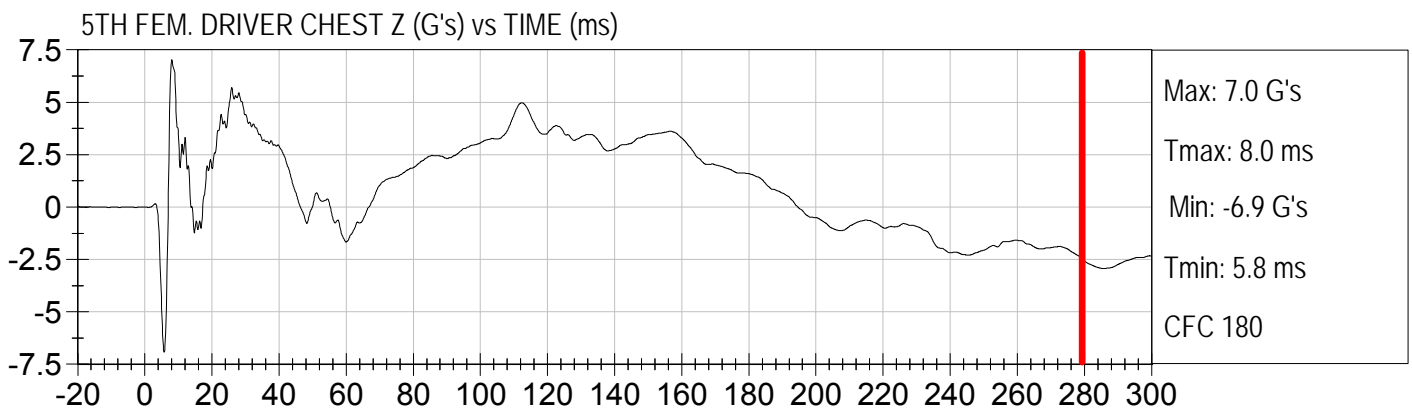
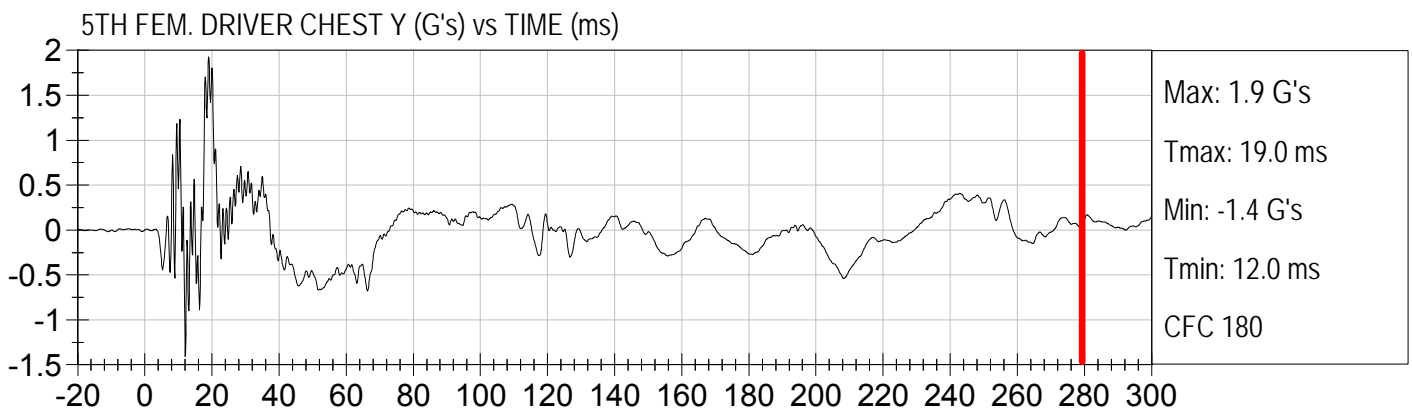
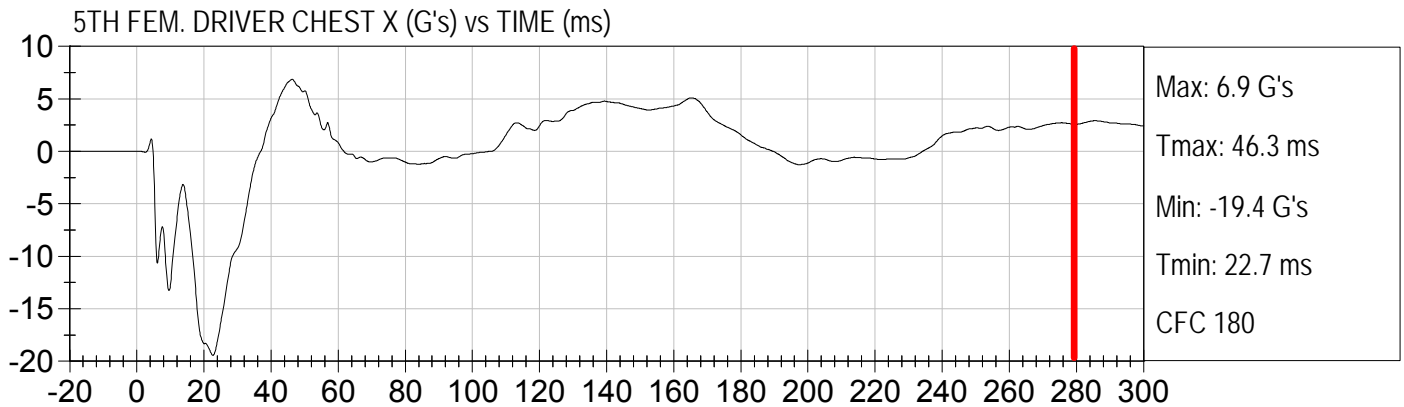


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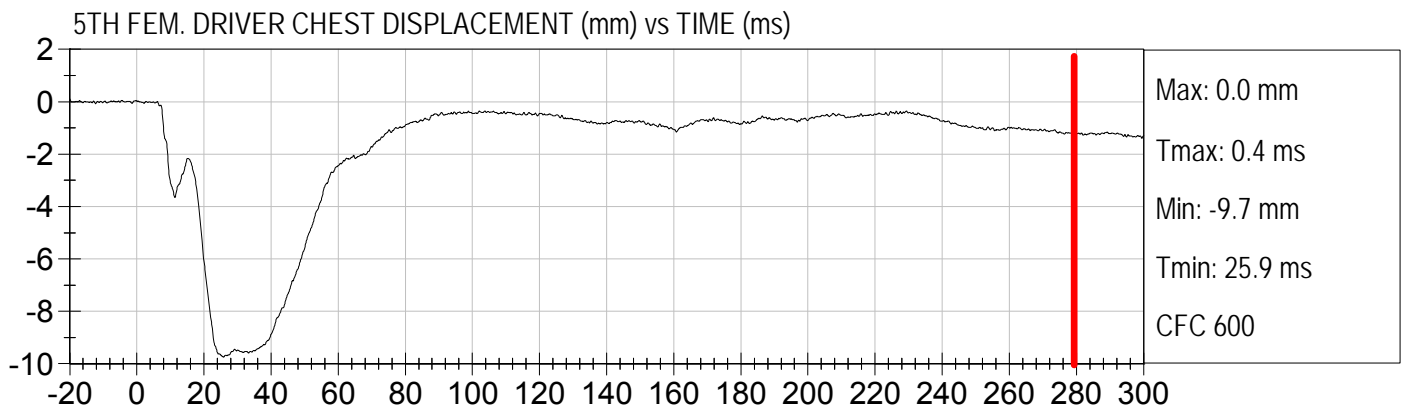
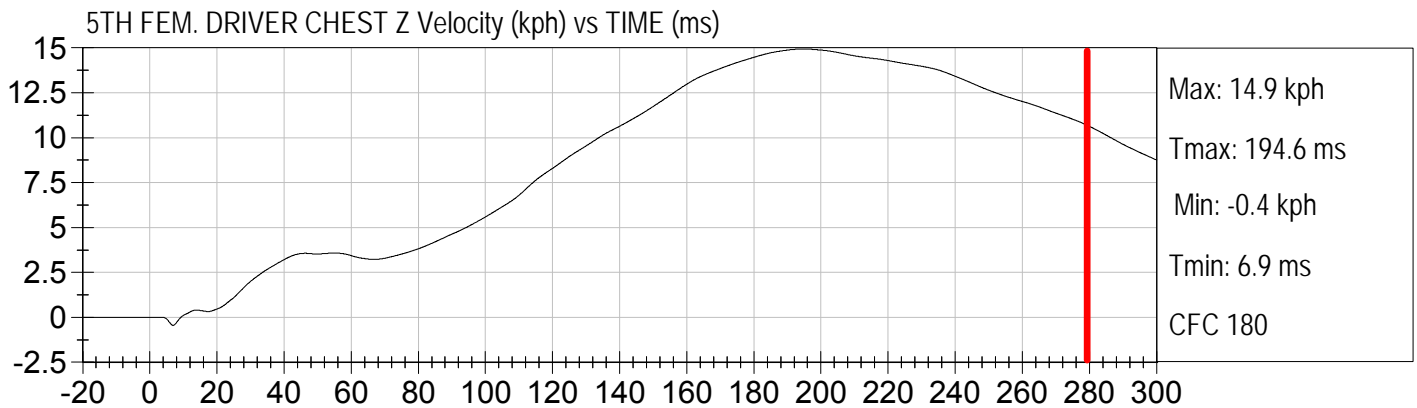
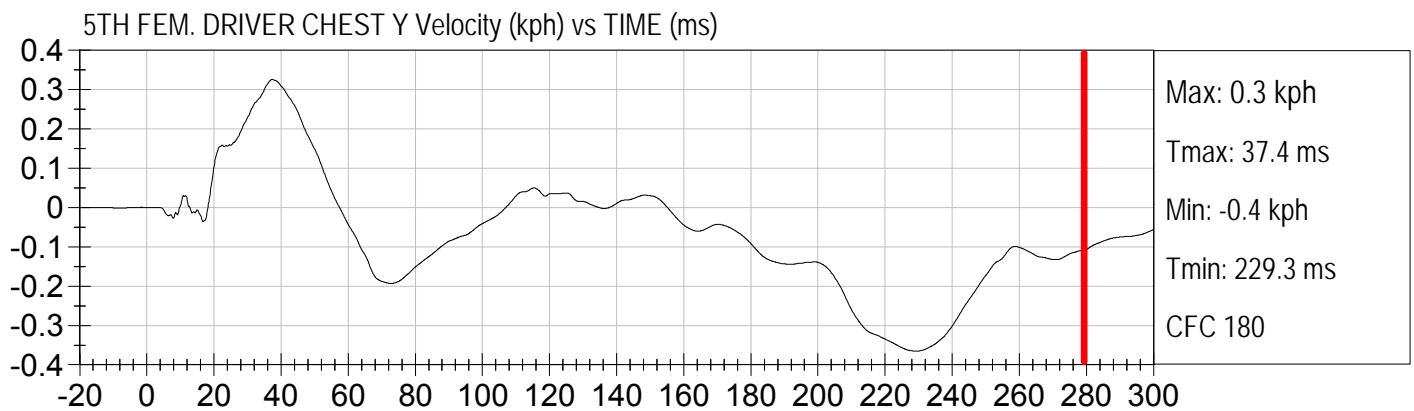
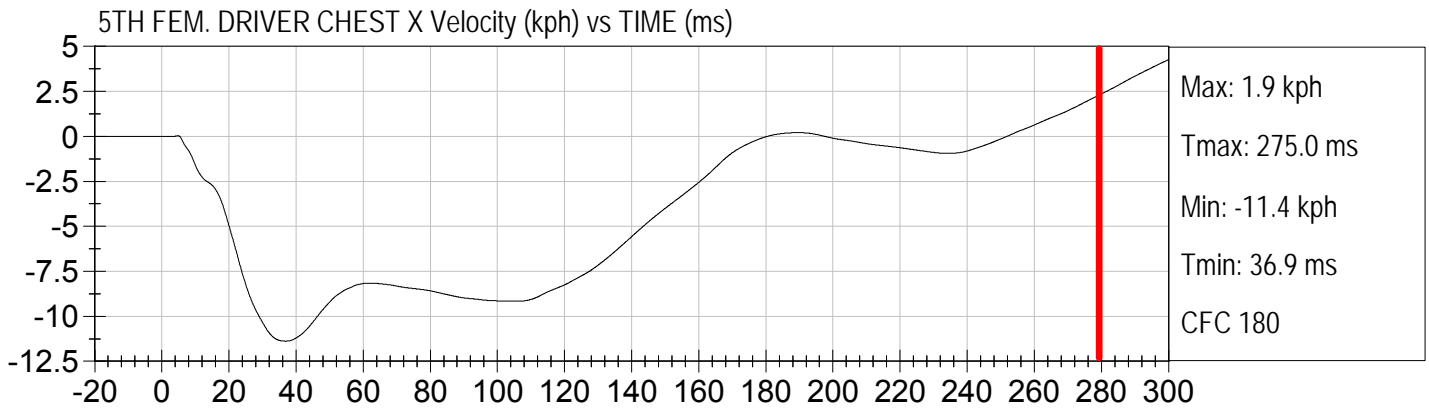


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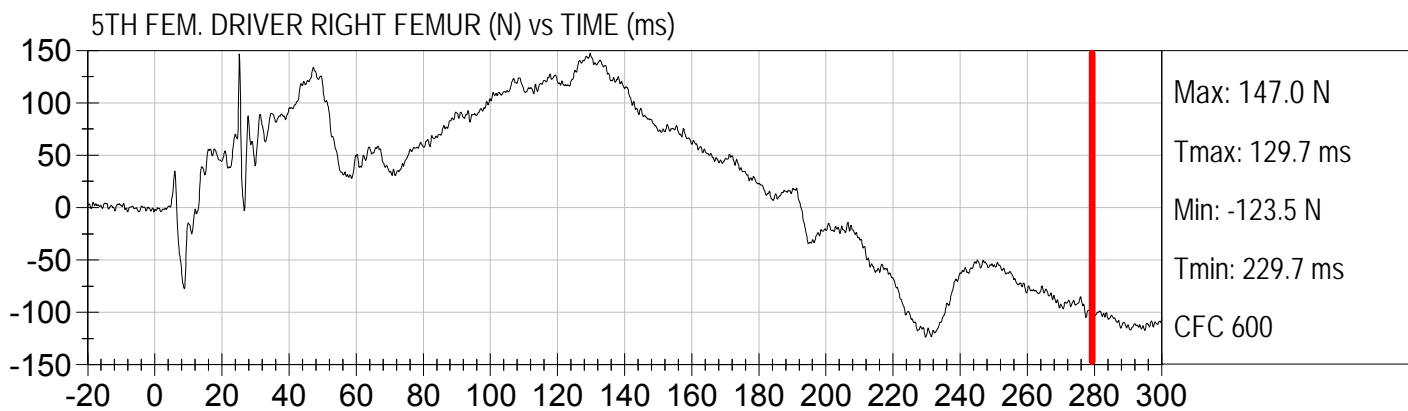
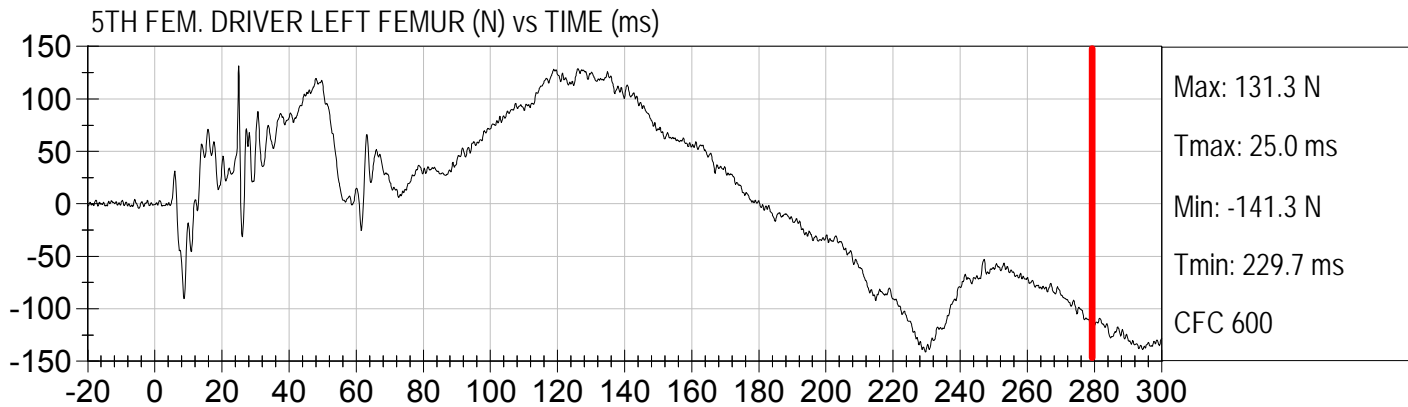


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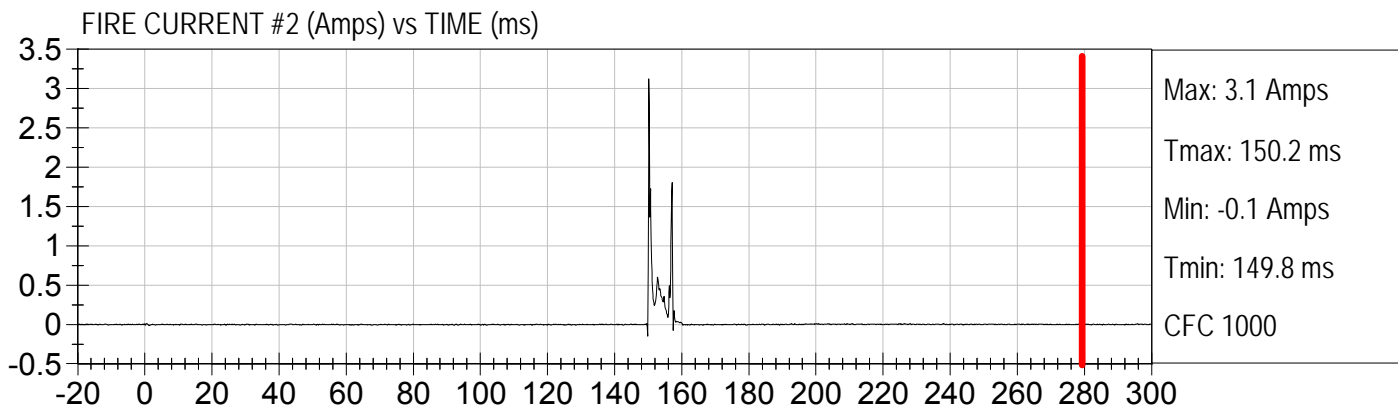
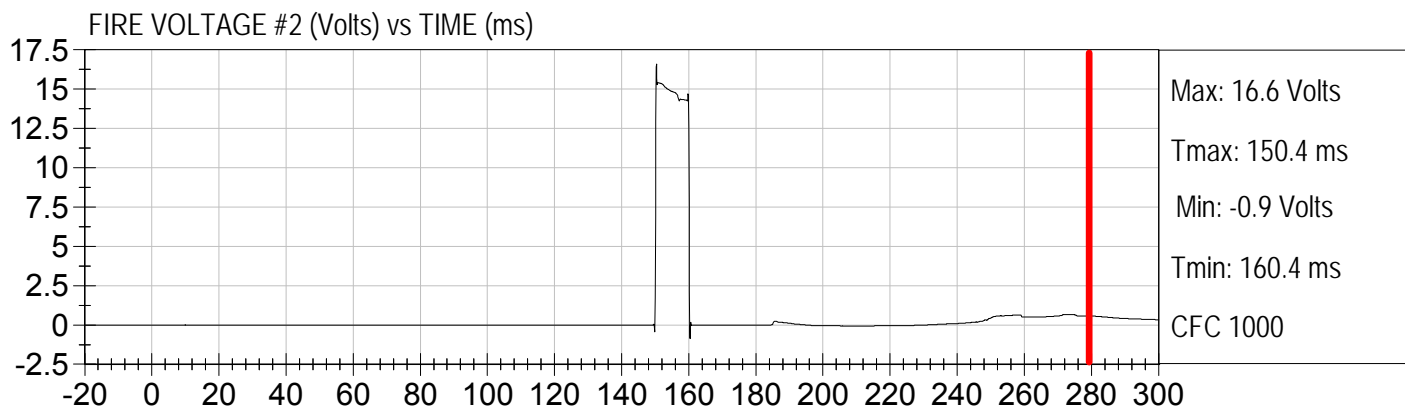
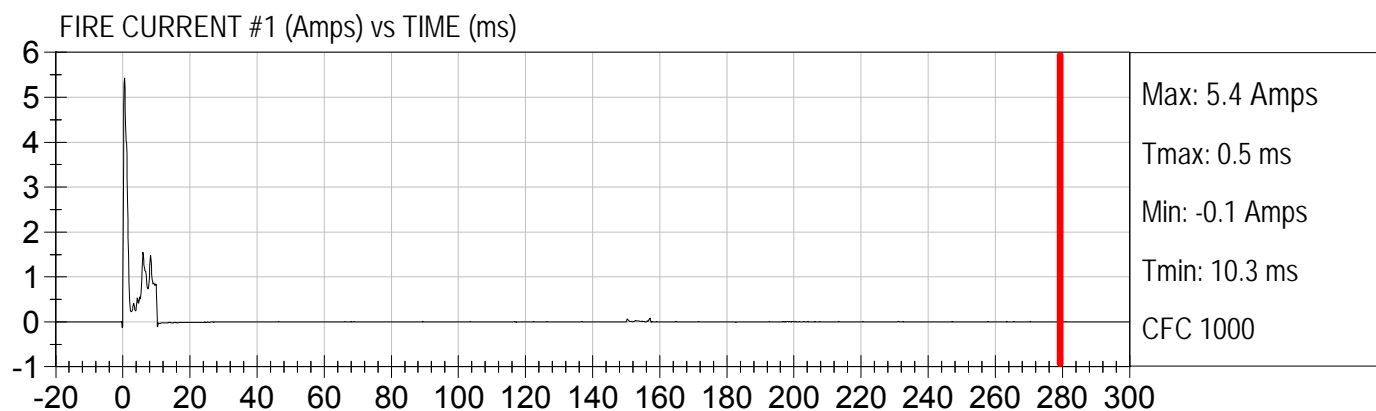
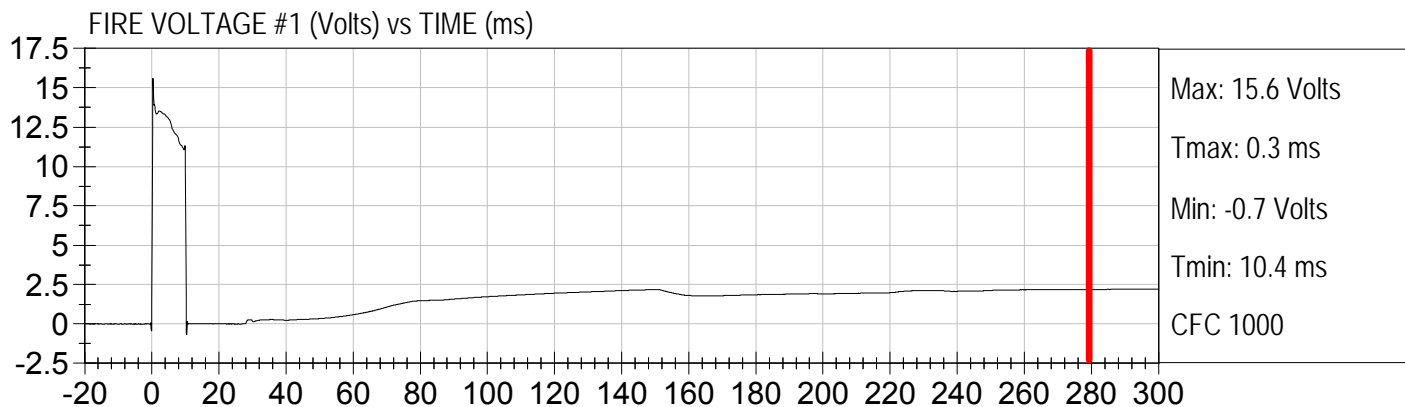


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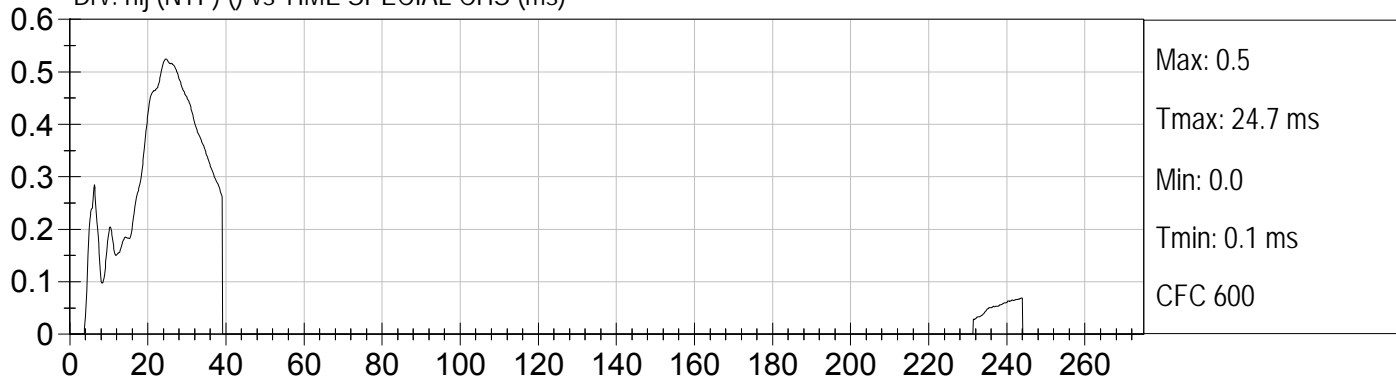


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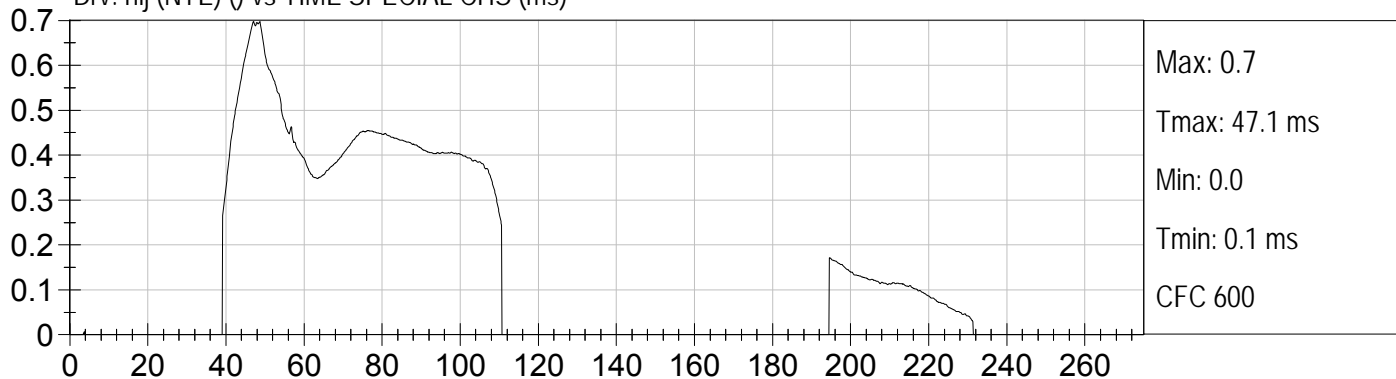




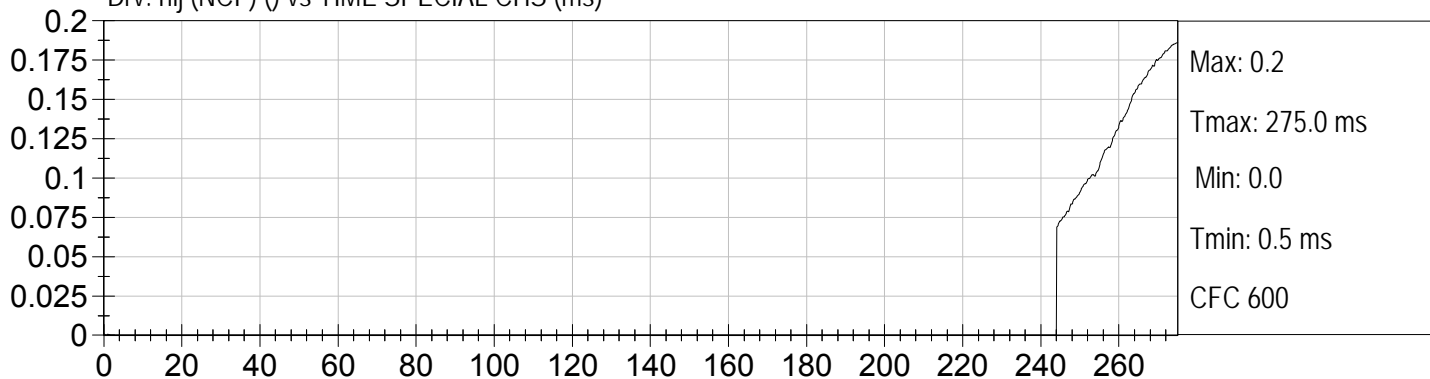
Drv. nij (NTF) () vs TIME SPECIAL CHS (ms)



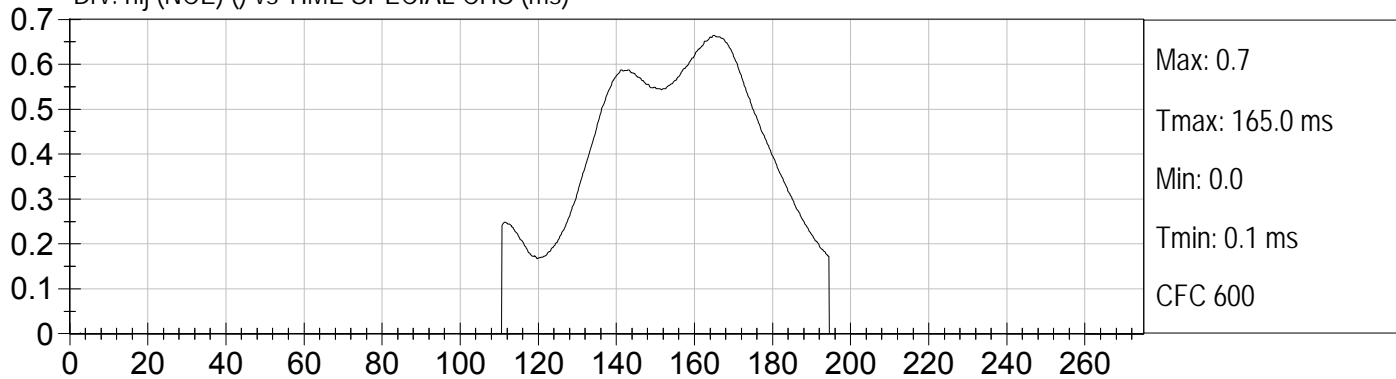
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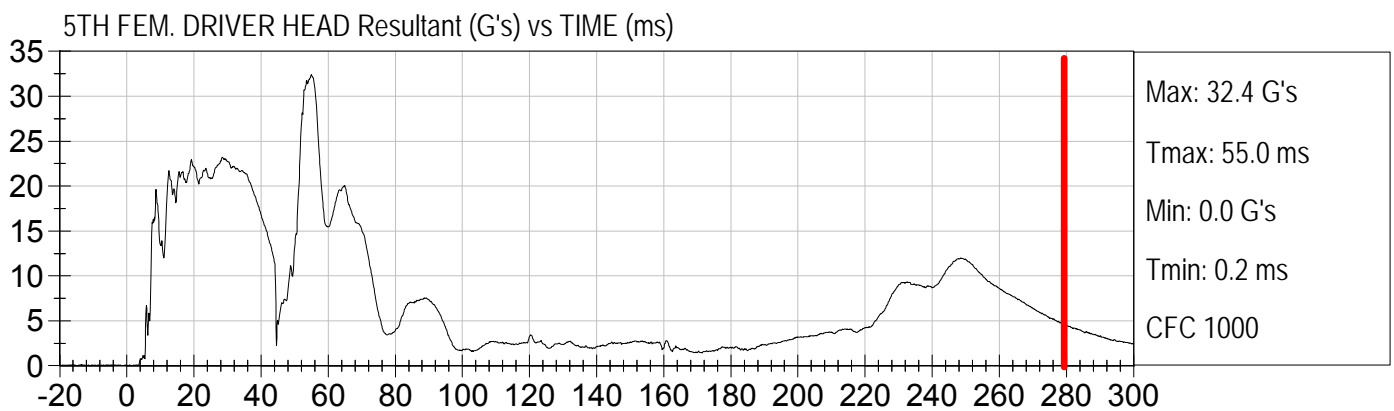
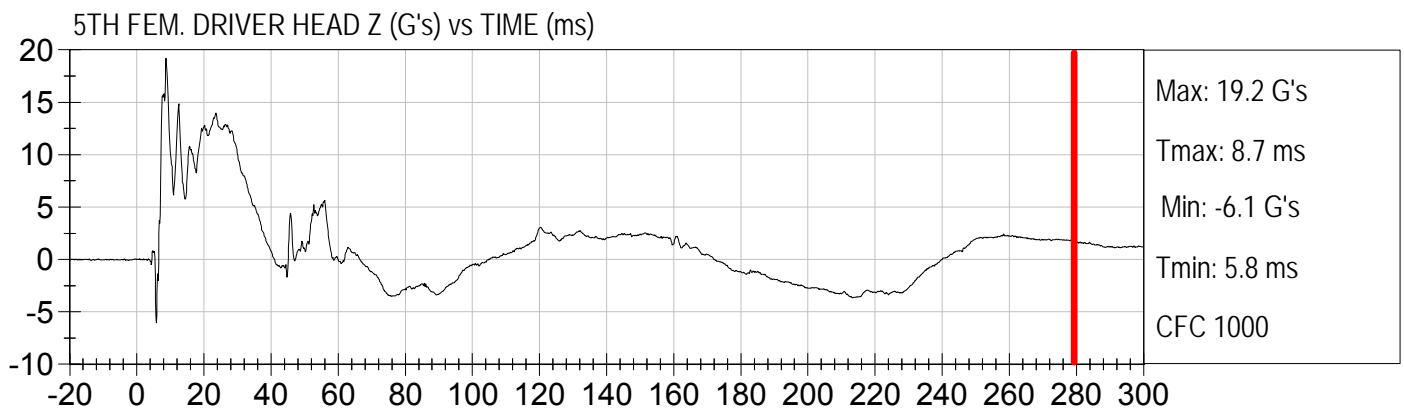
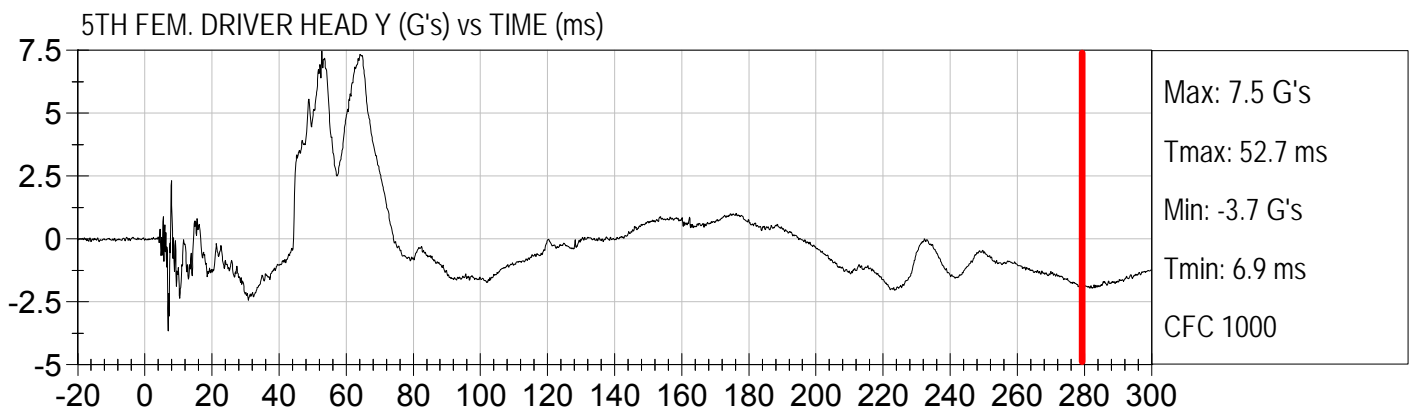
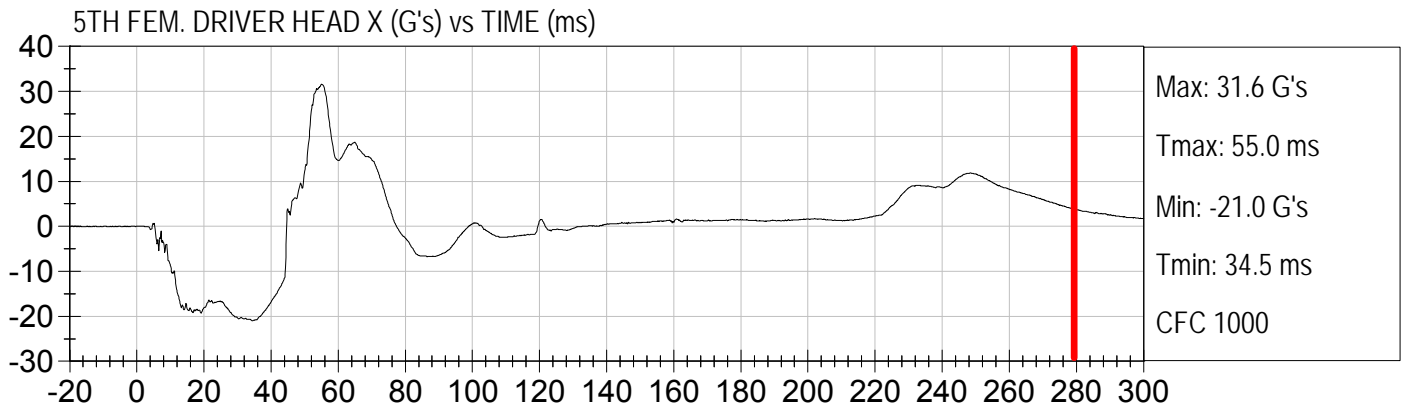


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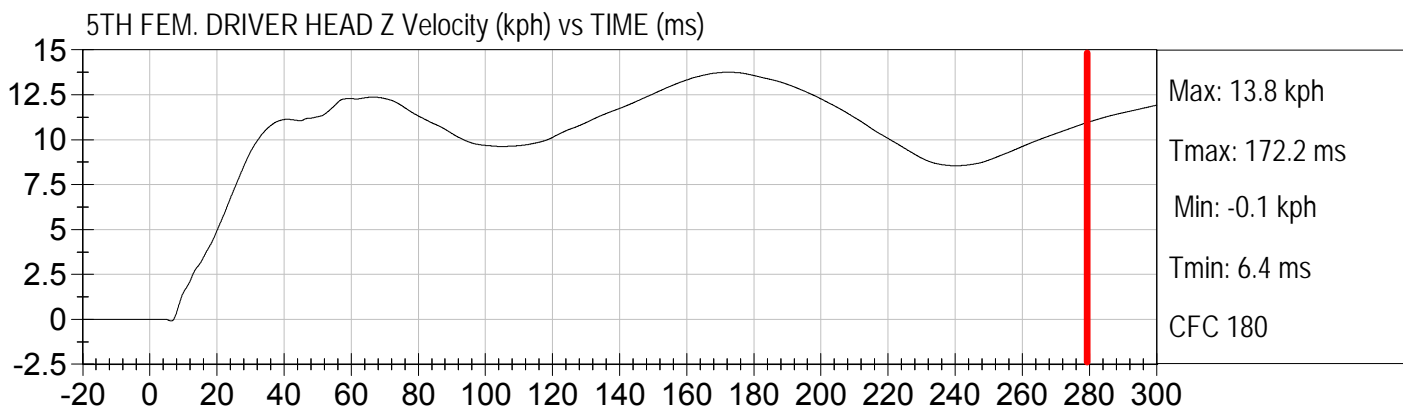
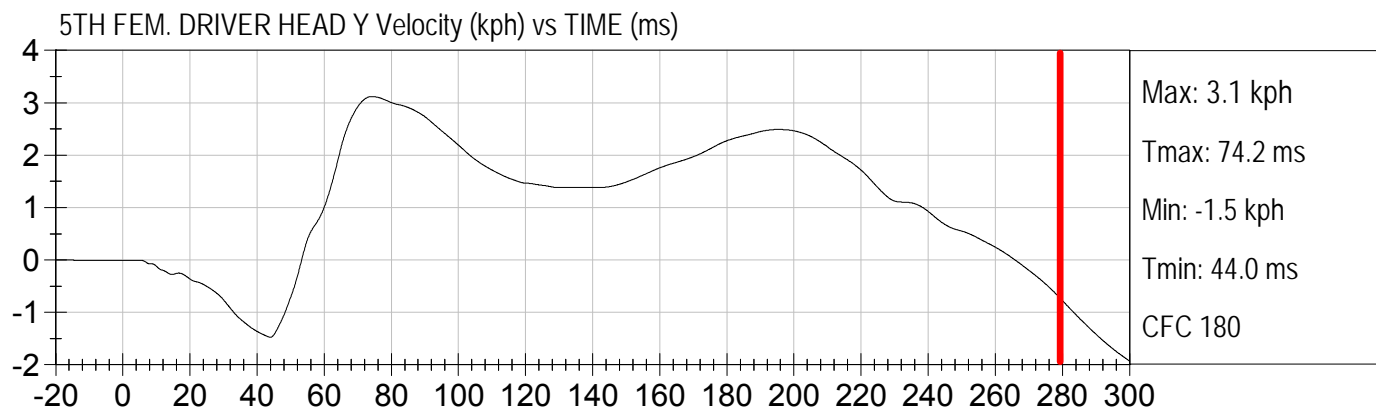
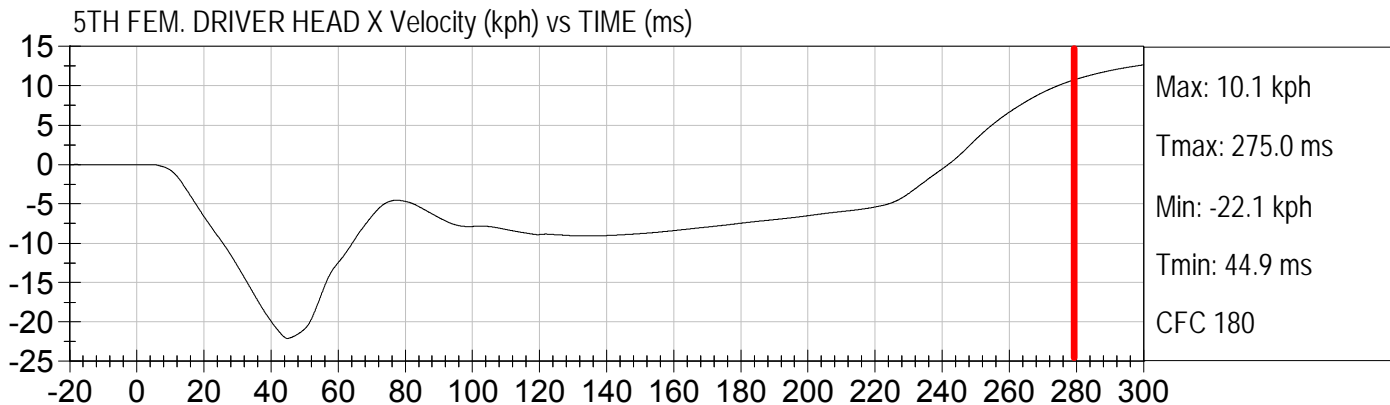


Injury Values Calculated between 0ms and 275ms



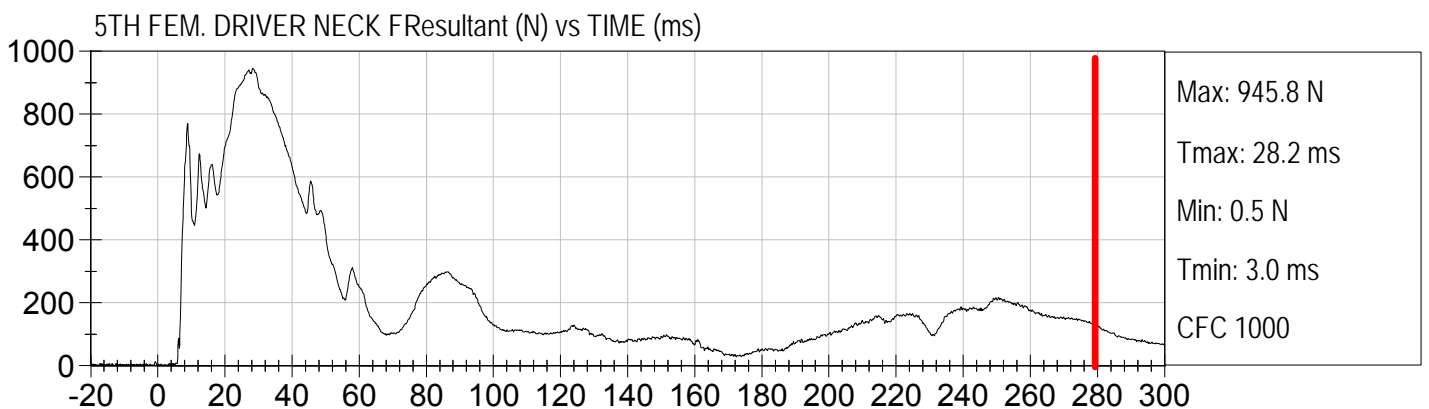
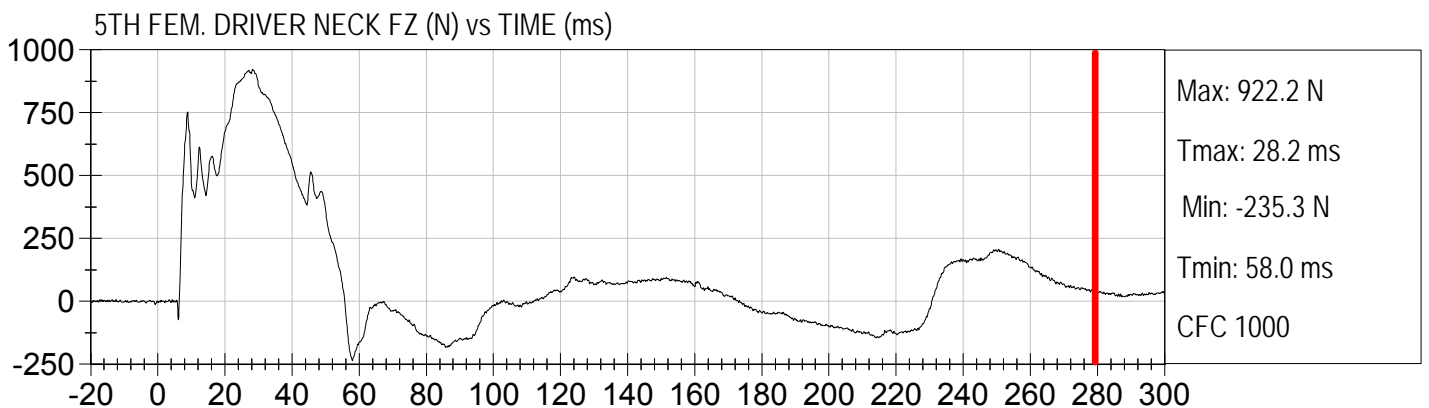
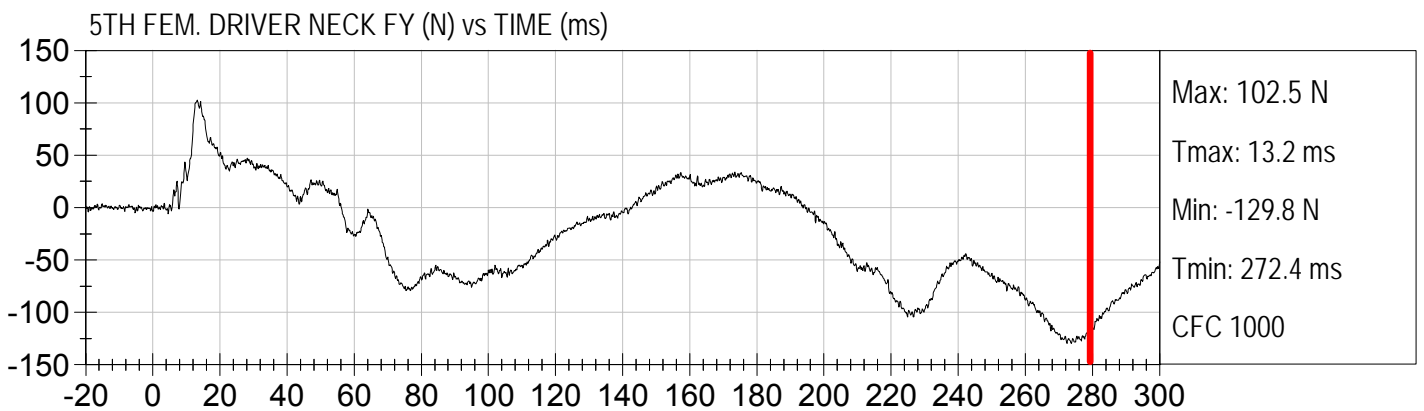
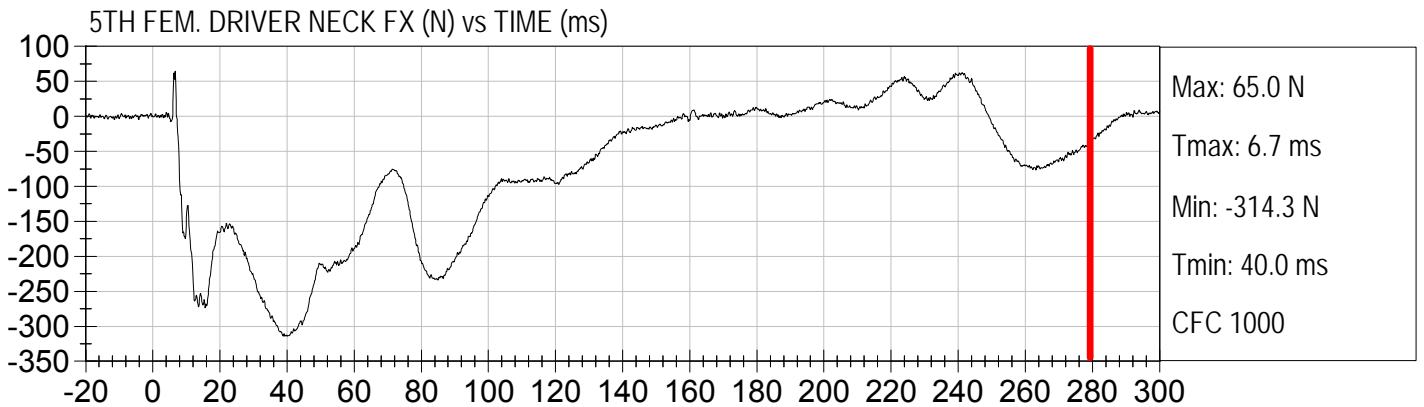


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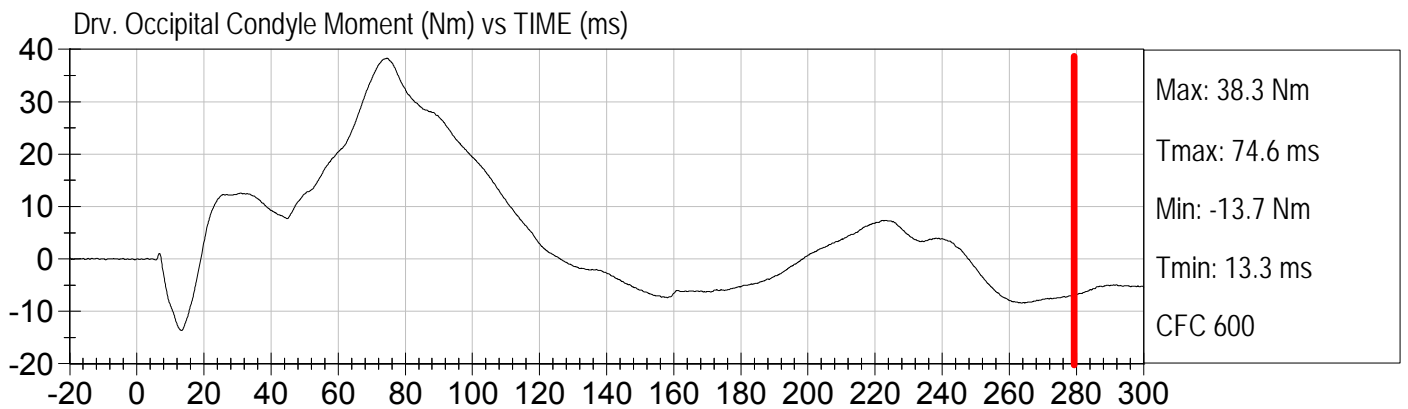
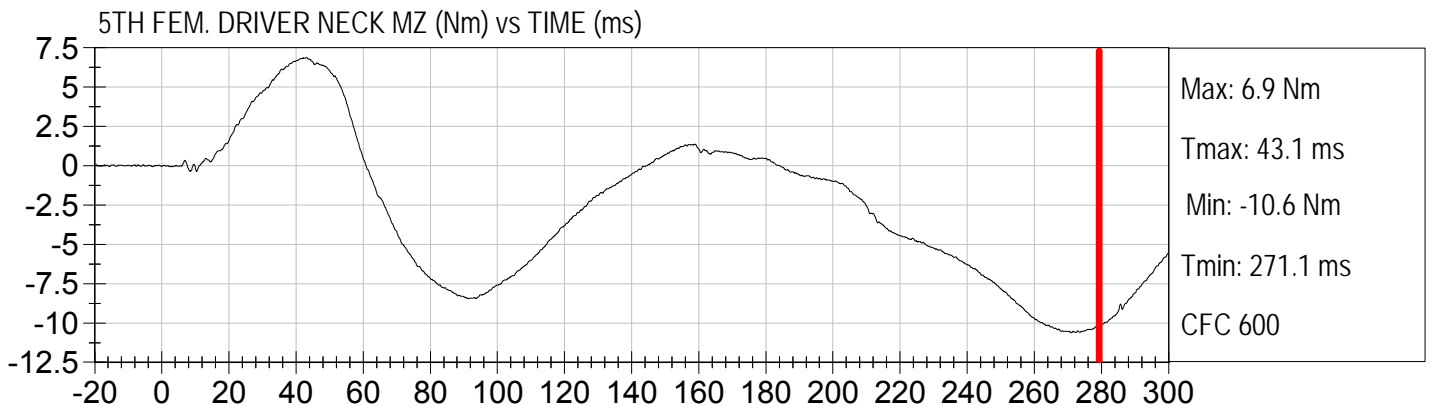
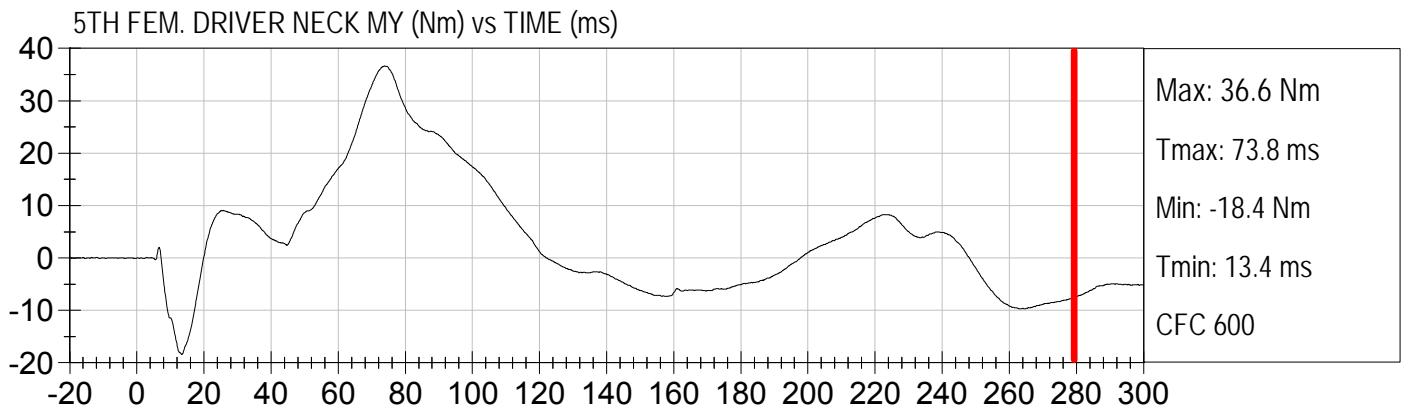
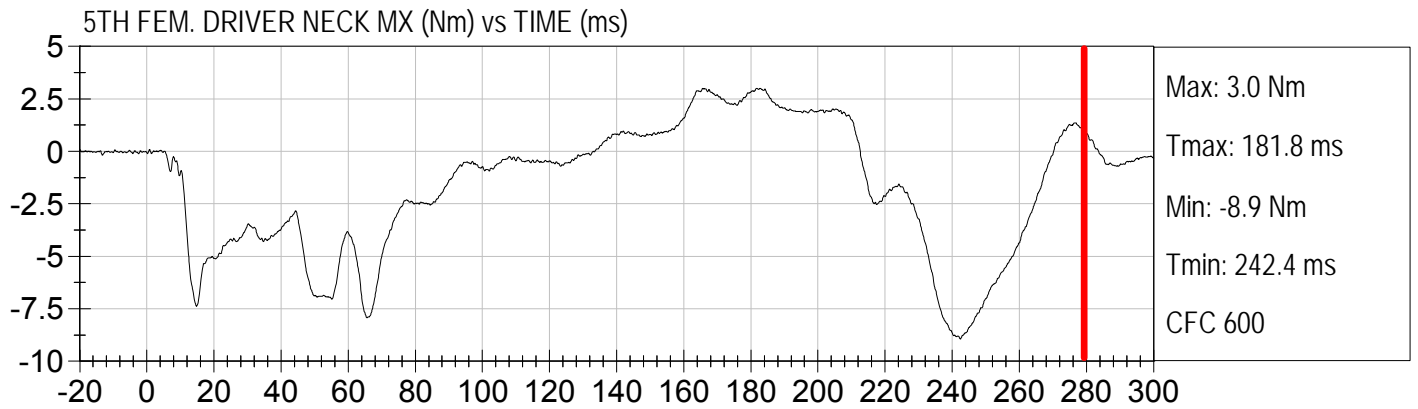


Injury Values Calculated between 0ms and 275ms



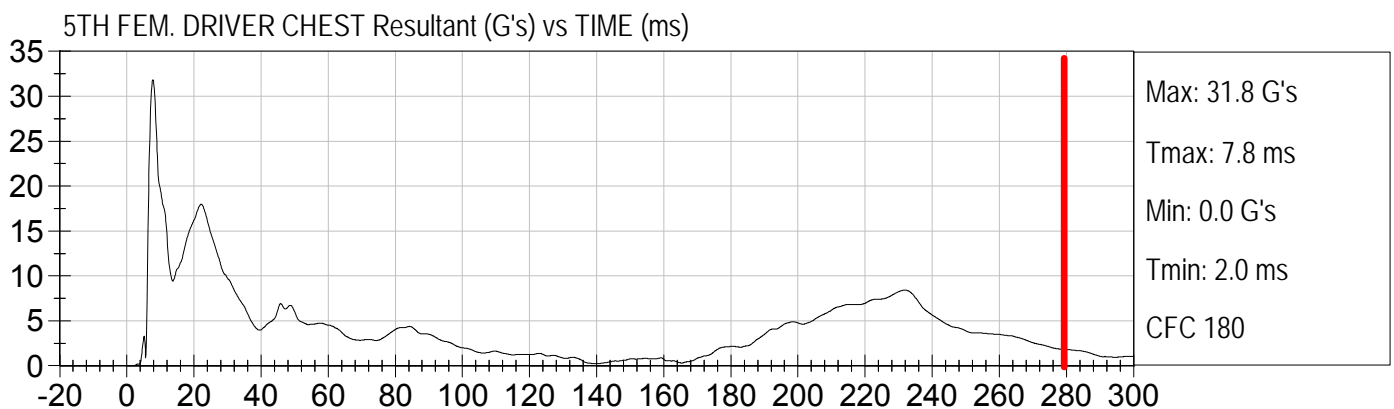
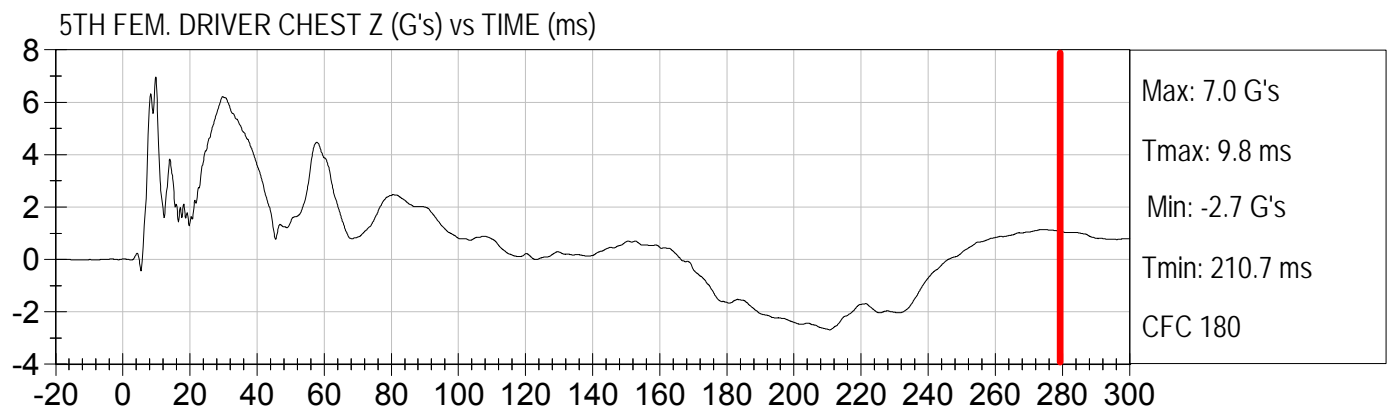
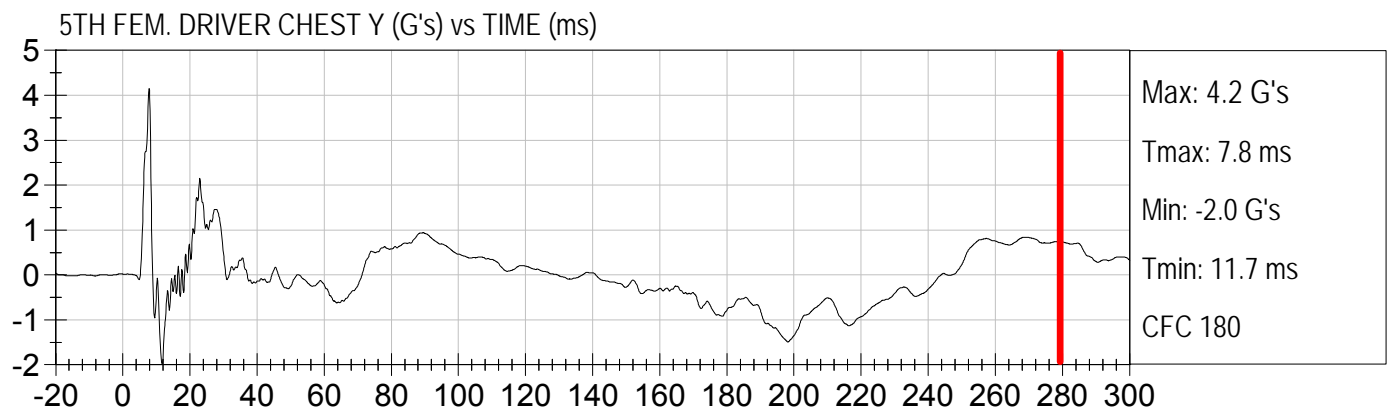
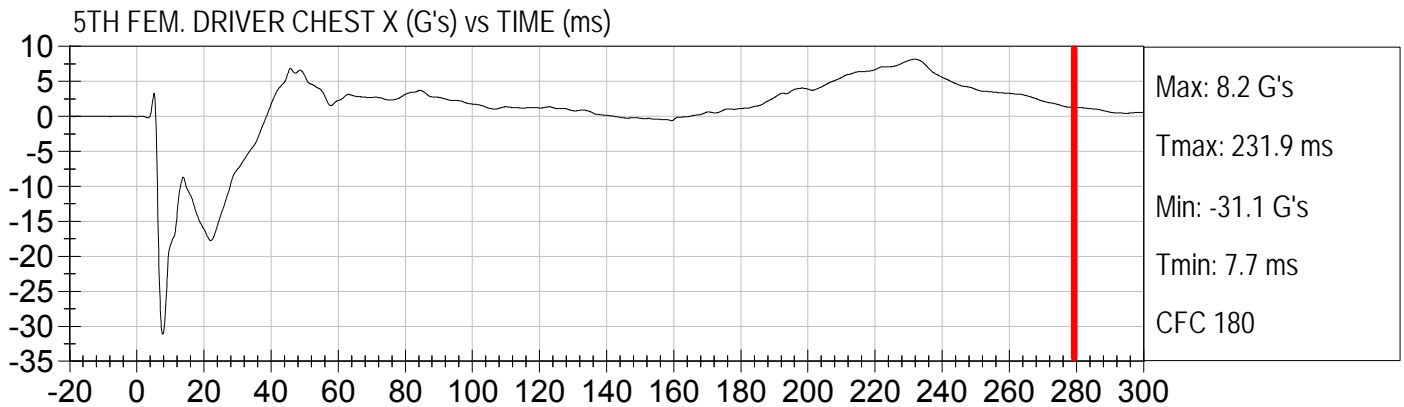


Injury Values Calculated between 0ms and 275ms



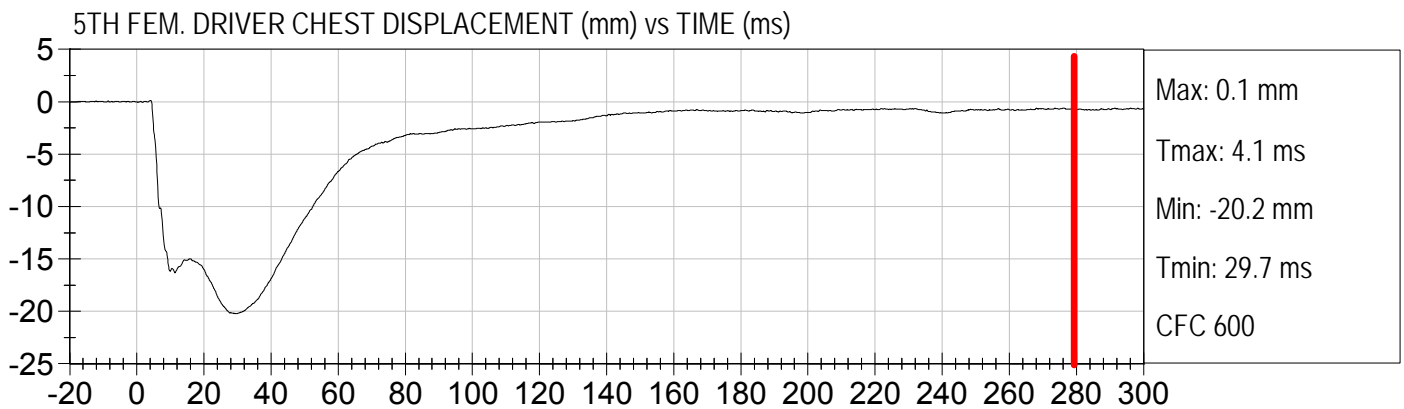
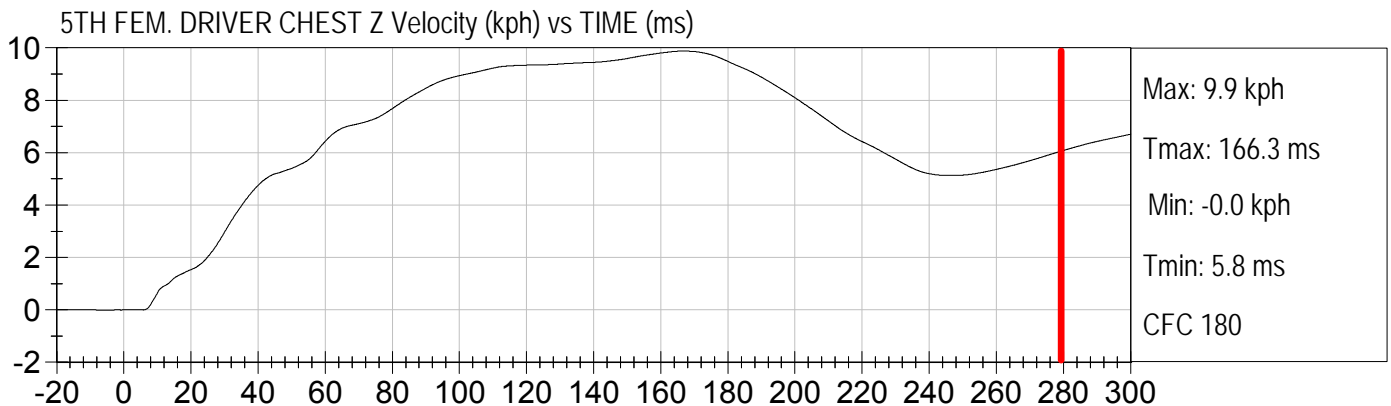
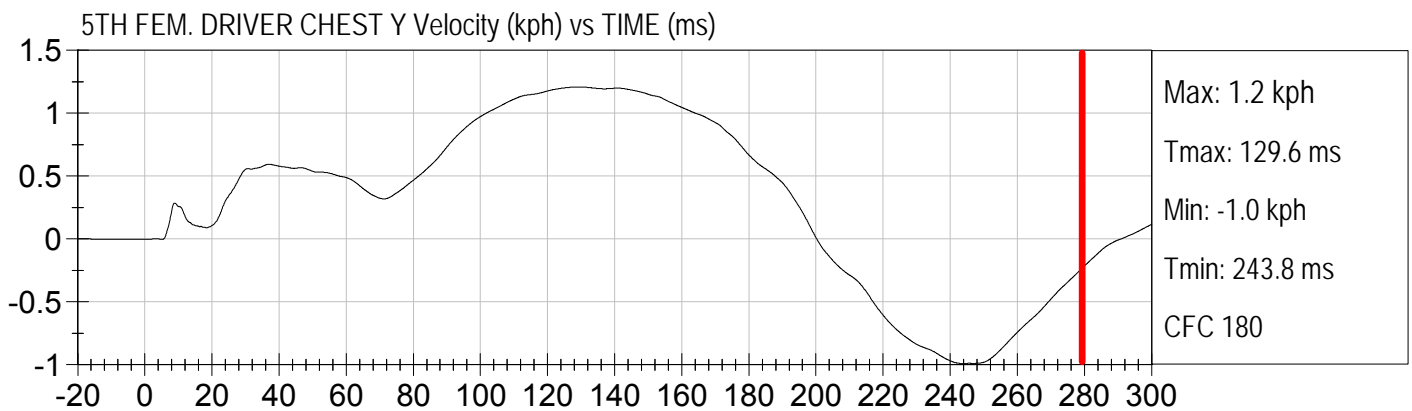
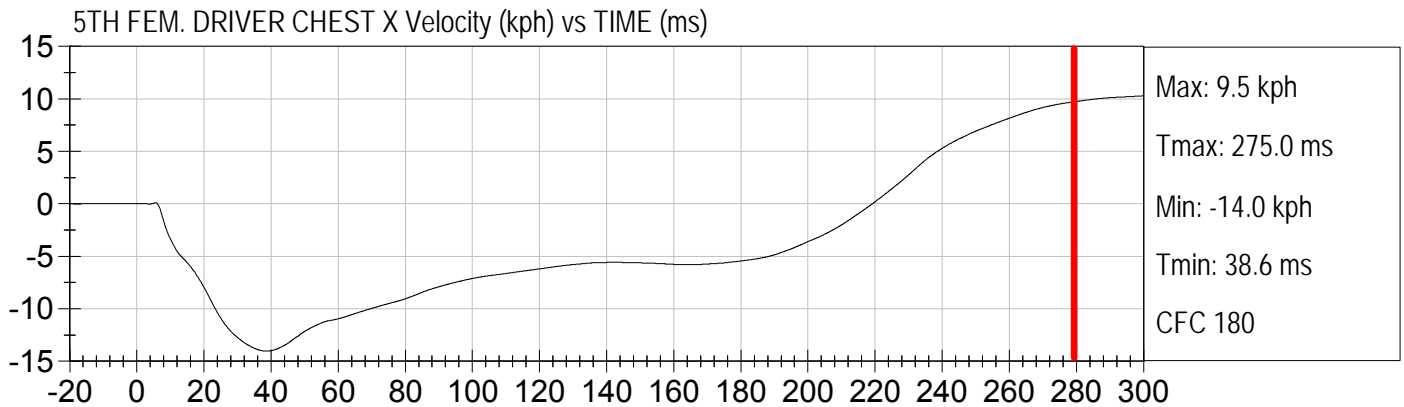


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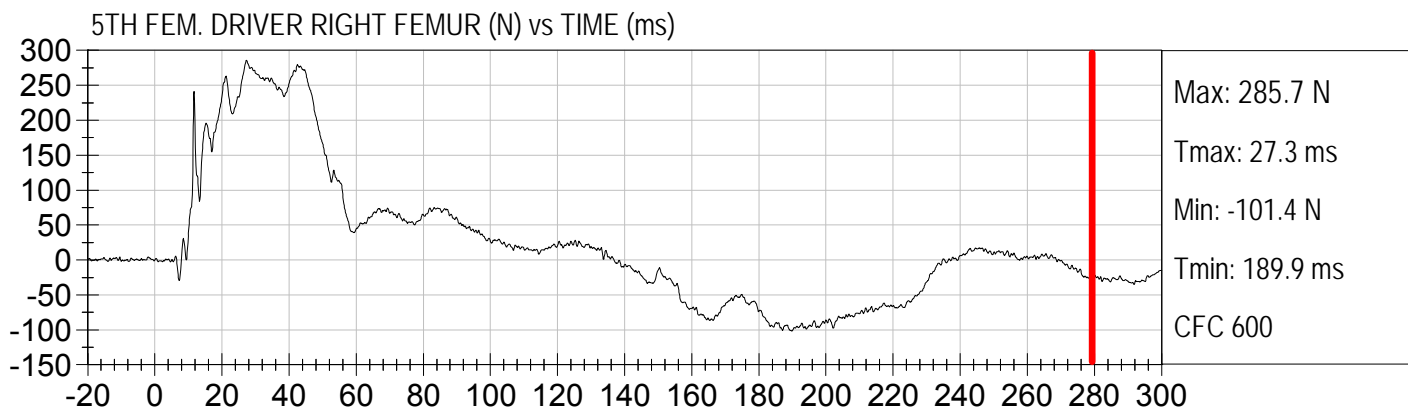
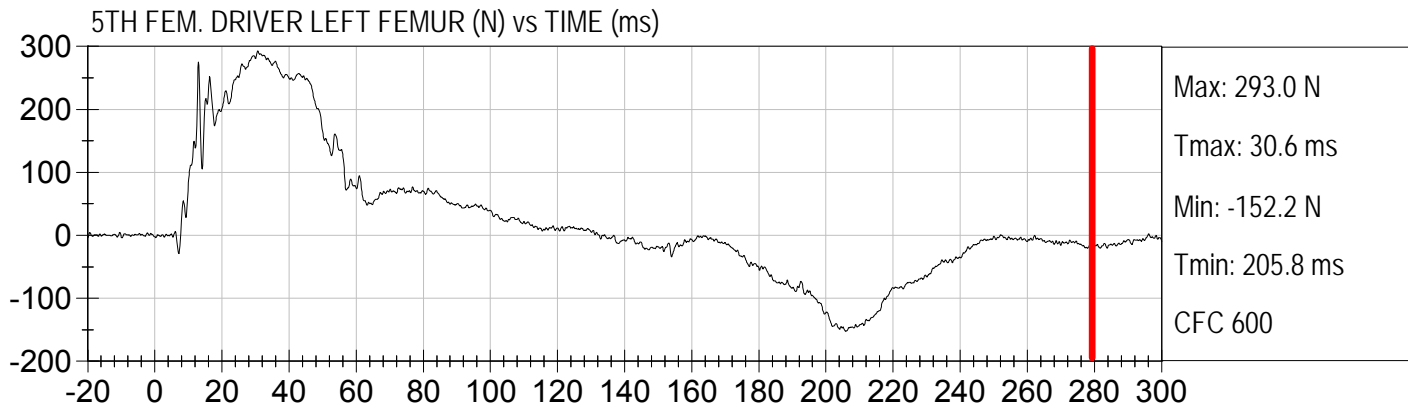


Injury Values Calculated between 0ms and 275ms



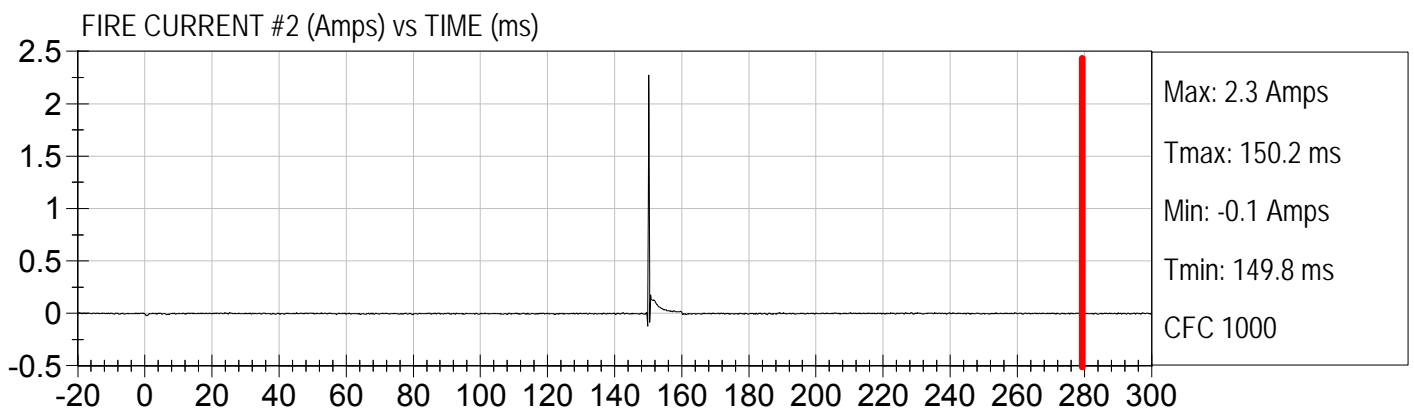
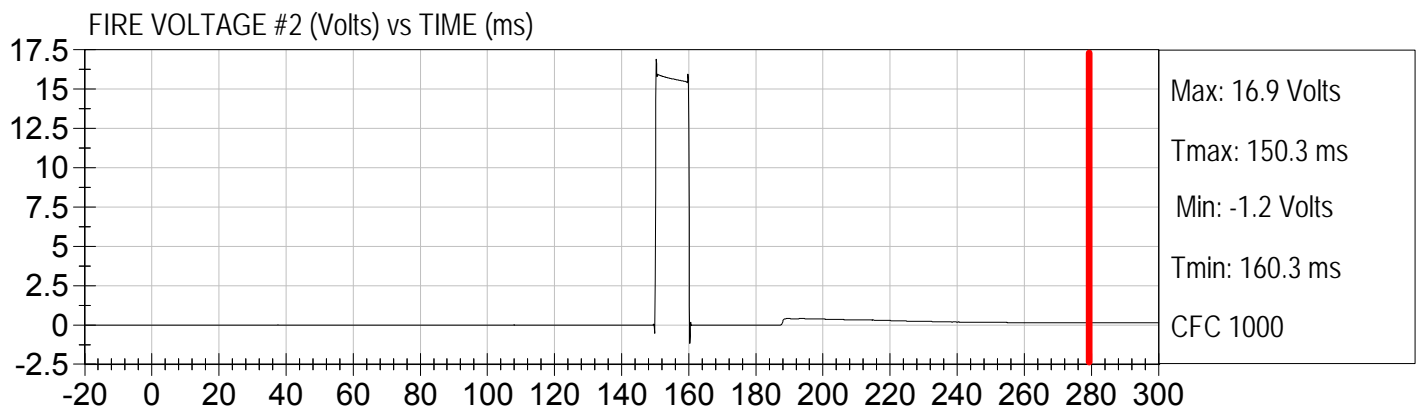
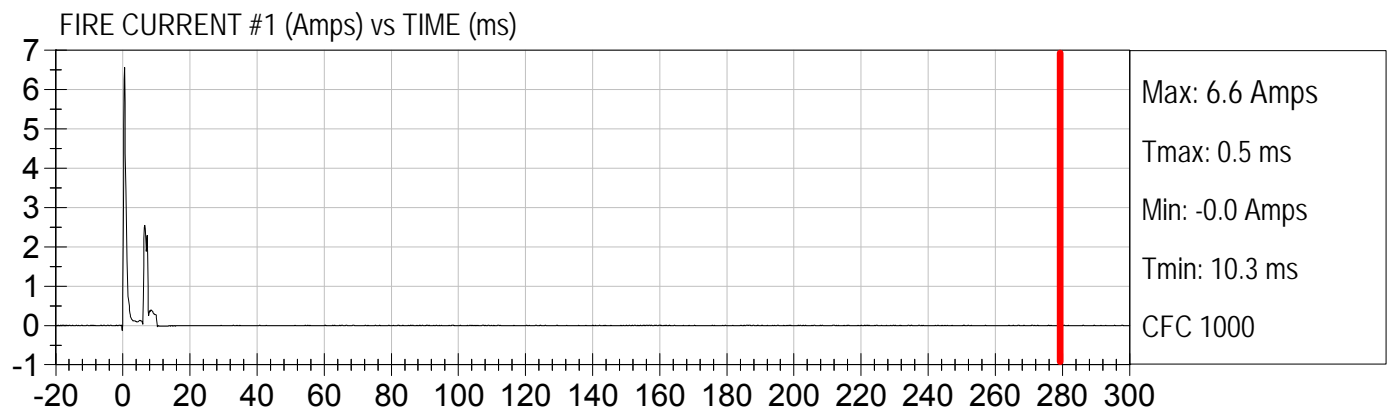
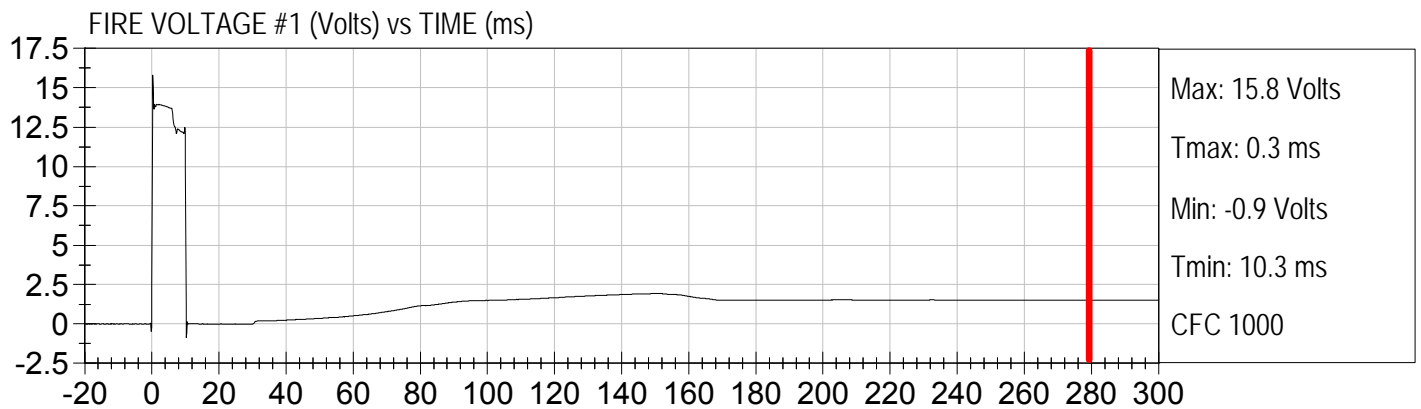


Injury Values Calculated between 0ms and 275ms



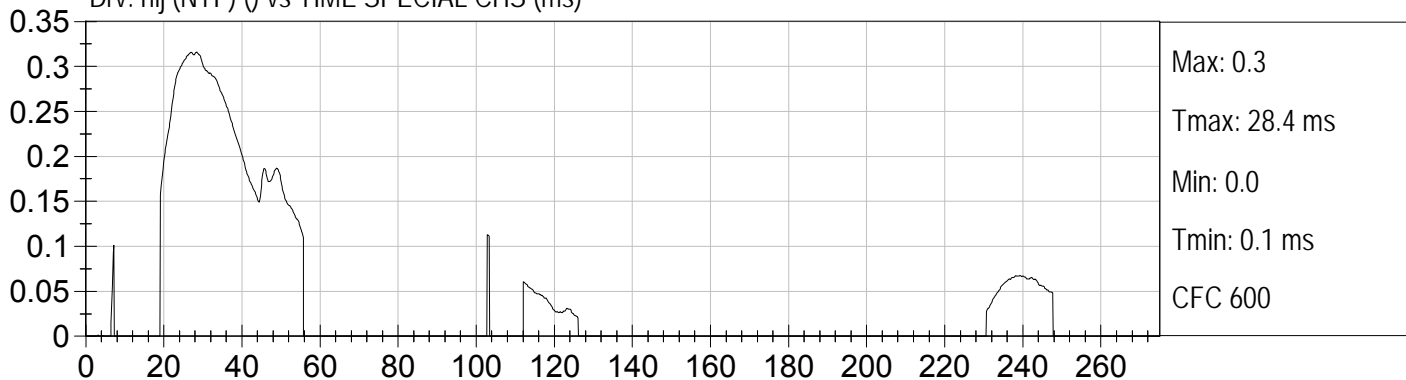


Injury Values Calculated between 0ms and 275ms

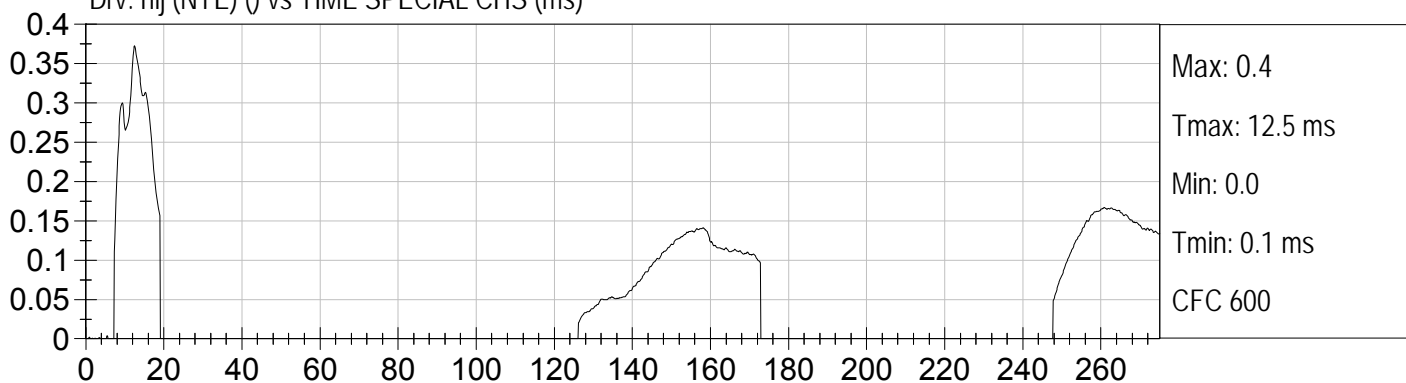




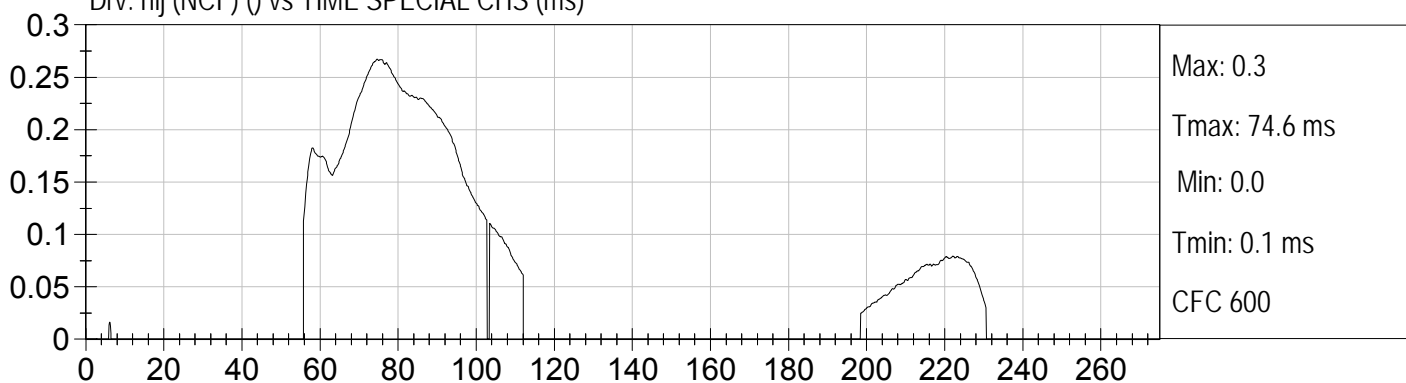
Drv. nij (NTF) () vs TIME SPECIAL CHS (ms)



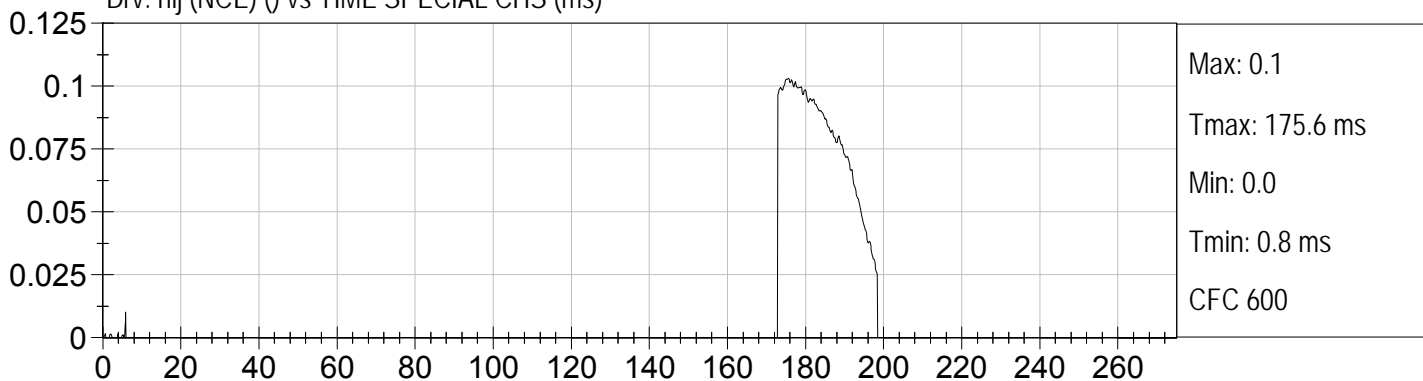
Drv. nij (NTE) () vs TIME SPECIAL CHS (ms)



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



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



APPENDIX C

CRASH TEST PHOTOGRAPHS

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MFD. BY FORD MOTOR CO. DATE: 12/12 GVWR: 2085 KG (4597 LB)
GAWR: (FR): 934 KG (2060 LB) (RR): 1200 KG (2646 LB)
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY, BUMPER,
AND THEFT PREVENTION STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.

TYPE: Passenger Car VIN: 1FADP3R48DL217777
RIM: (FR): 17x7.0J TRAILER TOWING - SEE OWNER GUIDE
TIRE: (FR): P225/50R17 93V (RR): 17x7.0J
PRESSURE: (FR): 260 kPa/ 38 PSI COLD (RR): 260 kPa/ 38 PSI COLD



EXT PNT: Z9 RC: 27 DSO:
WB | INT TR | TP/PS | R | AXLE | TR | SPR | F0025
SL | | | 8 | BS | H | BBBB
1201212135853 | UMU | ▽ 5U5A-3520472-AA

C20130200

C-1.

Vehicle Certification Label

C-2.



TIRE AND LOADING INFORMATION

SEATING CAPACITY TOTAL : 5 FRONT: 2 REAR: 3

The combined weight of occupants and cargo should never exceed : 375 kg or 827 lbs.

5U5A-1532-AA (TLU)

TIRE	SIZE	COLD TIRE PRESSURE
FRONT	P225/50R17 93V	260 KPA, 38 PSI
REAR	P225/50R17 93V	260 KPA, 38 PSI
SPARE	NONE	NONE

SEE OWNERS MANUAL FOR ADDITIONAL INFORMATION

1FADP3R48DL217777



C20130200

Tire Placard

C-3.



Pre-Test Front View of Test Vehicle

C-4.



Post-Test Front View of Test Vehicle

C-5.



Pre-Test Left Side View of Test Vehicle

C-6.



Post-Test Left Side View of Test Vehicle

C-7.



Pre-Test Right Side View of Test Vehicle

C-8.



Post-Test Right Side View of Test Vehicle

C-9.



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



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

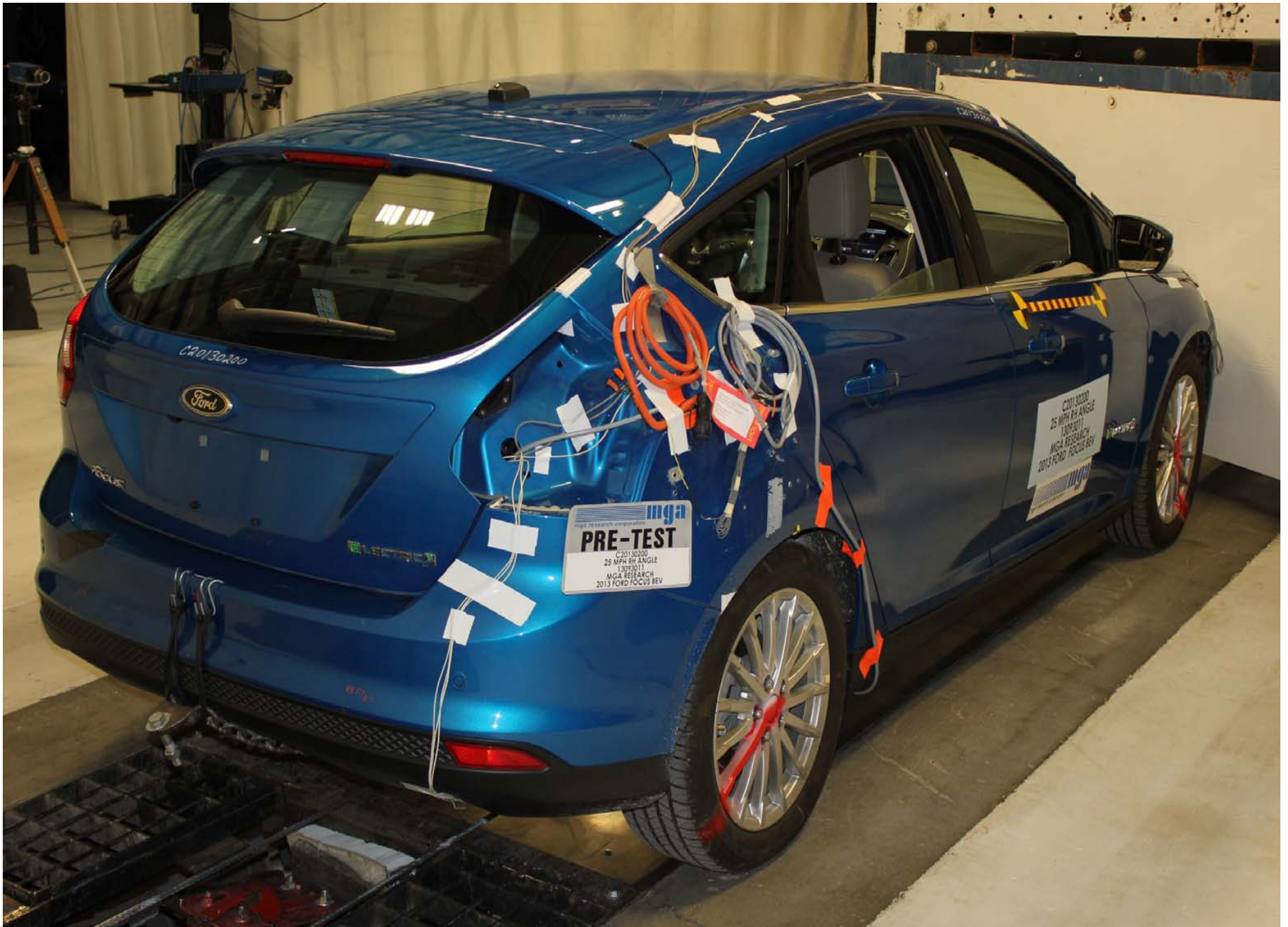
C-11.



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



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



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



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



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



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

C-17.



Pre-Test Rear View of Test Vehicle



Post-Test Rear View of Test Vehicle

C-19.



Pre-Test Windshield View



Post-Test Windshield View

C-21.



Pre-Test Engine Compartment View

C-22.



Post-Test Engine Compartment View



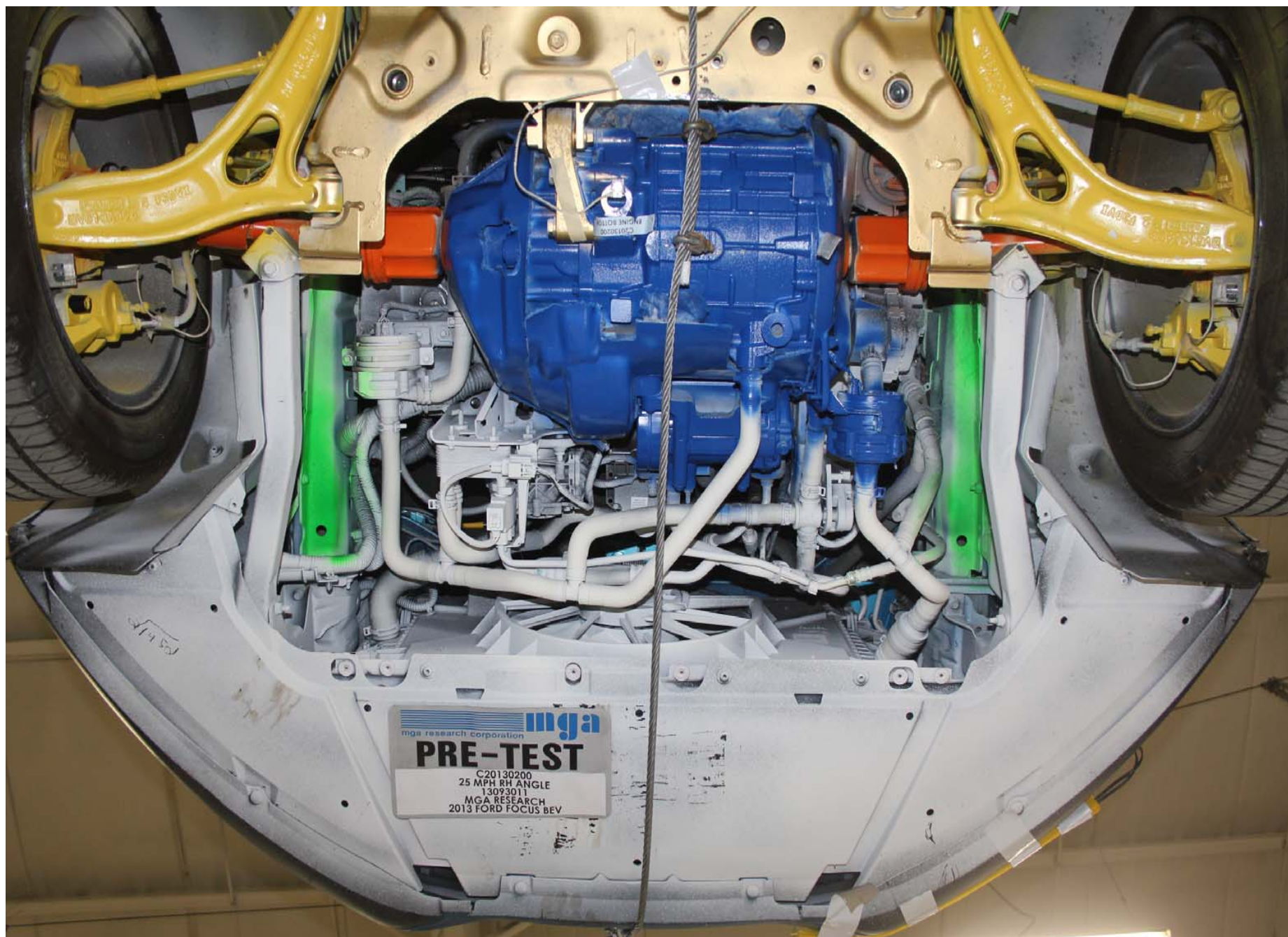
Pre-Test Fuel Filler Cap View

 **mga**
mga research corporation
POST-TEST
C20130200
25 MPH RH ANGLE
13093011
MGA RESEARCH
2013 FORD FOCUS BEV

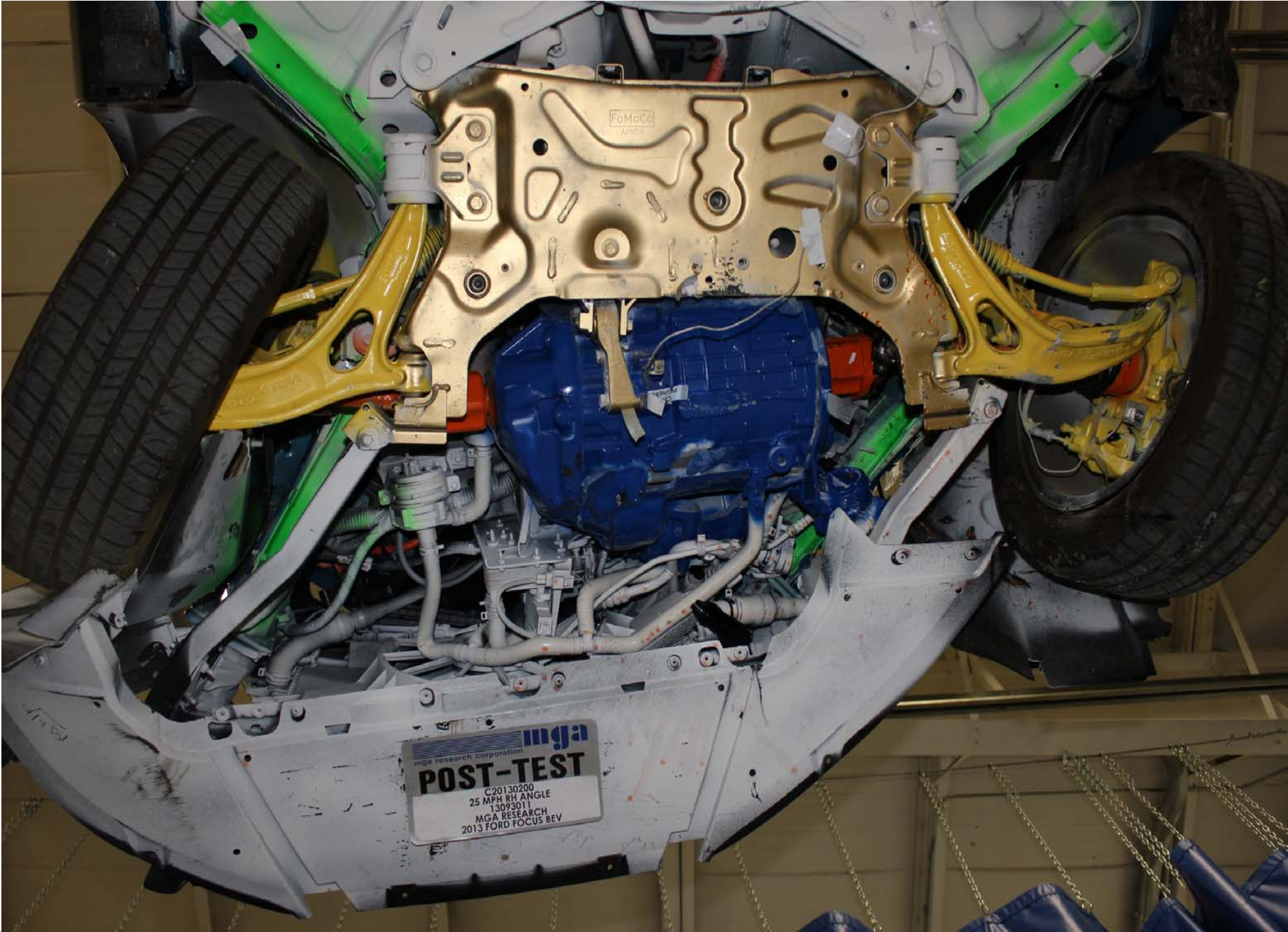


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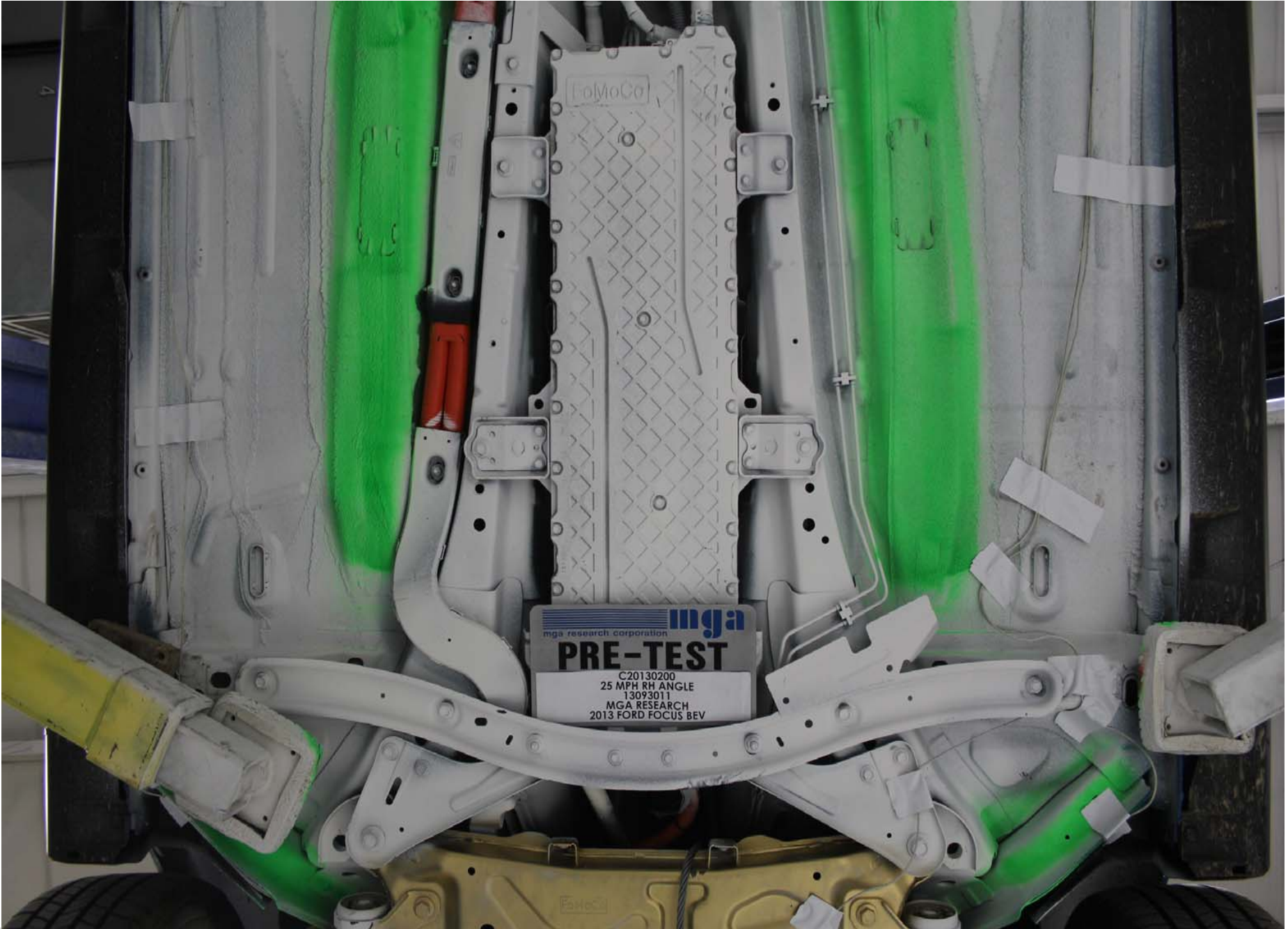
Post-Test Fuel Filler Cap View



Pre-Test Front Underbody View

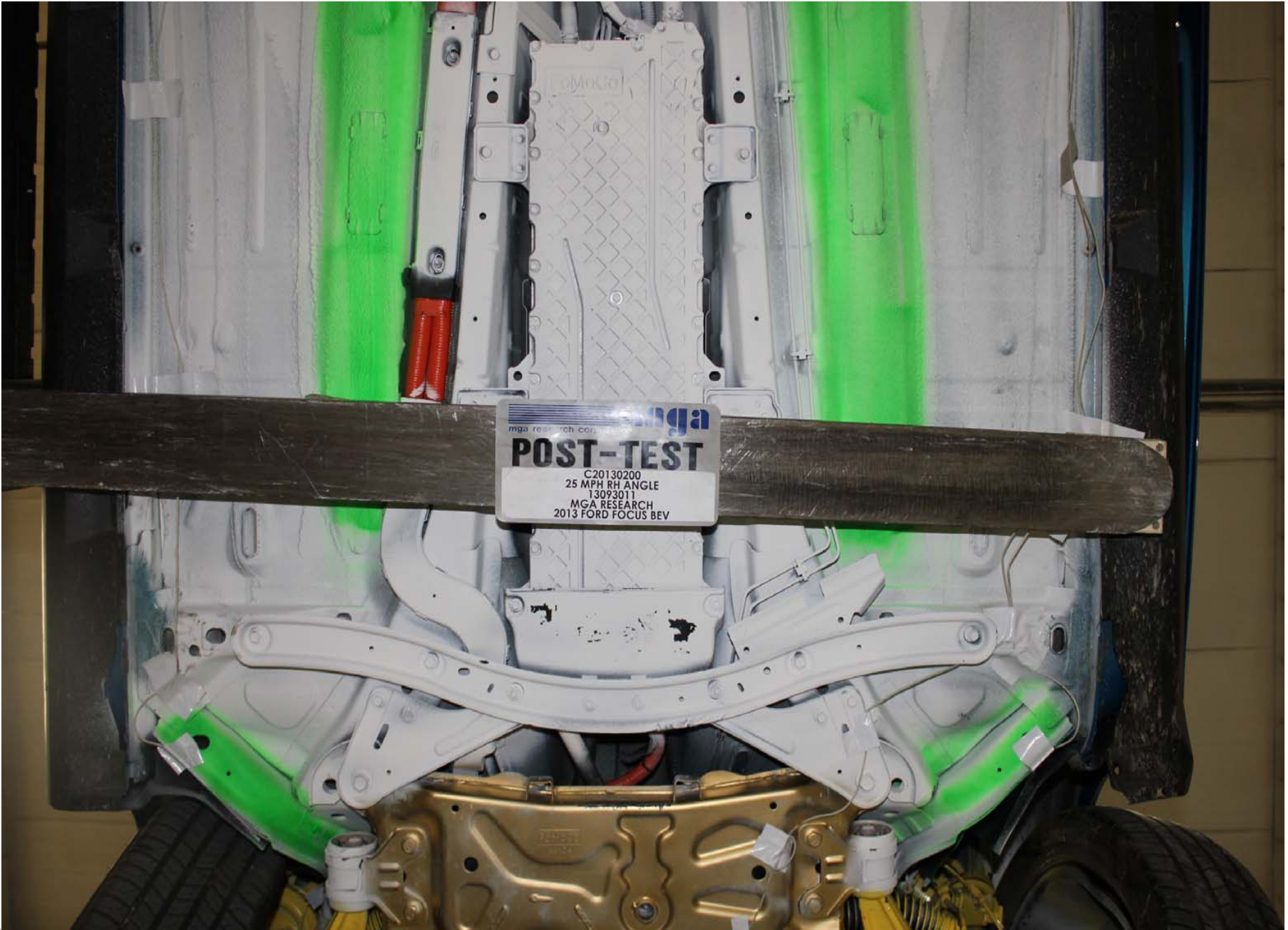


Post-Test Front Underbody View



C-27.

Pre-Test Mid Underbody View



Post-Test Mid Underbody View



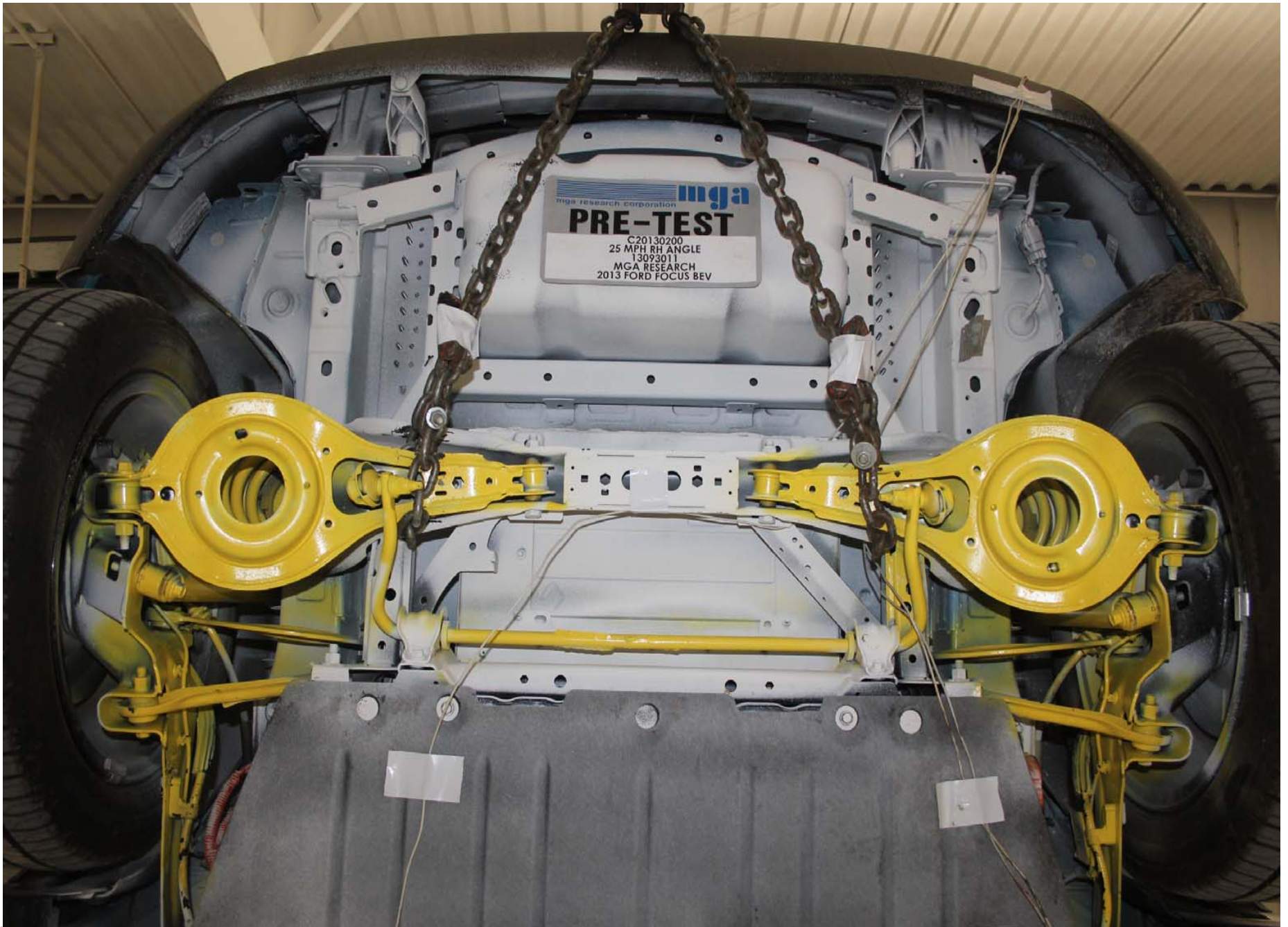
Pre-Test Mid Rear Underbody View

C-30.

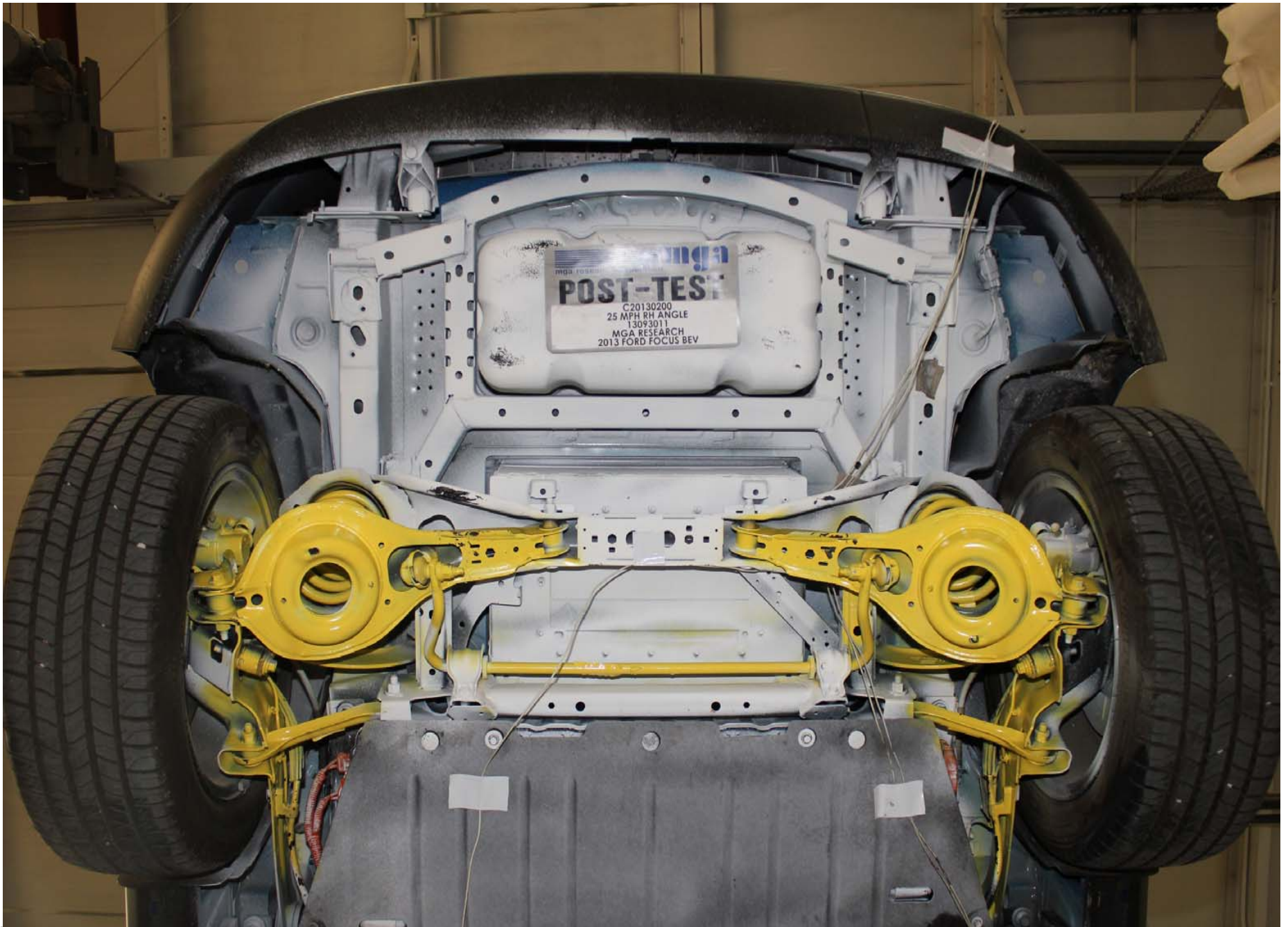


Post-Test Mid Rear Underbody View

C-31.



Pre-Test Rear Underbody View



Post-Test Rear Underbody View



Pre-Test Driver Dummy Front View (head position)

C-34.



Post-Test Driver Dummy Front View (head position)



Pre-Test Driver Dummy Position Left Side View



Post-Test Driver Dummy Position Left Side View



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



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



Pre-Test Driver Dummy Seat Position

C-40.



Post-Test Driver Dummy Seat Position

C-41.



Pre-Test Driver Dummy Feet Position

C-42.



Post-Test Driver Dummy Feet Position



Pre-Test Driver Side Knee Bolster View

C-44.



Post-Test Driver Side Knee Bolster View



Post-Test Driver Dummy Airbag Contact



Post-Test Driver Dummy Head Contact (visor)

C-47.



Post-Test Driver Dummy Head Contact (rearview mirror)

C-48.



Post-Test Driver Dummy Knee Contact

C-49.



Pre-Test Passenger Dummy Front View (head position)

C-50.



Post-Test Passenger Dummy Front View (head position)

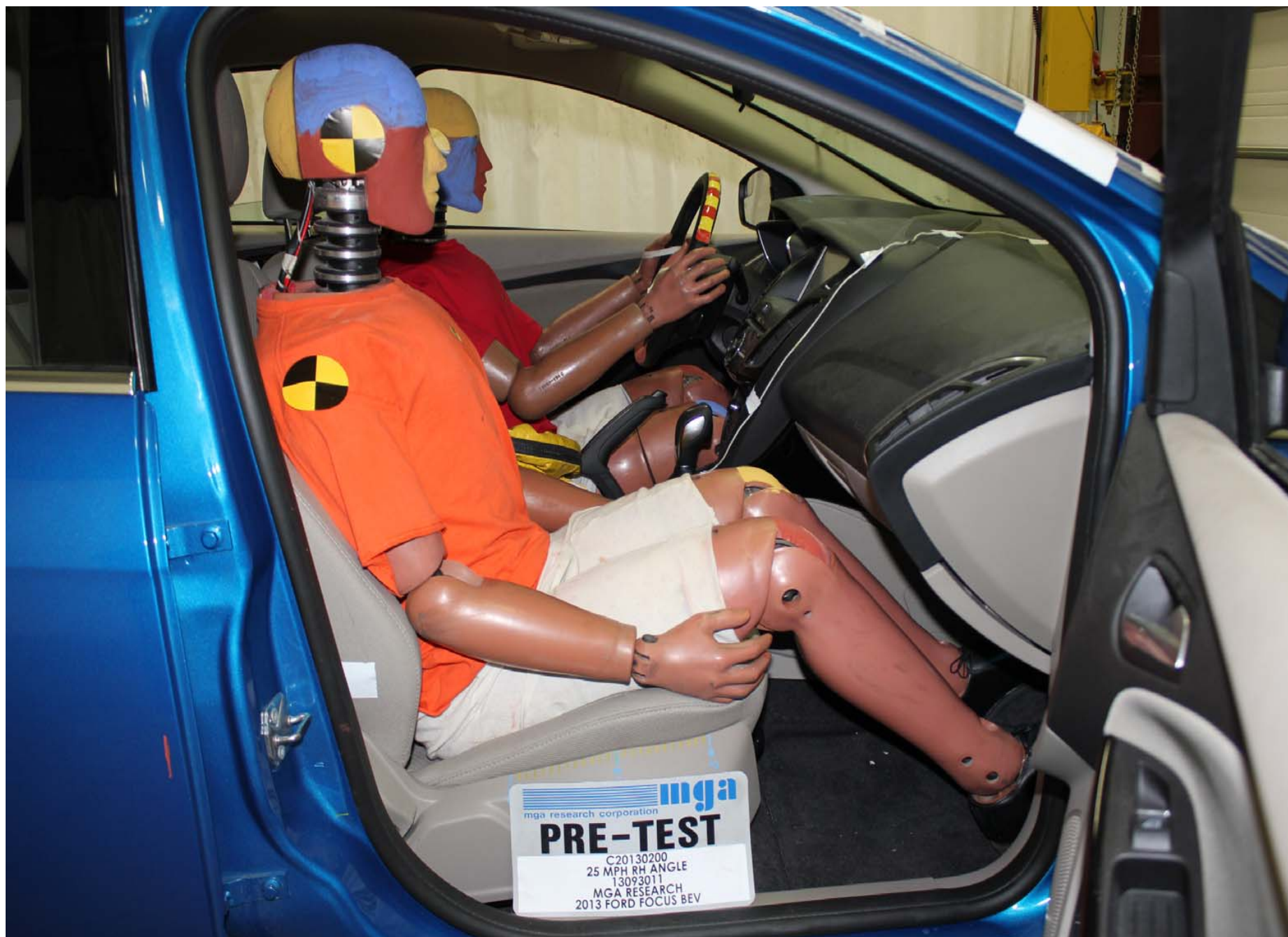
C-51.



Pre-Test Passenger Dummy Position Right Side View



Post-Test Passenger Dummy Position Right Side View



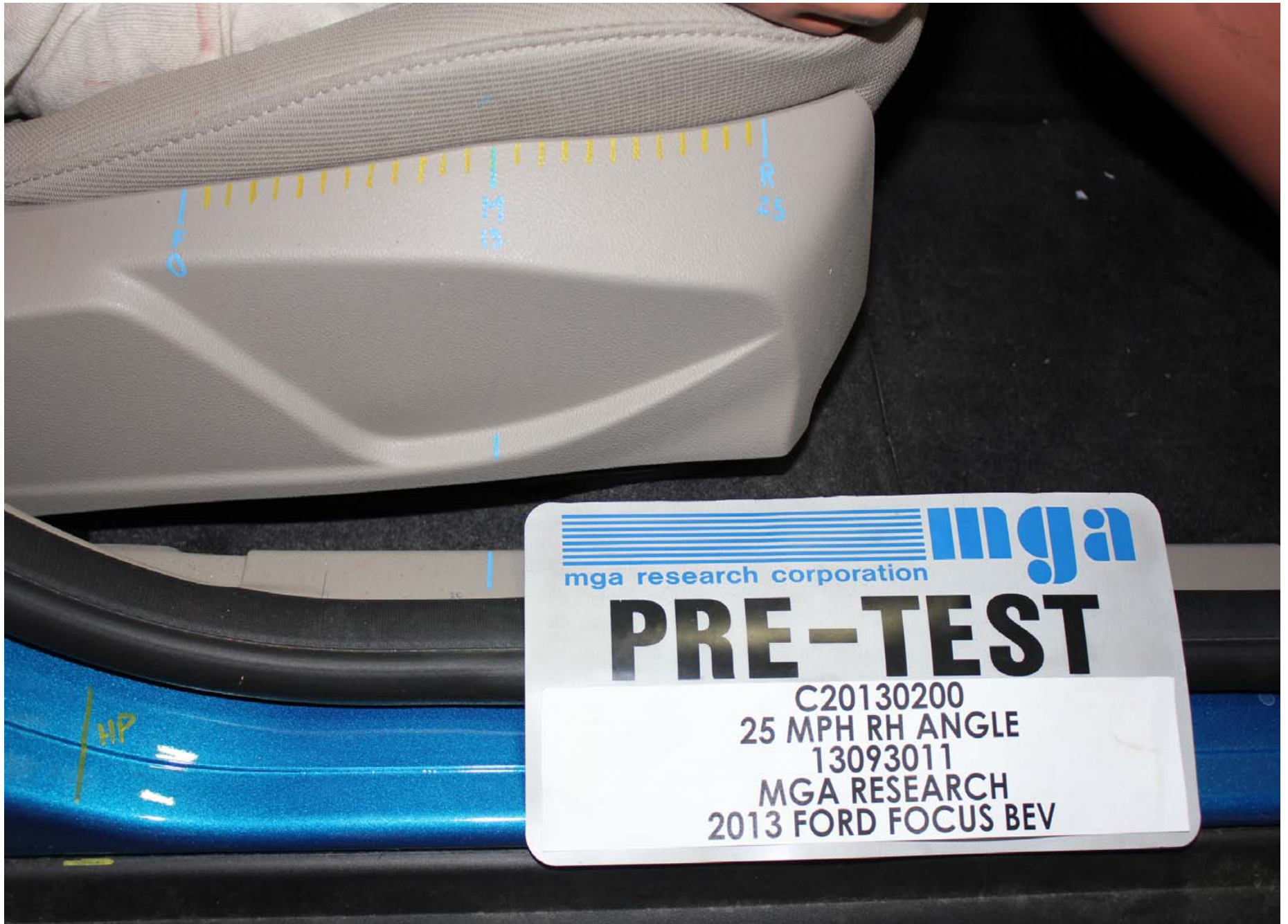
Pre-Test Passenger Dummy Position Right Side View (door open)

C-54.

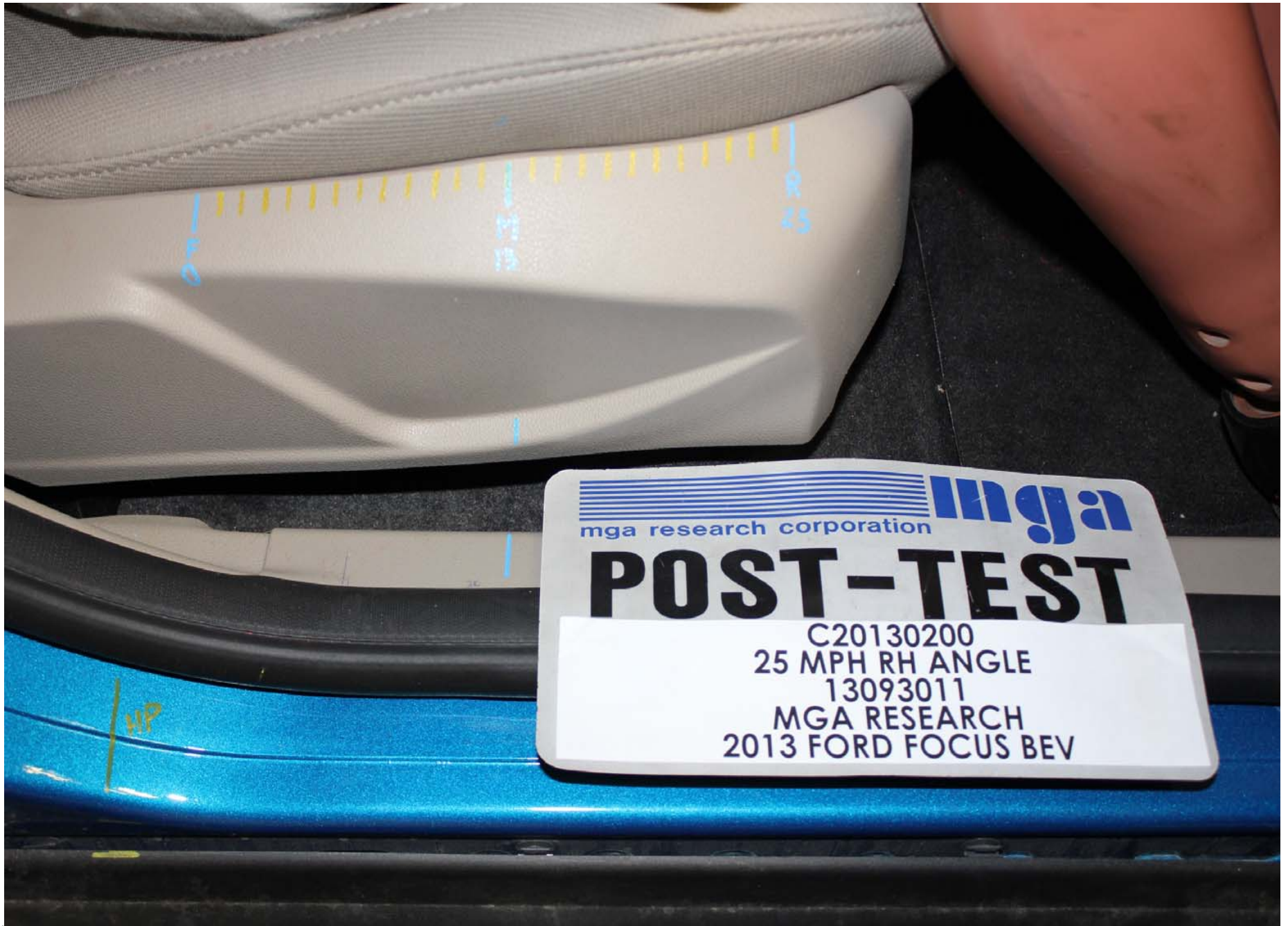


Post-Test Passenger Dummy Position Right Side View (door open)

C-55.



Pre-Test Passenger Dummy Seat Position



Post-Test Passenger Dummy Seat Position

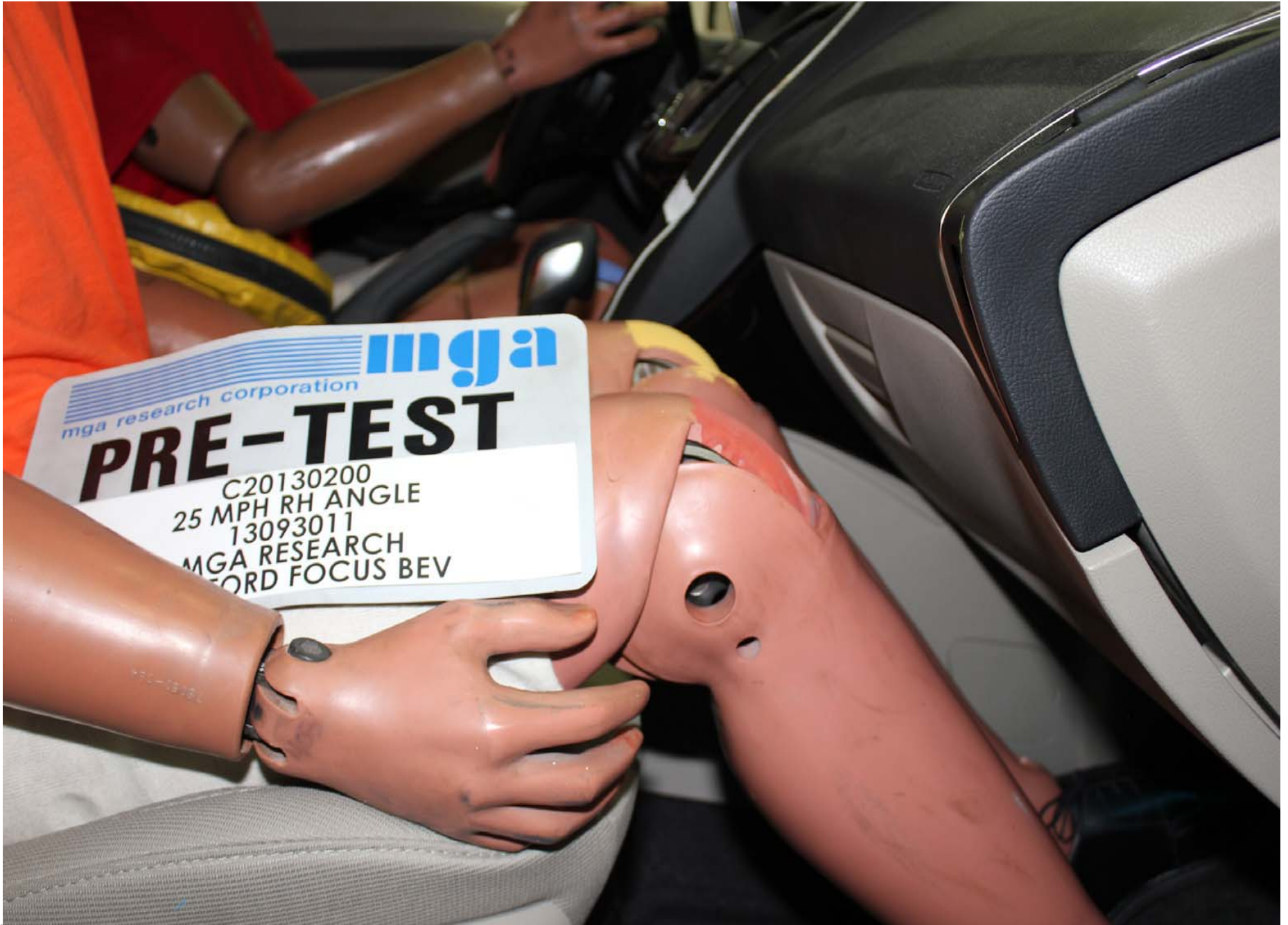
C-57.



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

C-61.



Post-Test Passenger Dummy Airbag Contact

C-62.



Post-Test Passenger Dummy Head Contact (A-post/headliner)

C-63.



Post-Test Passenger Dummy Knee Contact

C-64.



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25 MPH RH ANGLE
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Rollover 90 Degrees



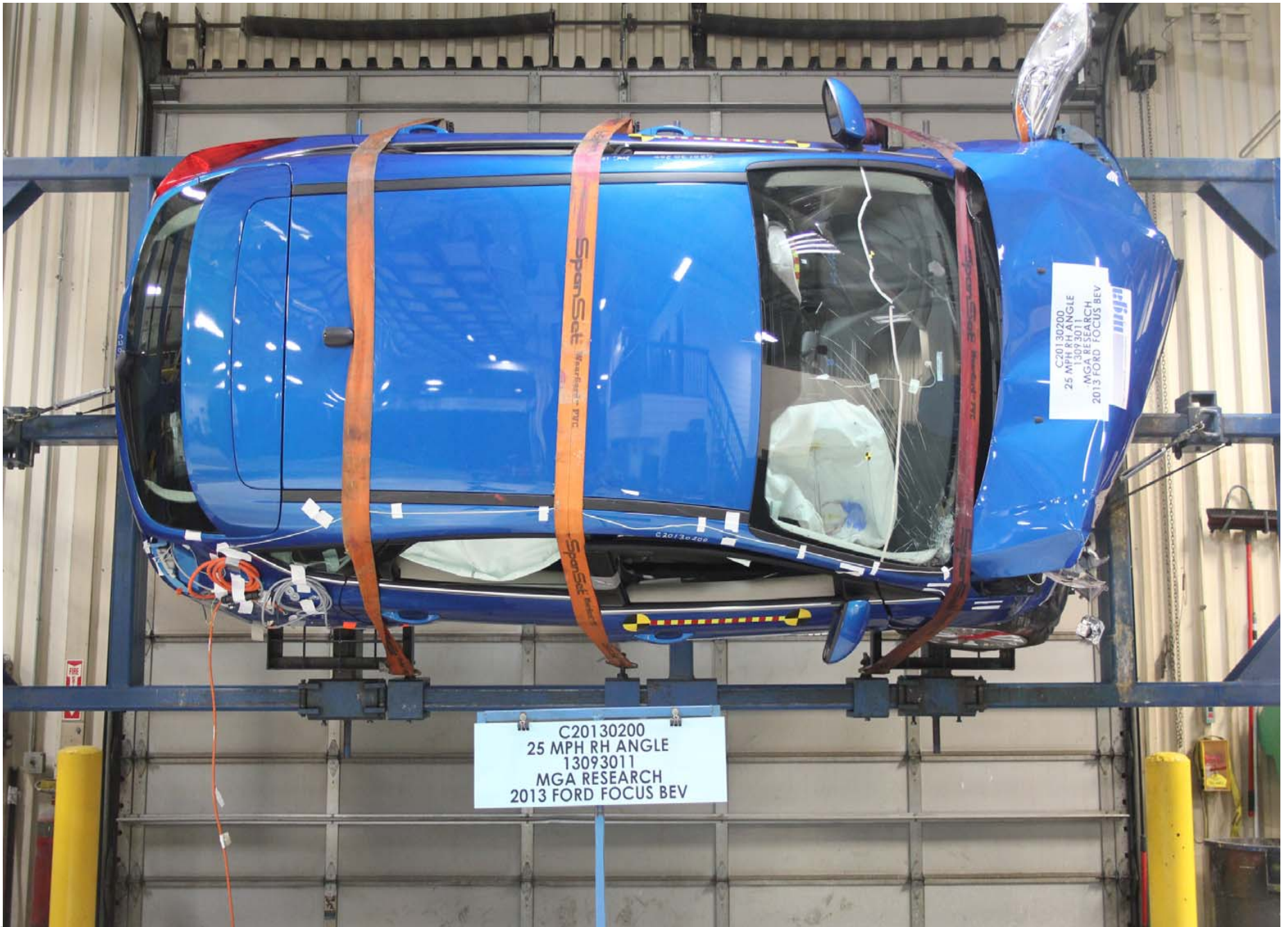
C20130200
25 MPH RH ANGLE
13093011
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2013 FORD FOCUS BEV

C20130200
25 MPH RH ANGLE
13093011
MGA RESEARCH
2013 FORD FOCUS BEV

C-65.

Rollover 180 Degrees

C-66.



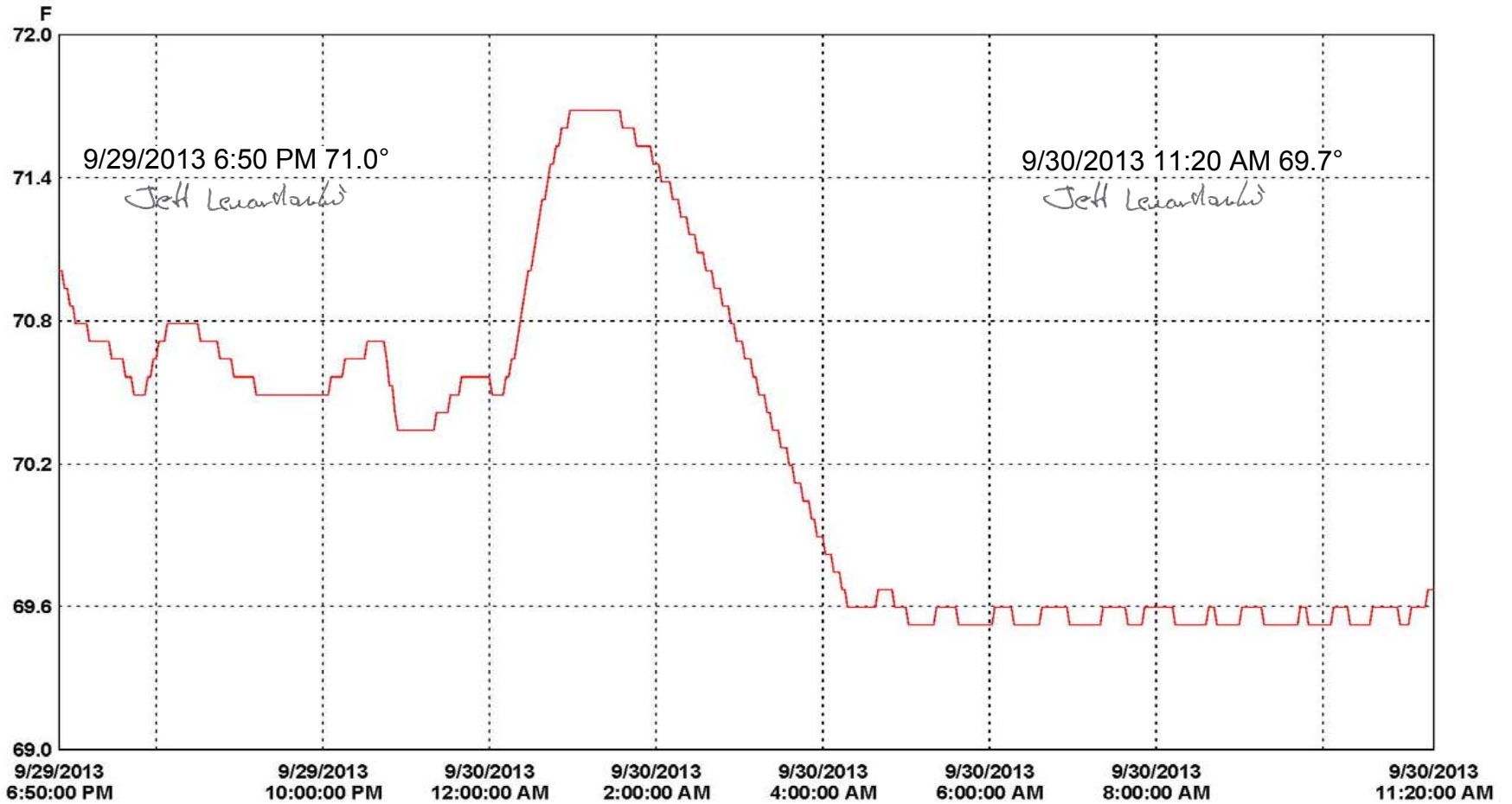
Rollover 270 Degrees

C-67.



Rollover 360 Degrees

C-68.

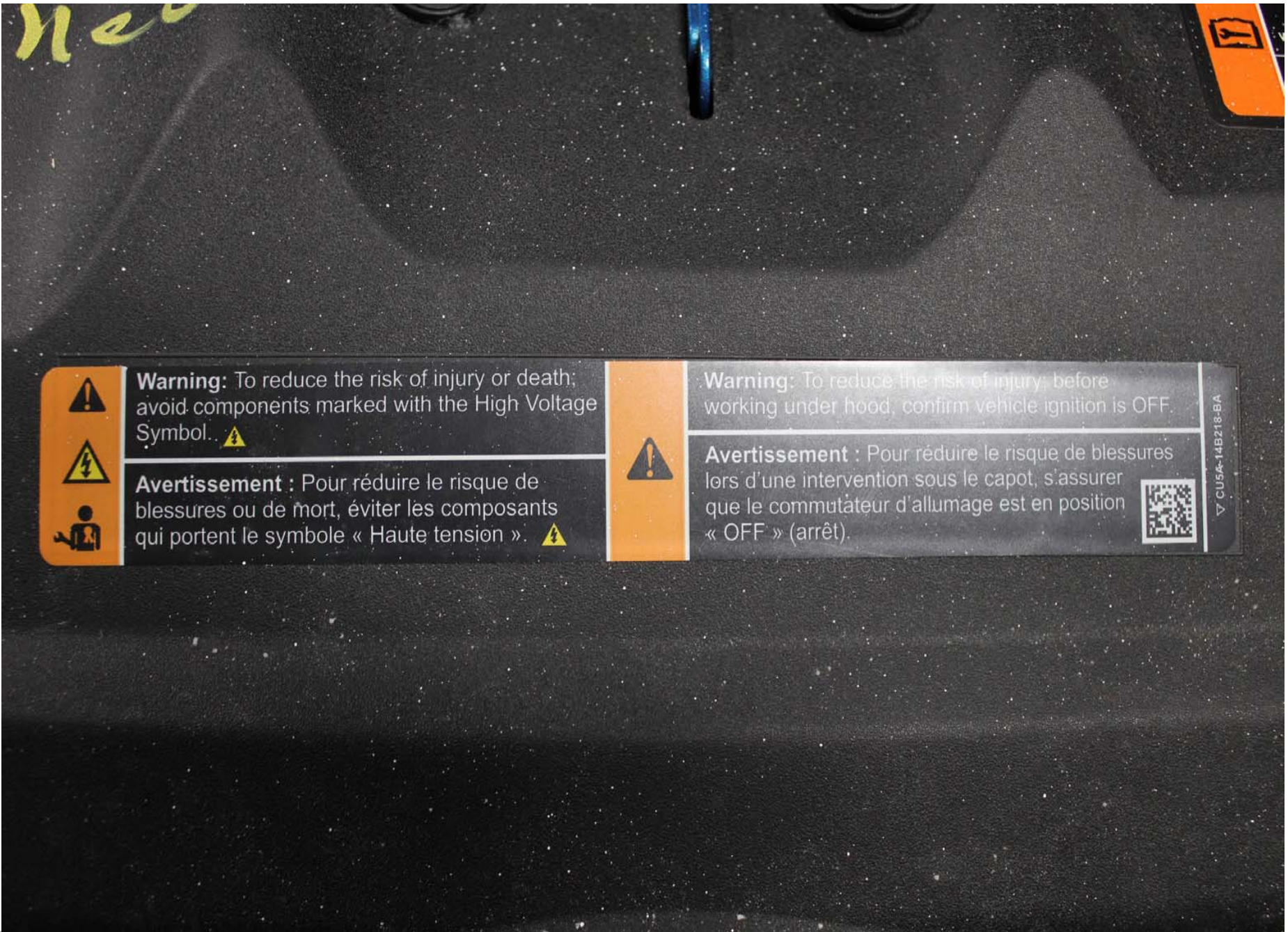


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LN	Logger file	ID #	Security	Created by	Creation time
1	C:\Program Files (x86)\Veriteq Instruments\wLog 4.4\Prep 2013\10102162_MGATemp_10102162.spl				

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



High Voltage Warning Label

C-70.



Pre-Test Passenger Compartment Adjacent to Electric Energy Storage System

C-71.



Post-Test Passenger Compartment Adjacent to Electric Energy Storage System



Pre-Test Manual High Voltage Service Disconnect in Place



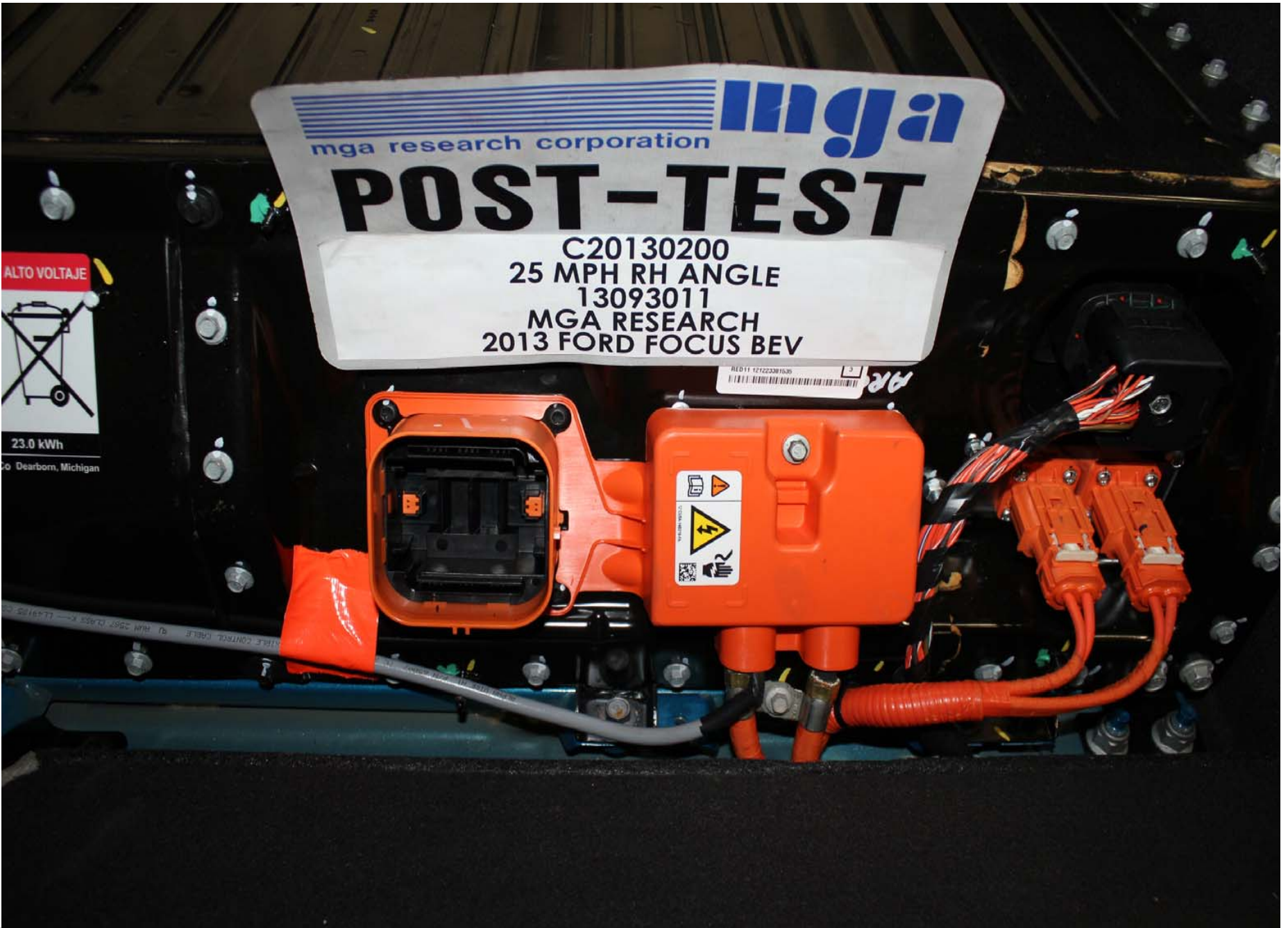
C-73.

Post-Test Manual High Voltage Service Disconnect in Place

C-74.



Pre-Test Manual High Voltage Service Disconnect Removed



C-75.

Post-Test Manual High Voltage Service Disconnect Removed

C20130200

CM58 10B759 AJ RACK# 386



RED11 121223381535



3

ARC

V2



C-76.

Pre-Test Voltage Monitoring Leads Attached to Electric Energy Storage System

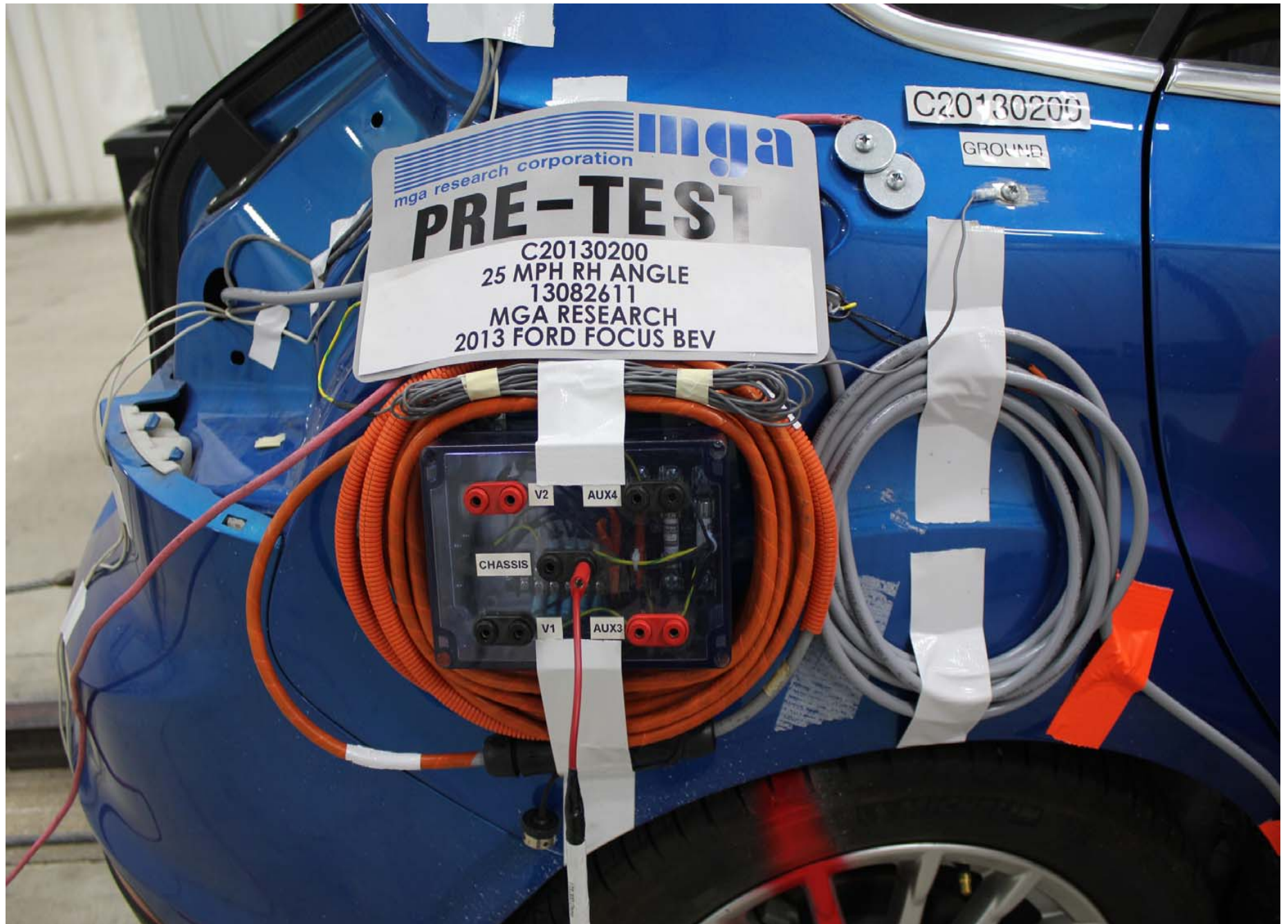
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mga research corporation
POST-TEST
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2013 FORD FOCUS BEV

V2



C-77.

Post-Test Voltage Monitoring Leads Attached to Electric Energy Storage System



Pre-Test View of Installed Isolation Interface Port



Post-Test View of Installed Isolation Interface Port

APPENDIX D

LOW RISK PHOTOGRAPHS

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

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

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

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

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

D-7.



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

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

D-9.



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

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



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

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

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



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

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Angel Guard Angel Ride Car Bed Belted, Forward Seat Track



Angel Guard Angel Ride Car Bed Belted, Middle Seat Track



Angel Guard Angel Ride Car Bed Belted, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Forward Seat Track



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



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



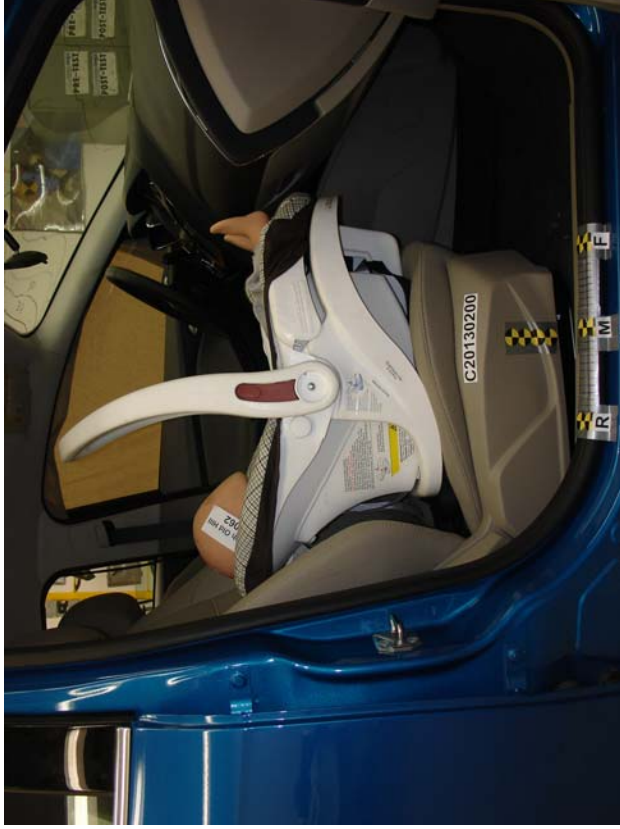
Cosco Arriva WBase, Unbelted, Rear Facing, Middle Seat Track



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



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



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



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



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



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



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



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



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



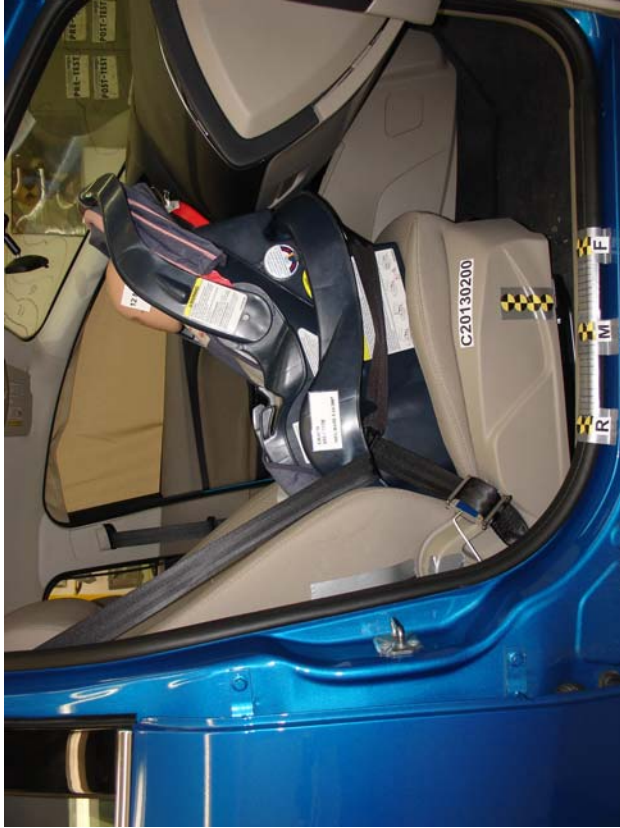
Cosco Arriva W/Out Base, Unbelted, Forward Facing, Middle Seat Track



Cosco Arriva W/Out Base, Unbelted, Forward Facing, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Middle Seat Track



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



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



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



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



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



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



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



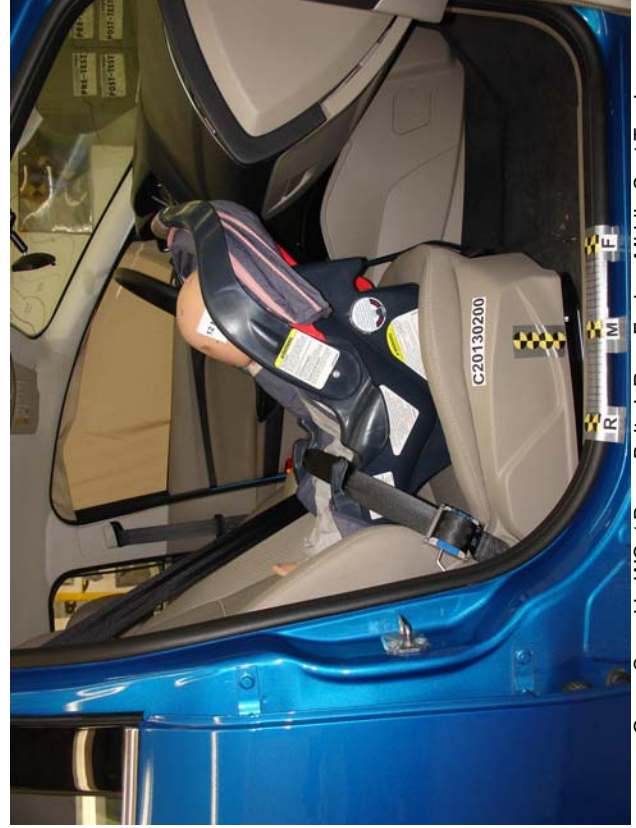
Graco Snuggly WBBase, Unbelted, Forward Facing, Middle Seat Track



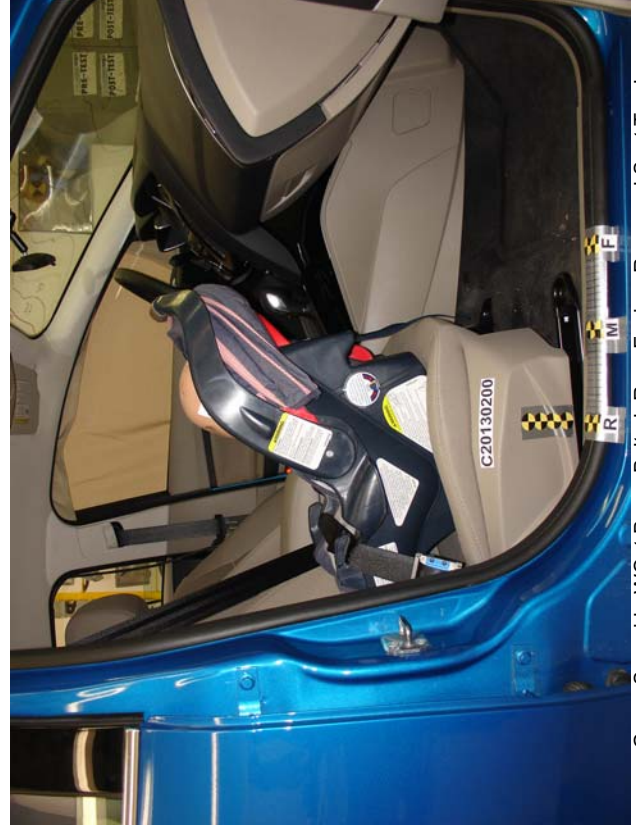
Graco Snuggly WBase, Unbelted, Forward Facing, Rearward Seat Track



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



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



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



Graco Snugride WOut Base, Unbelted, Rear Facing, Middle Seat Track



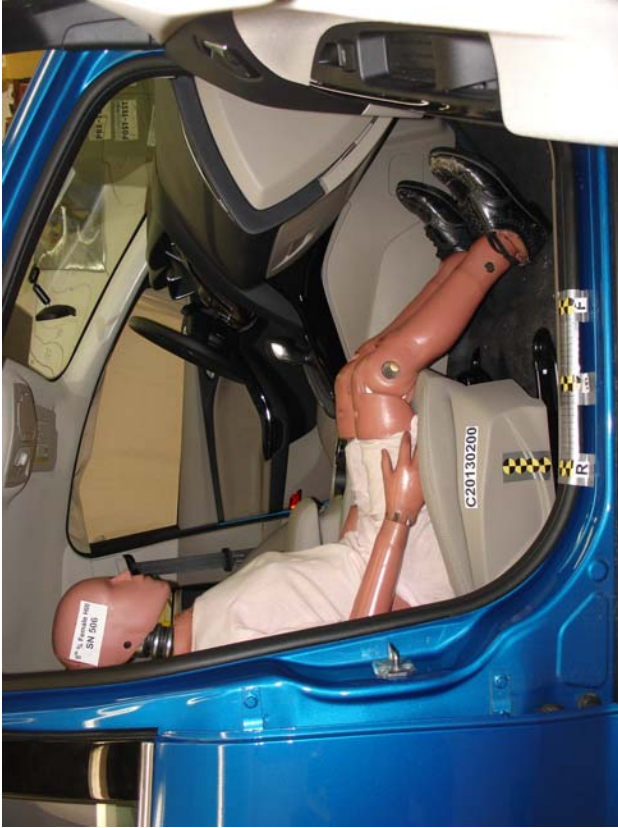
Graco Snugride WOut Base, Unbelted, Rear Facing, Rearward Seat Track



Graco Snugride WOut Base, Unbelted, Forward Facing, Middle Seat Track



Graco Snugride WOut Base, Unbelted, Forward Facing, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Rearward Seat Track



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



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



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



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



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



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



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



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



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



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



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



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



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



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



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



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



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



Unbelted 5th Percentile Female Dummy Reactivation, Middle Seat Track



Britax Roundabout Forward Facing Belted, Forward Seat Track



Britax Roundabout Forward Facing Belted, Middle Seat Track



Britax Roundabout Forward Facing Belted, Rearward Seat Track



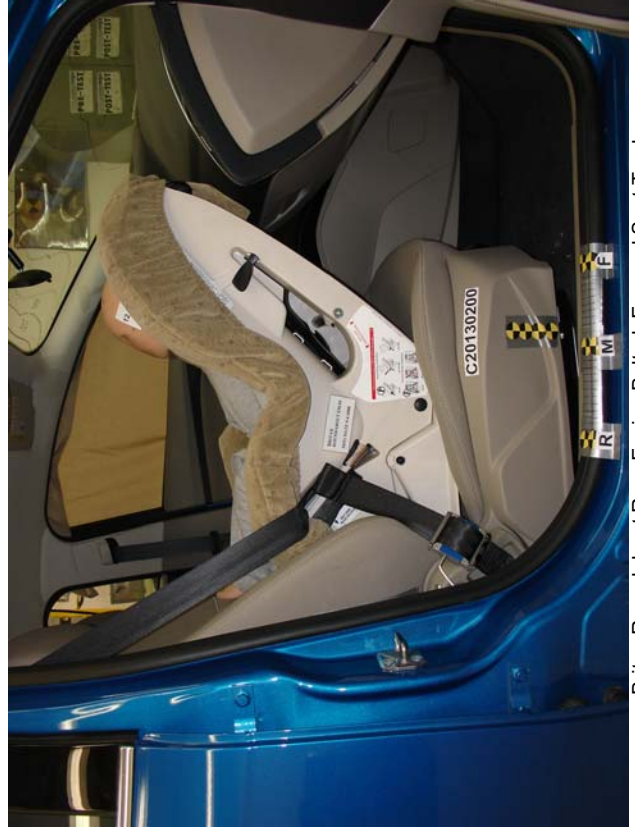
Britax Roundabout Forward Facing Unbelted, Forward Seat Track



Britax Roundabout Forward Facing Unbelted, Middle Seat Track



Britax Roundabout Forward Facing Unbelted, Rearward Seat Track



Britax Roundabout Rear Facing Belted, Forward Seat Track



Britax Roundabout Rear Facing Belted, Middle Seat Track



Britax Roundabout Rear Facing Belted, Rearward Seat Track



Britax Roundabout Rear Facing Unbelted, Forward Seat Track



Britax Roundabout Rear Facing Unbelted, Middle Seat Track



Britax Roundabout Rear Facing Unbelted, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Forward Seat Track



Cosco High Back Booster Forward Facing Belted, Forward Seat Track



Cosco High Back Booster Forward Facing Belted, Middle Seat Track



Cosco High Back Booster Forward Facing Belted, Rearward Seat Track



Cosco High Back Booster Forward Facing Unbelted, Forward Seat Track



Cosco High Back Booster Forward Facing Unbelted, Middle Seat Track



Cosco High Back Booster Forward Facing Unbelted, Rearward Seat Track



Cosco High Back Booster Rear Facing Unbelted, Forward Seat Track



Cosco High Back Booster Rear Facing Unbelted, Middle Seat Track



Cosco High Back Booster Rear Facing Unbelted, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Middle Seat Track



Evenflo Generations Forward Facing Belted, Forward Seat Track



Evenflo Generations Forward Facing Belted, Middle Seat Track



Evenflo Generations Forward Facing Belted, Rearward Seat Track



Evenflo Generations Forward Facing Unbelted, Forward Seat Track



Evenflo Generations Forward Facing Unbelted, Middle Seat Track



Evenflo Generations Forward Facing Unbelted, Rearward Seat Track



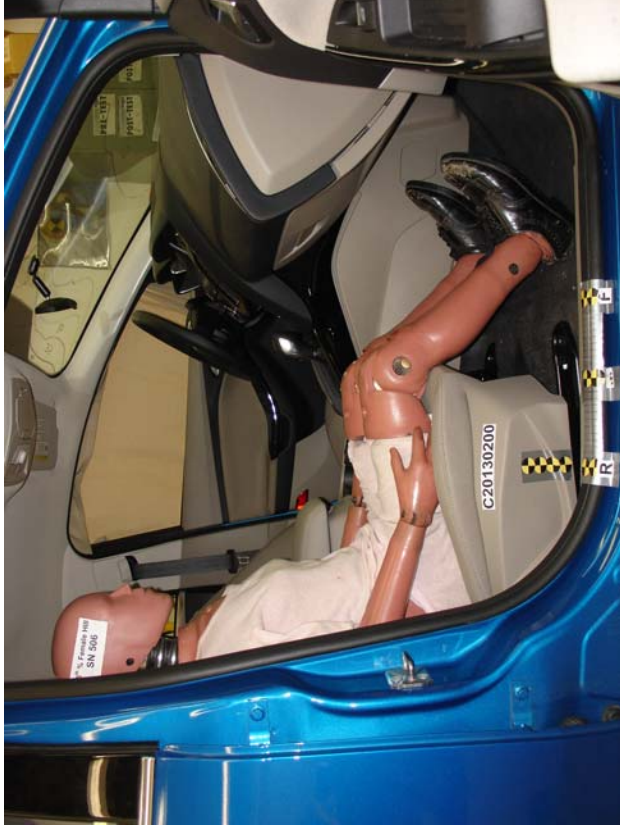
Evenflo Generations Rear Facing Unbelted, Forward Seat Track



Evenflo Generations Rear Facing Unbelted, Middle Seat Track



Evenflo Generations Rear Facing Unbelted, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Rearward Seat Track



Graco Comfordsport Forward Facing Belted, Forward Seat Track



Graco Comfordsport Forward Facing Belted, Middle Seat Track



Graco Comfordsport Forward Facing Belted, Rearward Seat Track



Graco Comfordsport Forward Facing Unbelted, Forward Seat Track



Graco Comfortsport Forward Facing Unbelted, Middle Seat Track



Graco Comfortsport Forward Facing Unbelted, Rearward Seat Track



Graco Comfortsport Rear Facing Belted, Forward Seat Track



Graco Comfortsport Rear Facing Belted, Middle Seat Track



Graco Comfortsport Rear Facing Belted, Rearward Seat Track



Graco Comfortsport Rear Facing Unbelted, Forward Seat Track



Graco Comfortsport Rear Facing Unbelted, Middle Seat Track



Graco Comfortsport Rear Facing Unbelted, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Rearward Seat Track



3-Year-Old Forward Facing Britax Roundabout Belted, Forward Seat Track



3-Year-Old Forward Facing Britax Roundabout Belted, Middle Seat Track



3-Year-Old Forward Facing Britax Roundabout Belted, Rearward Seat Track



Unbelted 5th Percentile Female Representative Reactivation, Forward Seat Track



3-Year-Old Forward Facing Cosco High Back Booster Belted, Forward Seat Track



3-Year-Old Forward Facing Cosco High Back Booster Belted, Middle Seat Track



3-Year-Old Forward Facing Cosco High Back Booster Belted, Rearward Seat Track



3-Year-Old Forward Facing Cosco High Back Booster Cinched With Harness, Forward



3-Year-Old Forward Facing Cosco High Back Booster Cinched With Harness, Middle Seat



3-Year-Old Forward Facing Cosco High Back Booster Cinched With Harness, Rearward



Unbelted 5th Percentile Female Dummy Reaction, Middle Seat Track



3-Year-Old Forward Facing Evenflo Generations Belted, Forward Seat Track



3-Year-Old Forward Facing Evenflo Generations Belted, Middle Seat Track



3-Year-Old Forward Facing Evenflo Generations Belted, Rearward Seat Track



3-Year-Old Forward Facing Evenflo Generations Cinched With Harness, Forward Seat



3-Year-Old Forward Facing Evenflo Generations Cinched With Harness, Middle Seat



3-Year-Old Forward Facing Evenflo Generations Cinched With Harness, Rearward Seat



Unbelted 5th Percentile Female Dummy Reactivation, Forward Seat Track



3-Year-Old Forward Facing Graco Comfortsport Belted, Forward Seat Track



3-Year-Old Forward Facing Graco Comfortsport Belted, Middle Seat Track



3-Year-Old Forward Facing Graco Comfortsport Belted, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Rearward Seat Track

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
3 Year Old
Section D

Forward Facing Toddler



3-Year-Old Cosco Summit Deluxe Belted, Forward Seat Track

Belt Positioning Booster Seat



3-Year-Old Cosco Summit Deluxe Belted, Middle Seat Track



3-Year-Old Cosco Summit Deluxe Belted, Rearward Seat Track



3-Year-Old Cosco Summit Deluxe Cinched With Harness, Forward Seat Track

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
3 Year Old
Section D

Forward Facing Toddler

Belt Positioning Booster Seat



3-Year-Old Cosco Summit Deluxe Cinched With Harness, Middle Seat Track



3-Year-Old Cosco Summit Deluxe Cinched With Harness, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Forward Seat Track

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
3 Year Old
Section D

Forward Facing Toddler



3-Year-Old Graco Platinum Cargo Belted, Forward Seat Track

Belt Positioning Booster Seat



3-Year-Old Graco Platinum Cargo Belted, Middle Seat Track

Forward Facing Toddler



3-Year-Old Graco Platinum Cargo Belted, Rearward Seat Track

Forward Facing Toddler



3-Year-Old Graco Platinum Cargo Belted With Harness, Forward Seat Track

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
3 Year Old
Section D

Forward Facing Toddler

Belt Positioning Booster Seat



3-Year-Old Graco Platinum Cargo Cinched With Harness, Middle Seat Track



3-Year-Old Graco Platinum Cargo Cinched With Harness, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reaction, Middle Seat Track

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
6 Year Old
Section D

Forward Facing Toddler

Belt Positioning Booster Seat



6-Year-Old Cosco Summit Deluxe Belted, Forward Seat Track



6-Year-Old Cosco Summit Deluxe Belted, Middle Seat Track



6-Year-Old Cosco Summit Deluxe Belted, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Rearward Seat Track

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
6 Year Old
Section D

Forward Facing Toddler

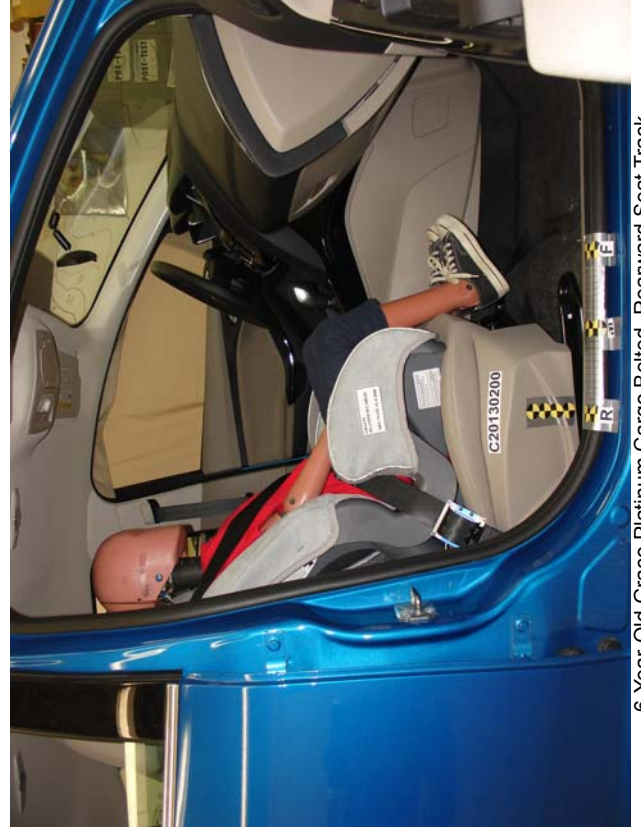
Belt Positioning Booster Seat



6-Year-Old Graco Platinum Cargo Belted, Forward Seat Track



6-Year-Old Graco Platinum Cargo Belted, Middle Seat Track



6-Year-Old Graco Platinum Cargo Belted, Rearward Seat Track



Unbelted 5th Percentile Female Dummy Reactivation, Middle Seat Track

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
3 Year Old No CRS



3-Year-Old Unbelted, Forward Seat Track, Position 1



3-Year-Old Unbelted, Forward Seat Track, Position 2



3-Year-Old Unbelted, Forward Seat Track, Position 3



3-Year-Old Unbelted, Forward Seat Track, Position 4

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
3 Year Old No CRS



3-Year-Old Unbelted, Forward Seat Track, Position 5



3-Year-Old Unbelted, Forward Seat Track, Position 6



3-Year-Old Unbelted, Forward Seat Track, Position 7



3-Year-Old Unbelted, Middle Seat Track, Position 1

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
3 Year Old No CRS



3-Year-Old Unbelted, Middle Seat Track, Position 2



3-Year-Old Unbelted, Middle Seat Track, Position 3



3-Year-Old Unbelted, Middle Seat Track, Position 4



3-Year-Old Unbelted, Middle Seat Track, Position 5

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
3 Year Old No CRS



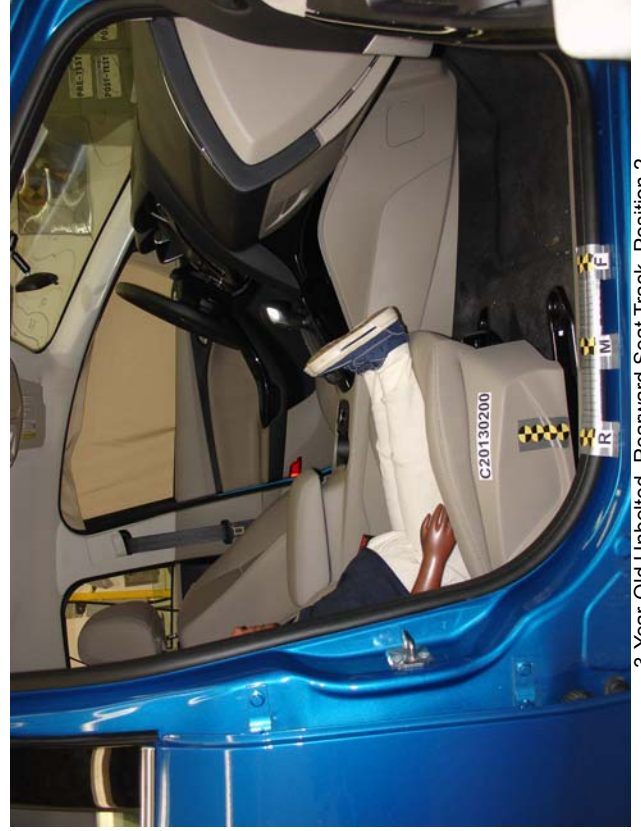
3-Year-Old Unbelted, Middle Seat Track, Position 6



3-Year-Old Unbelted, Middle Seat Track, Position 7



3-Year-Old Unbelted, Rearward Seat Track, Position 1



3-Year-Old Unbelted, Rearward Seat Track, Position 2

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
3 Year Old No CRS



3-Year-Old Unbelted, Rearward Seat Track, Position 3



3-Year-Old Unbelted, Rearward Seat Track, Position 4



3-Year-Old Unbelted, Rearward Seat Track, Position 5



3-Year-Old Unbelted, Rearward Seat Track, Position 6

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
3 Year Old No CRS



3-Year-Old Unbelted, Rearward Seat Track, Position 7



Unbelted 5th Percentile Female Dummy Reactivation, Forward Seat Track

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
6 Year Old No CRS



6-Year-Old Unbelted, Forward Seat Track, Position 1



6-Year-Old Unbelted, Forward Seat Track, Position 2



6-Year-Old Unbelted, Forward Seat Track, Position 3



6-Year-Old Unbelted, Forward Seat Track, Position 4

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
6 Year Old No CRS



6-Year-Old Unbelted, Middle Seat Track, Position 1



6-Year-Old Unbelted, Middle Seat Track, Position 2



6-Year-Old Unbelted, Middle Seat Track, Position 3



6-Year-Old Unbelted, Middle Seat Track, Position 4

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
6 Year Old No CRS



6-Year-Old Unbelted, Rearward Seat Track, Position 1



6-Year-Old Unbelted, Rearward Seat Track, Position 2



6-Year-Old Unbelted, Rearward Seat Track, Position 3



6-Year-Old Unbelted, Rearward Seat Track, Position 4

DOT/NHTSA 208 Suppression Test - 2013 Ford Focus (C20130200)
6 Year Old No CRS



Unbelted 5th Percentile Female Dummy Reactivation, Middle Seat Track

APPENDIX F

INSTRUMENTATION CALIBRATION

INSTRUMENTS FOR DRIVER DUMMY NO.: 401

	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Head X	AH5N9	Endevco	09/11/13
Head Y	AH5D9	Endevco	09/11/13
Head Z	AH5L1	Endevco	09/11/13
Neck Load Cell	N1562	Denton	09/06/13
Chest X	C12885	Endevco	08/27/13
Chest Y	AH5J3	Endevco	08/27/13
Chest Z	C12811	Endevco	08/27/13
Chest Displacement	401	Servo	09/10/13
Left Femur Load Cell	F2024	Denton	06/07/13
Right Femur Load Cell	F2025	Denton	06/07/13

INSTRUMENTS FOR PASSENGER DUMMY NO.: 403

	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Head X	C12853	Endevco	08/27/13
Head Y	AGH72	Endevco	08/27/13
Head Z	C10727	Endevco	08/27/13
Neck Load Cell	N1175	Denton	09/06/13
Chest X	C13081	Endevco	08/27/13
Chest Y	AGH11	Endevco	08/27/13
Chest Z	AL6Y2	Endevco	08/27/13
Chest Displacement	403	Servo	09/10/13
Left Femur Load Cell	F9428	Denton	05/15/13
Right Femur Load Cell	F9427	Denton	05/15/13

INSTRUMENTS FOR LOW RISK 5TH FEMALE DUMMY NO.: 124 (P1 & P2)

	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Head X	P79741	Endevco	05/07/13
Head Y	P79743	Endevco	05/07/13
Head Z	P79744	Endevco	05/07/13
Neck Load Cell	N701	Denton	05/23/13
Chest X	P79695	Endevco	05/07/13
Chest Y	P79696	Endevco	05/07/13
Chest Z	P79640	Endevco	05/07/13
Chest Displacement	124	Servo	05/16/13
Left Femur Load Cell	F2024	Denton	06/07/13
Right Femur Load Cell	F2025	Denton	06/07/13

VEHICLE INSTRUMENTS

	SERIAL NO.	MANUFACTURER	CALIBRATION DATE
Left Rear Seat Crossmember X	P63546	Endevco	05/29/13
Right Rear Seat Crossmember X	P63538	Endevco	06/06/13
Top of Engine X	P66773	Endevco	04/04/13
Bottom of Engine X	P78864	Endevco	04/29/13
Left Brake Caliper X	P63293	Endevco	04/03/13
Right Brake Caliper X	P67502	Endevco	08/15/13
Instrument Panel X	P78766	Endevco	04/30/13
Trunk Z	P63351	Endevco	04/15/13