REPORT NUMBER: TR-P29125-04-NC

MOVING 2007 FORD FIVE HUNDRED SEL INTO LEFT FRONT OF A 2007 FORD FIVE HUNDRED SEL – 50% OFFSET-OBLIQUE 15°

NHTSA No: R70210 (Bullet)
R70211 (Target)

PREPARED BY:
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JANUARY 8, 2010

FINAL REPORT

PREPARED FOR:
U.S. DEPARTMENT OF TRANSPORTATION / RITA / VOLPE CENTER
55 BROADWAY / RVT-92
CAMBRIDGE, MA 02142-1093

This final test report was prepared for the U.S. Department of Transportation / RITA / Volpe National Transportation Systems Center, in response to Contract Number DTRT57-05-D30106.

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TECHNICAL REPORT DOCUMENTATION PAGE

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Final Report of a Vehicle to Vehicle Crash Test of a 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No. R70210 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No. R70211	January 28, 2010
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15. Supplementary Notes

16. Abstract

A test was conducted in accordance with instructions outlined in Task Order DTRTV-T9001 in which a 2007 Ford Five Hundred SEL 4-Door Sedan moving at 110.55 km/h impacted a stationary 2007 Ford Five Hundred SEL 4-Door Sedan. The target vehicle was positioned at 15 degrees relative to the bullet vehicle, and the bullet vehicle impacted 50 percent of the left side of the target vehicle. Data indicant of FMVSS 208, 212, 219 (partial), 301 and foot well intrusion performance was collected for both the target and bullet vehicles. The test was conducted at KARCO Engineering, LLC. Facility in Adelanto, California on January 8, 2010.

The impact velocity of the moving barrier was 110.55 km/h. The target vehicle was positioned at an angle of 15.0 degrees and the offset of the target vehicle was 990 mm. from centerline to centerline. The target vehicle's maximum exterior post-test crush was 484 mm to the left of the vehicle centerline. The bullet vehicle's maximum exterior post-test crush was 524 mm to the left of the vehicle centerline. The dummies Injury Assessment Values are as follows:

Measurement Description	Units	Target Vehicle			
		Driver ATD		Left Rear Passenger	
		Threshold	Result	Threshold	Result
Head Injury Criteria (HIC_{15})	N/A	700.0	212.5	700.0	669.3
3 ms Chest Clip	g	60.0	39.3	60.0	51.3
Neck Tension	N	2520	1739.7	2620	2842.6
Neck Compression	N	-3600	-81.0	-2520	-692.8
Left Femur Force	N	-10000	-2760.0	-6805	-79.1
Right Femur Force	N	-10000	-3851.6	-6805	-492.4
		Bullet Vehicle			
Head Injury Criteria (HIC_{15})	N/A	700.0	560.2		
3 ms Head Clip	g	80.0	72.0		
3 ms Thorax Clip	g	60.0	41.8		
Neck Tension	N	2520	2531.5		
Neck Compression	N	-3600	-173.0		
Left Femur Force	N	-10000	-4175.7		
Right Femur Force	N	-10000	-4044.0		

TECHNICAL REPORT DOCUMENTATION PAGE … (CONTINUED)

17. Key Words		18. Distribution Statement	
2007 Ford Five Hundred SEL 4-Door Sedan R70210 R70211 15°, 50% Offset 113 km/h / 70 mph 50th THOR NT		Copies of this report are available from: National Highway Traffic Safety Admin. 1200 New Jersey Ave., SE Room W43-410 Washington, DC 20590	
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SECTION 1
PURPOSE AND TEST PROCEDURE

1.1 PURPOSE

This 113 km/h (70 mph) test was conducted in support of the National Highway Traffic Safety Administration's (NHTSA) Frontal Oblique Offset Program, under contract number DTRT57-05-D30106. The purpose of this test is to evaluate vehicle and occupant responses in a frontal oblique offset crash test.

1.2 TEST PROCEDURE

This test was conducted in accordance with the instructions set forth by NHTSA/Volpe for a 15°, 50% offset moving vehicle to vehicle impact, outlined in Task Order (TO) DTRTV-T9001. Data was obtained indicant of Federal Motor Vehicle Safety Standard (FMVSS) 208 – "Occupant Crash Protection", FMVSS 212 – "Windshield Mounting", FMVSS 219 (partial) – "Windshield Zone Intrusion", and FMVSS 301 – "Fuel System Integrity", in addition to the requirements of TO DTRTV-T90001 for both the target (R70211) and bullet (R70210) vehicles.

SECTION 2
SUMMARY OF TEST

2.1 SUMMARY

A model year 2007 Ford Five Hundred SEL (R70211) 4-door sedan was impacted on the left front corner by a 2007 Ford Five Hundred SEL (R70210) 4-door sedan. The target vehicle was stationary and positioned at a target angle of 15° and an offset of 50% to the line of forward motion of the bullet vehicle. The bullet vehicle was towed down the test track in a full forward direction and impacted the test vehicle at a velocity of 110.55 km/h (68.69 mph).

The target vehicle mass was 1891.0 kg (4170 lbs) and the bullet vehicle mass was 1890.0 kg (4167 lbs). The test was conducted by KARCO Engineering, LLC. on January 8, 2010.

The test was documented by two (2) real time and sixteen (16) high-speed video cameras. Camera locations and other pertinent data are located in Data Sheet No. 18 of this report. Pre- and post-test photographs of the target and bullet vehicles and the test setup were taken using a digital still camera. Photographic documentation of the test is presented in Appendix A of this report.

One 50% HIII adult male with THOR legs (Serial No.: 055) was seated in the left front (driver's) seating position and one Part 572O 5% adult female ATD (Serial No.: 630) was seated in the left rear seating position of the target vehicle. One 50% adult male THOR NT anthropomorphic test device (ATD) (Serial No.: 0006) was seated in the left front (driver's) seating position of the bullet vehicle. All ATD's were positioned according to instructions specified in FMVSS 208, the drivers for a Part 572E 50% adult male Hybrid III ATD and the rear passenger for a Part 572O 5% adult female Hybrid III ATD.

The driver of the target vehicle was restrained with a 3-point seat belt and a dual stage frontal airbag. The left rear passenger was restrained with a 3-point seat belt. The driver of the bullet vehicle was restrained with a 3-point seat belt and a dual stage frontal airbag.

Two-hundred seventy-seven (277) channels of data from the three ATD's, target and bullet vehicles were collected using a TDAS data acquisition system. Appendix B contains dummy response data plots, as well as target and bullet vehicle response data plots.

The target vehicle had 80.5% total windshield retention, with 73.3% and 87.8% retention on the left and right sides respectively. There appeared to be no intrusion into the protected zone of the windshield during any portion of the impact test.

The maximum static crush of the exterior of the target vehicle was 484 mm at DPD 2 to the left of the vehicle's centerline. The maximum crush of the underlying structure was 583 mm at DPD 1 of the lower bumper beam, to the left of the vehicle's centerline. The maximum static crush on the left side of the vehicle was 204 mm at level 2, 1350 mm rearward of the front of the vehicle. Full target vehicle measurements are presented in Section 3 of this report.

All of the target vehicle's doors remained closed and latched during the test. The left front door was jammed shut as a result of the impact, while the left rear and right side doors remained operational. The trunk remained closed and operational.

The driver ATD's visible contact points are as follows: the head contacted the airbag, the left hand, the door panel and the headrest; the chest contacted the airbag; both the left and right knees contacted the knee bolster.

The left rear passenger ATD's visible contact points are as follows: the head contacted the chest and seatback; the upper torso contacted the chin, the knees had no apparent contact points.

TARGET VEHICLE OCCUPANT INJURY CRITERIA SUMMARY

Measurement Description	Units	Driver ATD 50% HIII		Passenger ATD 5% HIII	
		Threshold	Result	Threshold	Result
Head Injury Criteria (HIC_{15})	n/a	700	212.5	700	669.3
3 ms Head Clip	g				
3 ms Thorax Clip	g	60	39.3		
3 ms Chest Clip	g				51.3
Neck Tension	N	2,520	1739.7	2,620	2842.6
Neck Compression	N	-3,600	-81.0	-2,520	-692.8
Left Femur Force	N	-10,000	-2760.0	-6,805	-79.1
Right Femur Force	N	-10,000	-525.5	-6,805	-492.4

The bullet vehicle had 98.5% total windshield retention, with 96.9% and 100.0% retention on the left and right sides respectively. There appeared to be no intrusion into the protected zone of the windshield during any portion of the impact test.

The maximum static crush of the exterior of the bullet vehicle was 524 mm at DPD 3 to the left of the vehicle's centerline. The maximum crush of the underlying structure was 752 mm at DPD 2 of the lower bumper beam, to the left of the vehicle's centerline. The maximum static crush on the left side of the vehicle was 105 mm at level 4, 1200 mm rearward of the front of the vehicle. Full bullet vehicle measurements are presented in Section 3 of this report.

All of the bullet vehicle's doors remained closed and latched during the test. The left front door was jammed shut as a result of the impact, while the left rear and right side doors remained operational. The trunk remained closed and operational.

The driver ATD's visible contact points are as follows: the head contacted the airbag and the headrest; the chest contacted the airbag and steering wheel; both the left and right knees contacted the knee bolster.

BULLET VEHICLE OCCUPANT INJURY CRITERIA SUMMARY

Measurement Description	Units	Driver ATD 50% THOR NT		Passenger ATD	
		Threshold	Result	Threshold	Result
Head Injury Criteria (HIC_{15})	n/a	700	560.2		
3 ms Head Clip	g	80	72.0		
3 ms Thorax Clip	g	60	41.8		
3 ms Chest Clip	g				
Neck Tension	N	2,520	173.0		
Neck Compression	N	3,600	102.8		
Left Femur Force	N	-10,000	-287.6		
Right Femur Force	N	-10,000	-4044.0		

SECTION 3

DATA SHEETS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

CONVERSION FACTORS USED IN THE REPORT

Quantity	Typical Application	Std Units	Metric Unit	Multiply By
Mass	Vehicle Weight	lb	kg	0.4535
Linear Velocity	Impact Velocity	mile/h	km/h	1.609344
Length or Distance	Measurements	in	mm	25.4
Volume	Fuel Systems	gal	liter	3.785
Volume	Small Fluids	oz	mL	29.573
Pressure	Tire Pressures	lbf/in^2	kPa	7.0
Volume	Liquid	gal	liter	3.785
Temperature	General Use	^oF	^oC	=(tf -32)/1.8
Force	Dynamic Forces	lbf	N	4.448
Moment	Torque	lbf•ft	Nm	1.355

DATA SHEET NO. 1

CRASH TEST SUMMARY

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

PRIMARY IMPACT DATA

Measured Parameter	Units	Value
Bullet Vehicle Velocity at Impact	km/h	110.6
Impact Angle	°	15.0
Bullet Vehicle Test Weight	kg	1890.0
Target Vehicle Test Weight	kg	1891.0
Bullet Vehicle Maximum Static Crush	mm	524
Target Vehicle Maximum Static Crush	mm	484
Actual Vehicle Offset (C/L to C/L)	mm	990

TARGET VEHICLE DOOR OPENING AND SEAT TRACK DATA

Description	Driver Side	Passenger Side
Front Door Opening	Remained closed and latched, jammed shut	Remained closed and latched, operational
Rear Door Opening	Remained closed and latched, opened without tools	Remained closed and latched, operational
Seat Track Shift (mm)	18	
Seat Back Failure	No	

BULLET VEHICLE DOOR OPENING AND SEAT TRACK DATA

Description	Driver Side	Passenger Side
Front Door Opening	Remained closed and latched, jammed shut	Remained closed and latched, operational
Rear Door Opening	Remained closed and latched, opened without tools	Remained closed and latched, operational
Seat Track Shift (mm)	14	
Seat Back Failure	No	

DATA SHEET NO. 1 … (CONTINUED)

CRASH TEST SUMMARY

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

TARGET VEHICLE STRUCTURAL OBSERVATIONS

Critical Areas of Performance	Observations
Pillar Performance	No separation occurred
Sill Separation	No separation occurred
Windshield Damage	Broke, Separated from Frame
Window Damage	None
Other Notable Effects	None

BULLET VEHICLE STRUCTURAL OBSERVATIONS

Critical Areas of Performance	Observations
Pillar Performance	No separation occurred
Sill Separation	No separation occurred
Windshield Damage	Cracked
Window Damage	None
Other Notable Effects	None

DATA SHEET NO. 1 … (CONTINUED)

CRASH TEST SUMMARY

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

TARGET VEHICLE TEST DUMMY DATA

Description	Driver	Rear Passenger
Dummy Type / Serial No.	P572E, 50% Adult Male, S/N: 055, THOR Legs	P572O, 5% Adult Female, S/N: 630
Lower Legs	Left: G110, Right: G109	
Head Contact	Airbag, L. Hand, Door Panel, Headrest	Seatback, Chest
Chest Contact	Airbag	Head
Abdomen Contact	None	None
Left Knee Contact	Knee Bolster	None
Right Knee Contact	Knee Bolster	Driver Seatback

BULLET VEHICLE TEST DUMMY DATA

Description	Driver	Rear Passenger
Dummy Type / Serial No.	THOR 50th NT, S/N 0006	
Lower Legs	Left: 0039, Right: 0109	
Head Contact	Airbag, Headrest	
Chest Contact	Steering Wheel	
Abdomen Contact	None	
Left Knee Contact	Knee Bolster	
Right Knee Contact	Knee Bolster	

DATA SHEET NO. 1 … (CONTINUED)

CRASH TEST SUMMARY

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

VIDEO COVERAGE

Camera Type	Number
Real Time	2
High-Speed Off-Board	10
High-Speed Target Vehicle On-Board	4
High-Speed Bullet Vehicle On-Board	2
Total	18

DATA CHANNELS

Description	Number
Target Vehicle Driver ATD Sensors	83
Target Vehicle Driver ATD Contact Switches	2
Target Vehicle Rear Passenger ATD Sensors	37
Target Vehicle Belt Assessment Sensors	4
Target Vehicle Structure Accelerometers	22
Target Vehicle Airbag Sensors	2
Bullet Vehicle Driver ATD Sensors	119
Bullet Vehicle Belt Assessment Sensors	2
Bullet Vehicle Structure Accelerometers	6
Total	277

DATA CHANNEL ANOMALIES

Channel	Description	Axis	Problem
30	Bullet Vehicle Driver Upper Spine T1 Z	Z	Channel failed, no data
125	Bullet Vehicle Right Sill Y	Y	Channel failed at 70.5 ms
263	Target Vehicle Driver Mid Seat Track X	X	Channel failed at 87.5 ms
264	Target Vehicle Accelerator Pedal X	X	Channel failed at 76.5 ms
267	Target Vehicle Brake Pedal X	X	Channel failed at 100.5 ms
268	Target Vehicle Brake Pedal Y	Y	Channel failed, no data
269	Target Vehicle Brake Pedal Z	Z	Channel failed at 101.0 ms

DATA SHEET NO. 2

POST-IMPACT OBSERVATIONS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

TARGET VEHICLE SUPPLEMENTAL RESTRAINT SYSTEM INFORMATION

Restraint Type	Left Front (Driver)		Left Rear (Passenger)	
	Installed	Deployed	Installed	Deployed
Front Airbag	Yes	Yes	No	
Knee Airbag	No		No	
Side Torso Airbag	Yes[1]	No	No	
Side Head Airbag	No		No	
Curtain Airbag	Yes[1]	No	Yes[1]	No
Pre-Tensioners	Yes	Yes	No	
Load Limiters	Yes	Yes	No	

BULLET VEHICLE SUPPLEMENTAL RESTRAINT SYSTEM INFORMATION

Restraint Type	Left Front (Driver)		Left Rear (Passenger)	
	Installed	Deployed	Installed	Deployed
Front Airbag	Yes	Yes		
Knee Airbag	No			
Side Torso Airbag	Yes[1]	No		
Side Head Airbag	No			
Curtain Airbag	Yes[1]	No		
Pre-Tensioners	Yes	Yes		
Load Limiters	Yes	Yes		

IMPACT DATA

Measurement Description	Units	Value
Horizontal Offset from Target	mm	+41 (Left)
Vertical Offset from Target	mm	Unavailable[2]
Impact Angle	°	15.0

TARGET VEHICLE STATIC CRUSH

Measured Parameter	Units	Value
Left Side	mm	202
Centerline	mm	334
Right Side	mm	-316

BULLET VEHICLE STATIC CRUSH

Measured Parameter	Units	Value
Left Side	mm	488
Centerline	mm	377
Right Side	mm	-57

[1] – Side and curtain airbags were disabled.

[2] – Impact location marker was wiped out during the impact test.

DATA SHEET NO. 3

GENERAL TARGET VEHICLE PARAMETER DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

TARGET VEHICLE INFORMATION AND OPTIONS

NHTSA No.	R70211	Rear Disc	Yes	
Make	Ford	Anti-Lock Brakes	Yes	
Model	Five Hundred SEL	All Wheel Drive	No	
Model Year	2007	Power Steering	Yes	
Body Style	4-Door Sedan	Driver Front Airbag	Yes	
VIN	1FAHP241X7G148774	Driver Side Torso Airbag	Yes	[1]
Color	Silver	Driver Side Head Airbag	No	
Delivery Date	12/17/2009	Driver Curtain/Airbag	Yes	[1]
Odometer (Miles)	33,313	Rear Pass. Airbag	No	
Dealer	Tustin Mazda	Rear Pass. Side Airbag	No	
Transmission	6-Speed Automatic	Rear Pass. Head Airbag	No	
Final Drive	Front	Rear Pass. Curtain/Airbag	Yes	[1]
Type/No. Cyl.	V6	Pre-Tensioners	Yes	
Engine Disp. (L)	3.0	Load Limiters	Yes	
Engine Placement	Transverse	Bucket Seats	Yes	
Roof Rack	No	Air Cond.	Yes	
Sunroof/T-Top	No	AM/FM CD	Yes	
Tinted Glass	No	Tilt Steering	Yes	
Traction Control	No	Automatic Door Locks	Yes	
Power Brakes	Yes	Power Windows	Yes	
Front Disc	Yes	Power Seats	Yes	

Does Owners Manual provide instructions to turn off automatic door locks. Yes

DATA FROM CERTIFICATION LABEL

Manufactured By	Ford Motor Co.	GVWR (kg)	2,186
		GAWR Front (kg)	1,150
Date of Manufacture	Dec-06	GAWR Rear (kg)	1,066

VEHICLE SEATING AND CAPACITY WEIGHT INFORMATION

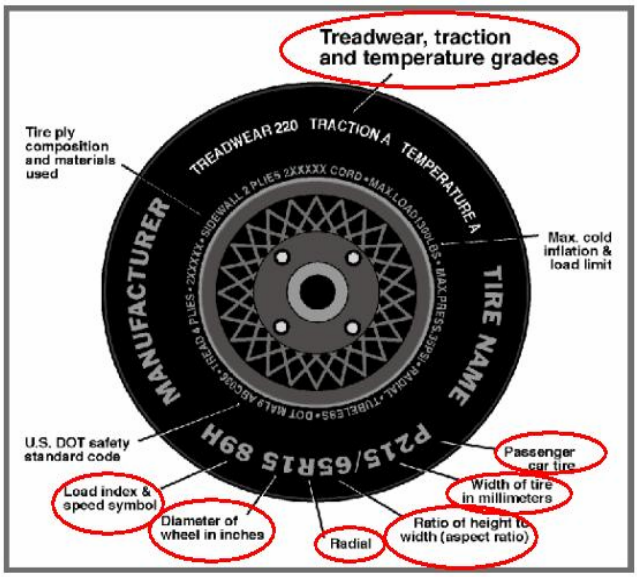
Measured Parameter	Front	Rear	Third	Total
Type of Seats	Bucket	Bench		
Number of Occupants	2	3		5
Capacity Weight (VCW) (kg)				430.0
Cargo Weight (RCLW) (kg)				89.8

[1] – Side and curtain airbags were disabled.

DATA SHEET NO. 3 … (CONTINUED)

GENERAL TARGET VEHICLE PARAMETER DATA

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10



TIRE DATA

Description	Front	Rear
Max. Tire Pressure	300	300
Cold Tire Pressure	220	220
Recommended Tire Size	P215/60R17	P215/60R17
Actual Tire Size	P215/60R17	P215/60R17
Tire Manufacturer	Continental	Continental
Tire Model	Conti Touring Contact AS	Conti Touring Contact AS
Load Range	690	690
Treadware Rating	360	360
Traction Rating	A	A
Temperature Rating	A	A
Tire Plies Sidewall	1 Polyester	1 Polyester
Tire Plies Body	1 Polyester, 2 Steel, 1 Nylon	1 Polyester, 2 Steel, 1 Nylon
Load Index/Speed Symbol	95T	95T
Tire Material	Polyester, Steel, Nylon	Polyester, Steel, Nylon
DOT Safety Code Left	A3KT 3MT 4606	A3KT 3MT 4606
DOT Safety Code Right	A3KT 3MT 4606	A3KT 3MT 4606

DATA SHEET NO. 3 … (CONTINUED)

GENERAL TARGET VEHICLE PARAMETER DATA

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

TARGET VEHICLE WEIGHTS

	Units	As Delivered Weights (UVW)			As Tested Weights (ATW)		
		Front Axle	Rear Axle	Total	Front Axle	Rear Axle	Total
Left	kg	511.5	341.5	853.0	549.0	450.5	999.5
Right	kg	496.5	323.5	820.0	490.5	401.0	891.5
Ratio	%	60.3	39.7	100.0	55.0	45.0	100.0
Total	kg	1008.0	665.0	1673.0	1039.5	851.5	1891.0

TARGET TEST WEIGHT CALCULATION

Measured Parameter	Units	Value
Total Delivered Weight (UVW)	kg	1673.0
Weight of 1 P572E ATD	kg	84.0
Weight of 1 P572O ATD	kg	56.0
Rated Cargo/Luggage Wt (RCLW)	kg	89.8
Calculated Vehicle Target Wt (TVTW)	kg	1902.8 [3]

TARGET VEHICLE ATTITUDES AND CG

	Units	LF	RF	LR	RR	CG Aft of Front Axle
As Delivered	mm	728	734	743	753	1143
As Tested	mm	721	732	690	714	1295

GENERAL TARGET VEHICLE DATA

Vehicle Wheelbase (mm):	2876
Weight of Ballast Secured in Cargo Area (kg):	0.0
Weight of Items Removed (kg):	25.0
Vehicle Components Removed:	Spare Tire, Jack and Tools, Trunk Liner

FUEL SYSTEM DATA

Fuel System Capacity From Owner's Manual (L):	75.7
Actual Test Volume with Entire Fuel System Filled (L):	70.4
Test Fluid Type:	Stoddard Solvent
Kinematic Viscosity:	per ASTM D 484-71
Type of Vehicle Fuel Pump:	Electric

[3] – COTR requested Test Weight of 1891 kg.

DATA SHEET NO. 3 … (CONTINUED)

GENERAL TARGET VEHICLE PARAMETER DATA

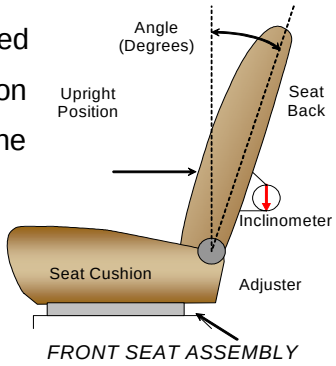
Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

NOMINAL DESIGN RIDING POSITION

The driver seat back is positioned to the manufacturer's designated angle. The procedure is as follows: a digital inclinometer is placed on the seat back 330 mm (13 in.) above the seat back pivot point. The left rear passenger seat back is fixed.

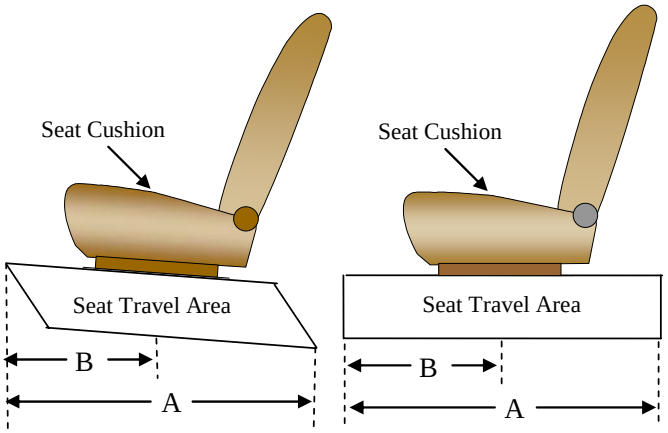


Description	Value
Driver w/Seated Dummy	17.4°
Left Rear Passenger w/Seated Dummy	Fixed

SEAT FORE/AFT POSITIONS

Total seat travel is measured from forward most possible position to the rearmost possible position. The driver seat is set to the longitudinal mid position, with the seat in the lowest possible height position. The left rear passenger seat is not adjustable horizontally or vertically.

Seating Position	Total Fore-Aft Travel	Test Position
Driver Seat	244 mm	122 mm
Left Rear Passenger Seat	Fixed	Fixed



SEAT BELT UPPER ANCHORAGE

The driver's seat belt upper anchorage is placed in the nominal design riding position for a 50th percentile adult male. The left rear passenger seat belt upper anchorage is fixed. Position number one (1) is considered the uppermost position.

Seating Position	Total No. of Positions	Test Position
Driver Seat	5	1
Left Rear Passenger Seat	Fixed	Fixed

DATA SHEET NO. 3 … (CONTINUED)

GENERAL TARGET VEHICLE PARAMETER DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

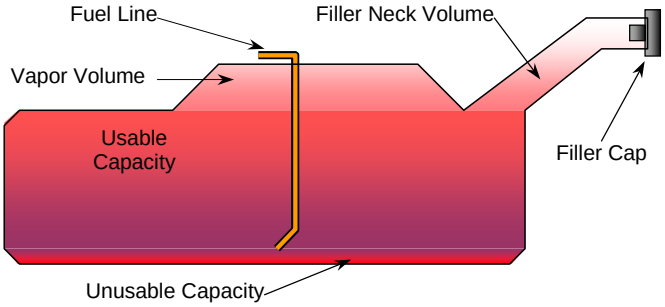
Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

FUEL TANK CAPACITY DATA

Description	Units	Value
Usable Capacity of "Standard Tank"	L	75.70
Usable Capacity of "Optional" Tank	L	
Allowable Capacity used for FMVSS 301	L	69.64 to 71.16
Actual Amount of Solvent used	L	70.40

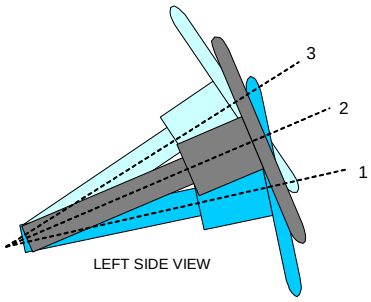
The test vehicle is equipped with an electric fuel pump. The fuel pump will operate when the key is in the "ON" position or when the engine is activated. The fuel filler door is located on the right rear fender. The standard fuel tank occupies the area under the rear seat.



VEHICLE FUEL TANK ASSEMBLY

STEERING COLUMN ADJUSTMENT

Steering wheel and column adjustments are made so that the steering wheel hub is at the geometric center of the locus it describes when moved through its full range of motion. An aluminum plate is placed across the rim of the steering wheel, an inclinometer is placed on the plate and the angle is measured. The vehicle's steering column did not telescope.



STEERING COLUMN ASSEMBLY

STEERING COLUMN POSITIONS

Description	Tilt Angle (°)	Fore/Aft Position (mm)
Lowermost positon No. 1	21.1	
Geometric center position No. 2	23.9	
Uppermost position No. 3	26.7	

DATA SHEET NO. 4

TARGET VEHICLE OCCUPANT INJURY ASSESSMENT DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

TARGET VEHICLE DRIVER ANTHROPOMORPHIC TEST DEVICE

Location	Metric	Description	SAE Filter Class	Max	Min
Head	Alpha-x	Angular acceleration (rad/sec^2)	simon	3277.7	-2088.7
	Alpha-y	Angular acceleration (rad/sec^2)	simon	2290.1	-830.3
	Alpha-z	Angular acceleration (rad/sec^2)	simon	2391.8	-2093.5
	Alpha-res	Angular acceleration - resultant (rad/sec^2)	simon	3788.5	
	Wx	Angular velocity (rad/sec)	simon	24.0	-36.9
	Wy	Angular velocity (rad/sec)	simon	12.4	-18.7
	Wz	Angular velocity (rad/sec)	simon	30.5	-4.4
	Wres	Angular velocity - resultant (rad/sec)	simon	44.9	
	HIC15	15 ms clip	1000	212.5	
	SFC	Skull fracture correlate	simon	45.8	
	CSDM	Cumulative strain (Tolerance = 0.05)	simon	0.98	
	CSDM	Cumulative strain (Tolerance = 0.10)	simon	0.59	
	CSDM	Cumulative strain (Tolerance = 0.15)	simon	0.15	
Neck	Fx	UNLC Fx (N)	1000	1290.02	-281.64
	Fz	UNLC Fz, neck system Tension (N)	1000	1739.7	-80.98
	NIJ	NTF	NIJ Program	0.22	
	NIJ	NTE	NIJ Program	0.34	
	NIJ	NCF	NIJ Program	0.01	
	NIJ	NCE	NIJ Program	0	
Chest	Chest Deflec	Chest Deflection	180	0.0	-26.1
	Chest CG G's	Chest CG acceleration, 3 ms clip, (G's)	180	39.3	
Femur	R Fz	Right Fz force (N)	600	687.3	-3851.6
	L Fz	Left Fz force (N)	600	807.8	-2760.0

DATA SHEET NO. 4 … (CONTINUED)

TARGET VEHICLE OCCUPANT INJURY ASSESSMENT DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Description	Axis	Units	Max	Time (ms)	Min	Time (ms)
Driver Head CG X	X	g	5.5	206.1	-41.3	98.9
Driver Head CG Y	Y	g	42.4	114.2	-4.3	206.5
Driver Head CG Z	Z	g	35.3	98.7	-1.2	26.3
Driver Top Head Array X	X	g	5.3	219.3	-45.8	110.1
Driver Top Head Array Y	Y	g	66.3	120.3	-6.2	203.8
Driver Left Side Head Array X	X	g	5.9	265.9	-42.2	98.9
Driver Left Side Head Array Z	Z	g	42.6	103.5	-5.3	124.5
Driver Front Head Array Y	Y	g	37.9	110.6	-6.1	330.4
Driver Front Head Array Z	Z	g	31.1	98.4	-0.5	26.3
Driver Head CG X Redundant	X	g	5.8	206.1	-42.8	99.1
Driver Head CG Y Redundant	Y	g	42.4	114.2	-4.4	206.1
Driver Head CG Z Redundant	Z	g	35.7	98.4	-0.9	26.1
Driver Upper Neck Force X	X	N	1290.0	105.0	-281.6	244.4
Driver Upper Neck Force Y	Y	N	1013.6	117.1	-128.5	205.8
Driver Upper Neck Force Z	Z	N	1739.7	91.6	-81.0	16.4
Driver Upper Neck Moment X	X	Nm	64.4	120.9	-11.7	191.0
Driver Upper Neck Moment Y	Y	Nm	28.8	85.6	-13.9	220.9
Driver Upper Neck Moment Z	Z	Nm	10.4	134.0	-21.3	89.6
Driver Lower Neck Force X	X	N	0.0	0.0	0.0	0.0
Driver Lower Neck Force Y	Y	N	1354.5	102.9	-170.9	203.0
Driver Lower Neck Force Z	Z	N	1664.4	89.6	-428.1	123.4
Driver Lower Neck Moment X	X	Nm	241.5	114.0	-40.6	204.5
Driver Lower Neck Moment Y	Y	Nm	205.1	117.6	-49.2	204.7
Driver Lower Neck Moment Z	Z	Nm	37.7	103.0	-11.4	309.4
Driver Chest X Primary	X	g	3.0	287.2	-32.6	66.7
Driver Chest Y Primary	Y	g	26.6	90.9	-2.2	29.4
Driver Chest Z Primary	Z	g	12.5	64.4	-11.2	92.5
Driver Chest X Redundant	X	g	3.1	284.0	-32.6	66.8
Driver Chest Y Redundant	Y	g	26.4	91.1	-2.2	287.6
Driver Chest Z Redundant	Z	g	12.4	62.4	-11.4	94.1
Driver Chest Deflection		mm	0.0	24.3	-26.1	69.5
Driver Pelvis X	X	g	2.9	238.4	-57.0	58.6

DATA SHEET NO. 4 … (CONTINUED)

TARGET VEHICLE OCCUPANT INJURY ASSESSMENT DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Description	Axis	Units	Max	Time (ms)	Min	Time (ms)
Driver Pelvis Y	Y	g	35.2	74.1	-3.1	209.8
Driver Pelvis Z	Z	g	9.2	52.4	-24.0	86.7
Driver Left Femur Force X	X	N	960.3	84.7	-70.5	229.7
Driver Left Femur Force Y	Y	N	512.1	75.8	-327.7	59.7
Driver Left Femur Force Z	Z	N	807.8	48.4	-2760.0	56.0
Driver Left Femur Moment X	X	Nm	78.7	107.9	-142.4	80.1
Driver Left Femur Moment Y	Y	Nm	92.4	84.7	-19.2	59.0
Driver Left Femur Moment Z	Z	Nm	22.0	146.5	-47.8	81.1
Driver Right Femur Force X	X	N	755.2	78.1	-525.2	58.3
Driver Right Femur Force Y	Y	N	606.4	58.8	-186.5	56.7
Driver Right Femur Force Z	Z	N	687.3	46.9	-3851.6	58.4
Driver Right Femur Moment X	X	Nm	39.8	103.6	-213.1	60.0
Driver Right Femur Moment Y	Y	Nm	144.9	77.6	-36.5	53.3
Driver Right Femur Moment Z	Z	Nm	44.5	54.0	-17.0	209.2
Driver Left Knee Deflection		°	0.6	50.1	-5.0	90.6
Driver Left Tibia X	X	g	3.6	285.9	-64.9	59.4
Driver Left Tibia Y	Y	g	66.2	66.3	-15.2	103.3
Driver Left Foot X	X	g	26.8	61.4	-54.5	46.1
Driver Left Foot Y	Y	g	83.1	63.9	-20.5	95.0
Driver Left Foot Z	Z	g	51.0	65.2	-52.4	46.2
Driver Left Ankle Rotation X	Y	°	18.1	381.5	-33.9	65.8
Driver Left Ankle Rotation Y	X	°	23.5	77.6	-7.6	4.8
Driver Left Ankle Rotation Z	Z	°	13.4	75.5	-10.4	387.5
Driver Left Upper Tibia Force X	Y	N	438.0	59.0	-547.0	96.7
Driver Left Upper Tibia Force Z	Z	N	0.0	0.0	0.0	0.0
Driver Left Upper Tibia Moment X	X	Nm	12.1	145.9	-100.6	67.2
Driver Left Upper Tibia Moment Y	Y	Nm	59.8	96.0	-80.5	58.3
Driver Left Lower Tibia Force X	X	N	75.2	244.2	-738.5	58.9
Driver Left Lower Tibia Force Y	Y	N	409.0	66.8	-112.5	73.5
Driver Left Lower Tibia Force Z	Z	N	79.0	260.1	-1858.1	65.9
Driver Left Lower Tibia Moment X	X	Nm	12.2	377.5	-92.3	65.8
Driver Left Lower Tibia Moment Y	Y	Nm	27.7	97.2	-57.7	58.8

DATA SHEET NO. 4 … (CONTINUED)

TARGET VEHICLE OCCUPANT INJURY ASSESSMENT DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Description	Axis	Units	Max	Time (ms)	Min	Time (ms)
Driver Right Knee Deflection		mm	0.5	53.7	-2.3	58.9
Driver Right Tibia	X	g	7.1	80.1	-50.4	62.9
Driver Right Tibia	Y	g	90.0	73.5	-19.6	107.0
Driver Right Foot	X	g	58.9	70.5	-55.2	43.9
Driver Right Foot	Y	g	126.6	70.7	-29.9	62.7
Driver Right Foot	Z	g	45.4	51.9	-56.6	55.8
Driver Right Ankle Rotation	X	°	-0.4	29.8	-33.6	76.4
Driver Right Ankle Rotation	Y	°	18.0	79.5	-14.9	19.1
Driver Right Ankle Rotation	Z	°	-20.2	70.3	-41.6	398.7
Driver Right Upper Tibia Force	X	N	343.9	47.0	-208.2	80.3
Driver Right Upper Tibia Force	Y	N	205.3	99.3	-1169.3	74.2
Driver Right Upper Tibia Force	Z	N	155.8	187.1	-2347.9	77.9
Driver Right Upper Tibia Moment	X	Nm	56.0	109.4	-132.4	74.8
Driver Right Upper Tibia Moment	Y	Nm	2.2	58.0	-56.7	57.2
Driver Right Lower Tibia Force	X	N	42.7	223.8	-505.8	58.1
Driver Right Lower Tibia Force	Y	N	474.5	63.0	-599.9	70.7
Driver Right Lower Tibia Force	Z	N	115.4	209.3	-4583.2	76.7
Driver Right Lower Tibia Moment	X	Nm	44.8	99.1	-178.1	74.9
Driver Right Lower Tibia Moment	Y	Nm	21.1	68.9	-44.4	58.7
Driver Lap Belt Force		N	5461.2	69.2	-23.8	135.6
Driver Shoulder Belt Force		N	4112.9	65.5	-51.9	19.7
LR Passenger Head CG	X	g	6.0	230.7	-75.7	111.6
LR Passenger Head CG	Y	g	19.9	111.5	-5.1	229.5
LR Passenger Head CG	Z	g	66.4	99.7	-1.7	36.3
LR Passenger Top Head Array	X	g	9.0	226.4	-114.5	108.8
LR Passenger Top Head Array	Y	g	35.0	111.0	-8.3	225.5
LR Passenger Left Side Head Array	X	g	8.4	229.6	-67.1	111.5
LR Passenger Left Side Head Array	Z	g	68.5	99.7	-1.4	37.3
LR Passenger Front Head Array	Y	g	31.2	108.9	-4.1	248.3
LR Passenger Front Head Array	Z	g	63.9	99.5	-27.4	108.6
LR Passenger Head CG Redundant	X	g	6.2	229.3	-76.0	111.6
LR Passenger Head CG Redundant	Y	g	20.2	111.2	-5.0	228.8
LR Passenger Head CG Redundant	Z	g	64.9	99.5	-1.4	35.5

DATA SHEET NO. 4 … (CONTINUED)

TARGET VEHICLE OCCUPANT INJURY ASSESSMENT DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

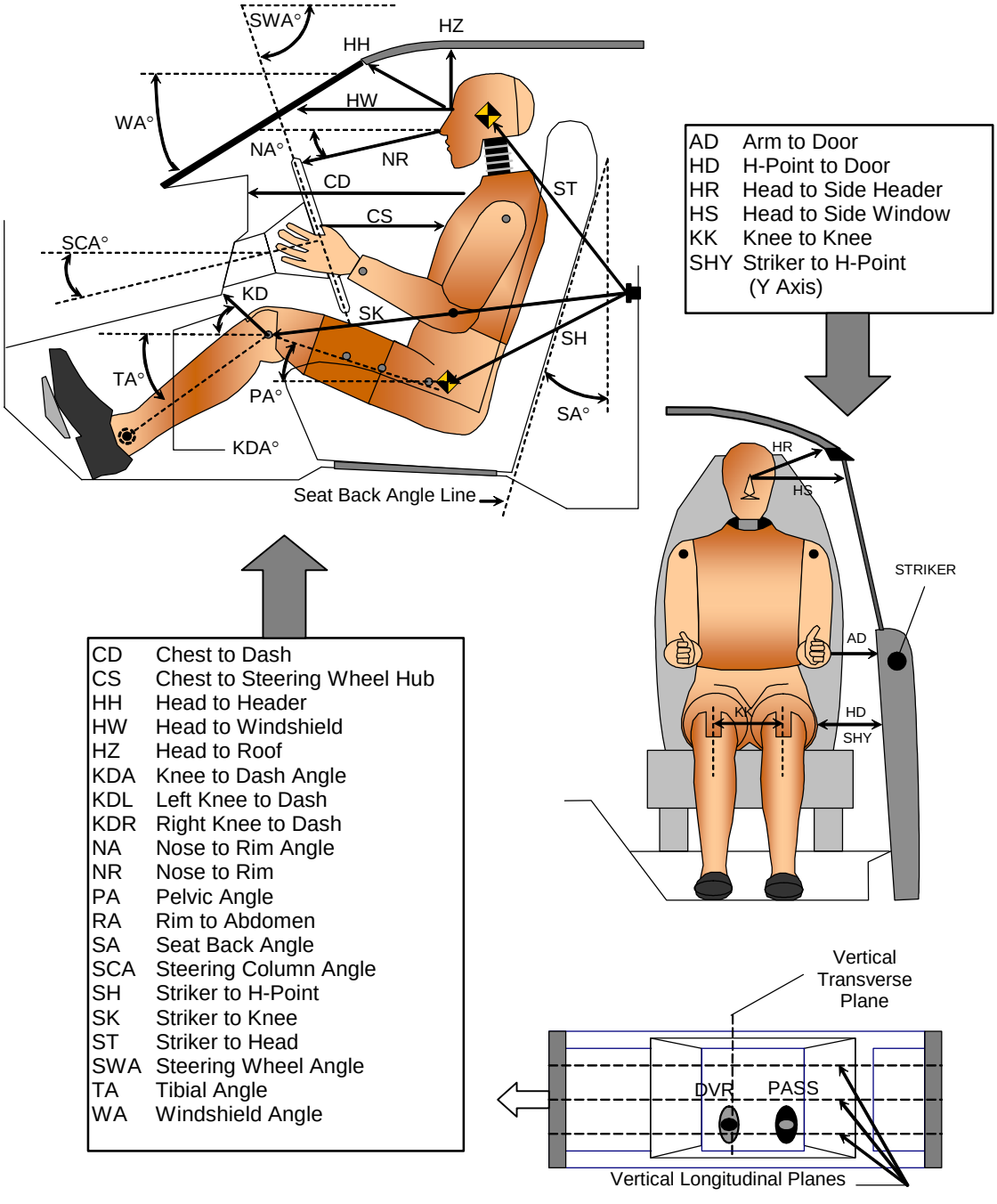
Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Description	Axis	Units	Max	Time (ms)	Min	Time (ms)
LR Passenger Upper Neck Force X	X	N	1894.8	110.8	-101.0	215.5
LR Passenger Upper Neck Force Y	Y	N	535.7	116.0	-106.4	185.5
LR Passenger Upper Neck Force Z	Z	N	2842.6	112.6	-692.8	259.2
LR Passenger Upper Neck Moment X	X	Nm	29.1	109.2	-22.1	84.0
LR Passenger Upper Neck Moment Y	Y	Nm	21.7	107.1	-54.8	263.0
LR Passenger Upper Neck Moment Z	Z	Nm	13.9	107.5	-13.7	83.3
LR Passenger Lower Neck Force X	X	N	2356.7	100.6	-172.1	192.0
LR Passenger Lower Neck Force Y	Y	N	498.5	100.0	-143.7	182.0
LR Passenger Lower Neck Force Z	Z	N	1745.0	79.2	-1839.5	111.3
LR Passenger Lower Neck Moment X	X	Nm	127.7	114.9	-29.8	184.3
LR Passenger Lower Neck Moment Y	Y	Nm	498.2	111.3	-51.9	196.2
LR Passenger Lower Neck Moment Z	Z	Nm	38.4	116.5	-16.9	262.0
LR Passenger Chest X Primary	X	g	4.5	262.8	-57.5	76.5
LR Passenger Chest Y Primary	Y	g	19.1	99.2	-2.4	324.5
LR Passenger Chest Z Primary	Z	g	9.2	65.5	-20.5	100.3
LR Passenger Chest X Redundant	X	g	4.4	262.8	-57.3	76.5
LR Passenger Chest Y Redundant	Y	g	18.8	99.2	-2.4	323.4
LR Passenger Chest Z Redundant	Z	g	9.2	65.4	-20.9	100.4
LR Passenger Chest Deflection		mm	0.1	34.8	-35.6	97.9
LR Passenger Pelvis X Primary	Y	g	6.1	125.7	-49.9	75.6
LR Passenger Pelvis Y Primary	Z	g	19.3	82.5	-4.2	327.9
LR Passenger Pelvis Z Primary	X	g	3.9	286.9	-26.0	98.7
LR Passenger Left Femur Force Z	Z	N	1296.4	66.0	-79.1	312.9
LR Passenger Right Femur Force Z	Z	N	1391.1	75.3	-492.4	83.3
LR Passenger Lap Belt Force		N	6285.1	74.2	2.1	1.5
LR Passenger Shoulder Belt Force		N	6668.5	79.6	1.7	2.3

DATA SHEET NO. 5

TARGET VEHICLE DUMMY POSITIONING DATA

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10



DATA SHEET NO. 5 … (CONTINUED)

TARGET VEHICLE DUMMY POSITIONING DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

TEST DUMMY POSITION MEASUREMENTS

Code	Measurement Description	Driver		Left Rear Passenger	
		Length (mm)	Angle (°)	Length (mm)	Angle (°)
WA	Windshield Angle		28.2		
SWA	Steering Wheel Angle		66		
SCA	Steering Column Angle		24		
SA	Seat Back Angle		17.4		Fixed
HZ	Head to Roof (Z)	206	88.9	328	89.7
HH	Head to Header	316	36		
HR	Head to Side Header	279	32.2	203	39
NR	Nose to Rim	374	7.2		
CD	Chest to Dash	558	14.1		
CS	Chest to Steering Hub	306	0.1		
RA	Rim to Abdomen	189	0.8		
KDL	Left Knee to Dash / Seat Back	161	13.8	371	12
KDR	Right Knee to Dash / Seat Back	157	25.1	360	14.9
PA	Pelvis Angle		24.8		23.5
TA	Tibia Angle		44.9		61
KK	Knee to Knee	224		154	
SK	Striker to Knee	593	4.7	620	18.1
ST	Striker to Head	625	77.6	308	73.8
SH	Striker to H-Point	274	38.5	359	42.8
SHY	Striker to H-Point (Y)	268		311	
HS	Head to Side Window	377		420	
HD	H-Point to Door	46		101	
AD	Arm to Door	120		173	

DATA SHEET NO. 5 … (CONTINUED)

TARGET VEHICLE DUMMY POSITIONING DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

TEST DUMMY POINT LOCATIONS

Description	Driver			Left Rear Passenger		
	X	Y	Z	X	Y	Z
Head CG	2648	451	1194	1600	416	1109
Bridge of Nose	2760	378	1182	1695	343	1115
Tip of Nose	2775	382	1148	1717	343	1082
Chin	2749	379	1071	1697	343	1004
Hip Point	2754	632	529	1778	71	569
Left Knee	3130	530	651	2103	451	620
Right Knee	3145	315	623	2118	306	605
Left Ankle	3425	548	352	2285	464	323
Right Ankle	3454	250	350	2295	292	333
Front Outboard Seat Anchor Bolt	3056	549	288			
Center of Striker	2540	816	699	1514	799	813

Reference Planes: X – Rear of Vehicle Centerline, X+ forward

Y – Vehicle Centerline, Y+ left

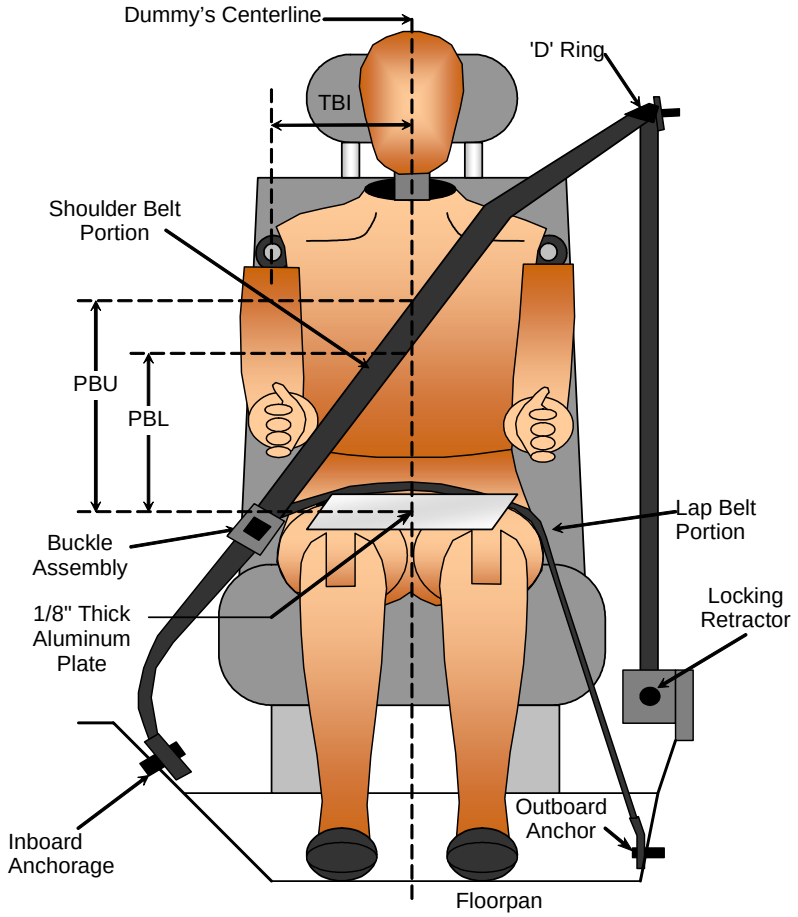
Z – Ground, Z+ up

All measurements in millimeters

DATA SHEET NO. 6

TARGET VEHICLE SEAT BELT POSITIONING DATA

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10



SEAT BELT POSITIONING MEASUREMENTS

Code	Measured Parameter	Units	Driver	Left Rear Passenger
TBI	Dummy C/L to Lap/Shoulder Belt Intersect	mm	182	185
PBU	Top Surface of Reference to Belt Upper	mm	336	293
PBL	Top Surface of Reference to Belt Lower	mm	255	215

DATA SHEET NO. 7

TARGET VEHICLE ACCELEROMETER LOCATIONS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Accelerometer Description	Axes	Location		
		X	Y	Z
Left Rear Sill	X,Y	-2893	750	340
Right Rear Sill	X,Y	-2983	-750	340
Vehicle CG	X,Y,Z	-2823	20	350
Engine Top	X	-783	-50	800
Engine Bottom	X	-1043	-30	86
Left Front Brake Caliper	X	-993	820	94
Right Front Brake Caliper	X	-988	-820	96
Instrument Panel	X	-1883	0	880
Driver Seat Track	X	-2413	660	220
Accelerator Pedal	X,Y,Z	-1643	270	490
Brake Pedal	X,Y,Z	-1653	370	510
Foot Rest	X,Y,Z	-1743	690	540

Reference Planes: X – Front of Vehicle Centerline, X+ forward

Y – Vehicle Centerline, Y+ left

Z – Ground Plane, Z+ up

All measurements in millimeters

DATA SHEET NO. 8

TARGET VEHICLE ACCELEROMETER DATA SUMMARY

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

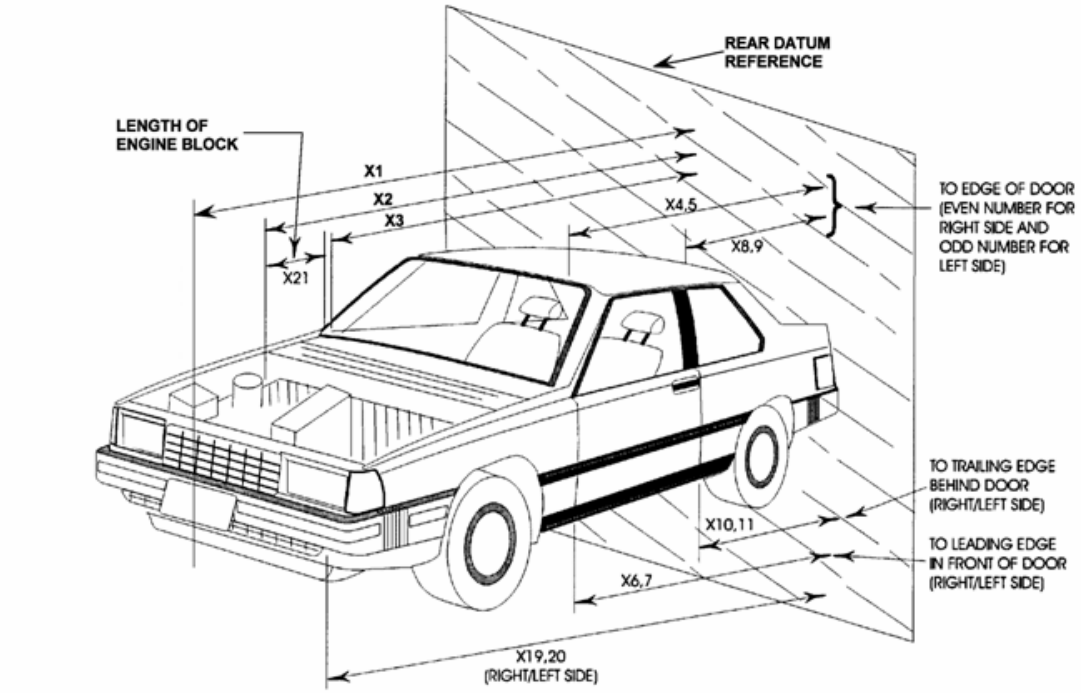
Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

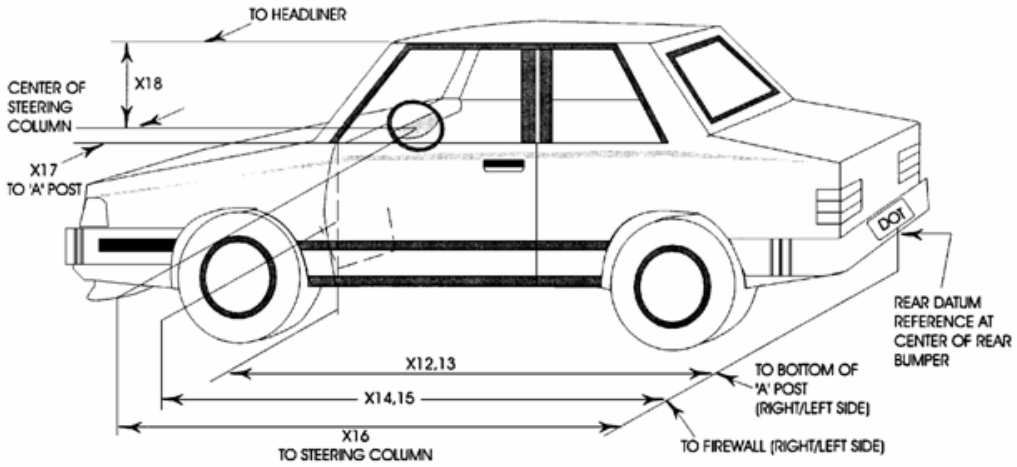
No.	Accelerometer Description	Axis	Units	Max	Time (ms)	Min	Time (ms)
1	Left Rear Sill	X	g	2.8	129.2	-26.2	63.2
2		Y	g	25.1	48.3	-3.0	84.7
4	Right Rear Sill	X	g	2.0	152.5	-43.3	52.4
5		Y	g	16.6	51.5	-2.8	85.0
7	Vehicle CG	X	g	2.2	42.7	-41.1	52.0
8		Y	g	23.7	51.8	-4.0	95.0
9		Z	g	23.0	48.1	-15.0	37.3
10	Engine Top	X	g	57.8	55.2	-87.3	36.3
11	Engine Bottom	X	g	20.2	117.3	-53.0	35.8
12	Left Front Brake Caliper	X	g	197.1	48.9	-140.6	64.3
13	Right Front Brake Caliper	X	g	33.6	52.0	-73.6	46.7
14	Instrument Panel	X	g	22.3	108.9	-80.6	51.2
15	Driver Seat Track	X	g	0.7	90.9	-81.1	55.4
16	Accelerator Pedal	X	g	23.7	61.5	-91.5	44.0
17		Y	g	24.9	94.9	-48.0	44.3
18		Z	g	28.6	49.5	-43.1	53.1
19	Brake Pedal	X	g	116.3	54.3	-165.7	44.7
20		Y	g	0.0	0.0	0.0	0.0
21		Z	g	94.7	72.4	-73.5	60.1
22	Foot Rest	X	g	17.5	30.8	-55.8	40.1
23		Y	g	49.2	48.5	-18.4	90.0
24		Z	g	13.4	64.6	-29.2	69.7

DATA SHEET NO. 9

TARGET VEHICLE MEASUREMENTS

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10





DATA SHEET NO. 9 … (CONTINUED)

TARGET VEHICLE MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

VEHICLE MEASUREMENT TABLE

No.	Description	Pre-Test	Post-Test	Difference
1	Total Vehicle Length at Centerline	5093	4759	-334
2	RSOV to Front of Engine	4559	4383	-176
3	RSOV to Firewall Centerline	4023	4392	369
4	RSOV to Leading Edge of Right Door	3542	3527	-15
5	RSOV to Leading Edge of Left Door	3551	3507	-44
6	RSOV to Lower Leading Edge of Right Door	3505	3470	-35
7	RSOV to Lower Leading Edge of Left Door	3518	3461	-57
8	RSOV to Upper Leading Edge of Right Door	3528	3518	-10
9	RSOV to Upper Leading Edge of Left Door	3537	3493	-44
10	RSOV to Lower Trailing Edge of Right Door	2455	2418	-37
11	RSOV to Lower Trailing Edge of Left Door	2462	2415	-47
12	RSOV to Bottom of Right A-Pillar	3503	3466	-37
13	RSOV to Bottom of Left A-Pillar	3523	3392	-131
14	RSOV to Firewall on Right Side	3921	4388	467
15	RSOV to Firewall on Left Side	3927	3689	-238
16	RSOV to Steering Column	3065	3016	-49
17	Center of Steering Column to Left A-Pillar	440	475	35
18	Center of Steering Column to Headliner	437	459	22
19	RSOV to Right Side of Front Bumper	4361	4677	316
20	RSOV to Left Side of Front Bumper	4370	4168	-202
21	Engine Block Length	536	449	-87
RD	RSOV to Right Side of Dash	3240	3222	-18
CD	RSOV to Center of Dash	3235	3174	-61
LD	RSOV to Left Side of Dash	3244	3157	-87

RSOV = Rear Surface of Vehicle

All measurements in millimeters

DATA SHEET NO. 9 … (CONTINUED)

TARGET VEHICLE MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

VEHICLE STRUCTURAL MEASUREMENT TABLE

No.	Description	Pre-Test	Post-Test	Difference
1	Total Vehicle Length	5093	5037	-56
2	Total Vehicle Width	1884	1902	18
3	Bumper Top Height	540	280	-260
4	Bumper Bottom Height	381	221	-160
5	Longitudinal Member Top Height	540	510	-30
6	Longitudinal Member Bottom Height	435	450	15
7	Distance Between Longitudinal Members	980	990	10
8	Longitudinal Member Width	100	105	5
9	Engine Top Height	888	838	-50
10	Engine Bottom Height	213	153	-60
11	Engine and Gearbox Width	760	634	-126
12	Front Bumper to Engine Distance	534	254	-280
13	Front Shock Absorber Fixing Height	871	864	-7
14	Hood Leading Edge Height	784	822	38
15	Front Shock Absorber Fixing Width	1249	1244	-5
16	Front Bumper to Front Axle Distance	1013	860	-153
17	Front Axle to A-Pillar Distance	556	507	-49
18	A-Pillar to B-Pillar Distance	1034	923	-111
19	B-Pillar to Rear Axle Distance	1286	1267	-19
20	B-Pillar to C-Pillar Distance	824	813	-11
21	Roof Sill Bottom Height	1416	1344	-72
22	Roof Sill Top Height	1464	1395	-69
23	Floor Sill Bottom Height	268	171	-97
24	Floor Sill Top Height	290	191	-99

All measurements in millimeters

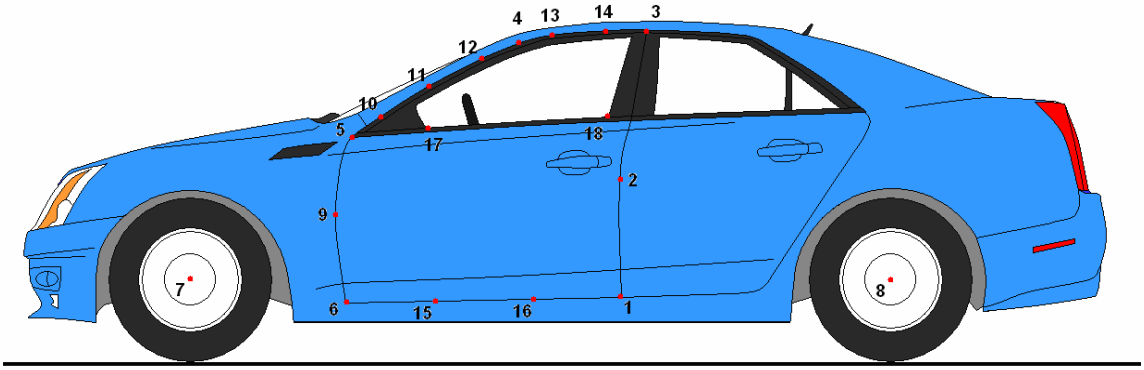
DATA SHEET NO. 9 … (CONTINUED)

TARGET VEHICLE MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10



LEFT FRONT DOOR JAM MEASUREMENTS

Point	Pre-Test			Post-Test			Difference		
	X	Y	Z	X	Y	Z	X	Y	Z
1	2739	779	327	2722	731	233	-17	-48	-94
2	2465	780	966	2480	760	887	15	-20	-79
3	2362	635	1402	2399	633	1333	37	-2	-69
4	2922	670	1318	2965	661	1284	43	-9	-34
5	3468	781	952	3416	774	834	-52	-7	-118
6	3416	774	328	3379	742	202	-37	-32	-126
7	4079	896	291	3899	743	269	-180	-153	-22
8	1203	869	303	1202	839	300	-1	-30	-3
9	3464	793	696	3382	778	578	-82	-15	-118
10	3430	766	1015	3384	763	901	-46	-3	-114
11	3253	733	1144	3247	729	1069	-6	-4	-75
12	3064	698	1257	3100	685	1233	36	-13	-24
13	2801	653	1356	2842	644	1311	41	-9	-45
14	2431	629	1402	2468	630	1330	37	1	-72
15	3308	766	287	3280	710	159	-28	-56	-128
16	3106	765	287	3086	710	174	-20	-55	-113
17	3271	849	938	3233	835	835	-38	-14	-103
18	2518	840	970	2494	888	890	-24	48	-80

NOTE: Points 1 through 6 and 9 through16 are taken in the door frame area. Points 17 and 18 are taken on the outer door surface.

Reference Planes: X – Rear of Vehicle Centerline, X+ forward

Y – Vehicle Centerline, Y+ left

Z – Ground, Z+ up

All measurements in millimeters

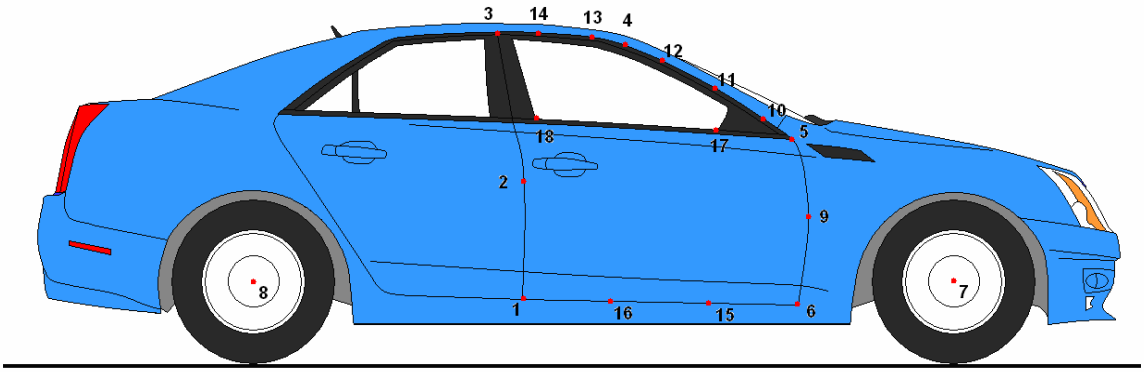
DATA SHEET NO. 9 … (CONTINUED)

TARGET VEHICLE MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10



RIGHT FRONT DOOR JAM MEASUREMENTS

Point	Pre-Test			Post-Test			Difference		
	X	Y	Z	X	Y	Z	X	Y	Z
1	2689	-840	360	2656	-890	392	-33	-50	32
2	2491	-840	747	2472	-865	784	-19	-25	37
3	2404	-636	1398	2412	-628	1428	8	8	30
4	2924	-683	1315	2927	-690	1330	3	-7	15
5	3464	-806	921	3450	-857	924	-14	-51	3
6	3391	-828	317	3356	-905	325	-35	-77	8
7	4075	-914	303	4051	-985	301	-24	-71	-2
8	1202	-942	309	1186	-963	323	-16	-21	14
9	3458	-823	698	3437	-883	703	-21	-60	5
10	3437	-788	1000	3423	-835	1004	-14	-47	4
11	3130	-723	1215	3129	-747	1227	-1	-24	12
12	2973	-692	1296	2979	-701	1306	6	-9	10
13	2817	-663	1348	2824	-666	1364	7	-3	16
14	2465	-636	1400	2472	-629	1427	7	7	27
15	3101	-832	290	3066	-899	308	-35	-67	18
16	2817	-836	302	2783	-895	330	-34	-59	28
17	3250	-865	952	3241	-907	966	-9	-42	14
18	2505	-870	980	2498	-887	1017	-7	-17	37

NOTE: Points 1 through 6 and 9 through16 are taken in the door frame area. Points 17 and 18 are taken on the outer door surface.

Reference Planes: X – Rear of Vehicle Centerline, X+ forward

Y – Vehicle Centerline, Y+ left

Z – Ground, Z+ up

All measurements in millimeters

DATA SHEET NO. 10

TARGET VEHICLE STRUCTURAL CRUSH MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Description	Pre-Test			Post-Test			Difference		
	X	Y	Z	X	Y	Z	X	Y	Z
Lower Bumper Beam 1	4948	574	378	4365	392	297	-583	-182	-81
Lower Bumper Beam 2	4963	403	379	4388	236	263	-575	-167	-116
Lower Bumper Beam 3	4978	136	383	4518	21	264	-460	-115	-119
Lower Bumper Beam 4	4978	-136	385	4683	-195	290	-295	-59	-95
Lower Bumper Beam 5	4964	-405	388	4836	-414	314	-128	-9	-74
Lower Bumper Beam 6	4949	-574	391	4928	-553	333	-21	21	-58
Upper Bumper Beam 1	4903	672	529	4407	448	476	-496	-224	-53
Upper Bumper Beam 2	4966	401	528	4394	208	393	-572	-193	-135
Upper Bumper Beam 3	4980	134	532	4512	32	412	-468	-102	-120
Upper Bumper Beam 4	4979	-138	535	4690	-173	436	-289	-35	-99
Upper Bumper Beam 5	4966	-406	537	4851	-387	460	-115	19	-77
Upper Bumper Beam 6	4902	-673	541	4972	-631	495	70	42	-46
Upper Radiator Support 1	4597	672	794	4580	550	1079	-17	-122	285
Upper Radiator Support 2	4761	402	804	4583	539	1036	-178	137	232
Upper Radiator Support 3	4761	134	812	4605	612	858	-156	478	46
Upper Radiator Support 4	4758	-138	814	4600	608	862	-158	746	48
Upper Radiator Support 5	4764	-405	809	4706	-413	815	-58	-8	6
Upper Radiator Support 6	4599	-674	810	4588	-694	772	-11	-20	-38
Front of Hood 1	4692	670	824	4194	510	962	-498	-160	138
Front of Hood 2	4882	402	774	4340	276	784	-542	-126	10
Front of Hood 3	4925	134	791	4453	33	785	-472	-101	-6
Front of Hood 4	4925	-137	792	4566	-204	859	-359	-67	67
Front of Hood 5	4883	-404	783	4644	-443	961	-239	-39	178
Front of Hood 6	4687	-673	842	4552	-704	1121	-135	-31	279

Notes: Lower Bumper Beam measurement points were taken on the foam material of the bumper.

See Figures 333 through 340 of Appendix A for photographs of the crush measurements.

Reference Planes: X – Rear of Vehicle Centerline, X+ forward

Y – Vehicle Centerline, Y+ left

Z – Ground, Z+ up

All measurements in millimeters

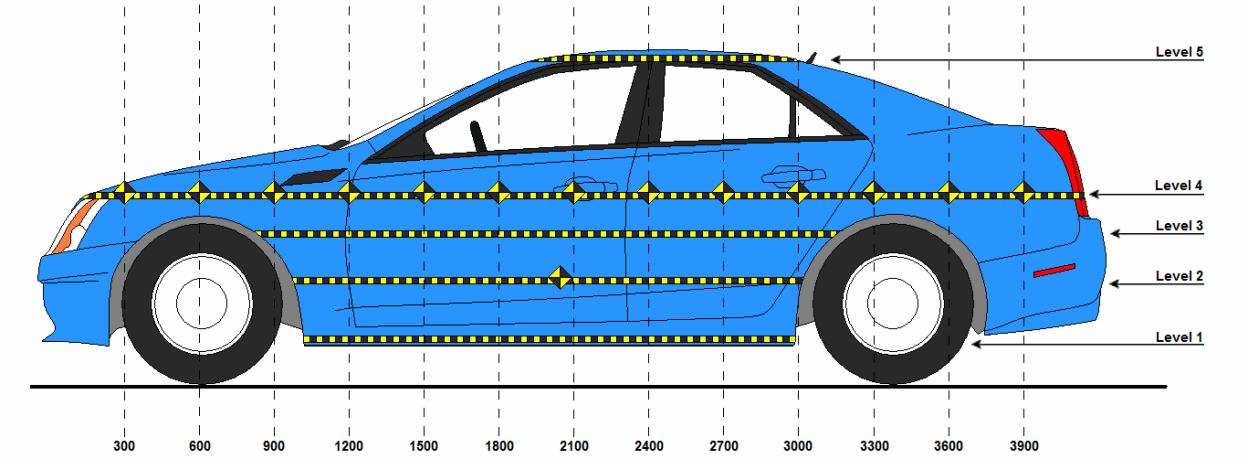
DATA SHEET NO. 11

TARGET VEHICLE SIDE CRUSH MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10



Level	Description	Height Above Ground
1	Sill Top	295
2	Occupant H-Point	550
3	Mid-Door	597
4	Vehicle Length	729
5	Window Top	1455

All measurements in millimeters

DATA SHEET NO. 11… (CONTINUED)

TARGET VEHICLE SIDE CRUSH MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

	Pre-Test					Post-Test					Difference				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
0															
150															
300															
450															
600				653					719					66	
750				622					728					106	
900				583					647					64	
1050				578					714					136	
1200				582					735					153	
1350		581	578	596			785	768	733			204	190	137	
1500	624	591	591	594		691	663	657	651		67	72	66	57	
1650	628	590	589	590		670	607	600	597		42	17	11	7	
1800	630	588	586	587		671	605	599	588		41	17	13	1	
1950	629	586	585	584		671	603	597	586		42	17	12	2	
2100	629	585	583	583	759	671	602	595	585	729	42	17	12	2	-30
2250	630	584	582	582	872	669	600	595	585	874	39	16	13	3	2
2400	629	583	581	582	867	669	599	594	586	865	40	16	13	4	-2
2550	629	583	581	581	867	666	598	594	587	859	37	15	13	6	-8
2700	630	584	583	583	876	680	623	620	613	861	50	39	37	30	-15
2850	632	586	584	584	883	679	621	618	611	868	47	35	34	27	-15
3000	635	588	586	586		678	619	616	610		43	31	30	24	
3150	635	590	589	589		676	618	614	609		41	28	25	20	
3300	638	593	592	592		674	617	614	609		36	24	22	17	
3450	633	592	591	596		675	612	610	609		42	20	19	13	
3600			582	594				603	603				21	9	
3750				581					590					9	
3900				576					581					5	
4050				587					591					4	
4200				622					617					-5	
4350				637					629					-8	
4500				651					639					-12	

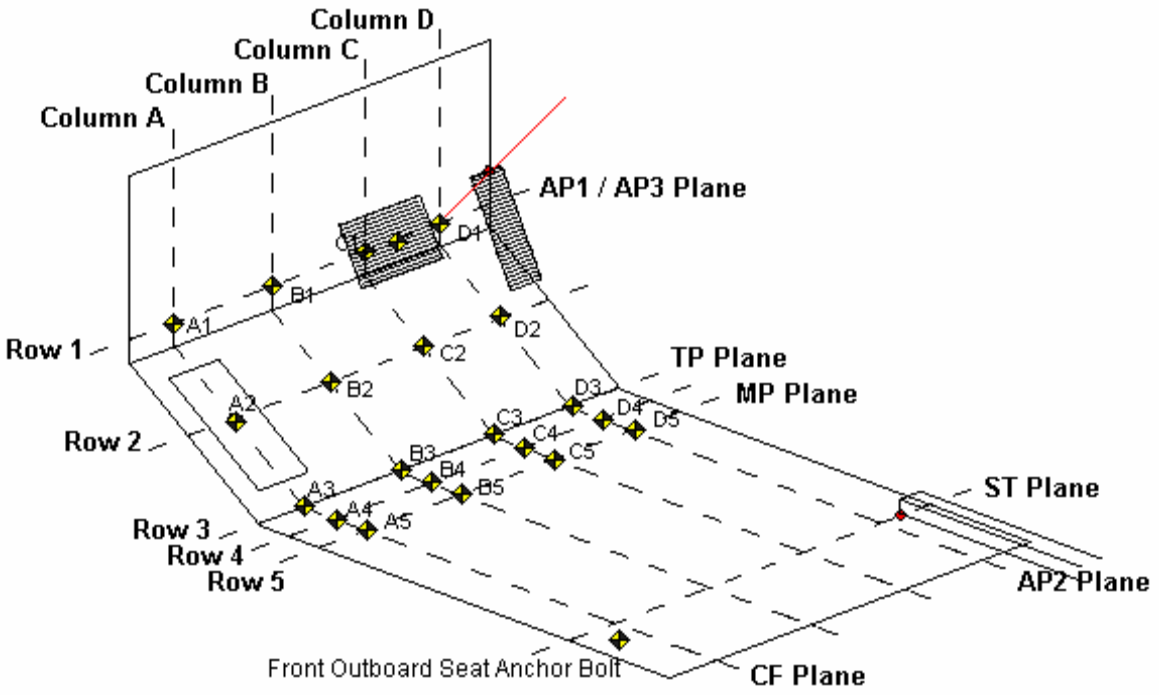
All measurements in millimeters

DATA SHEET NO. 12

TARGET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

STANDARD NHTSA FLOORPAN MEASUREMENTS



AP1: Y-Z Plane passing through D1

AP2: X-Z Plane passing through D1

AP3: X-Y plane passing through D1

MP: Y-Z plane, halfway between the ST plane and AP1 plane

CF Plane: X-Z plane passes through center of footrest.

BP Plane: X-Z plane passes through center of brake pedal

TP Plane: Y-Z plane, intersection of BP Plane and the intersection of the toe pan and floorboard

Column A: intersection of vehicle and CF plane

Column D: Intersection of vehicle and AP2 plane

Row 1: intersection of the vehicle and the AP3 Plane

Row 3: intersection of the vehicle and TP plane

Row 5: intersection of the vehicle and MP plane

Row 2: evenly spaced between row 1 and 3

Row 4: evenly spaced between row 3 and 5

DATA SHEET NO. 12 … (CONTINUED)

TARGET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

DRIVER FLOORPAN

Point	Pre-Test			Post-Test			Difference		
	X	Y	Z	X	Y	Z	X	Y	Z
A1	3651	508	379	3583	466	297	-68	-42	-82
A2	3619	517	261	3569	465	177	-50	-52	-84
A3	3537	516	203	3534	465	99	-3	-51	-104
A4	3444	518	206	3442	467	104	-2	-51	-102
A5	3347	520	207	3346	467	102	-1	-53	-105
B1	3707	403	326	3633	346	262	-74	-57	-64
B2	3623	407	260	3603	358	175	-20	-49	-85
B3	3533	409	206	3534	357	104	1	-52	-102
B4	3441	408	208	3440	359	121	-1	-49	-87
B5	3345	412	208	3345	362	123	0	-50	-85
C1	3699	296	328	3642	242	267	-57	-54	-61
C2	3618	299	265	3607	249	170	-11	-50	-95
C3	3534	297	214	3535	245	121	1	-52	-93
C4	3439	301	211	3440	251	135	1	-50	-76
C5	3344	298	210	3344	250	132	0	-48	-78
D1	3711	191	312	3680	148	251	-31	-43	-61
D2	3630	191	249	3627	145	176	-3	-46	-73
D3	3533	188	209	3532	138	133	-1	-50	-76
D4	3434	188	213	3433	138	142	-1	-50	-71
D5	3344	189	212	3343	141	145	-1	-48	-67
Left IP	3270	530	751	3207	473	663	-63	-57	-88
Right IP	3280	199	736	3233	143	659	-47	-56	-77
Steering Column	3066	350	939	3031	320	885	-35	-30	-54
Outboard Seat Bolt	3056	549	288	3061	508	184	5	-41	-104
Brake Pedal	3538	315	411	3466	349	336	-72	34	-75

Reference Planes: X – Rear of Vehicle at Centerline, X+ forward

Y – Vehicle Centerline, Y+ left

Z – Ground, Z+ up

All measurements in millimeters

DATA SHEET NO. 12 … (CONTINUED)

TARGET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

ADDITIONAL FLOORPAN MEASUREMENT POINTS (NON-STANDARD)

PRE-TEST

POST-TEST

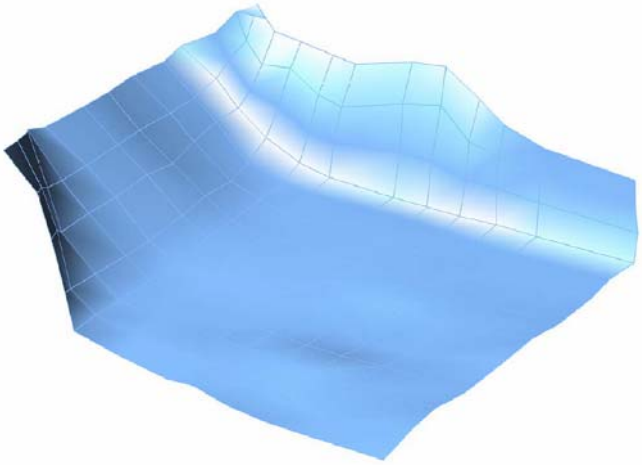
DATA SHEET NO. 12 … (CONTINUED)

TARGET VEHICLE INTRUSION MEASUREMENTS

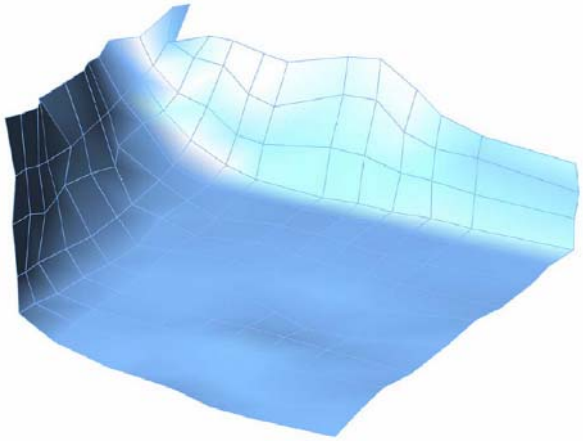
Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

ADDITIONAL FLOORPAN MEASUREMENT POINTS (NON-STANDARD)

PRE-TEST



POST-TEST



Reference Planes: X – Rear of Vehicle Centerline, X+ forward

Y – Vehicle Centerline, Y+ left

Z – Ground, Z+ up

DATA SHEET NO. 12 … (CONTINUED)

TARGET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Point No.	Row	Pre-Test			Post-Test			Difference		
		X	Y	Z	X	Y	Z	X	Y	Z
1	A	2138	-293	206	2106	-365	99	-32	-72	-107
2	A	2141	-357	215	2108	-427	114	-33	-70	-101
3	A	2145	-408	216	2113	-480	120	-32	-72	-96
4	A	2143	-465	209	2112	-536	119	-31	-71	-90
5	A	2138	-537	216	2107	-607	133	-31	-70	-83
6	A	2137	-593	220	2108	-666	142	-29	-73	-78
7	A	2136	-646	214	2105	-717	141	-31	-71	-73
8	A	2137	-717	215	2106	-788	150	-31	-71	-65
9	A	2143	-760	216	2112	-831	154	-31	-71	-62
10	A	2140	-803	217	2106	-873	160	-34	-70	-57
11	A	2144	-819	248	2114	-885	193	-30	-66	-55
12	A	2150	-825	282	2113	-889	224	-37	-64	-58
13	A	2153	-830	310	2124	-897	254	-29	-67	-56
14	B	2250	-296	204	2218	-370	91	-32	-74	-113
15	B	2249	-339	204	2217	-412	95	-32	-73	-109
16	B	2251	-397	218	2220	-468	116	-31	-71	-102
17	B	2249	-458	216	2219	-529	122	-30	-71	-94
18	B	2254	-522	199	2224	-592	113	-30	-70	-86
19	B	2260	-579	211	2229	-650	128	-31	-71	-83
20	B	2267	-638	216	2237	-707	140	-30	-69	-76
21	B	2271	-696	213	2238	-765	144	-33	-69	-69
22	B	2271	-753	214	2238	-825	150	-33	-72	-64
23	B	2272	-799	215	2239	-870	153	-33	-71	-62
24	B	2276	-811	253	2244	-881	190	-32	-70	-63
25	B	2276	-820	293	2248	-890	231	-28	-70	-62
26	B	2274	-824	319	2246	-894	257	-28	-70	-62
27	C	2310	-299	204	2277	-373	89	-33	-74	-115
28	C	2309	-360	198	2276	-434	89	-33	-74	-109
29	C	2309	-406	217	2278	-478	116	-31	-72	-101
30	C	2310	-460	211	2278	-531	121	-32	-71	-90
31	C	2317	-521	195	2285	-594	109	-32	-73	-86
32	C	2316	-582	213	2284	-654	129	-32	-72	-84
33	C	2313	-637	216	2282	-713	138	-31	-76	-78
34	C	2321	-695	213	2290	-766	141	-31	-71	-72
35	C	2325	-753	214	2294	-823	148	-31	-70	-66
36	C	2327	-797	216	2293	-868	152	-34	-71	-64
37	C	2332	-807	257	2301	-879	192	-31	-72	-65
38	C	2333	-814	296	2302	-885	229	-31	-71	-67

All measurements in millimeters

DATA SHEET NO. 12 … (CONTINUED)

TARGET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Point No.	Row	Pre-Test			Post-Test			Difference		
		X	Y	Z	X	Y	Z	X	Y	Z
39	D	2333	-829	330	2306	-900	265	-27	-71	-65
40	D	2369	-309	202	2334	-384	93	-35	-75	-109
41	D	2366	-368	202	2332	-442	93	-34	-74	-109
42	D	2364	-415	209	2332	-488	111	-32	-73	-98
43	D	2364	-466	207	2331	-537	118	-33	-71	-89
44	D	2363	-526	202	2330	-598	116	-33	-72	-86
45	D	2362	-586	212	2330	-657	128	-32	-71	-84
46	D	2362	-640	214	2330	-712	137	-32	-72	-77
47	D	2370	-697	216	2339	-765	143	-31	-68	-73
48	D	2371	-751	217	2339	-821	148	-32	-70	-69
49	D	2375	-793	215	2341	-863	149	-34	-70	-66
50	D	2372	-804	258	2341	-876	193	-31	-72	-65
51	D	2372	-812	305	2344	-885	239	-28	-73	-66
52	D	2373	-837	349	2345	-910	282	-28	-73	-67
53	E	2421	-322	206	2389	-397	89	-32	-75	-117
54	E	2422	-374	209	2390	-448	100	-32	-74	-109
55	E	2416	-420	209	2383	-494	108	-33	-74	-101
56	E	2414	-471	205	2381	-544	112	-33	-73	-93
57	E	2411	-526	212	2380	-599	126	-31	-73	-86
58	E	2410	-589	213	2379	-662	130	-31	-73	-83
59	E	2408	-641	216	2375	-711	138	-33	-70	-78
60	E	2413	-699	216	2381	-768	142	-32	-69	-74
61	E	2412	-751	218	2380	-820	146	-32	-69	-72
62	E	2419	-790	216	2385	-861	149	-34	-71	-67
63	E	2418	-803	270	2389	-875	201	-29	-72	-69
64	E	2417	-823	334	2389	-895	263	-28	-72	-71
65	E	2421	-841	375	2395	-911	307	-26	-70	-68
66	F	2462	-326	201	2429	-401	88	-33	-75	-113
67	F	2461	-379	208	2429	-454	102	-32	-75	-106
68	F	2457	-425	208	2424	-498	108	-33	-73	-100
69	F	2453	-474	204	2424	-549	112	-29	-75	-92
70	F	2457	-527	212	2426	-600	126	-31	-73	-86
71	F	2460	-592	214	2428	-663	133	-32	-71	-81
72	F	2460	-641	216	2429	-714	138	-31	-73	-78
73	F	2461	-697	215	2430	-769	140	-31	-72	-75
74	F	2463	-749	218	2431	-819	144	-32	-70	-74
75	F	2464	-789	216	2430	-859	144	-34	-70	-72
76	F	2462	-801	270	2433	-875	200	-29	-74	-70

All measurements in millimeters

DATA SHEET NO. 12 … (CONTINUED)

TARGET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Point No.	Row	Pre-Test			Post-Test			Difference		
		X	Y	Z	X	Y	Z	X	Y	Z
77	G	2463	-813	328	2431	-892	260	-32	-79	-68
78	G	2466	-838	370	2438	-912	298	-28	-74	-72
79	G	2543	-341	203	2510	-413	94	-33	-72	-109
80	G	2547	-390	204	2514	-464	99	-33	-74	-105
81	G	2546	-432	206	2514	-505	103	-32	-73	-103
82	G	2544	-485	207	2512	-557	107	-32	-72	-100
83	G	2542	-531	208	2511	-605	112	-31	-74	-96
84	G	2542	-589	215	2513	-663	121	-29	-74	-94
85	G	2544	-642	212	2511	-716	123	-33	-74	-89
86	G	2545	-692	213	2513	-764	129	-32	-72	-84
87	G	2552	-750	213	2520	-824	137	-32	-74	-76
88	G	2553	-788	216	2521	-860	142	-32	-72	-74
89	G	2552	-798	257	2520	-871	183	-32	-73	-74
90	G	2545	-806	303	2515	-882	226	-30	-76	-77
91	G	2543	-834	346	2515	-909	272	-28	-75	-74
92	H	2603	-344	214	2561	-418	114	-42	-74	-100
93	H	2604	-388	214	2566	-462	110	-38	-74	-104
94	H	2600	-431	213	2564	-506	108	-36	-75	-105
95	H	2597	-488	213	2563	-561	110	-34	-73	-103
96	H	2593	-536	213	2558	-610	112	-35	-74	-101
97	H	2589	-592	221	2556	-666	116	-33	-74	-105
98	H	2590	-644	219	2556	-715	134	-34	-71	-85
99	H	2589	-700	219	2556	-770	137	-33	-70	-82
100	H	2592	-748	217	2560	-820	138	-32	-72	-79
101	H	2594	-788	223	2562	-862	149	-32	-74	-74
102	H	2586	-798	261	2556	-872	184	-30	-74	-77
103	H	2577	-807	309	2549	-881	233	-28	-74	-76
104	H	2574	-834	349	2548	-908	274	-26	-74	-75
105	I	2618	-350	257	2564	-415	159	-54	-65	-98
106	I	2636	-387	239	2580	-461	145	-56	-74	-94
107	I	2634	-432	238	2590	-505	139	-44	-73	-99
108	I	2629	-488	236	2588	-561	138	-41	-73	-98
109	I	2627	-532	235	2581	-603	142	-46	-71	-93
110	I	2622	-592	241	2584	-665	144	-38	-73	-97
111	I	2626	-644	240	2595	-714	141	-31	-70	-99
112	I	2629	-700	232	2593	-769	153	-36	-69	-79
113	I	2636	-743	231	2603	-813	153	-33	-70	-78
114	I	2642	-790	241	2609	-861	168	-33	-71	-73

All measurements in millimeters

DATA SHEET NO. 12 … (CONTINUED)

TARGET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Point No.	Row	Pre-Test			Post-Test			Difference		
		X	Y	Z	X	Y	Z	X	Y	Z
115	J	2630	-800	281	2600	-876	206	-30	-76	-75
116	J	2619	-811	330	2588	-888	256	-31	-77	-74
117	J	2618	-834	354	2589	-907	280	-29	-73	-74
118	J	2636	-352	321	2571	-412	222	-65	-60	-99
119	J	2657	-392	308	2577	-459	218	-80	-67	-90
120	J	2682	-436	276	2589	-512	198	-93	-76	-78
121	J	2682	-492	274	2607	-567	195	-75	-75	-79
122	J	2678	-542	273	2623	-611	191	-55	-69	-82
123	J	2671	-595	279	2622	-665	188	-49	-70	-91
124	J	2672	-647	268	2623	-721	178	-49	-74	-90
125	J	2685	-708	264	2654	-777	176	-31	-69	-88
126	J	2686	-755	267	2651	-823	189	-35	-68	-78
127	J	2682	-794	267	2647	-860	194	-35	-66	-73
128	J	2668	-800	291	2639	-876	213	-29	-76	-78
129	J	2657	-809	324	2626	-887	256	-31	-78	-68
130	J	2655	-833	357	2613	-896	283	-42	-63	-74
131	K	2656	-356	375	2573	-415	280	-83	-59	-95
132	K	2677	-394	357	2585	-458	272	-92	-64	-85
133	K	2703	-443	326	2602	-515	252	-101	-72	-74
134	K	2718	-492	307	2623	-569	234	-95	-77	-73
135	K	2716	-537	306	2620	-614	238	-96	-77	-68
136	K	2709	-593	308	2637	-668	230	-72	-75	-78
137	K	2718	-649	297	2649	-725	228	-69	-76	-69
138	K	2718	-711	290	2672	-782	212	-46	-71	-78
139	K	2716	-757	289	2681	-824	213	-35	-67	-76
140	K	2714	-798	295	2681	-865	223	-33	-67	-72
141	K	2704	-810	315	2678	-886	232	-26	-76	-83
142	K	2680	-812	348	2666	-896	262	-14	-84	-86
143	K	2680	-836	384	2656	-893	265	-24	-57	-119
144	L	2705	-361	414	2600	-431	340	-105	-70	-74
145	L	2712	-400	406	2601	-466	333	-111	-66	-73
146	L	2734	-451	387	2613	-524	318	-121	-73	-69
147	L	2765	-494	360	2640	-575	301	-125	-81	-59
148	L	2770	-536	341	2667	-616	284	-103	-80	-57
149	L	2761	-599	340	2669	-676	284	-92	-77	-56
150	L	2763	-653	333	2676	-729	279	-87	-76	-54
151	L	2765	-705	328	2701	-777	267	-64	-72	-61
152	L	2759	-758	323	2716	-828	252	-43	-70	-71

All measurements in millimeters

DATA SHEET NO. 12 … (CONTINUED)

TARGET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Point No.	Row	Pre-Test			Post-Test			Difference		
		X	Y	Z	X	Y	Z	X	Y	Z
153	J	2753	-785	333	2727	-868	257	-26	-83	-76
154	J	2724	-812	345	2698	-885	263	-26	-73	-82
155	J	2706	-832	369	2660	-893	308	-46	-61	-61
156	J	2654	-815	383	2646	-904	311	-8	-89	-72

All measurements in millimeters

DATA SHEET NO. 12 … (CONTINUED)

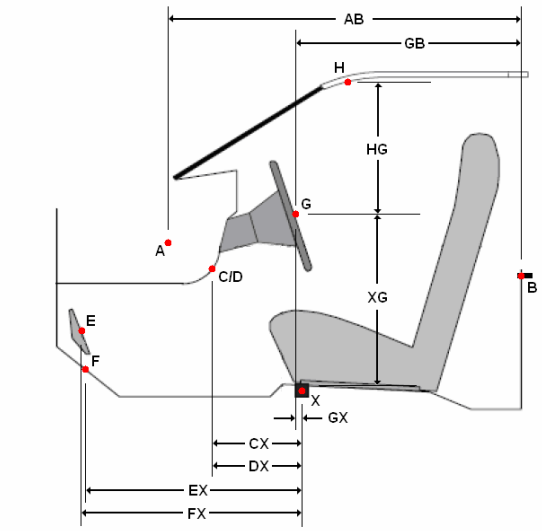
TARGET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

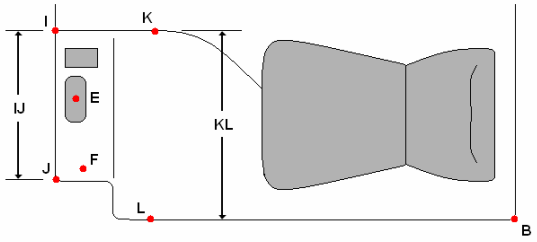
Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

SIDE VIEW



TOP VIEW



OCCUPANT COMPARTMENT INTRUSION

Description	Driver's Side			Passenger's Side		
	Pre-Test	Post-Test	Difference	Pre-Test	Post-Test	Difference
AB	983	852	131	970	953	17
GB	526	476	50	705	691	14
CX	214	127	87	214	202	12
DX	224	150	74	217	218	-1
EX	479	380	99			
FX	470	402	68	539	543	-4
GX	9	-45	54	193	188	5
XG	654	701	-47	551	524	27
HG	437	459	-22	522	545	-23
IJ	442	448	-6			
KL	484	479	5			

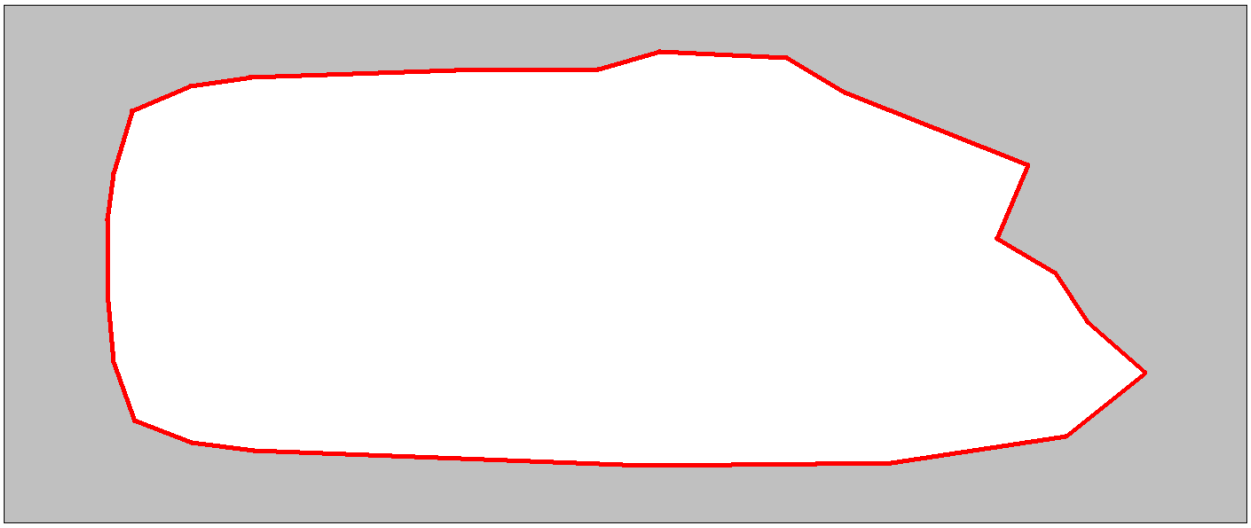
All measurements in millimeters

DATA SHEET NO. 13

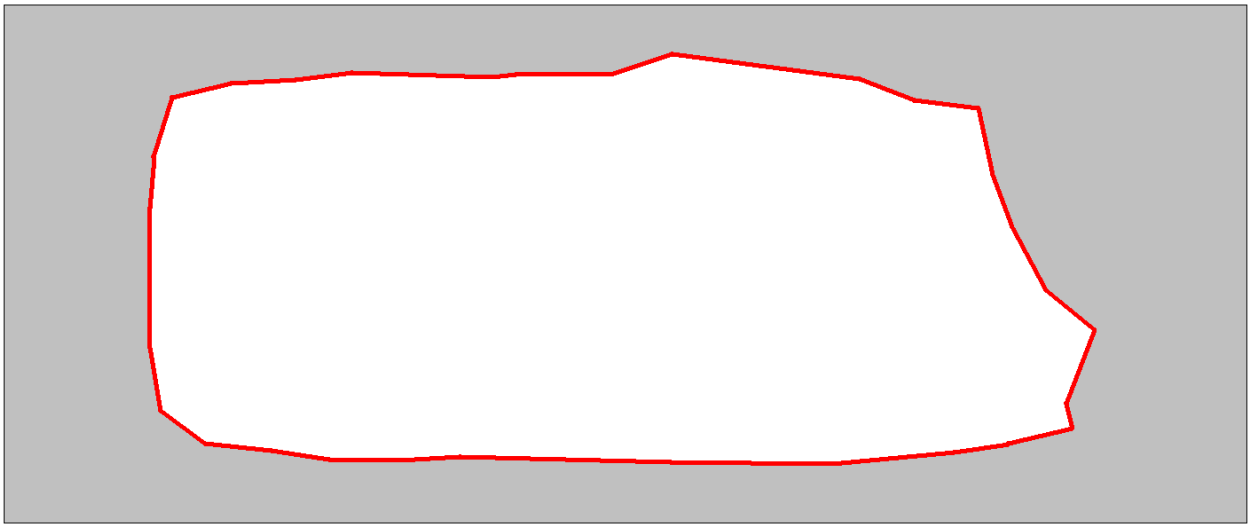
TARGET VEHICLE EXTERIOR PROFILE MEASUREMENTS

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

LEVEL 1



LEVEL 2



NOTE: No Pre-Test Measurements Available.

DATA SHEET NO. 13 … (CONTINUED)

TARGET VEHICLE EXTERIOR PROFILE MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

LEVEL 1

Point No.	Pre-Test			Post-Test			Difference		
	X	Y	Z	X	Y	Z	X	Y	Z
1				4612	-819	524			
2				3726	-960	536			
3				3422	-963	537			
4				3122	-961	535			
5				2825	-959	536			
6				2529	-955	535			
7				2228	-947	536			
8				1926	-938	536			
9				1623	-931	538			
10				683	-900	527			
11				394	-849	526			
12				112	-747	532			
13				13	-453	533			
14				-11	-149	532			
15				-11	157	532			
16				12	453	528			
17				98	750	530			
18				388	869	499			
19				692	912	498			
20				1747	941	500			
21				2046	944	501			
22				2349	949	501			
23				2658	1038	502			
24				2959	1019	502			
25				3259	998	502			
26				3529	845	487			
27				4429	483	503			
28				4276	133	506			
29				4552	-34	507			
30				4722	-276	506			
31				4988	-522	504			

DATA SHEET NO. 13 … (CONTINUED)

TARGET VEHICLE EXTERIOR PROFILE MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

LEVEL 2

Point No.	Pre-Test			Post-Test			Difference		
	X	Y	Z	X	Y	Z	X	Y	Z
1				4607	-789	814			
2				4313	-863	810			
3				4017	-910	811			
4				3720	-936	812			
5				3419	-955	812			
6				3118	-957	811			
7				2817	-955	810			
8				2521	-951	816			
9				2219	-943	814			
10				1918	-935	815			
11				1616	-924	816			
12				1313	-949	814			
13				1013	-941	810			
14				709	-892	810			
15				411	-856	809			
16				194	-701	813			
17				149	-394	808			
18				153	-88	805			
19				153	228	815			
20				168	528	812			
21				263	814	799			
22				555	875	818			
23				854	897	818			
24				1153	926	819			
25				1456	922	820			
26				1760	914	789			
27				2062	918	789			
28				2365	918	789			
29				2668	1015	797			
30				2969	984	795			
31				3267	940	797			
32				3570	904	789			
33				3840	796	792			
34				4148	759	829			
35				4218	434	786			

DATA SHEET NO. 13 … (CONTINUED)

TARGET VEHICLE EXTERIOR PROFILE MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

LEVEL 2 … (CONTINUED)

Point No.	Pre-Test			Post-Test			Difference		
	X	Y	Z	X	Y	Z	X	Y	Z
36				4322	150	781			
37				4479	-116	797			
38				4707	-318	778			
39				4570	-675	775			

DATA SHEET NO. 14

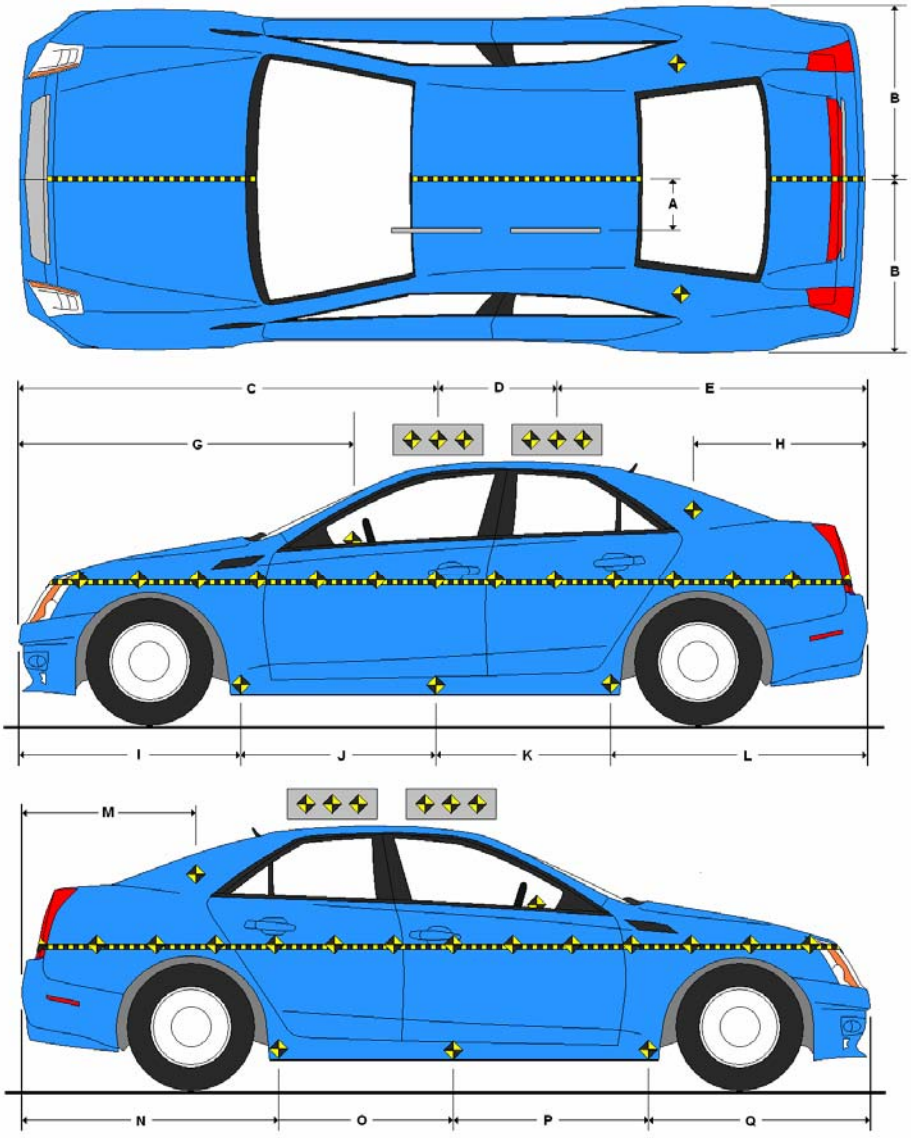
TARGET VEHICLE PHOTOGRAPHIC REFERENCE TARGET LOCATIONS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Item	Value
A	448
B	942
C	2359
D	607
E	2127
F	
G	1840
H	1467
I	1517
J	956
K	957
L	1663
M	1474
N	1657
O	959
P	949
Q	1527



ADDITIONAL PHOTOGRAPHIC REFERENCE DATA

Description	Value	Notes
Driver's Door Panel Reference Target Spacing	305	Visible in Camera View No. 5
Passenger's Door Panel Reference Target Spacing	305	Visible in Camera View No. 9
Overhead Reference Panel Spacing	152	Visible in Camera View No. 7
Left and Right Side Vehicle Targets	300	Visible in left and right side views
Top Vehicle Targets	305	Visible in Camera Views No. 6,7

All measurements in millimeters

DATA SHEET NO. 15

TARGET VEHICLE POST-TEST AIRBAG DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Description	Units	Driver	Right Front Passenger
Number of Vent Holes		2	
Size of Vent Holes	mm	30	
Shape of Vent Holes		Round	
Total Vent Area	mm^2	707	
Length of Deflated Bag (if Square)	mm		
Width if Deflated Bag (if Square)	mm		
Diameter of Deflated Bag (if Round)	mm	470	
Airbag Tethered		No	
Length of Tethers	mm		

DATA SHEET NO. 16

TARGET VEHICLE ACCIDENT INVESTIGATION DATA

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

VEHICLE INFORMATION

VIN:	1FAHP241X7G148774	Wheelbase (mm):	2876
Vehicle Size Category:	4-Door Sedan	Test Weight (kg):	1891

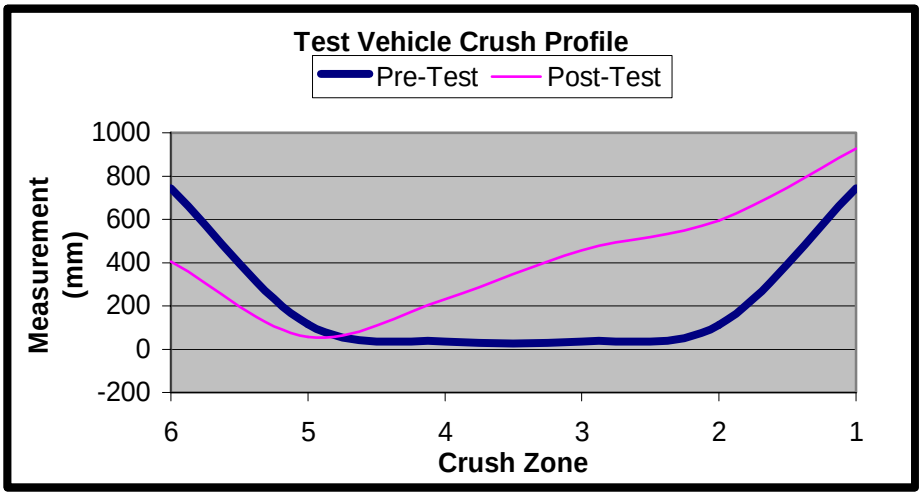
ACCELEROMETER DATA

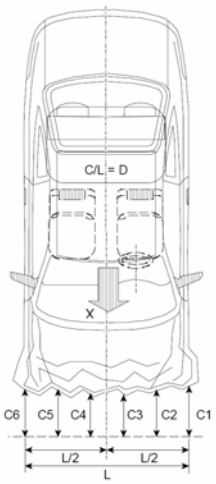
Accelerometer Location:	CG		
Cal. Procedure/Interval:	6 month/drop test		
Integration Algorithm:	NHTSA Standard	Linearity:	Good
Impact Velocity (km/h):	116.2		
Velocity Change (km/h):	59.5	Time of Separation (msec):	N/A

CRUSH PROFILE

Collision Damage Classification:	11FLAW2	Midpoint of Damage:	N/A
Damage Region Length:	1873	Impact Mode:	15°, 50% Offset

No.	Meaurement Description	Units	Pre-Test	Post-Test	Difference
C1	Crush Zone 1 at Left Side of Vehicle	mm	743	926	183
C2	Crush Zone 2 at Left Side of Vehicle	mm	111	595	484
C3	Crush Zone 3 at Left Side of Vehicle	mm	35	457	422
C4	Crush Zone 4 at Right Side of Vehicle	mm	35	232	197
C5	Crush Zone 5 at Right Side of Vehicle	mm	114	56	-58
C6	Crush Zone 6 at Right Side of Vehicle	mm	743	404	-339





DATA SHEET NO. 17

TARGET VEHICLE FMVSS 212 / 219 SUMMARY

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

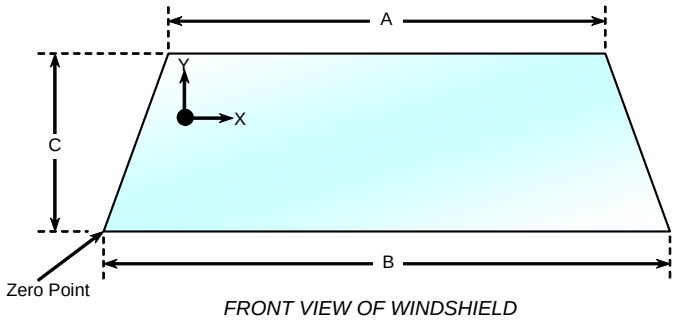
Windshield mounting details: windshield glass is secured to the vehicle frame with rubber cement type adhesive and rubber molding.

The standard requires that the post-test retention measurement be a minimum of 75% of the pre-test total periphery measurements for vehicles not equipped with passive occupant restraints, and 50% for each side of the windshield for vehicles that are equipped with passive occupant restraints.

Temperature of windshield molding during the test: 17.8° C

WINDSHIELD PERIPHERY MEASUREMENTS

Measurement	Units	Pre-Test	Post-Test	% Retention
Left Side	mm	2304	1688	73.3%
Right Side	mm	2304	2023	87.8%
Total	mm	4608	3711	80.5%



FRONT VIEW OF WINDSHIELD

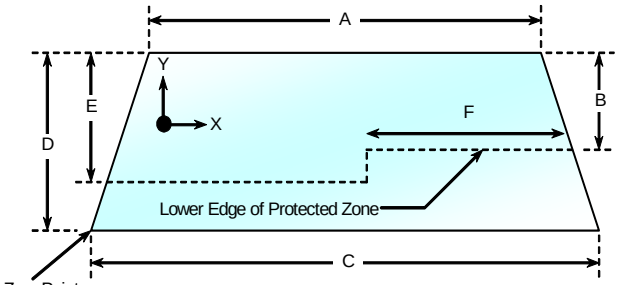
WINDSHIELD DIMENSIONS

Item	Units	Segment Length	Molding Width
A	mm	1320	18
B	mm	1647	20
C-Left	mm	820	18
C-Right	mm	820	18

DATA SHEET NO. 17 … (CONTINUED)

TARGET VEHICLE FMVSS 212 / 219 SUMMARY

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10



FRONT VIEW OF WINDSHIELD

WINDSHIELD AND PROTECTED ZONE

Item	Units	Value
A	mm	1320
B	mm	467
C	mm	1647
D	mm	820
E	mm	540
F	mm	560

AREA OF PROTECTED ZONE FAILURES

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

X	Y

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

X	Y

DATA SHEET NO. 18

TARGET VEHICLE FMVSS 301 FUEL SYSTEM INTEGRITY POST-IMPACT DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Temperature at Time of Impact: 17.8° C Test Time: 1:11 PM

Stoddard Solvent Spillage Measurements

A. From impact until vehicle motion ceases: 0 oz.
(Maximum allowable = 1 oz.)

B. For the 5 minute period after motion ceases: 0 oz.
(Maximum allowable = 5 oz.)

C. For the following 25 minutes: 0 oz.
(Maximum allowable = 1 oz./minute)

D. Spillage: No spillage occurred

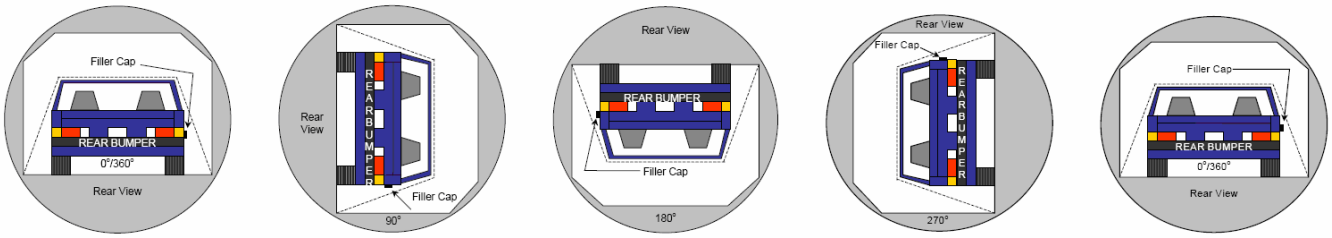
DATA SHEET NO. 19

TARGET VEHICLE FMVSS 301 STATIC ROLLOVER DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10



0° TO 90° 90° TO 180° 180° TO 270° 270° TO 360°

1. The specified fixture rollover rate for each 90° of rotation is 60 to 180 seconds.
2. The position hold time at each position is 300 seconds (minimum).
3. Details of Stoddard solvent spillage: No spillage occurred

SOLVENT COLLECTION TIME TABLE IN SECONDS

Test Phase	Rotation Time	Hold Time	Total Time
0° To 90°	81	300	381
90° To 180°	84	300	384
180° To 270°	76	300	376
270° To 360°	84	300	384

FMVSS 301 SPILLAGE TABLE

Test Phase	First 5 Minutes	Sixth Minute	Seventh Minute	Eighth Minute
0° To 90°	0			
90° To 180°	0			
180° To 270°	0			
270° To 360°	0			

SOLVENT SPILLAGE LOCATION TABLE

Test Phase	Spillage Location
0° To 90°	None
90° To 180°	None
180° To 270°	None
270° To 360°	None

DATA SHEET NO. 20

GENERAL BULLET VEHICLE PARAMETER DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

BULLET VEHICLE INFORMATION AND OPTIONS

NHTSA No.	R70210	Rear Disc	Yes	
Make	Ford	Anti-Lock Brakes	Yes	
Model	Five Hundred SEL	All Wheel Drive	No	
Model Year	2007	Power Steering	Yes	
Body Style	4-Door Sedan	Driver Front Airbag	Yes	
VIN	1FAHP24187G151706	Driver Side Torso Airbag	Yes	[1]
Color	White	Driver Side Head Airbag	No	
Delivery Date	12/14/2009	Driver Curtain/Airbag	Yes	[1]
Odometer (Miles)	30,093	Rear Pass. Airbag	No	
Dealer	Cal Worthington Ford	Rear Pass. Side Airbag	No	
Transmission	6-Speed Automatic	Rear Pass. Head Airbag	No	
Final Drive	Front	Rear Pass. Curtain/Airbag	Yes	[1]
Type/No. Cyl.	V6	Pre-Tensioners	Yes	
Engine Disp. (L)	3.0	Load Limiters	Yes	
Engine Placement	Transverse	Bucket Seats	Yes	
Roof Rack	No	Air Cond.	Yes	
Sunroof/T-Top	No	AM/FM CD	Yes	
Tinted Glass	No	Tilt Steering	Yes	
Traction Control	No	Automatic Door Locks	Yes	
Power Brakes	Yes	Power Windows	Yes	
Front Disc	Yes	Power Seats	Yes	

Does Owners Manual provide instructions to turn off automatic door locks.	Yes

DATA FROM CERTIFICATION LABEL

Manufactured By	Ford Motor Co.	GVWR (kg)	2,186
		GAWR Front (kg)	1,150
Date of Manufacture	Jan-07	GAWR Rear (kg)	1,066

VEHICLE SEATING AND CAPACITY WEIGHT INFORMATION

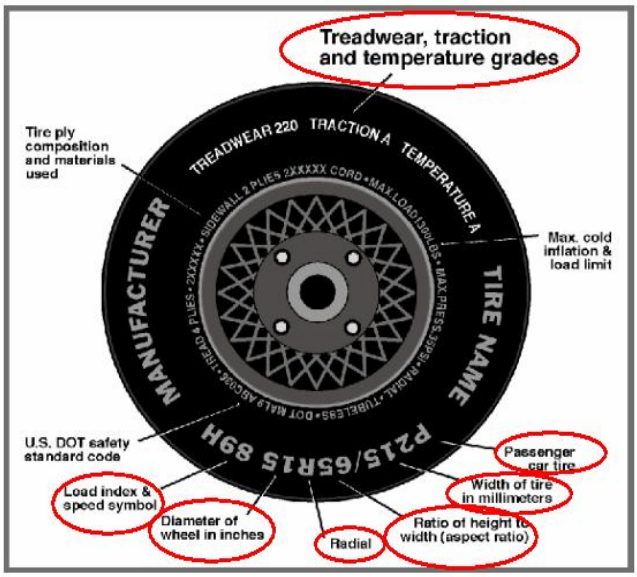
Measured Parameter	Front	Rear	Third	Total
Type of Seats	Bucket	Bench		
Number of Occupants	2	3		5
Capacity Weight (VCW) (kg)				430.0
Cargo Weight (RCLW) (kg)				89.8

[1] – Side and curtain airbags were disabled.

DATA SHEET NO. 20 … (CONTINUED)

GENERAL BULLET VEHICLE PARAMETER DATA

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10



TIRE DATA

Description	Front	Rear
Max. Tire Pressure	300	300
Cold Tire Pressure	220	220
Recommended Tire Size	P215/60R17	P215/60R17
Actual Tire Size	P215/60R17	P215/60R17
Tire Manufacturer	Continental	Continental
Tire Model	Conti Touring Contact AS	Conti Touring Contact AS
Load Range	690	690
Treadware Rating	360	360
Traction Rating	A	A
Temperature Rating	A	A
Tire Plies Sidewall	1 Polyester	1 Polyester
Tire Plies Body	1 Polyester, 2 Steel, 1 Nylon	1 Polyester, 2 Steel, 1 Nylon
Load Index/Speed Symbol	95T	95T
Tire Material	Polyester, Steel, Nylon	Polyester, Steel, Nylon
DOT Safety Code Left	A3KT 3MT 3408	A3KT 3MT 5106
DOT Safety Code Right	A3KT 3MT 3408	A3KT 3MT 2107

DATA SHEET NO. 20 … (CONTINUED)

GENERAL BULLET VEHICLE PARAMETER DATA

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

BULLET VEHICLE WEIGHTS

	Units	As Delivered Weights (UVW)			As Tested Weights (ATW)		
		Front Axle	Rear Axle	Total	Front Axle	Rear Axle	Total
Left	kg	509.5	338.5	848.0	546.0	443.0	989.0
Right	kg	494.5	328.0	822.5	487.0	414.0	901.0
Ratio	%	60.1	39.9	100.0	54.7	45.3	100.0
Total	kg	1004.0	666.5	1670.5	1033.0	857.0	1890.0

TARGET TEST WEIGHT CALCULATION

Measured Parameter	Units	Value
Total Delivered Weight (UVW)	kg	1670.5
Weight of 1 THOR 50th NT ATD	kg	101.0
Rated Cargo/Luggage Wt (RCLW)	kg	89.8
Calculated Vehicle Target Wt (TVTW)	kg	1861.3 [3]

BULLET VEHICLE ATTITUDES AND CG

	Units	LF	RF	LR	RR	CG Aft of Front Axle
As Delivered	mm	731	731	737	742	1146
As Tested	mm	725	731	688	699	1303

GENERAL BULLET VEHICLE DATA

Vehicle Wheelbase (mm):	2873
Weight of Ballast Secured in Cargo Area (kg):	0.0
Weight of Items Removed (kg):	28.5
Vehicle Components Removed:	Spare Tire, Jack and Tools, Trunk Liner, Right Front Door Trim

FUEL SYSTEM DATA

Fuel System Capacity From Owner's Manual (L):	75.7
Actual Test Volume with Entire Fuel System Filled (L):	70.4
Test Fluid Type:	Stoddard Solvent
Kinematic Viscosity:	per ASTM D 484-71
Type of Vehicle Fuel Pump:	Electric

[3] – COTR requested Test Weight of 1891 kg.

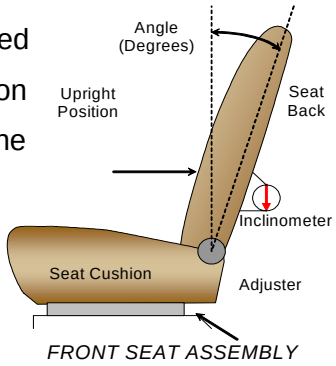
DATA SHEET NO. 20 … (CONTINUED)

GENERAL BULLET VEHICLE PARAMETER DATA

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

NOMINAL DESIGN RIDING POSITION

The driver seat back is positioned to the manufacturer's designated angle. The procedure is as follows: a digital inclinometer is placed on the seat back 330 mm (13 in.) above the seat back pivot point. The left rear passenger seat back is fixed.

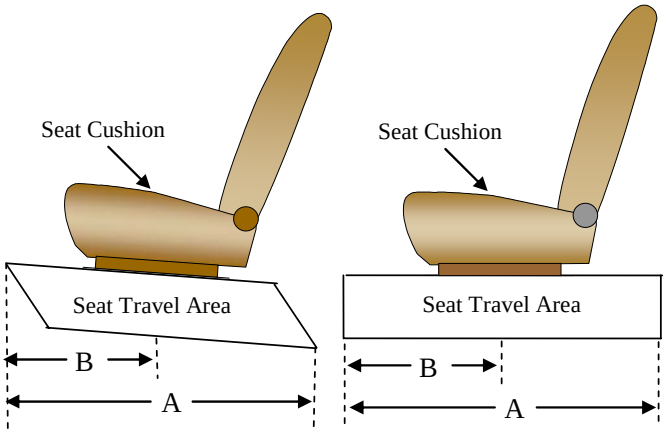


Description	Value
Driver w/Seated Dummy	17.1°
Left Rear Passenger w/Seated Dummy	

SEAT FORE/AFT POSITIONS

Total seat travel is measured from forward most possible position to the rearmost possible position. The driver seat is set to the longitudinal mid position, with the seat in the lowest possible height position. The left rear passenger seat is not adjustable horizontally or vertically.

Seating Position	Total Fore-Aft Travel	Test Position
Driver Seat	242 mm	121 mm
Left Rear Passenger Seat		



SEAT BELT UPPER ANCHORAGE

The driver's seat belt upper anchorage is placed in the nominal design riding position for a 50th percentile adult male. The left rear passenger seat belt upper anchorage is fixed. Position number one (1) is considered the uppermost position.

Seating Position	Total No. of Positions	Test Position
Driver Seat	5	1
Left Rear Passenger Seat		

DATA SHEET NO. 20 … (CONTINUED)

GENERAL BULLET VEHICLE PARAMETER DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

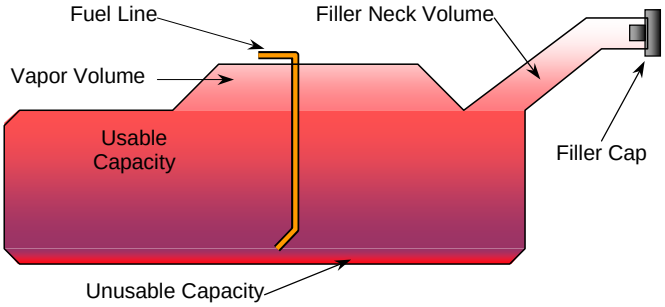
Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

FUEL TANK CAPACITY DATA

Description	Units	Value
Usable Capacity of "Standard Tank"	L	75.70
Usable Capacity of "Optional" Tank	L	
Allowable Capacity used for FMVSS 301	L	69.64 to 71.16
Actual Amount of Solvent used	L	70.40

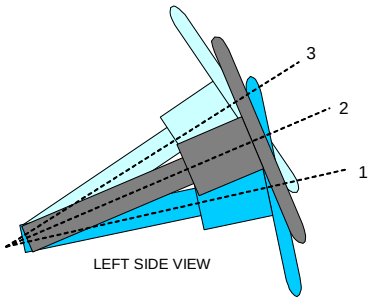
The test vehicle is equipped with an electric fuel pump. The fuel pump will operate when the key is in the "ON" position or when the engine is activated. The fuel filler door is located on the right rear fender. The standard fuel tank occupies the area under the rear seat.



VEHICLE FUEL TANK ASSEMBLY

STEERING COLUMN ADJUSTMENT

Steering wheel and column adjustments are made so that the steering wheel hub is at the geometric center of the locus it describes when moved through its full range of motion. An aluminum plate is placed across the rim of the steering wheel, an inclinometer is placed on the plate and the angle is measured. The vehicle's steering column did not telescope.



STEERING COLUMN ASSEMBLY

STEERING COLUMN POSITIONS

Description	Tilt Angle (°)	Fore/Aft Position (mm)
Lowermost positon No. 1	21.6	
Geometric center position No. 2	24.2	
Uppermost position No. 3	26.8	

DATA SHEET NO. 21

BULLET VEHICLE OCCUPANT INJURY ASSESSMENT DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

BULLET VEHICLE DRIVER ANTHROPOMORPHIC TEST DEVICE

Location	Metric	Description	SAE Filter Class	Max	Min
Head	Alpha-x	Angular acceleration (rad/sec^2)	simon	1541.5	-1607.5
	Alpha-y	Angular acceleration (rad/sec^2)	simon	5580.5	-2796.9
	Alpha-z	Angular acceleration (rad/sec^2)	simon	2466.3	-3274.9
	Alpha-res	Angular acceleration - resultant (rad/sec^2)	simon	5693.1	
	Wx	Angular velocity (rad/sec)	simon	13.8	-11.7
	Wy	Angular velocity (rad/sec)	simon	25.8	-37.9
	Wz	Angular velocity (rad/sec)	simon	27.2	-9.7
	Wres	Angular velocity - resultant (rad/sec)	simon	46.7	
	HIC36	36 ms clip	1000	805.2	
	HIC15	15 ms clip	1000	560.2	
	SFC	Skull fracture correlate	simon	67.5	
	CSDM	Cumulative strain (Tolerance = 0.05)	simon	1.0	
	CSDM	Cumulative strain (Tolerance = 0.10)	simon	0.8	
	CSDM	Cumulative strain (Tolerance = 0.15)	simon	0.4	
	Head CG G's	Head resultant CG acceleration, 3 ms clip (g's)	1000	72.0	
Neck	Fx at OC	UNLC Fx transferred to OC, neck system (N)	1000	240.1	-101.8
	Fz	UNLC Fz, neck system Tension (N)	1000	2531.5	-173.0
	Fz	UNLC Fz, neck system Compression (N)	1000	2531.5	-173.0
	My at OC	UNLC My transferred to OC, neck system Flexion (N-m)	FX 1000, MY 600	20.0	-18.1
	My at OC	UNLC My transferred to OC, neck system Extension (N-m)	FX 1000, MY 600	20.0	-18.1
	Fx_OC	On head acting through total neck section, (N)	1000	714.6	-376.7
	Fy_OC	On head acting through total neck section, (N)	1000	257.8	-105.2
	Fz_OC	On head acting through total neck section, (N)	1000	113.1	-2713.0
	Mx_OC	On head acting through total neck section, (Nm)	600	16.1	-20.1
	My_OC	On head acting through total neck section, (Nm)	600	11.0	-14.3
	Mz_OC	On head acting through total neck section, (Nm)	600	9.0	-6.9
	Fx_head	On head acting through O.C. joint only (N)	1000	684.2	-204.9
	Fz_head	On head acting through O.C. joint only (N)	1000	140.1	-2365.0
	My_head	On head acting through O.C. joint only (Nm)	600	19.9	-18.1

DATA SHEET NO. 21 … (CONTINUED)

BULLET VEHICLE OCCUPANT INJURY ASSESSMENT DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/07/10

BULLET VEHICLE DRIVER ANTHROPOMORPHIC TEST DEVICE … (CONTINUED)

Location	Metric	Description	SAE Filter Class	Max	Min
Chest	UR x	Upper Crux x-defl , Right (mm)	180	0.5	-42.2
	UR y	Upper Crux y-defl , Right (mm)	180	14.9	-8.1
	UR z	Upper Crux x-defl , Right (mm)	180	7.9	-4.3
	UR d	Upper Crux "d" displacement , Right (mm)	180	0.5	-40.8
	UL x	Upper Crux x-defl , Left (mm)	180	11.0	-11.6
	UL y	Upper Crux y-defl , Left (mm)	180	24.9	-9.1
	UL z	Upper Crux x-defl , Left (mm)	180	21.1	-14.7
	UL d	Upper Crux "d" displacement , Left (mm)	180	8.4	-17.2
	LR x	Lower Crux x-defl , Right (mm)	180	13.5	-0.8
	LR y	Lower Crux y-defl , Right (mm)	180	0.0	-8.5
	LR z	Lower Crux x-defl , Right (mm)	180	0.0	-27.0
	LR d	Lower Crux "d" displacement , Right (mm)	180	0.5	-24.5
	LL x	Lower Crux x-defl , Left (mm)	180	5.5	-2.4
	LL y	Lower Crux y-defl , Left (mm)	180	8.9	-4.6
	LL z	Lower Crux x-defl , Left (mm)	180	1.2	-22.2
	LL d	Lower Crux "d" displacement , Left (mm)	180	12.6	-0.1
	Chest CG G's	Chest CG acceleration, 3 ms clip, (G's)	180	41.8	
Abdomen	Up x	Max upper string pot (mm)	180	7.2	-0.2
	Up V*C	Upper viscous criteria	180	0.08	0.00
	LR x	Lower right x-deflection (mm)	180	0.1	-47.7
	LR y	Lower right y-deflection (mm)	180	15.6	-0.5
	LR z	Lower right z-deflection (mm)	180	6.2	-0.4
	LR V*C	Right viscous criterion based on x-deflection	180	0.39	-0.06
	LL x	Lower left x-deflection (mm)	180	0.1	-41.9
	LL y	Lower left y-deflection (mm)	180	5.1	-3.8
	LL z	Lower left z-deflection (mm)	180	2.0	-3.0
	LL V*C	Left viscous criterion based on x-deflection	180	0.29	-0.04
Pelvis	CG res.	Pelvis cg resultant acceleration (G)	1000	37.9	
Acetabulum	R Fx	Right Fx force (N)	600	237.8	-1900.7
	R Fy	Right Fy force (N)	600	982.9	-182.5
	R Fz	Right Fz force (N)	600	1094.4	-45.7
	R Rres.	Resultant of Fx, Fy, Fz (N)	600	1965.6	
	L Fx	Left Fx force (N)	600	760.9	-2059.6
	L Fy	Left Fy force (N)	600	290.1	-360.1
	L Fz	Left Fz force (N)	600	1724.9	-659.1

DATA SHEET NO. 21 … (CONTINUED)

BULLET VEHICLE OCCUPANT INJURY ASSESSMENT DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/07/10

BULLET VEHICLE DRIVER ANTHROPOMORPHIC TEST DEVICE … (CONTINUED)

Location	Metric	Description	SAE Filter Class	Max	Min
Acetabulum	L Rres.	Resultant of Fx, Fy, Fz (N)	600	2310.0	
Femur	R Fx	Right Fz force (N)	600	262.6	-4044.0
	R Mx	Right Mx moment (Nm)	600	92.5	-50.4
	R My	Right My moment (Nm)	600	117.2	-17.3
	R Mres	Resultant of Mx and My only (not Mz) (Nm)	600	117.2	
	L Fx	Left Fz force (N)	600	225.6	-4175.8
	L Mx	Left Mx moment (Nm)	600	117.8	-113.5
	L My	Left My moment (Nm)	600	118.2	-36.3
	L Mres	Resultant of Mx and My only (not Mz) (Nm)	600	166.9	
Knee	R knee	Knee displacement (mm)	180	0.2	-2.0
	L knee	Knee displacement (mm)	180	0.0	-3.2
Tibia	RU Fz	Right upper axial force (N)	600	20.9	-1504.1
	RL Fz	Right lower axial force (N)	600	19.9	-2915.4
	RU My	Right upper bending moment (Nm)	600	48.1	-86.0
	RL My	Right lower bending moment (Nm)	600	50.2	-62.5
	RU Index	Right upper tibia index	600	0.43	
	RL Index	Right lower tibia index	600	0.46	
	LU Fz	Left upper axial force (N)	600	258.9	-703.0
	LL Fz	Left lower axial force (N)	600	135.6	-1832.6
	LU My	Left upper bending moment (Nm)	600	22.9	-74.5
	LL My	Left lower bending moment (Nm)	600	12.3	-61.1
	LU Index	Left upper tibia index	600	0.38	
	LL Index	Left lower tibia index	600	0.44	
Ankle	R ankle Fx	Ankle X Force (N)		184.5	-1245.7
	R ankle Fy	Ankle Y Force (N)		2018.1	-554.4
	R ankle Fz	Ankle Z Force (N)		19.7	-2886.0
	R ankle Mx	Ankle Mx Moment (Nm)		139.5	-47.8
	R ankle My	Ankle My Moment (Nm)		111.2	-3.4
	R inversion	Rotation about ankle X-axis, subtalar joint (deg)	180	-1.4	-38.7
	R dors	Rotation about ankle Y-axis joint (deg)	180	35.6	-1.1
	L ankle Fx	Ankle X Force (N)		107.9	-1108.1
	L ankle Fy	Ankle Y Force (N)		223.3	-362.8
	L ankle Fz	Ankle Z Force (N)		133.3	-1977.5
	L ankle Mx	Ankle Mx Moment (Nm)		4.8	-43.2
	L ankle My	Ankle My Moment (Nm)		36.7	-9.4

DATA SHEET NO. 21 … (CONTINUED)

BULLET VEHICLE OCCUPANT INJURY ASSESSMENT DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/07/10

BULLET VEHICLE DRIVER ANTHROPOMORPHIC TEST DEVICE … (CONTINUED)

Location	Metric	Description	SAE Filter Class	Max	Min
Ankle	L inversion	Rotation about ankle X-axis, subtalar joint (deg)	180	4.7	-31.4
	L dors	Rotation about ankle Y-axis joint (deg)	180	22.6	-3.9

DATA SHEET NO. 21 … (CONTINUED)

BULLET VEHICLE OCCUPANT INJURY ASSESSMENT DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Description	Axis	Units	Max	Time (ms)	Min	Time (ms)
Driver Head CG X	X	g	15.7	319.5	-60.9	100.5
Driver Head CG Y	Y	g	24.1	114.4	-8.0	319.8
Driver Head CG Z	Z	g	53.3	103.8	-2.7	43.8
Driver Top Head Array X	X	g	22.0	319.5	-96.3	107.6
Driver Top Head Array Y	Y	g	33.3	113.3	-12.0	320.0
Driver Left Side Head Array X	X	g	19.7	319.5	-78.2	101.1
Driver Left Side Head Array Z	Z	g	51.0	100.6	-3.2	44.6
Driver Rear Head Array Y	Y	g	32.1	115.3	-13.3	86.9
Driver Rear Head Array Z	Z	g	78.5	104.2	-5.9	154.3
Driver Head CG X Redundant	X	g	14.9	319.6	-62.2	100.5
Driver Head CG Y Redundant	Y	g	24.1	114.4	-8.3	319.9
Driver Head CG Z Redundant	Z	g	55.6	103.8	-2.9	43.8
Driver Upper Neck Force X	X	N	240.1	111.2	-101.8	153.4
Driver Upper Neck Force Y	Y	N	258.0	118.6	-106.4	270.3
Driver Upper Neck Force Z	Z	N	2531.5	102.8	-173.0	336.2
Driver Upper Neck Moment X	X	Nm	21.9	133.5	-12.8	82.7
Driver Upper Neck Moment Y	Y	Nm	16.3	106.5	-15.6	155.0
Driver Upper Neck Moment Z	Z	Nm	6.0	222.5	-7.2	145.5
Driver Lower Neck Force X	X	N	1350.7	106.3	-357.1	67.5
Driver Lower Neck Force Y	Y	N	941.0	101.2	-180.1	86.2
Driver Lower Neck Force Z	Z	N	2582.0	82.0	-167.0	317.4
Driver Lower Neck Moment X	X	Nm	48.8	169.3	-27.7	270.3
Driver Lower Neck Moment Y	Y	Nm	19.5	69.2	-42.1	107.6
Driver Lower Neck Moment Z	Z	Nm	6.9	233.1	-13.5	126.4
Driver Front Skull Spring Force Z	Z	N	204.5	315.7	-73.4	113.6
Driver Rear Skull Spring Force Z	Z	N	450.8	101.4	-94.1	71.2
Driver Occipital Condyle Rotation		°	15.4	110.4	-10.0	158.3
Driver Upper Spine T1 X	X	g	4.6	241.1	-51.6	80.7
Driver Upper Spine T1 Y	Y	g	24.2	99.3	-13.9	74.6
Driver Upper Spine T1 Z	Z	g	0.0	0.0	0.0	0.0
Driver Thorax X	X	g	3.6	236.1	-42.4	87.1
Driver Thorax Y	Y	g	17.8	92.0	-7.5	110.0
Driver Thorax Z	Z	g	14.5	107.1	-4.2	50.6

DATA SHEET NO. 21 … (CONTINUED)

BULLET VEHICLE OCCUPANT INJURY ASSESSMENT DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Description	Axis	Units	Max	Time (ms)	Min	Time (ms)
Driver Lower Spine T12 X	X	g	3.5	218.8	-41.9	67.7
Driver Lower Spine T12 Y	Y	g	15.5	91.4	-6.1	109.0
Driver Lower Spine T12 Z	Z	g	10.1	106.7	-13.1	91.4
Driver Upper Left CRUX Base Rotation		°	110.3	80.8	104.2	98.0
Driver Upper Left CRUX Middle Rotation		°	226.1	152.1	185.4	79.2
Driver Upper Left CRUX Elbow Rotation		°	153.4	79.1	109.8	154.9
Driver Lower Left CRUX Base Rotation		°	160.9	89.1	154.0	132.9
Driver Lower Left CRUX Middle Rotation		°	143.8	106.8	136.7	59.2
Driver Lower Left CRUX Elbow Rotation		°	135.7	93.5	120.5	29.3
Driver Upper Right CRUX Base Rotation		°	178.7	297.2	172.6	116.7
Driver Upper Right CRUX Middle Rotation		°	133.2	120.7	112.6	28.2
Driver Upper Right CRUX Elbow Rotation		°	167.4	40.8	122.5	80.2
Driver Lower Right CRUX Base Rotation		°	190.0	92.9	177.0	24.3
Driver Lower Right CRUX Middle Rotation		°	277.8	11.5	260.4	77.3
Driver Lower Right CRUX Elbow Rotation		°	281.4	77.1	256.1	38.3
Driver Upper Abdomen Deflection		mm	7.2	112.0	-0.2	97.9
Driver Left DGSP X Deflection	X	mm	94.5	115.7	52.8	25.6
Driver Left DGSP Y Rotation	Y	°	172.8	72.3	167.2	33.5
Driver Left DGSP Z Rotation	Z	°	158.0	39.4	154.7	97.0
Driver Right DGSP X Deflection	X	mm	101.4	117.3	52.0	0.0
Driver Right DGSP Y Rotation	Y	°	173.5	30.2	167.3	70.8
Driver Right DGSP Z Rotation	Z	°	158.5	53.7	155.8	139.6
Driver Upper Thoracic Spine Force X	X	N	73.2	28.6	-1352.0	93.8
Driver Upper Thoracic Spine Force Y	Y	N	1192.1	97.2	-381.0	65.6
Driver Upper Thoracic Spine Force Z	Z	N	1153.0	72.3	-1338.7	86.8
Driver Upper Thoracic Spine Moment X	X	Nm	120.7	114.9	-42.7	73.0
Driver Upper Thoracic Spine Moment Y	Y	Nm	76.7	116.3	-122.5	67.3
Driver Pelvis X	X	g	4.1	214.1	-37.0	65.8
Driver Pelvis Y	Y	g	19.9	77.8	-12.5	100.4
Driver Pelvis Z	Z	g	9.5	107.4	-15.5	93.1
Driver Left Acetabulum Force X	X	N	760.9	107.1	-2059.6	48.5
Driver Left Acetabulum Force Y	Y	N	290.1	58.5	-360.1	198.5
Driver Left Acetabulum Force Z	Z	N	1724.9	65.8	-659.1	91.9

DATA SHEET NO. 21 … (CONTINUED)

BULLET VEHICLE OCCUPANT INJURY ASSESSMENT DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Description	Axis	Units	Max	Time (ms)	Min	Time (ms)
Driver Right Acetabulum Force X	X	N	237.8	217.7	-1900.6	48.9
Driver Right Acetabulum Force Y	Y	N	982.9	64.8	-182.5	282.2
Driver Right Acetabulum Force Z	Z	N	1094.4	71.9	-45.7	395.0
Driver Left Femur Force X	X	N	828.8	80.9	-138.1	199.1
Driver Left Femur Force Y	Y	N	240.7	45.9	-287.6	102.5
Driver Left Femur Force Z	Z	N	225.6	112.9	-4175.7	46.4
Driver Left Femur Moment X	X	Nm	117.8	101.1	-113.5	56.1
Driver Left Femur Moment Y	Y	Nm	118.2	101.0	-36.3	46.3
Driver Left Femur Moment Z	Z	Nm	45.9	66.1	-40.9	93.9
Driver Right Femur Force X	X	N	535.5	89.8	-82.3	110.2
Driver Right Femur Force Y	Y	N	214.3	85.2	-156.1	43.1
Driver Right Femur Force Z	Z	N	262.6	198.7	-4044.0	55.1
Driver Right Femur Moment X	X	Nm	92.5	95.7	-50.4	59.0
Driver Right Femur Moment Y	Y	Nm	117.2	72.4	-17.3	52.7
Driver Right Femur Moment Z	Z	Nm	54.6	69.5	-9.7	130.4
Driver Left Knee Deflection		°	0.2	170.3	-2.0	48.8
Driver Left Tibia X	X	g	3.5	225.9	-56.1	62.5
Driver Left Tibia Y	Y	g	25.0	59.8	-18.6	99.4
Driver Left Foot X	X	g	13.0	41.4	-80.7	60.8
Driver Left Foot Y	Y	g	45.0	61.0	-19.2	88.9
Driver Left Foot Z	Z	g	20.9	43.0	-49.1	57.9
Driver Left Ankle Rotation X	X	°	4.7	297.6	-31.4	72.4
Driver Left Ankle Rotation Y	Y	°	22.6	111.7	-3.9	236.6
Driver Left Ankle Rotation Z	Z	°	12.2	251.7	-13.7	113.0
Driver Left Upper Tibia Force X	X	N	395.6	63.5	-99.6	87.6
Driver Left Upper Tibia Force Y	Y	N	447.6	101.3	-417.9	59.0
Driver Left Upper Tibia Force Z	Z	N	258.9	74.6	-703.0	41.7
Driver Left Upper Tibia Moment X	X	Nm	29.4	71.1	-30.5	93.6
Driver Left Upper Tibia Moment Y	Y	Nm	22.9	130.9	-74.5	63.8
Driver Left Lower Tibia Force X	X	N	86.6	220.0	-757.4	63.8
Driver Left Lower Tibia Force Y	Y	N	96.0	203.9	-189.7	82.1
Driver Left Lower Tibia Force Z	Z	N	135.6	234.5	-1832.6	63.7
Driver Left Lower Tibia Moment X	X	Nm	25.4	104.9	-39.7	59.2

DATA SHEET NO. 21 … (CONTINUED)

BULLET VEHICLE OCCUPANT INJURY ASSESSMENT DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

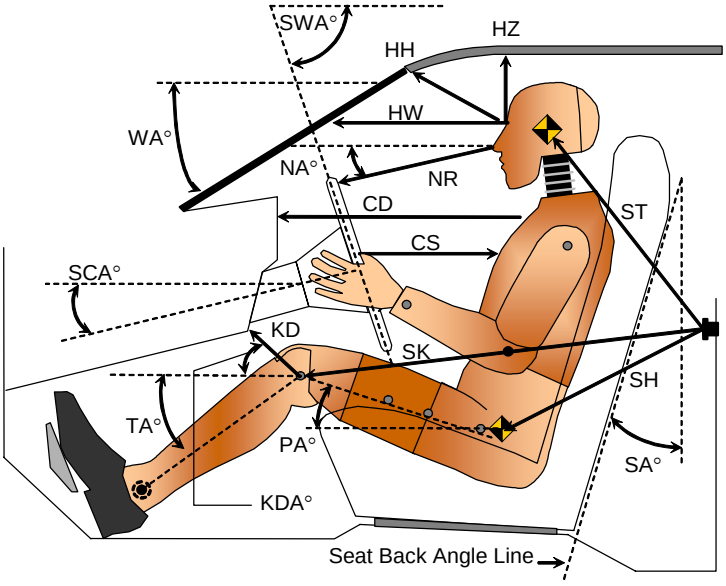
Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Description	Axis	Units	Max	Time (ms)	Min	Time (ms)
Driver Left Lower Tibia Moment Y	Y	Nm	12.3	109.6	-61.1	62.0
Driver Right Knee Deflection		mm	0.0	214.1	-3.2	82.9
Driver Right Tibia X	X	g	29.8	79.6	-71.5	69.7
Driver Right Tibia Y	Y	g	140.2	69.5	-31.0	88.0
Driver Right Foot X	X	g	48.4	52.4	-67.2	70.0
Driver Right Foot Y	Y	g	72.8	70.2	-27.1	94.4
Driver Right Foot Z	Z	g	52.9	69.6	-75.8	67.6
Driver Right Ankle Rotation X	X	°	-1.4	37.1	-38.7	72.6
Driver Right Ankle Rotation Y	Y	°	35.5	83.4	-1.0	1.0
Driver Right Ankle Rotation Z	Z	°	9.7	44.3	-5.6	399.9
Driver Right Upper Tibia Force X	X	N	332.5	43.9	-629.5	79.8
Driver Right Upper Tibia Force Y	Y	N	326.5	94.2	-598.3	69.4
Driver Right Upper Tibia Force Z	Z	N	20.9	13.0	-1504.1	76.8
Driver Right Upper Tibia Moment X	X	Nm	75.9	86.5	-45.0	70.2
Driver Right Upper Tibia Moment Y	Y	Nm	48.1	79.8	-86.0	63.0
Driver Right Lower Tibia Force X	X	N	44.3	189.0	-1123.9	69.4
Driver Right Lower Tibia Force Y	Y	N	1078.6	69.2	-427.6	85.9
Driver Right Lower Tibia Force Z	Z	N	19.9	8.2	-2915.4	70.0
Driver Right Lower Tibia Moment X	X	Nm	42.7	87.0	-58.2	68.3
Driver Right Lower Tibia Moment Y	Y	Nm	50.2	79.7	-62.5	61.0
Driver Lap Belt Force		N	2361.2	104.3	0.4	4.9
Driver Shoulder Belt Force		N	5607.3	66.5	-1.6	173.8

DATA SHEET NO. 22

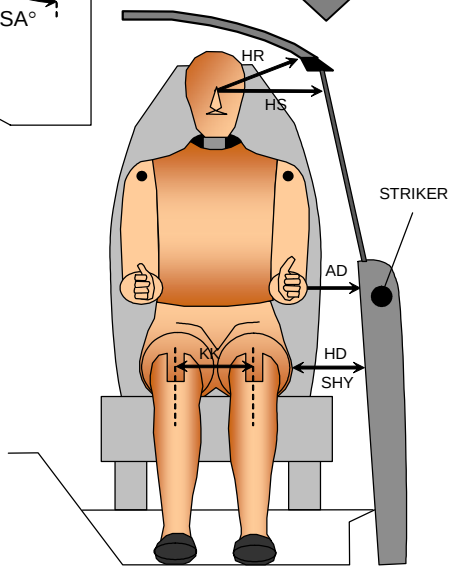
BULLET VEHICLE DUMMY POSITIONING DATA

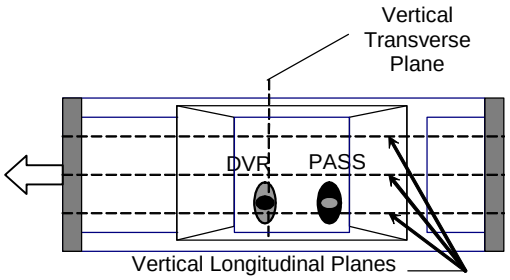
Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10



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

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





DATA SHEET NO. 22 … (CONTINUED)

BULLET VEHICLE DUMMY POSITIONING DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

TEST DUMMY POSITION MEASUREMENTS

Code	Measurement Description	Driver		Left Rear Passenger	
		Length (mm)	Angle (°)	Length (mm)	Angle (°)
WA	Windshield Angle		23.7		
SWA	Steering Wheel Angle		66.2		
SCA	Steering Column Angle		23.8		
SA	Seat Back Angle		17.1		
HZ	Head to Roof (Z)	172	90		
HH	Head to Header	292	28		
HR	Head to Side Header	273	26.5		
NR	Nose to Rim	407	11.7		
CD	Chest to Dash	559	14.4		
CS	Chest to Steering Hub	312	0.3		
RA	Rim to Abdomen	191	0.1		
KDL	Left Knee to Dash / Seat Back	103	27.1		
KDR	Right Knee to Dash / Seat Back	83	37.1		
PA	Pelvis Angle		24.6		
TA	Tibia Angle		54.7		
KK	Knee to Knee	270			
SK	Striker to Knee	642	0.3		
ST	Striker to Head	646	79.6		
SH	Striker to H-Point	284	30.1		
SHY	Striker to H-Point (Y)	808			
HS	Head to Side Window	369			
HD	H-Point to Door	42			
AD	Arm to Door	113			

DATA SHEET NO. 22 … (CONTINUED)

BULLET VEHICLE DUMMY POSITIONING DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

TEST DUMMY POINT LOCATIONS

Description	Driver			Left Rear Passenger		
	X	Y	Z	X	Y	Z
Head CG	2652	448	1223			
Bridge of Nose	2750	367	1210			
Tip of Nose	2752	369	1171			
Chin	2749	368	1091			
Hip Point	2800	557	550			
Left Knee	3197	553	689			
Right Knee	3222	277	687			
Left Ankle	3443	543	348			
Right Ankle						
Front Outboard Seat Anchor Bolt	3073	561	283			
Center of Striker	2555	804	692			

Reference Planes: X – Rear of Vehicle Centerline, X+ forward

Y – Vehicle Centerline, Y+ left

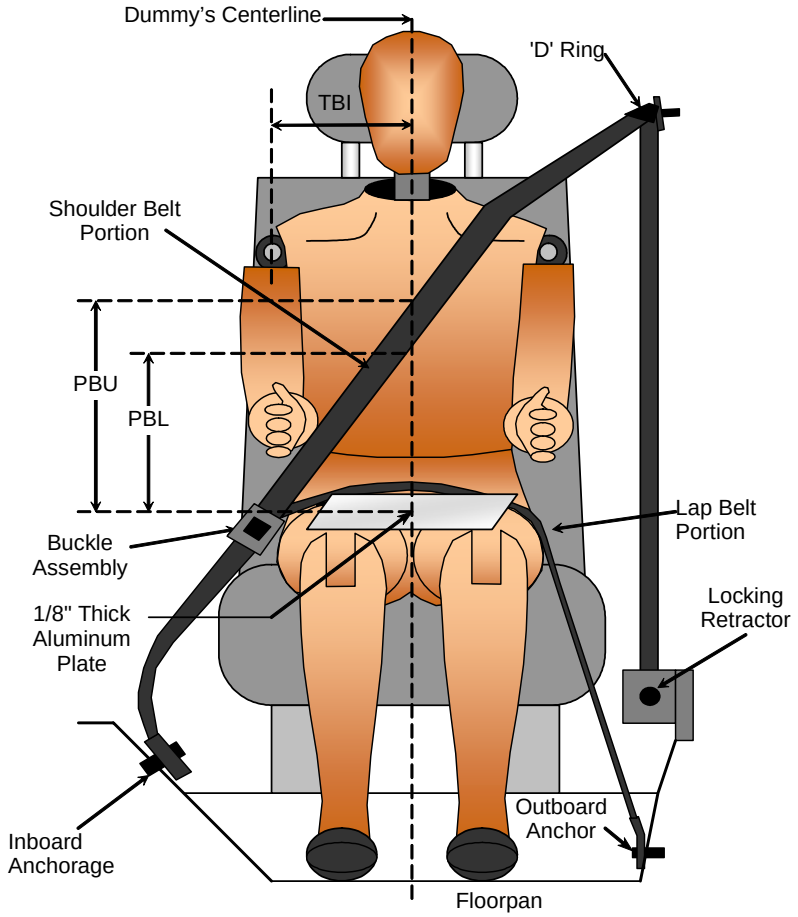
Z – Ground, Z+ up

All measurements in millimeters

DATA SHEET NO. 23

BULLET VEHICLE SEAT BELT POSITIONING DATA

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10



SEAT BELT POSITIONING MEASUREMENTS

Code	Measured Parameter	Units	Driver	Left Rear Passenger
TBI	Dummy C/L to Lap/Shoulder Belt Intersect	mm	218	
PBU	Top Surface of Reference to Belt Upper	mm	355	
PBL	Top Surface of Reference to Belt Lower	mm	274	

DATA SHEET NO. 24

BULLET VEHICLE ACCELEROMETER LOCATIONS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

VEHICLE ACCELEROMETER LOCATIONS

Accelerometer Description	Axes	Location		
		X	Y	Z
Left Rear Sill	X,Y	-2205	710	336
Right Rear Sill	X,Y	-2305	-720	335
Trunk	Z	-3985	100	400
Driver Seat Track	X	-2175	600	300

Reference Planes: X – Front of Vehicle Centerline, X+ forward

Y – Vehicle Centerline, Y+ left

Z – Ground Plane, Z+ up

All measurements in millimeters

DATA SHEET NO. 25

BULLET VEHICLE ACCELEROMETER DATA SUMMARY

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

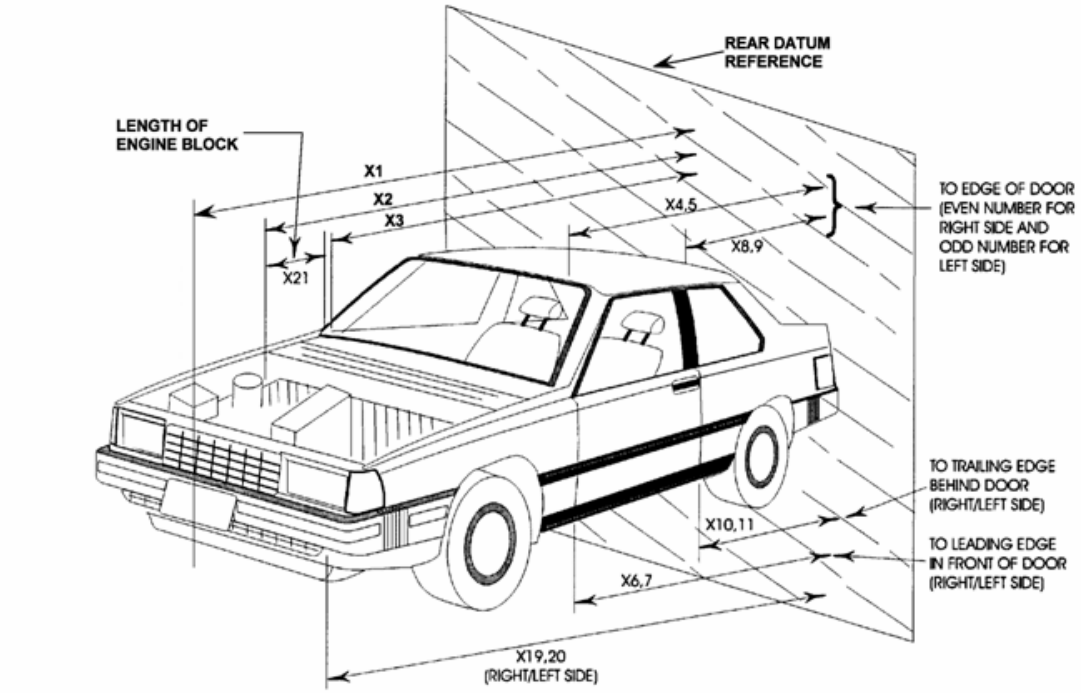
Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

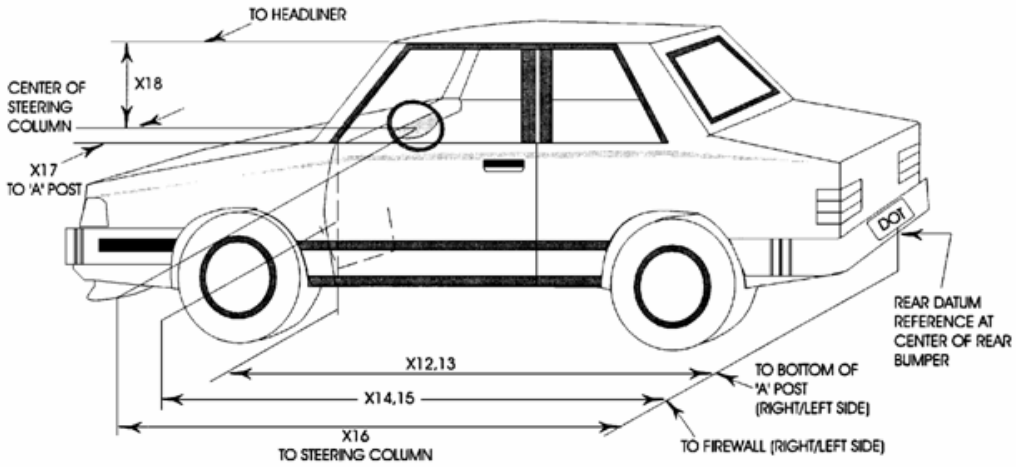
No.	Accelerometer Description	Axis	Units	Max	Time (ms)	Min	Time (ms)
1	Left Rear Sill	X	g	2.7	172.8	-47.2	59.2
2		Y	g	13.6	41.9	-10.2	90.6
3	Right Rear Sill	X	g	2.0	180.4	-34.8	60.3
4		Y	g	15.1	39.2	-2.5	69.8
5	Trunk	Z	g	2.7	173.0	-44.0	59.7
6	Driver Seat Track	X	g	4.7	80.3	-10.2	91.2

DATA SHEET NO. 26

BULLET VEHICLE MEASUREMENTS

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10





DATA SHEET NO. 26 … (CONTINUED)

BULLET VEHICLE MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

VEHICLE MEASUREMENT TABLE

No.	Description	Pre-Test	Post-Test	Difference
1	Total Vehicle Length at Centerline	5105	4728	-377
2	RSOV to Front of Engine	4582	4361	-221
3	RSOV to Firewall Centerline	4030	3914	-116
4	RSOV to Leading Edge of Right Door	3566	3537	-29
5	RSOV to Leading Edge of Left Door	3568	3543	-25
6	RSOV to Lower Leading Edge of Right Door	3531	3495	-36
7	RSOV to Lower Leading Edge of Left Door	3536	3498	-38
8	RSOV to Upper Leading Edge of Right Door	3552	3524	-28
9	RSOV to Upper Leading Edge of Left Door	3554	3532	-22
10	RSOV to Lower Trailing Edge of Right Door	2476	2440	-36
11	RSOV to Lower Trailing Edge of Left Door	2475	2442	-33
12	RSOV to Bottom of Right A-Pillar	3538	3503	-35
13	RSOV to Bottom of Left A-Pillar	3536	3451	-85
14	RSOV to Firewall on Right Side	3976	3912	-64
15	RSOV to Firewall on Left Side	3942	3853	-89
16	RSOV to Steering Column	3081	3127	46
17	Center of Steering Column to Left A-Pillar	447	464	17
18	Center of Steering Column to Headliner	439	463	24
19	RSOV to Right Side of Front Bumper	4384	4441	57
20	RSOV to Left Side of Front Bumper	4386	3898	-488
21	Engine Block Length	536	398	-138
RD	RSOV to Right Side of Dash	3261	3224	-37
CD	RSOV to Center of Dash	3261	3221	-40
LD	RSOV to Left Side of Dash	3259	3235	-24

RSOV = Rear Surface of Vehicle

All measurements in millimeters

DATA SHEET NO. 26 … (CONTINUED)

BULLET VEHICLE MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

VEHICLE STRUCTURAL MEASUREMENT TABLE

No.	Description	Pre-Test	Post-Test	Difference
1	Total Vehicle Length	5105	4812	-293
2	Total Vehicle Width	1898	1889	-9
3	Bumper Top Height	535	533	-2
4	Bumper Bottom Height	371	370	-1
5	Longitudinal Member Top Height	550	590	40
6	Longitudinal Member Bottom Height	425	485	60
7	Distance Between Longitudinal Members	980	930	-50
8	Longitudinal Member Width	100	125	25
9	Engine Top Height	895	877	-18
10	Engine Bottom Height	213	185	-28
11	Engine and Gearbox Width	798	804	6
12	Front Bumper to Engine Distance	523	144	-379
13	Front Shock Absorber Fixing Height	871	895	24
14	Hood Leading Edge Height	781	852	71
15	Front Shock Absorber Fixing Width	1257	1263	6
16	Front Bumper to Front Axle Distance	1009	880	-129
17	Front Axle to A-Pillar Distance	560	397	-163
18	A-Pillar to B-Pillar Distance	1027	958	-69
19	B-Pillar to Rear Axle Distance	1286	1283	-3
20	B-Pillar to C-Pillar Distance	827	827	0
21	Roof Sill Bottom Height	1386	1361	-25
22	Roof Sill Top Height	1454	1426	-28
23	Floor Sill Bottom Height	253	212	-41
24	Floor Sill Top Height	297	258	-39

All measurements in millimeters

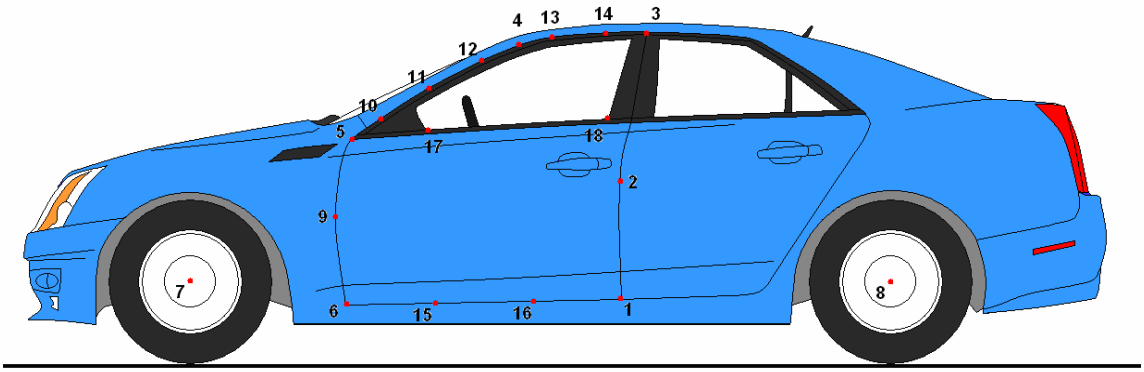
DATA SHEET NO. 26 … (CONTINUED)

BULLET VEHICLE MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10



LEFT FRONT DOOR JAM MEASUREMENTS

Point	Pre-Test			Post-Test			Difference		
	X	Y	Z	X	Y	Z	X	Y	Z
1	2692	794	365	2679	745	329	-13	-49	-36
2	2512	804	852	2508	778	817	-4	-26	-35
3	2379	634	1395	2382	637	1370	3	3	-25
4	2936	668	1314	2940	657	1283	4	-11	-31
5	3485	786	945	3465	768	888	-20	-18	-57
6	3433	780	326	3407	734	270	-26	-46	-56
7	4096	899	291	3848	862	230	-248	-37	-61
8	1223	882	301	1211	848	301	-12	-34	0
9	3476	794	628	3442	765	573	-34	-29	-55
10	3426	762	1030	3413	747	978	-13	-15	-52
11	3206	717	1178	3202	705	1141	-4	-12	-37
12	3075	693	1252	3075	680	1225	0	-13	-27
13	2728	639	1368	2728	637	1343	0	-2	-25
14	2436	629	1398	2438	631	1372	2	2	-26
15	3289	772	284	3273	720	241	-16	-52	-43
16	3054	771	284	3039	710	236	-15	-61	-48
17	3290	847	938	3269	851	877	-21	4	-61
18	2534	846	967	2515	830	930	-19	-16	-37

NOTE: Points 1 through 6 and 9 through16 are taken in the door frame area. Points 17 and 18 are taken on the outer door surface.

Reference Planes: X – Rear of Vehicle Centerline, X+ forward

Y – Vehicle Centerline, Y+ left

Z – Ground, Z+ up

All measurements in millimeters

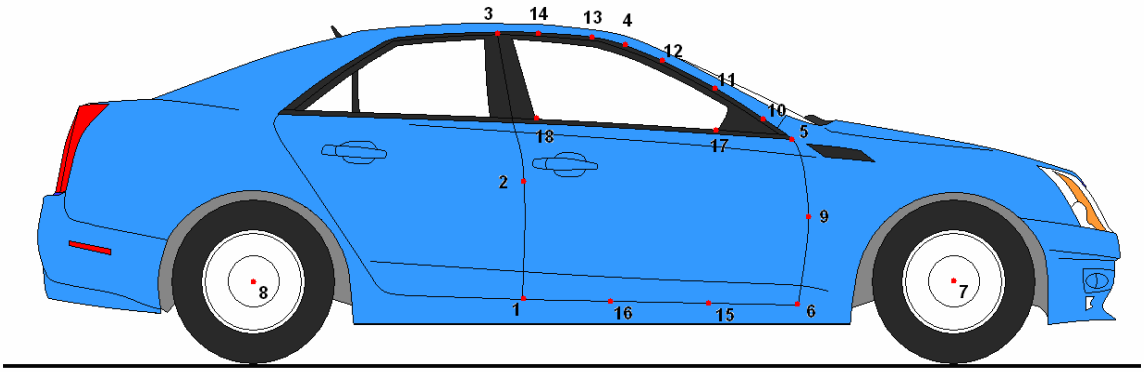
DATA SHEET NO. 26 … (CONTINUED)

BULLET VEHICLE MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10



RIGHT FRONT DOOR JAM MEASUREMENTS

Point	Pre-Test			Post-Test			Difference		
	X	Y	Z	X	Y	Z	X	Y	Z
1	2716	-836	363	2678	-865	406	-38	-29	43
2	2520	-843	841	2489	-849	887	-31	-6	46
3	2378	-656	1402	2360	-637	1441	-18	19	39
4	3476	-802	983	3448	-824	1015	-28	-22	32
5	3488	-819	907	3460	-844	939	-28	-25	32
6	3462	-837	382	3424	-886	415	-38	-49	33
7	4098	-920	304	4118	-925	309	20	-5	5
8	1223	-944	315	1200	-958	321	-23	-14	6
9	3482	-831	713	3451	-863	746	-31	-32	33
10	3435	-790	1034	3406	-808	1067	-29	-18	33
11	3242	-746	1165	3219	-753	1197	-23	-7	32
12	3055	-705	1269	3034	-704	1301	-21	1	32
13	2943	-683	1317	2922	-678	1350	-21	5	33
14	2428	-646	1404	2410	-628	1442	-18	18	38
15	3300	-833	296	3259	-879	332	-41	-46	36
16	3048	-831	296	3009	-872	335	-39	-41	39
17	3281	-872	964	3254	-892	995	-27	-20	31
18	2526	-877	983	2497	-885	1027	-29	-8	44

NOTE: Points 1 through 6 and 9 through16 are taken in the door frame area. Points 17 and 18 are taken on the outer door surface.

Reference Planes: X – Rear of Vehicle Centerline, X+ forward

Y – Vehicle Centerline, Y+ left

Z – Ground, Z+ up

All measurements in millimeters

DATA SHEET NO. 27

BULLET VEHICLE STRUCTURAL CRUSH MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Description	Pre-Test			Post-Test			Difference		
	X	Y	Z	X	Y	Z	X	Y	Z
Lower Bumper Beam 1	4958	563	400	4265	639	404	-693	76	4
Lower Bumper Beam 2	4974	392	401	4222	497	478	-752	105	77
Lower Bumper Beam 3	4987	124	403	4252	294	495	-735	170	92
Lower Bumper Beam 4	4987	-147	403	4442	102	483	-545	249	80
Lower Bumper Beam 5	4973	-417	405	4618	-74	463	-355	343	58
Lower Bumper Beam 6	4957	-584	407	4744	-190	427	-213	394	20
Upper Bumper Beam 1	4914	662	549	4372	741	440	-542	79	-109
Upper Bumper Beam 2	4974	393	551	4335	500	572	-639	107	21
Upper Bumper Beam 3	4991	123	550	4305	328	626	-686	205	76
Upper Bumper Beam 4	4992	-145	552	4498	142	618	-494	287	66
Upper Bumper Beam 5	4976	-416	556	4676	-61	600	-300	355	44
Upper Bumper Beam 6	4915	-684	558	4812	-299	569	-103	385	11
Upper Radiator Support 1	4607	662	820	4352	751	813	-255	89	-7
Upper Radiator Support 2	4774	393	824	4465	480	910	-309	87	86
Upper Radiator Support 3	4773	124	833	4519	227	975	-254	103	142
Upper Radiator Support 4	4771	-143	836	4603	-14	900	-168	129	64
Upper Radiator Support 5	4775	-414	828	4598	-281	882	-177	133	54
Upper Radiator Support 6	4611	-683	829	4544	-585	825	-67	98	-4
Front of Hood 1	4726	660	816	4580	686	1111	-146	26	295
Front of Hood 2	4917	390	766	4628	437	912	-289	47	146
Front of Hood 3	4958	122	785	4733	189	894	-225	67	109
Front of Hood 4	4958	-149	787	4795	-77	896	-163	72	109
Front of Hood 5	4917	-417	776	4792	-346	886	-125	71	110
Front of Hood 6	4720	-685	833	4649	-638	970	-71	47	137

Notes: Lower Bumper Beam measurement points were taken on the foam material of the bumper.

See Figures 587 through 594 of Appendix A for photographs of the crush measurements.

Reference Planes: X – Rear of Vehicle Centerline, X+ forward

Y – Vehicle Centerline, Y+ left

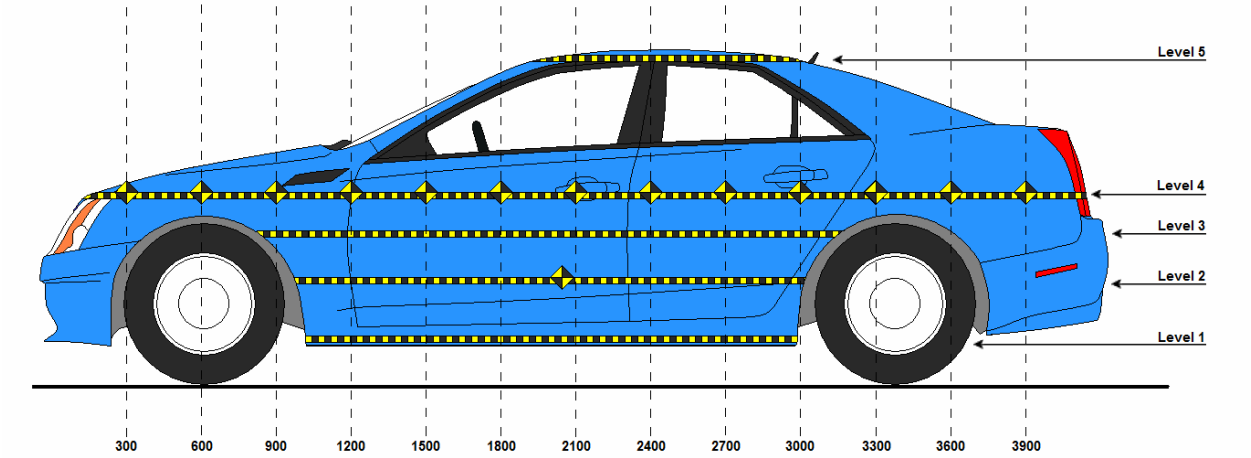
Z – Ground, Z+ up

All measurements in millimeters

DATA SHEET NO. 28

BULLET VEHICLE SIDE CRUSH MEASUREMENTS

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10



Level	Description	Height Above Ground
1	Sill Top	296
2	Occupant H-Point	543
3	Mid-Door	605
4	Vehicle Length	755
5	Window Top	1566

All measurements in millimeters

DATA SHEET NO. 28… (CONTINUED)

BULLET VEHICLE SIDE CRUSH MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

	Pre-Test					Post-Test					Difference				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
0															
150															
300															
450															
600				657					531					-126	
750				629					482					-147	
900				595					523					-72	
1050				584					625					41	
1200				592					697					105	
1350		578	574	598			635	635	659			57	61	61	
1500	626	588	587	593		681	617	613	609		55	29	26	16	
1650	628	587	586	590		669	615	611	607		41	28	25	17	
1800	625	584	583	586		669	614	609	604		44	30	26	18	
1950	624	582	581	584		668	612	608	603		44	30	27	19	
2100	623	581	579	582		667	612	607	602		44	31	28	20	
2250	622	580	578	581		668	612	607	603		46	32	29	22	
2400	622	579	577	590		668	612	608	613		46	33	31	23	
2550	621	578	577	579		667	613	608	604		46	35	31	25	
2700	623	580	578	581	890	672	616	612	607	883	49	36	34	26	-7
2850	624	581	580	583	890	671	615	611	606	880	47	34	31	23	-10
3000	625	583	582	585	898	670	615	610	606	886	45	32	28	21	-12
3150	628	585	584	588		671	615	611	607		43	30	27	19	
3300	628	588	587	591		669	615	611	608		41	27	24	17	
3450	630	585	586	597		668	610	608	612		38	25	22	15	
3600			576	595				596	608				20	13	
3750				587					596					9	
3900				584					592					8	
4050				612					610					-2	
4200				632					629					-3	
4350				644					649					5	
4500				658					660					2	

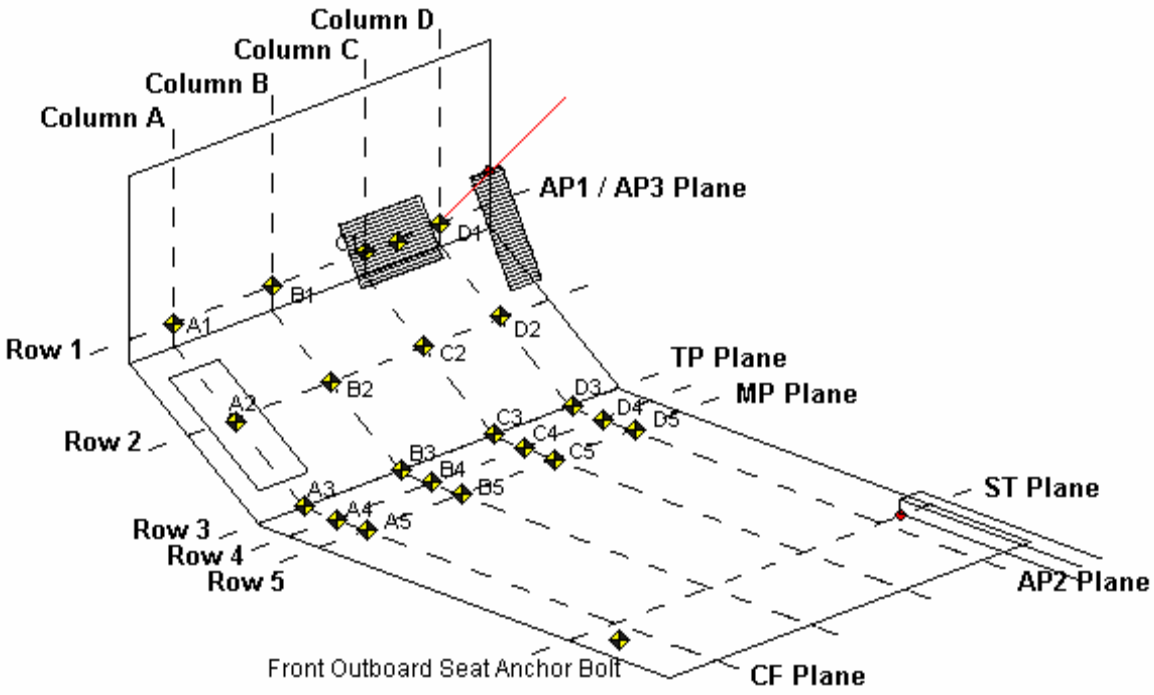
All measurements in millimeters

DATA SHEET NO. 29

BULLET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

STANDARD NHTSA FLOORPAN MEASUREMENTS



AP1: Y-Z Plane passing through D1

AP2: X-Z Plane passing through D1

AP3: X-Y plane passing through D1

MP: Y-Z plane, halfway between the ST plane and AP1 plane

CF Plane: X-Z plane passes through center of footrest.

BP Plane: X-Z plane passes through center of brake pedal

TP Plane: Y-Z plane, intersection of BP Plane and the intersection of the toe pan and floorboard

Column A: intersection of vehicle and CF plane

Column D: Intersection of vehicle and AP2 plane

Row 1: intersection of the vehicle and the AP3 Plane

Row 3: intersection of the vehicle and TP plane

Row 5: intersection of the vehicle and MP plane

Row 2: evenly spaced between row 1 and 3

Row 4: evenly spaced between row 3 and 5

DATA SHEET NO. 29 … (CONTINUED)

BULLET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

DRIVER FLOORPAN X-AXIS

Point	Pre-Test			Post-Test			Difference		
	X	Y	Z	X	Y	X	X	Y	Z
A1	3668	520	376	3599	471	367	-69	-49	-9
A2	3639	526	277	3583	465	264	-56	-61	-13
A3	3567	528	203	3548	460	169	-19	-68	-34
A4	3480	531	199	3460	463	160	-20	-68	-39
A5	3384	536	203	3364	467	166	-20	-69	-37
B1	3723	438	329	3633	369	343	-90	-69	14
B2	3652	439	263	3589	371	258	-63	-68	-5
B3	3563	444	204	3543	376	168	-20	-68	-36
B4	3476	445	204	3455	378	170	-21	-67	-34
B5	3383	449	199	3362	382	162	-21	-67	-37
C1	3721	356	325	3621	289	346	-100	-67	21
C2	3644	357	262	3582	288	253	-62	-69	-9
C3	3560	358	206	3537	290	166	-23	-68	-40
C4	3474	358	202	3452	292	176	-22	-66	-26
C5	3382	360	205	3362	294	177	-20	-66	-28
D1	3734	197	316	3609	128	344	-125	-69	28
D2	3651	194	250	3567	124	256	-84	-70	6
D3	3564	193	208	3534	127	180	-30	-66	-28
D4	3472	193	210	3450	126	189	-22	-67	-21
D5	3381	193	209	3357	128	191	-24	-65	-18
Left IP	3306	512	713	3282	449	701	-24	-63	-12
Right IP	3304	239	718	3282	177	712	-22	-62	-6
Steering Column	3079	364	929	3131	314	885	52	-50	-44
Outboard Seat Bolt	3073	561	283	3059	503	244	-14	-58	-39
Brake Pedal	3542	359	381	3463	266	384	-79	-93	3

Reference Planes: X – Rear of Vehicle at Centerline, X+ forward

Y – Vehicle Centerline, Y+ left

Z – Ground, Z+ up

All measurements in millimeters

DATA SHEET NO. 29 … (CONTINUED)

BULLET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

ADDITIONAL FLOORPAN MEASUREMENT POINTS (NON-STANDARD)

PRE-TEST

POST-TEST

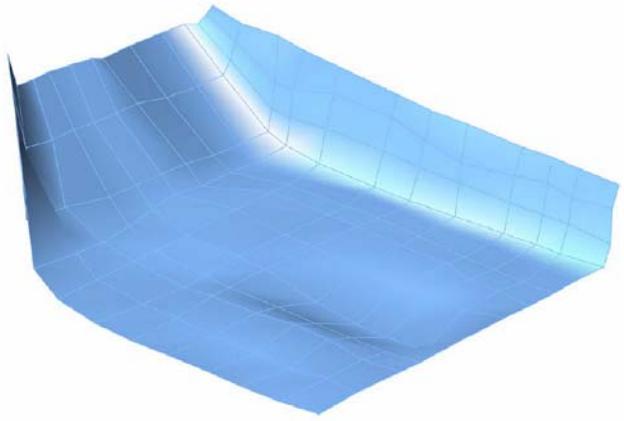
DATA SHEET NO. 29 … (CONTINUED)

BULLET VEHICLE INTRUSION MEASUREMENTS

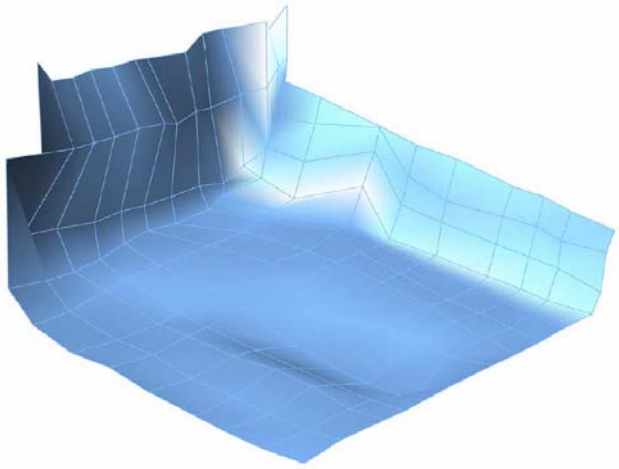
Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

ADDITIONAL FLOORPAN MEASUREMENT POINTS (NON-STANDARD)

PRE-TEST



POST-TEST



Reference Planes: X – Rear of Vehicle Centerline, X+ forward

Y – Vehicle Centerline, Y+ left

Z – Ground, Z+ up

DATA SHEET NO. 29 … (CONTINUED)

BULLET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Point No.	Row	Pre-Test			Post-Test			Difference		
		X	Y	Z	X	Y	Z	X	Y	Z
1	A	2156	-329	215	2120	-380	159	-36	-51	-56
2	A	2155	-397	220	2119	-446	168	-36	-49	-52
3	A	2156	-478	219	2118	-526	171	-38	-48	-48
4	A	2157	-514	218	2119	-563	171	-38	-49	-47
5	A	2156	-591	222	2117	-641	178	-39	-50	-44
6	A	2156	-668	223	2116	-717	183	-40	-49	-40
7	A	2157	-715	222	2116	-764	183	-41	-49	-39
8	A	2157	-759	223	2116	-807	186	-41	-48	-37
9	A	2160	-803	224	2118	-852	189	-42	-49	-35
10	A	2157	-849	226	2114	-898	194	-43	-49	-32
11	A	2156	-858	253	2112	-906	220	-44	-48	-33
12	A	2163	-867	293	2120	-916	263	-43	-49	-30
13	A	2160	-874	322	2117	-921	290	-43	-47	-32
14	B	2213	-328	212	2175	-379	155	-38	-51	-57
15	B	2206	-407	218	2167	-447	161	-39	-40	-57
16	B	2207	-472	219	2166	-524	166	-41	-52	-53
17	B	2206	-513	215	2166	-564	165	-40	-51	-50
18	B	2202	-583	194	2161	-634	148	-41	-51	-46
19	B	2210	-659	218	2168	-709	176	-42	-50	-42
20	B	2206	-717	223	2163	-766	185	-43	-49	-38
21	B	2201	-757	224	2158	-807	186	-43	-50	-38
22	B	2209	-808	222	2167	-856	186	-42	-48	-36
23	B	2219	-846	223	2173	-894	189	-46	-48	-34
24	B	2218	-858	257	2174	-907	225	-44	-49	-32
25	B	2219	-862	289	2178	-911	256	-41	-49	-33
26	B	2218	-871	324	2176	-919	291	-42	-48	-33
27	C	2269	-328	212	2231	-380	155	-38	-52	-57
28	C	2262	-406	212	2224	-457	155	-38	-51	-57
29	C	2261	-474	226	2221	-525	172	-40	-51	-54
30	C	2257	-513	216	2216	-566	163	-41	-53	-53
31	C	2257	-578	194	2216	-630	146	-41	-52	-48
32	C	2256	-659	218	2215	-711	176	-41	-52	-42
33	C	2251	-719	223	2210	-769	185	-41	-50	-38
34	C	2246	-759	223	2204	-812	186	-42	-53	-37
35	C	2250	-807	222	2206	-858	186	-44	-51	-36
36	C	2253	-845	224	2208	-893	190	-45	-48	-34
37	C	2253	-855	258	2212	-904	224	-41	-49	-34
38	C	2254	-862	296	2213	-911	260	-41	-49	-36

All measurements in millimeters

DATA SHEET NO. 29 … (CONTINUED)

BULLET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Point No.	Row	Pre-Test			Post-Test			Difference		
		X	Y	Z	X	Y	Z	X	Y	Z
39	D	2257	-868	327	2214	-918	294	-43	-50	-33
40	D	2320	-329	213	2272	-382	156	-48	-53	-57
41	D	2316	-410	212	2279	-461	154	-37	-51	-58
42	D	2312	-475	227	2275	-529	170	-37	-54	-57
43	D	2309	-511	216	2269	-564	163	-40	-53	-53
44	D	2301	-579	195	2260	-632	146	-41	-53	-49
45	D	2301	-660	218	2259	-710	175	-42	-50	-43
46	D	2298	-737	220	2254	-786	181	-44	-49	-39
47	D	2294	-764	221	2250	-815	182	-44	-51	-39
48	D	2294	-811	222	2249	-861	185	-45	-50	-37
49	D	2297	-841	223	2255	-891	187	-42	-50	-36
50	D	2300	-851	259	2256	-901	224	-44	-50	-35
51	D	2299	-856	292	2257	-906	256	-42	-50	-36
52	D	2296	-865	327	2255	-915	292	-41	-50	-35
53	E	2380	-330	213	2340	-383	159	-40	-53	-54
54	E	2377	-409	212	2339	-462	153	-38	-53	-59
55	E	2373	-480	218	2335	-532	162	-38	-52	-56
56	E	2370	-517	215	2331	-570	160	-39	-53	-55
57	E	2361	-578	203	2319	-631	152	-42	-53	-51
58	E	2360	-661	219	2315	-681	175	-45	-20	-44
59	E	2365	-735	221	2321	-784	185	-44	-49	-36
60	E	2364	-768	222	2321	-818	186	-43	-50	-36
61	E	2365	-802	223	2322	-853	187	-43	-51	-36
62	E	2366	-835	224	2323	-886	187	-43	-51	-37
63	E	2371	-846	262	2330	-898	223	-41	-52	-39
64	E	2371	-847	287	2329	-899	249	-42	-52	-38
65	E	2374	-859	331	2332	-912	295	-42	-53	-36
66	F	2434	-329	214	2402	-392	162	-32	-63	-52
67	F	2432	-408	217	2393	-462	161	-39	-54	-56
68	F	2439	-482	217	2400	-535	160	-39	-53	-57
69	F	2443	-519	214	2402	-574	159	-41	-55	-55
70	F	2437	-578	220	2395	-629	169	-42	-51	-51
71	F	2432	-660	222	2390	-711	179	-42	-51	-43
72	F	2430	-735	222	2387	-787	183	-43	-52	-39
73	F	2425	-770	224	2382	-823	186	-43	-53	-38
74	F	2424	-807	223	2381	-859	184	-43	-52	-39
75	F	2429	-830	224	2384	-882	185	-45	-52	-39
76	F	2426	-841	264	2384	-895	224	-42	-54	-40

All measurements in millimeters

DATA SHEET NO. 29 … (CONTINUED)

BULLET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Point No.	Row	Pre-Test			Post-Test			Difference		
		X	Y	Z	X	Y	Z	X	Y	Z
77	G	2426	-847	296	2384	-900	257	-42	-53	-39
78	G	2424	-855	332	2384	-908	294	-40	-53	-38
79	G	2492	-333	215	2452	-389	161	-40	-56	-54
80	G	2484	-411	215	2445	-465	158	-39	-54	-57
81	G	2485	-487	211	2446	-542	155	-39	-55	-56
82	G	2482	-521	215	2443	-574	161	-39	-53	-54
83	G	2480	-580	221	2440	-633	173	-40	-53	-48
84	G	2475	-659	223	2431	-726	182	-44	-67	-41
85	G	2472	-735	224	2424	-784	183	-48	-49	-41
86	G	2470	-766	225	2431	-849	187	-39	-83	-38
87	G	2479	-806	223	2437	-879	185	-42	-73	-38
88	G	2480	-829	224	2437	-893	226	-43	-64	2
89	G	2479	-840	267	2434	-902	268	-45	-62	1
90	G	2475	-848	309	2437	-907	295	-38	-59	-14
91	G	2475	-854	337	2435	-908	296	-40	-54	-41
92	H	2559	-348	217	2518	-404	165	-41	-56	-52
93	H	2563	-425	215	2522	-478	159	-41	-53	-56
94	H	2562	-490	216	2522	-544	166	-40	-54	-50
95	H	2561	-526	217	2521	-580	169	-40	-54	-48
96	H	2560	-583	219	2519	-635	171	-41	-52	-48
97	H	2559	-674	221	2516	-728	169	-43	-54	-52
98	H	2558	-736	222	2514	-789	170	-44	-53	-52
99	H	2557	-765	222	2516	-819	176	-41	-54	-46
100	H	2558	-790	223	2515	-842	180	-43	-52	-43
101	H	2562	-829	226	2514	-877	185	-48	-48	-41
102	H	2562	-838	268	2519	-894	224	-43	-56	-44
103	H	2561	-847	310	2520	-905	267	-41	-58	-43
104	H	2562	-853	343	2522	-911	297	-40	-58	-46
105	I	2623	-383	222	2581	-439	175	-42	-56	-47
106	I	2617	-454	220	2578	-509	166	-39	-55	-54
107	I	2615	-498	220	2575	-554	165	-40	-56	-55
108	I	2616	-549	222	2576	-603	165	-40	-54	-57
109	I	2621	-597	226	2578	-651	171	-43	-54	-55
110	I	2620	-635	233	2576	-690	176	-44	-55	-57
111	I	2616	-679	230	2571	-735	173	-45	-56	-57
112	I	2615	-732	230	2563	-785	178	-52	-53	-52
113	I	2617	-780	225	2571	-823	182	-46	-43	-43
114	I	2611	-829	232	2566	-884	188	-45	-55	-44

All measurements in millimeters

DATA SHEET NO. 29 … (CONTINUED)

BULLET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Point No.	Row	Pre-Test			Post-Test			Difference		
		X	Y	Z	X	Y	Z	X	Y	Z
115	J	2614	-837	263	2572	-894	221	-42	-57	-42
116	J	2617	-842	296	2574	-905	255	-43	-63	-41
117	J	2613	-853	345	2578	-914	295	-35	-61	-50
118	J	2670	-399	372	2603	-429	329	-67	-30	-43
119	J	2667	-420	257	2598	-477	223	-69	-57	-34
120	J	2662	-485	253	2597	-540	213	-65	-55	-40
121	J	2651	-553	246	2593	-607	203	-58	-54	-43
122	J	2650	-600	247	2592	-656	203	-58	-56	-44
123	J	2643	-637	250	2588	-693	201	-55	-56	-49
124	J	2643	-682	248	2586	-740	199	-57	-58	-49
125	J	2646	-737	239	2586	-795	197	-60	-58	-42
126	J	2647	-785	235	2589	-846	184	-58	-61	-51
127	J	2640	-829	241	2590	-882	194	-50	-53	-47
128	J	2642	-837	266	2570	-895	220	-72	-58	-46
129	J	2643	-841	297	2575	-906	252	-68	-65	-45
130	J	2654	-856	349	2576	-916	300	-78	-60	-49
131	K	2725	-452	400	2632	-542	291	-93	-90	-109
132	K	2726	-487	306	2624	-590	287	-102	-103	-19
133	K	2722	-532	302	2621	-626	284	-101	-94	-18
134	K	2722	-570	302	2619	-661	282	-103	-91	-20
135	K	2719	-604	301	2611	-693	287	-108	-89	-14
136	K	2713	-638	304	2601	-728	287	-112	-90	-17
137	K	2714	-677	302	2606	-761	275	-108	-84	-27
138	K	2723	-742	285	2607	-797	279	-116	-55	-6
139	K	2719	-793	283	2608	-826	275	-111	-33	-8
140	K	2715	-836	284	2609	-883	274	-106	-47	-10
141	K	2710	-842	303	2598	-916	278	-112	-74	-25
142	K	2709	-849	324	2590	-921	305	-119	-72	-19
143	K	2707	-853	348	2586	-929	315	-121	-76	-33
144	L	2758	-483	417	2647	-528	403	-111	-45	-14
145	L	2783	-538	349	2671	-597	350	-112	-59	1
146	L	2782	-567	347	2662	-626	349	-120	-59	2
147	L	2782	-595	348	2659	-653	352	-123	-58	4
148	L	2776	-629	347	2650	-683	350	-126	-54	3
149	L	2770	-659	347	2644	-715	353	-126	-56	6
150	L	2775	-686	336	2648	-745	344	-127	-59	8
151	L	2780	-742	331	2635	-801	340	-145	-59	9
152	L	2778	-796	330	2651	-853	342	-127	-57	12

All measurements in millimeters

DATA SHEET NO. 29 … (CONTINUED)

BULLET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Point No.	Row	Pre-Test			Post-Test			Difference		
		X	Y	Z	X	Y	Z	X	Y	Z
153	J	2773	-832	330	2663	-907	327	-110	-75	-3
154	J	2765	-848	328	2617	-923	349	-148	-75	21
155	J	2757	-852	342	2616	-928	338	-141	-76	-4
156	J	2752	-857	354	2603	-938	371	-149	-81	17

All measurements in millimeters

DATA SHEET NO. 29 … (CONTINUED)

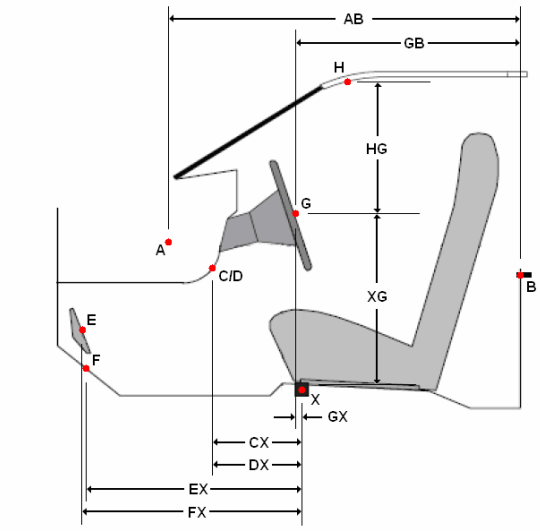
BULLET VEHICLE INTRUSION MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

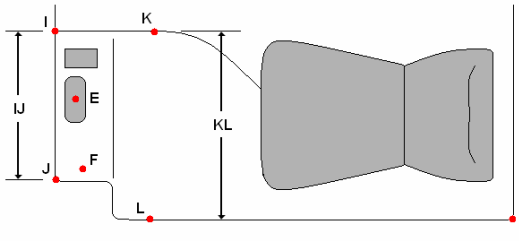
Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

SIDE VIEW



TOP VIEW



OCCUPANT COMPARTMENT INTRUSION

Description	Driver's Side			Passenger's Side		
	Pre-Test	Post-Test	Difference	Pre-Test	Post-Test	Difference
AB	980	904	76	981	978	3
GB	526	580	-54	703	697	6
CX	234	222	12	207	196	11
DX	232	226	6	208	204	4
EX	477	402	75			
FX	468	433	35	531	527	4
GX	8	69	-61	190	185	5
XG	646	641	5	542	520	22
HG	439	463	-24	532	540	-8
IJ	430	453	-23			
KL	512	509	3			

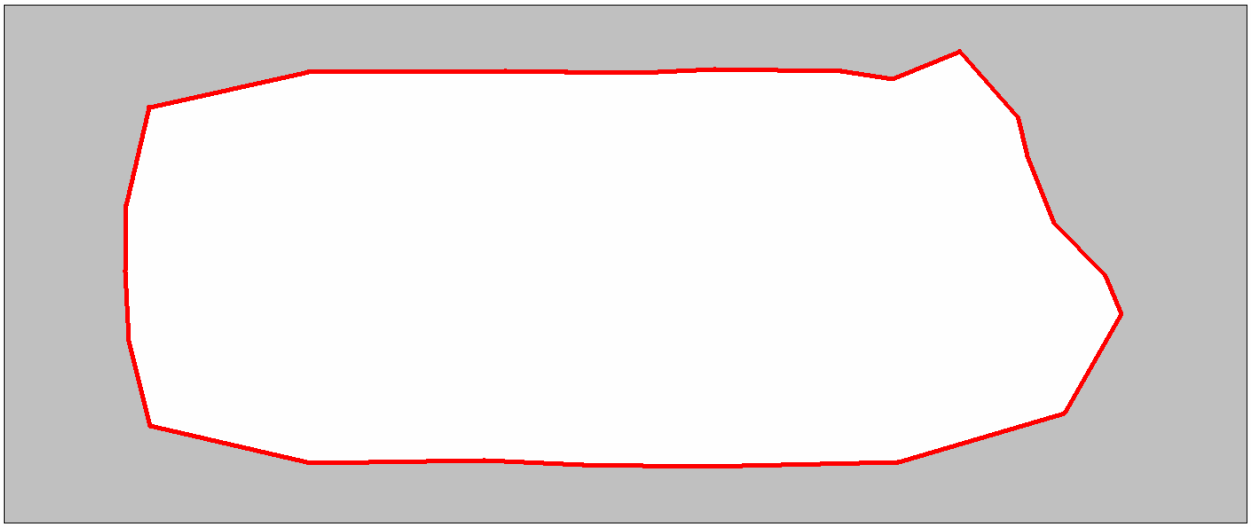
All measurements in millimeters

DATA SHEET NO. 30

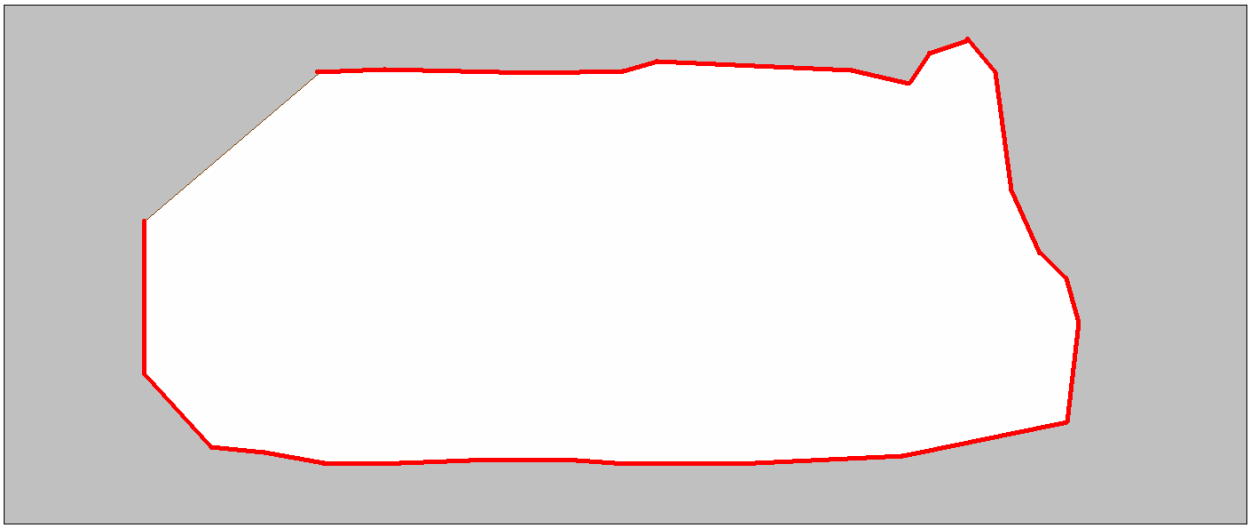
BULLET VEHICLE EXTERIOR PROFILE MEASUREMENTS

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

LEVEL 1



LEVEL 2



NOTE: No Pre-Test Measurements Available.

DATA SHEET NO. 30 … (CONTINUED)

BULLET VEHICLE EXTERIOR PROFILE MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

LEVEL 1

Point No.	Pre-Test			Post-Test			Difference		
	X	Y	Z	X	Y	Z	X	Y	Z
1				4535	-701	608			
2				3724	-936	603			
3				2991	-951	611			
4				2611	-954	610			
5				2222	-952	612			
6				1873	-938	610			
7				1622	-933	599			
8				887	-936	606			
9				120	-765	606			
10				13	-337	605			
11				-2	-18	606			
12				7	290	581			
13				120	775	583			
14				884	943	545			
15				1561	946	583			
16				2129	945	582			
17				2437	948	583			
18				2845	966	581			
19				3456	949	582			
20				3704	918	583			
21				4035	1043	583			
22				4312	729	588			
23				4357	548	589			
24				4499	201	592			
25				4730	-42	597			
26				4814	-231	601			

DATA SHEET NO. 30 … (CONTINUED)

BULLET VEHICLE EXTERIOR PROFILE MEASUREMENTS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

LEVEL 2

Point No.	Pre-Test			Post-Test			Difference		
	X	Y	Z	X	Y	Z	X	Y	Z
1				4591	-748	743			
2				3783	-912	744			
3				2948	-948	744			
4				2486	-950	744			
5				2395	-944	743			
6				2218	-926	744			
7				1767	-929	745			
8				1512	-935	743			
9				1342	-947	734			
10				1005	-944	734			
11				718	-895	738			
12				463	-873	734			
13				136	-512	734			
14				135	-199	734			
15				136	22	734			
16				131	221	710			
17				977	937	712			
18				1280	953	711			
19				1890	937	710			
20				2433	944	710			
21				2617	990	709			
22				3118	972	705			
23				3521	957	706			
24				3672	919	705			
25				3826	885	698			
26				3930	1028	787			
27				4106	1096	705			
28				4242	944	709			
29				4289	638	708			
30				4316	386	711			
31				4454	77	709			
32				4578	-42	710			
33				4643	-252	729			

DATA SHEET NO. 31

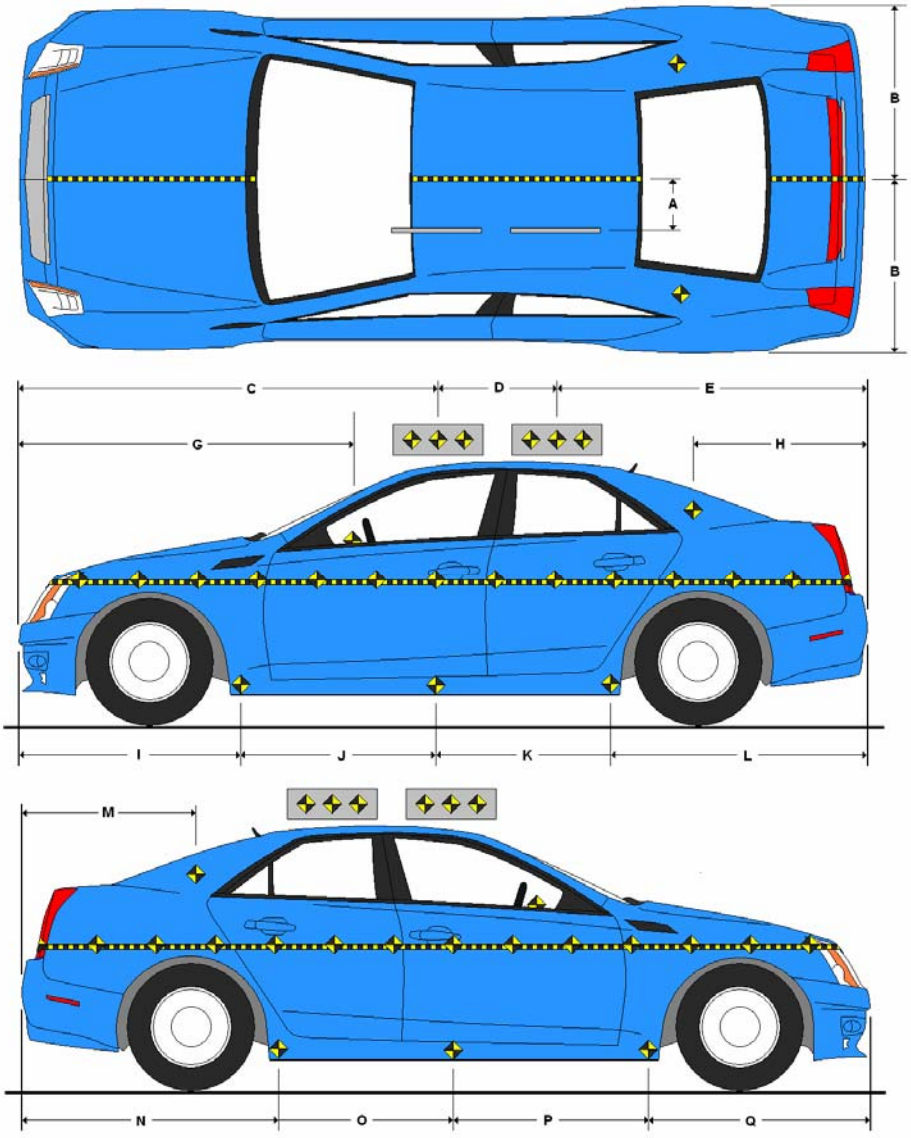
BULLET VEHICLE PHOTOGRAPHIC REFERENCE TARGET LOCATIONS

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Item	Value
A	412
B	949
C	2406
D	608
E	2091
F	
G	1922
H	1478
I	1520
J	951
K	949
L	1685
M	1491
N	1704
O	943
P	944
Q	1514



ADDITIONAL PHOTOGRAPHIC REFERENCE DATA

Description	Value	Notes
Driver's Door Panel Reference Target Spacing	305	Visible in Camera View No. 5
Passenger's Door Panel Reference Target Spacing	305	Visible in Camera View No. 9
Overhead Reference Panel Spacing	152	Visible in Camera View No. 7
Left and Right Side Vehicle Targets	300	Visible in left and right side views
Top Vehicle Targets	305	Visible in Camera Views No. 6,7

All measurements in millimeters

DATA SHEET NO. 32

BULLET VEHICLE POST-TEST AIRBAG DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10

Description	Units	Driver	Right Front Passenger
Number of Vent Holes		2	
Size of Vent Holes	mm	30	
Shape of Vent Holes		Round	
Total Vent Area	mm^2	707	
Length of Deflated Bag (if Square)	mm		
Width if Deflated Bag (if Square)	mm		
Diameter of Deflated Bag (if Round)	mm	490	
Airbag Tethered		No	
Length of Tethers	mm		

DATA SHEET NO. 33

BULLET VEHICLE ACCIDENT INVESTIGATION DATA

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

VEHICLE INFORMATION

VIN:	1FAHP24187G151706	Wheelbase (mm):	2873
Vehicle Size Category:	4-Door Sedan	Test Weight (kg):	1890

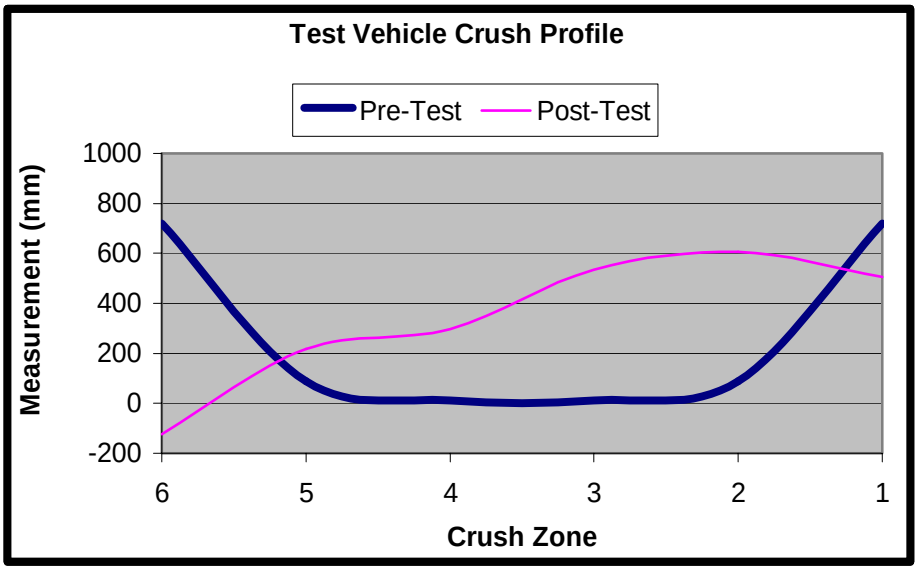
ACCELEROMETER DATA

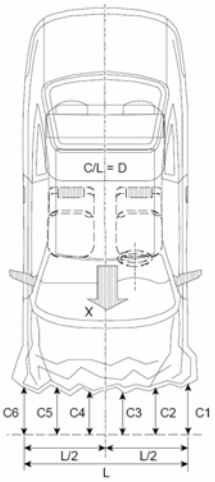
Accelerometer Location:	CG		
Cal. Procedure/Interval:	6 month/drop test		
Integration Algorithm:	NHTSA Standard	Linearity:	Good
Impact Velocity (km/h):	116.2		
Velocity Change (km/h):	149.1	Time of Separation (msec):	N/A

CRUSH PROFILE

Collision Damage Classification:	11FLAW2	Midpoint of Damage:	N/A
Damage Region Length:	1871	Impact Mode:	15°, 50% Offset

No.	Meaurement Description	Units	Pre-Test	Post-Test	Difference
C1	Crush Zone 1 at Left Side of Vehicle	mm	719	507	-212
C2	Crush Zone 2 at Left Side of Vehicle	mm	89	606	517
C3	Crush Zone 3 at Left Side of Vehicle	mm	11	535	524
C4	Crush Zone 4 at Right Side of Vehicle	mm	11	298	287
C5	Crush Zone 5 at Right Side of Vehicle	mm	87	218	131
C6	Crush Zone 6 at Right Side of Vehicle	mm	720	-123	-843





DATA SHEET NO. 34

BULLET VEHICLE FMVSS 212 / 219 SUMMARY

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

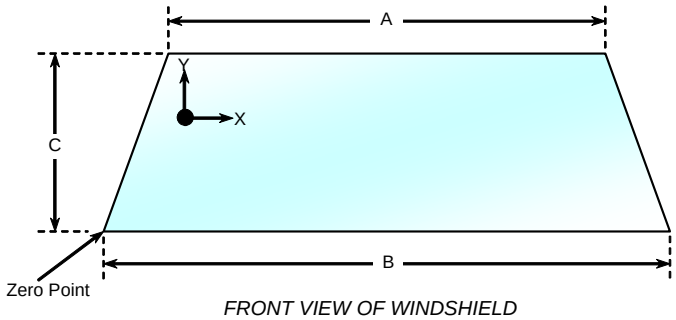
Windshield mounting details: windshield glass is secured to the vehicle frame with rubber cement type adhesive and rubber molding.

The standard requires that the post-test retention measurement be a minimum of 75% of the pre-test total periphery measurements for vehicles not equipped with passive occupant restraints, and 50% for each side of the windshield for vehicles that are equipped with passive occupant restraints.

Temperature of windshield molding during the test: 17.8° C

WINDSHIELD PERIPHERY MEASUREMENTS

Measurement	Units	Pre-Test	Post-Test	% Retention
Left Side	mm	2304	2232	96.9%
Right Side	mm	2304	2302	99.9%
Total	mm	4608	4534	98.4%



FRONT VIEW OF WINDSHIELD

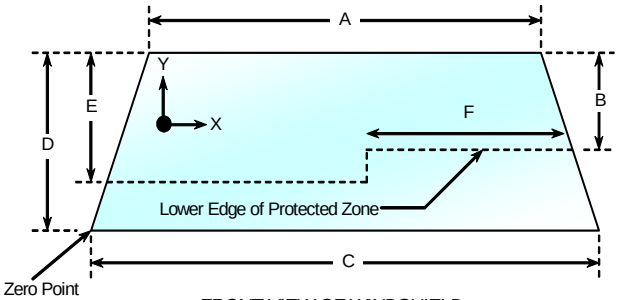
WINDSHIELD DIMENSIONS

Item	Units	Segment Length	Molding Width
A	mm	1320	18
B	mm	1647	70
C-Left	mm	820	18
C-Right	mm	820	18

DATA SHEET NO. 34 … (CONTINUED)

BULLET VEHICLE FMVSS 212 / 219 SUMMARY

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10



FRONT VIEW OF WINDSHIELD

WINDSHIELD AND PROTECTED ZONE

Item	Units	Value
A	mm	1320
B	mm	467
C	mm	1647
D	mm	820
E	mm	540
F	mm	560

AREA OF PROTECTED ZONE FAILURES

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

X	Y

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

X	Y

DATA SHEET NO. 35

BULLET VEHICLE FMVSS 301 FUEL SYSTEM INTEGRITY POST-IMPACT DATA

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

Temperature at Time of Impact: 17.8° C Test Time: 1:11 PM

Stoddard Solvent Spillage Measurements

A. From impact until vehicle motion ceases: 0 oz.
(Maximum allowable = 1 oz.)

B. For the 5 minute period after motion ceases: 0 oz.
(Maximum allowable = 5 oz.)

C. For the following 25 minutes: 0 oz.
(Maximum allowable = 1 oz./minute)

D. Spillage: No spillage occurred

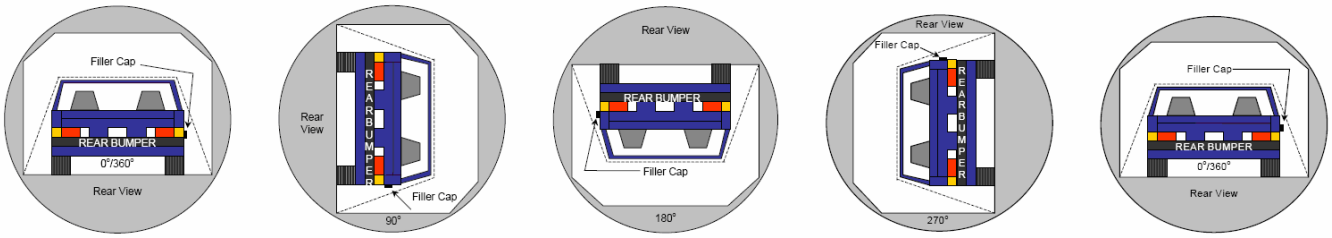
DATA SHEET NO. 36

BULLET VEHICLE FMVSS 301 STATIC ROLLOVER DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10



0° TO 90° 90° TO 180° 180° TO 270° 270° TO 360°

4. The specified fixture rollover rate for each 90° of rotation is 60 to 180 seconds.
5. The position hold time at each position is 300 seconds (minimum).
6. Details of Stoddard solvent spillage: No spillage occurred

SOLVENT COLLECTION TIME TABLE IN SECONDS

Test Phase	Rotation Time	Hold Time	Total Time
0° To 90°	79	300	379
90° To 180°	84	300	384
180° To 270°	72	300	372
270° To 360°	86	300	386

FMVSS 301 SPILLAGE TABLE

Test Phase	First 5 Minutes	Sixth Minute	Seventh Minute	Eighth Minute
0° To 90°	0			
90° To 180°	0			
180° To 270°	0			
270° To 360°	0			

SOLVENT SPILLAGE LOCATION TABLE

Test Phase	Spillage Location
0° To 90°	None
90° To 180°	None
180° To 270°	None
270° To 360°	None

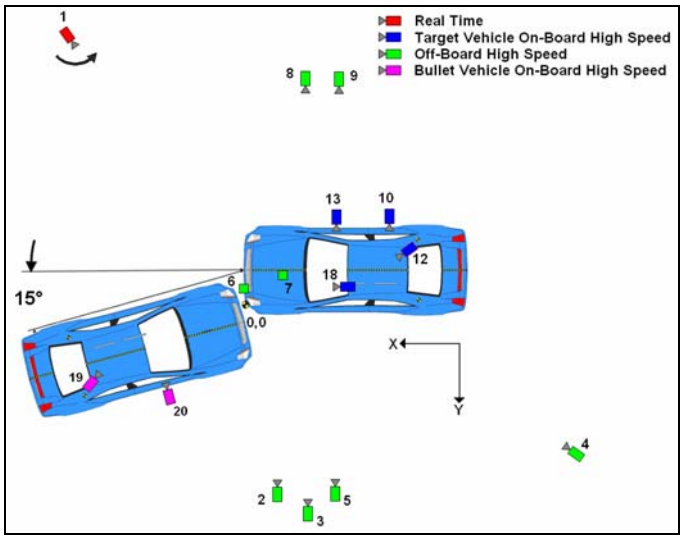
DATA SHEET NO. 37

VIDEO COVERAGE DATA

Target Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70211

Bullet Vehicle: 2007 Ford Five Hundred SEL 4-Door Sedan NHTSA No.: R70210

Test Program: 70 mph, 15°, 50% Offset Vehicle to Vehicle Test Date: 01/08/10



View No.	Description	Location (m)			Angle (°)	Lens (mm)	Frame Rate	
		X	Y	Z				
1	Real Time Panning	14.69	-30.63	2.15			30	
2	Overall Left Side	-2.44	12.47	1.13	0	24	1000	
3	Left Side	-2.67	12.90	1.15	0	35	1000	
4	Driver and Interior	-12.00	9.68	2.76	-5	ZOOM	1000	
5	Left Tight Target Driver to IP Contact	-0.93	12.74	1.13	0	85	1000	
6	Overhead - Impact Point	0.19	0.34	7.17	90	50	1000	
7	Overhead - Overall	0.44	-0.27	7.61	90	14	1000	
8	Right Side	-1.32	-14.81	1.17	0	35	1000	
9	Overall Right Side	-2.22	-14.27	1.16	0	24	1000	
10	Target Vehicle Rear Occupant Side, On-Board	-3.03	-0.76	1.20	-1	10	1000	
11	Right Passenger and Interior View							[4]
12	Target Vehicle Driver Over Shoulder, On-Board	-3.14	-0.20	1.40	-3	12.5	1000	
13	Target Vehicle Driver Side, On-Board	-2.15	-0.76	1.17	-1	10	1000	
14								
15								
16	Pit View of Engine	-0.93	-0.15	-1.82	-90	8	1000	
17	Pit View of Fuiel Tank	-3.08	-0.22	-1.93	-90	12.5	1000	
18	Target Vehicle Driver Lower Leg, On-Bo	-1.52	0.36	0.27	0	8.5	1000	
19	Bullet Vehicle Driver Over Shoulder, On-Board	-2.14	0.20	1.27	-5	8.5	1000	[5]
20	Bullet Vehicle Driver Side, On-Board	-2.70	0.64	1.14	0	8.5	1000	

Reference Planes: X – Impact Point, X+ forward on vehicle
Y – Impact Point, Y+ left on vehicle
Z – Ground, Z+ up

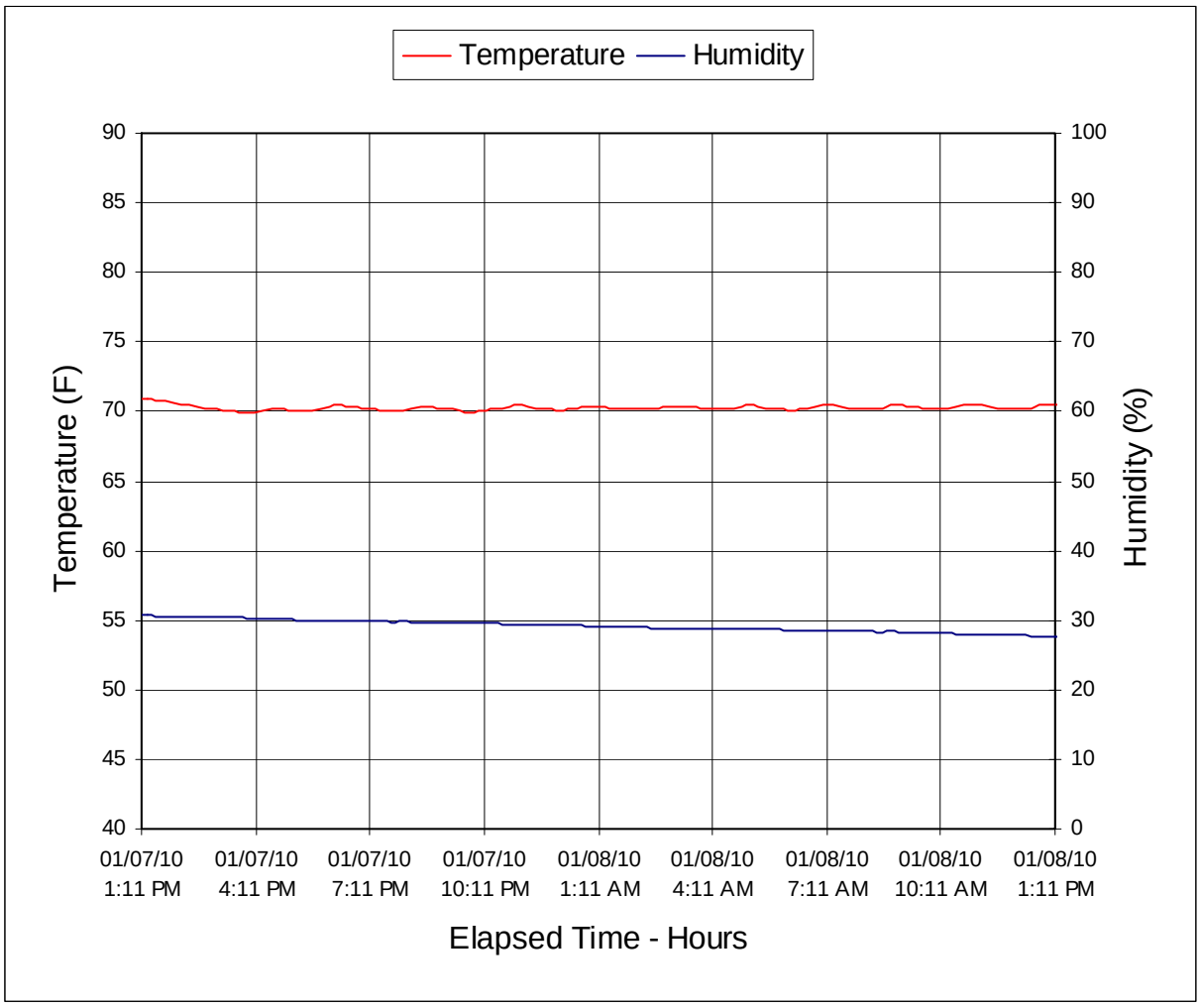
[4] – Camera not required by COTR.
[5] – Camera did not collect data.

DATA SHEET NO. 38

DUMMY / VEHICLE TEMPERATURE STABILIZATION

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

TARGET VEHICLE

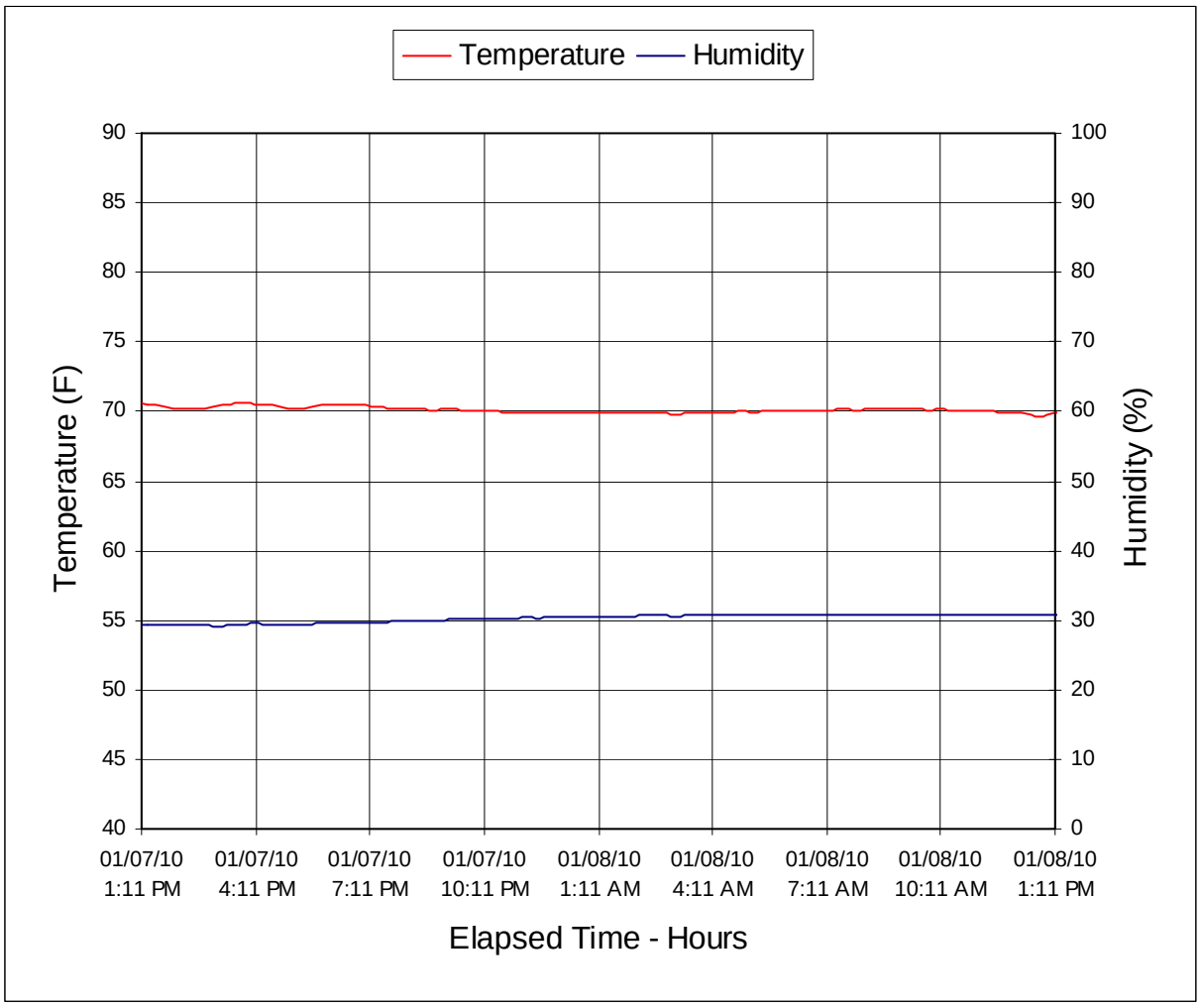


DATA SHEET NO. 38 … (CONTINUED)

DUMMY / VEHICLE TEMPERATURE STABILIZATION

Target Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70211
Bullet Vehicle:	2007 Ford Five Hundred SEL 4-Door Sedan	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	01/08/10

BULLET VEHICLE



APPENDIX A

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600	Bullet Vehicle Pre-Test Structural Member Crush Measurement	A-600
601	Bullet Vehicle Post-Test Structural Member Crush Measurement	A-601
602	Bullet Vehicle Pre-Test Structural Member Crush Measurement	A-602
603	Bullet Vehicle Post-Test Structural Member Crush Measurement	A-603
604	Target Vehicle on Rollover Device (0^o)	A-604
605	Target Vehicle on Rollover Device (90^o)	A-605
606	Target Vehicle on Rollover Device (180^o)	A-606
607	Target Vehicle on Rollover Device (270^o)	A-607
608	Target Vehicle on Rollover Device (360^o)	A-608
609	Bullet Vehicle on Rollover Device (0^o)	A-609
610	Bullet Vehicle on Rollover Device (90^o)	A-610
611	Bullet Vehicle on Rollover Device (180^o)	A-611
612	Bullet Vehicle on Rollover Device (270^o)	A-612

Figure		Page
613	Bullet Vehicle on Rollover Device (360°)	A-613
614	Vehicle Impact	A-614

Figure A-1: Target Vehicle, Right Front ¾ View, As-Received

Figure A-2: Target Vehicle, Left Rear ¾ View, As-Received

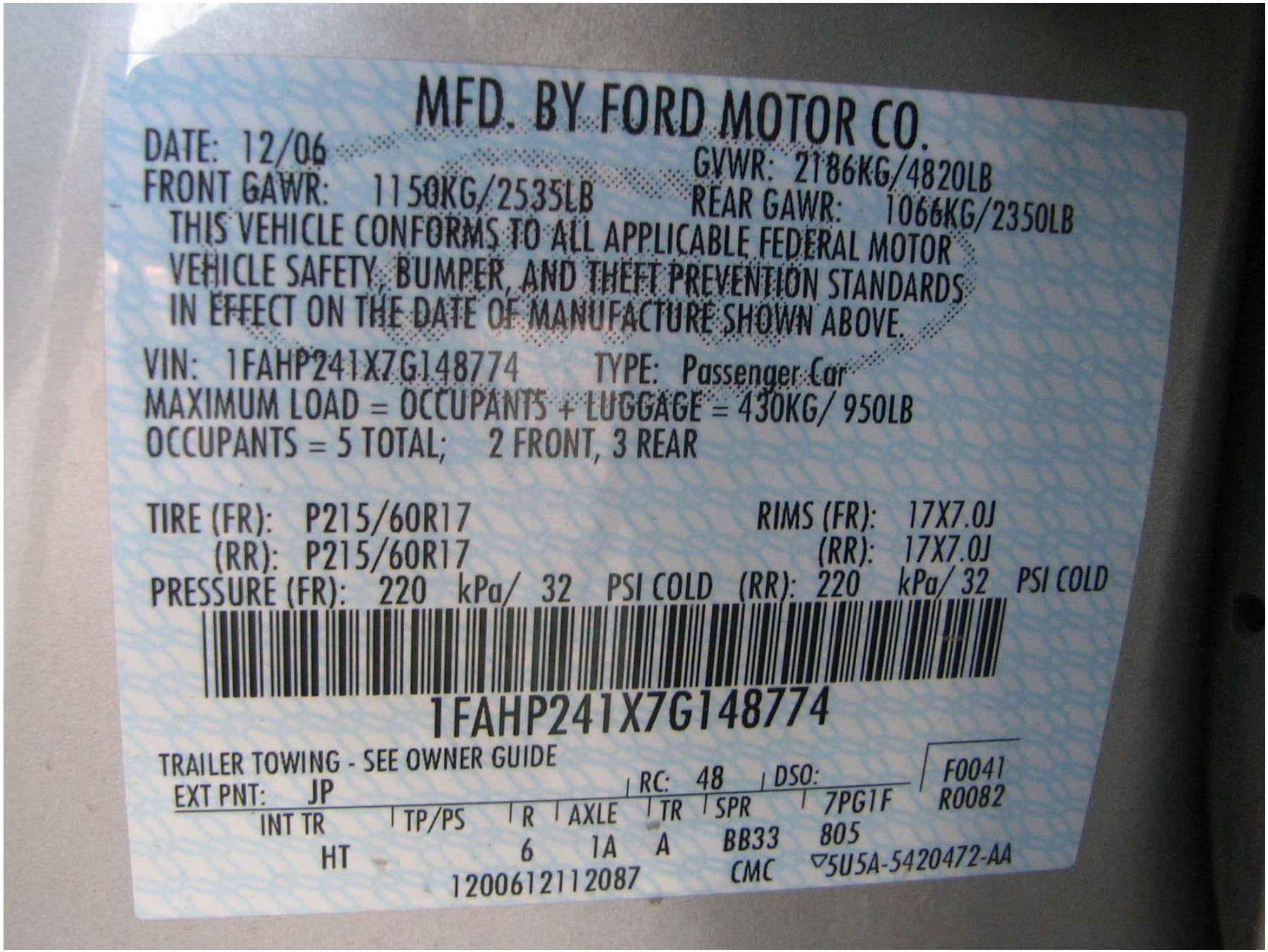

Figure A-3: Target Vehicle Manufacturer's Label

Figure A-4: Target Vehicle Tire Placard

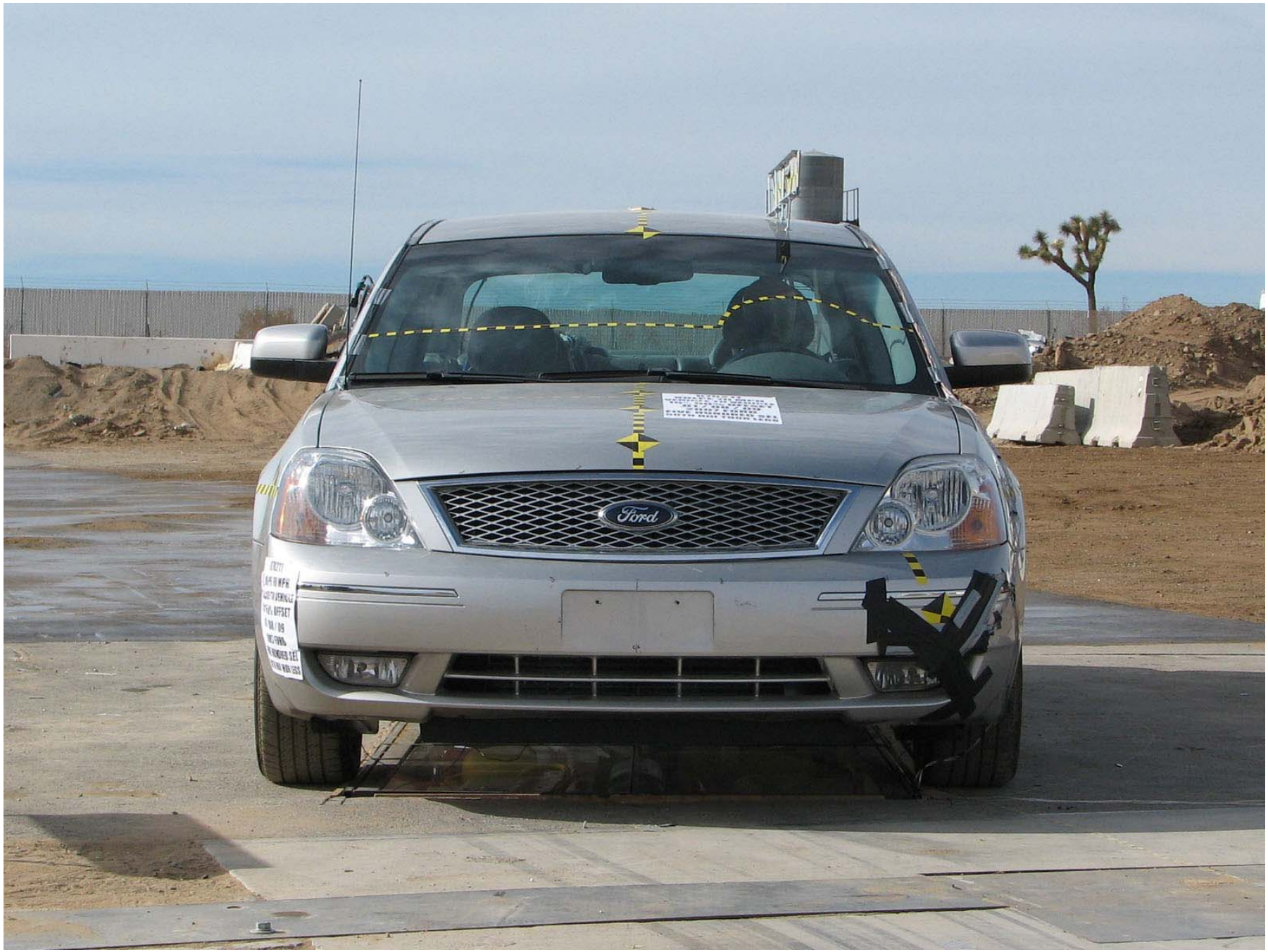

Figure A-5: Target Vehicle Pre-Test Front View

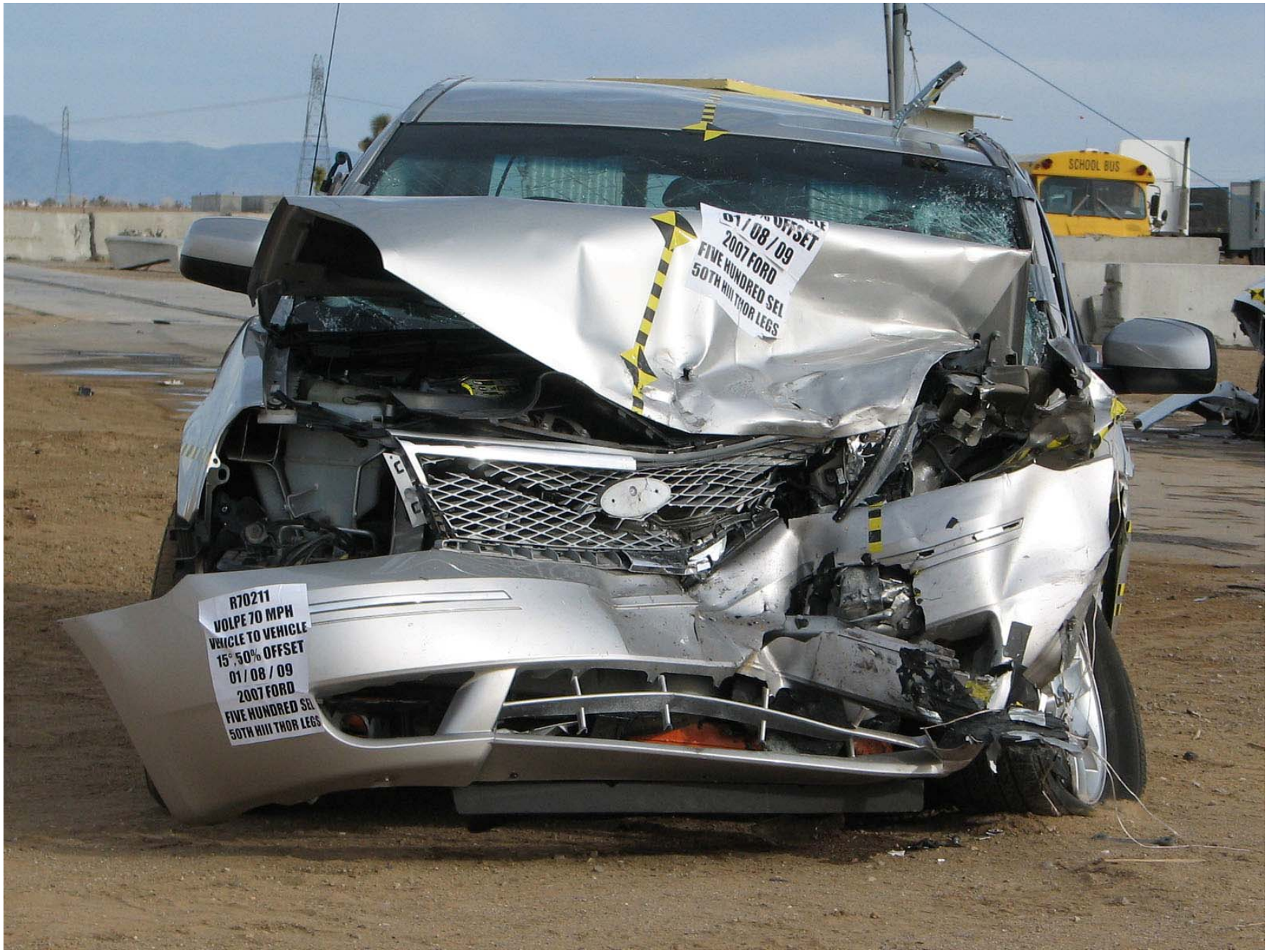

Figure A-6: Target Vehicle Post-Test Front View

Figure A-7: Target Vehicle Pre-Test Left Front ¾ View

Figure A-8: Target Vehicle Post-Test Left Front ¾ View

Figure A-9: Target Vehicle Pre-Test Left Side View

Figure A-10: Target Vehicle Post-Test Left Side View

Figure A-11: Target Vehicle Pre-Test Left Rear ¾ View

Figure A-12: Target Vehicle Post-Test Left Rear ¾ View

Figure A-13: Target Vehicle Pre-Test Rear View

Figure A-14: Target Vehicle Post-Test Rear View

Figure A-15: Target Vehicle Pre-Test Right Rear ¾ View

Figure A-16: Target Vehicle Post-Test Right Rear ¾ View

Figure A-17: Target Vehicle Pre-Test Right Side View

Figure A-18: Target Vehicle Post-Test Right Side View

Figure A-19: Target Vehicle Pre-Test Right Front ¾ View

Figure A-20: Target Vehicle Post-Test Right Front ¾ View

Figure A-21: Bullet Vehicle, Right Front ¾ View, As-Received

Figure A-22: Bullet Vehicle, Left Rear ¾ View, As-Received

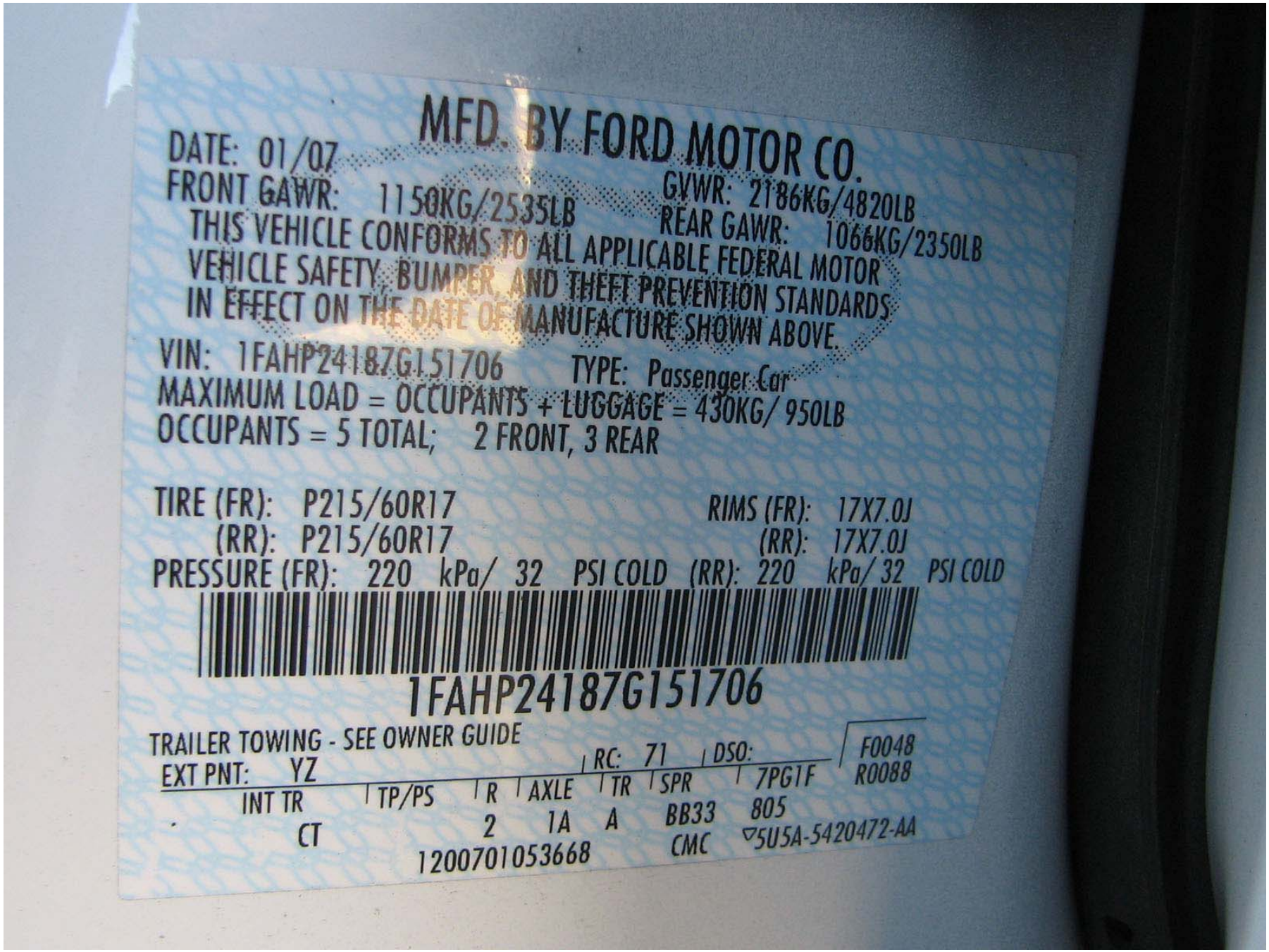

Figure A-23: Bullet Vehicle Manufacturer's Label

Figure A-24: Bullet Vehicle Tire Placard

Figure A-25: Test Vehicle Pre-Test Front View

Figure A-26: Test Vehicle Post-Test Front View

Figure A-27: Bullet Vehicle Pre-Test Left Front ¾ View

Figure A-28: Bullet Vehicle Post-Test Left Front ¾ View

Figure A-29: Bullet Vehicle Pre-Test Left Side View

Figure A-30: Test Vehicle Post-Test Left Side View

Figure A-31: Bullet Vehicle Pre-Test Left Rear ¾ View

Figure A-32: Bullet Vehicle Post-Test Left Rear ¾ View

Figure A-33: Bullet Vehicle Pre-Test Rear View

Figure A-34: Test Vehicle Post-Test Rear View

Figure A-35: Bullet Vehicle Pre-Test Right Rear ¾ View

Figure A-36: Bullet Vehicle Post-Test Right Rear ¾ View

Figure A-37: Bullet Vehicle Pre-Test Right Side View

Figure A-38: Bullet Vehicle Post-Test Right Side View

Figure A-39: Bullet Vehicle Pre-Test Right Front ¾ View

Figure A-40: Bullet Vehicle Post-Test Right Front ¾ View

Figure A-41: Test Set-Up Pre-Test Overhead View

Figure A-42: Target Vehicle Post-Test Overhead View

Figure A-43: Bullet Vehicle Post-Test Overhead View

Figure A-44: Test Set-Up Pre-Test Overhead Close-Up View

Figure A-45: Target Vehicle Post-Test Overhead Close-Up View

Figure A-46: Bullet Vehicle Post-Test Overhead Close-Up View

Figure A-47: Test Set-Up Pre-Test Impact Point Marker

Figure A-48: Target Vehicle Post-Test Impact Point Marker

Figure A-49: Test Set-Up Pre-Test Impact Point Marker

Figure A-50: Target Vehicle Post-Test Impact Point Marker

Figure A-51: Test Set-Up Pre-Test Left Front ¾ View

Figure A-52: Test Set-Up Post-Test Left Front ¾ View

Figure A-53: Test Set-Up Pre-Test Right Front ¾ View

Figure A-54: Test Set-Up Post-Test Right Front ¾ View

Figure A-55: Test Set-Up Pre-Test Right Rear ¾ View

Figure A-56: Test Set-Up Post-Test Right Rear ¾ View

Figure A-57: Test Set-Up Pre-Test Left Rear ¾ View

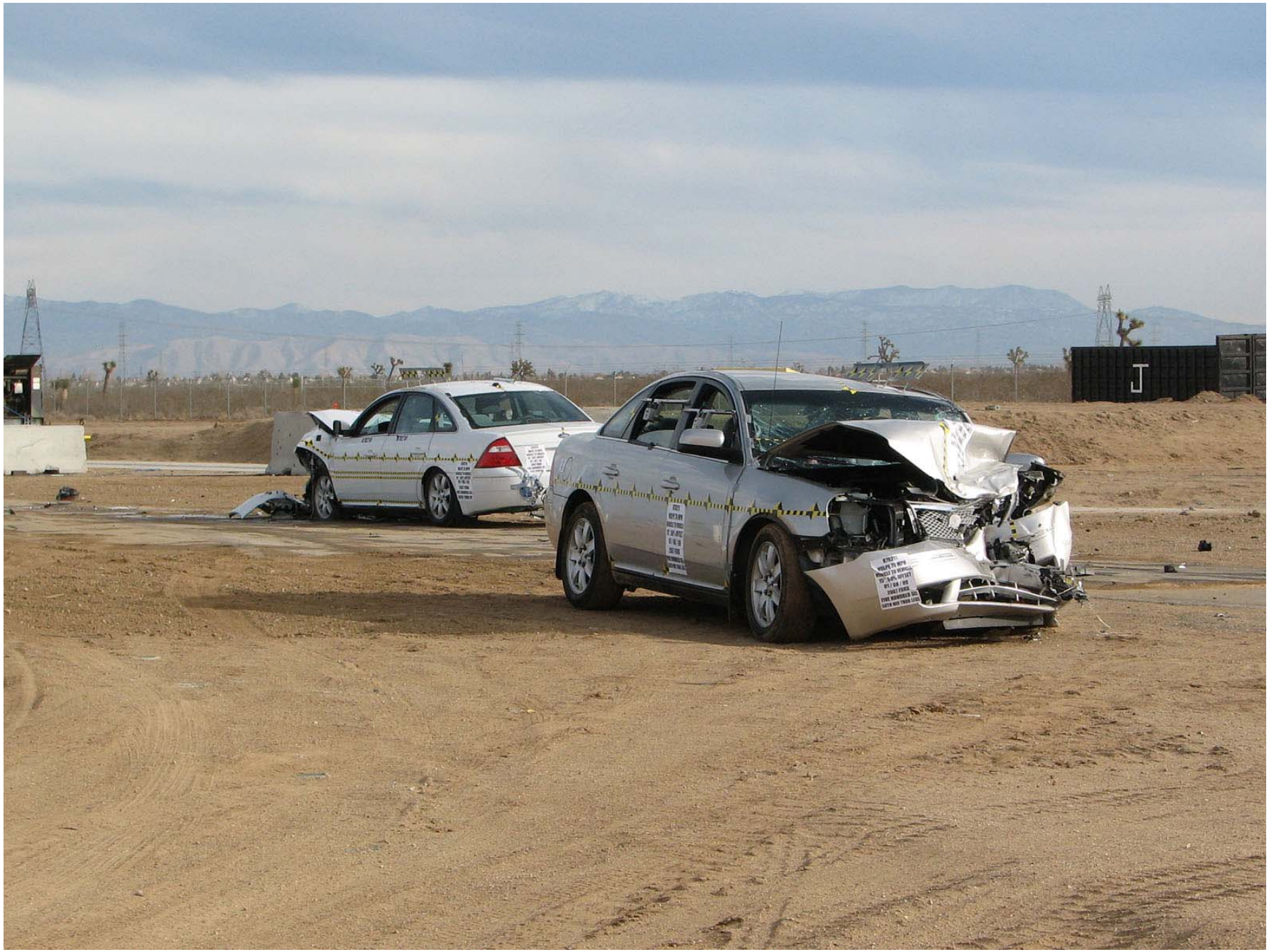

Figure A-58: Test Set-Up Post-Test Left Rear ¾ View

Figure A-59: Target Vehicle Pre-Test Front ¾ View of Left Side Doors

Figure A-60: Target Vehicle Post-Test Front ¾ View of Left Side Doors

Figure A-61: Target Vehicle Pre-Test Rear ¾ View of Left Side Doors

Figure A-62: Target Vehicle Post-Test Rear ¾ View of Left Side Doors

Figure A-63: Target Vehicle Pre-Test Front ¾ View of Right Side Doors

Figure A-64: Target Vehicle Post-Test Front ¾ View of Right Side Doors

Figure A-65: Target Vehicle Pre-Test Rear ¾ View of Right Side Doors

Figure A-66: Target Vehicle Post-Test Rear ¾ View of Right Side Doors

Figure A-67: Target Vehicle Pre-Test Left Front Door

Figure A-68: Target Vehicle Post-Test Left Front Door

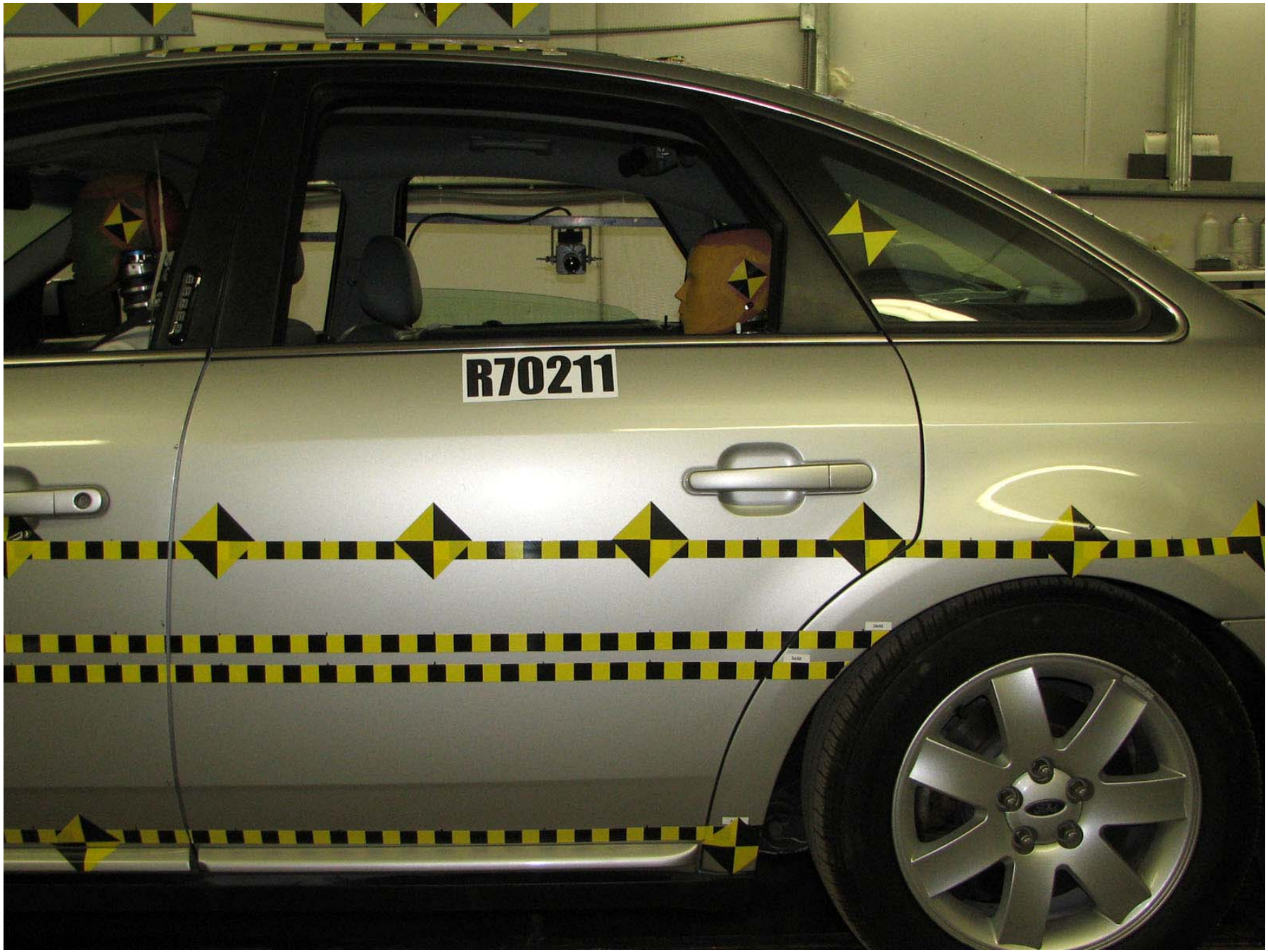

Figure A-69: Target Vehicle Pre-Test Left Rear Door

Figure A-70: Target Vehicle Post-Test Left Rear Door

Figure A-71: Target Vehicle Pre-Test Right Front Door

Figure A-72: Target Vehicle Post-Test Right Front Door

Figure A-73: Target Vehicle Pre-Test Right Rear Door

Figure A-74: Target Vehicle Post-Test Right Rear Door

Figure A-75: Target Vehicle Pre-Test Windshield View

Figure A-76: Target Vehicle Post-Test Windshield View

Figure A-77: Target Vehicle Pre-Test Engine Compartment View

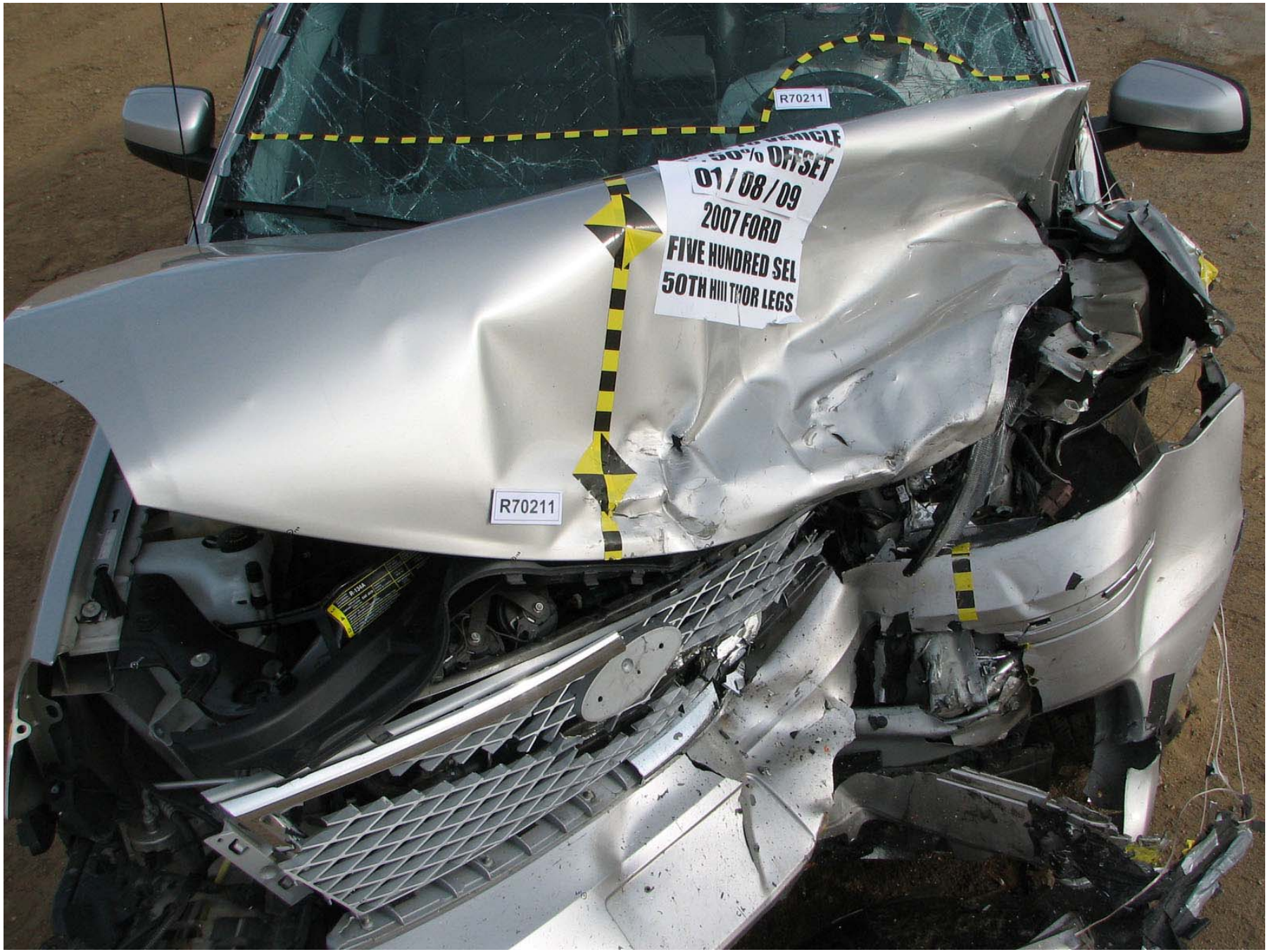

Figure A-78: Target Vehicle Post-Test Engine Compartment View

Figure A-79: Target Vehicle Pre-Test Fuel Filler Cap View

Figure A-80: Target Vehicle Post-Test Fuel Filler Cap View

Figure A-81: Target Vehicle Pre-Test Left Side A-Pillar Side View

Figure A-82: Target Vehicle Post-Test Left Side A-Pillar Side View

Figure A-83: Target Vehicle Pre-Test Left Side A-Pillar Rear ¾ View

Figure A-84: Target Vehicle Post-Test Left Side A-Pillar Rear ¾ View

Figure A-85: Target Vehicle Pre-Test Left Side B-Pillar Side View

Figure A-86: Target Vehicle Post-Test Left Side B-Pillar Side View

Figure A-87: Target Vehicle Pre-Test Left Side B-Pillar Rear ¾ View

Figure A-88: Target Vehicle Post-Test Left Side B-Pillar Rear ¾ View

Figure A-89: Target Vehicle Pre-Test Left Side C-Pillar Side View

Figure A-90: Target Vehicle Post-Test Left Side C-Pillar Side View

Figure A-91: Target Vehicle Pre-Test Left Side C-Pillar Front ¾ View

Figure A-92: Target Vehicle Post-Test Left Side C-Pillar Front ¾ View

Figure A-93: Target Vehicle Pre-Test Left Front Sill Side View, Door Closed

Figure A-94: Target Vehicle Post-Test Left Front Sill Side View, Door Closed

Figure A-95: Target Vehicle Pre-Test Left Front Sill Side View, Door Open

Figure A-96: Target Vehicle Post-Test Left Front Sill Side View, Door Open

Figure A-97: Target Vehicle Pre-Test Left Front Sill Rear ¾ View, Door Closed

Figure A-98: Target Vehicle Post-Test Left Front Sill Rear ¾ View, Door Closed

Figure A-99: Target Vehicle Pre-Test Left Front Sill Rear ¾ View, Door Open

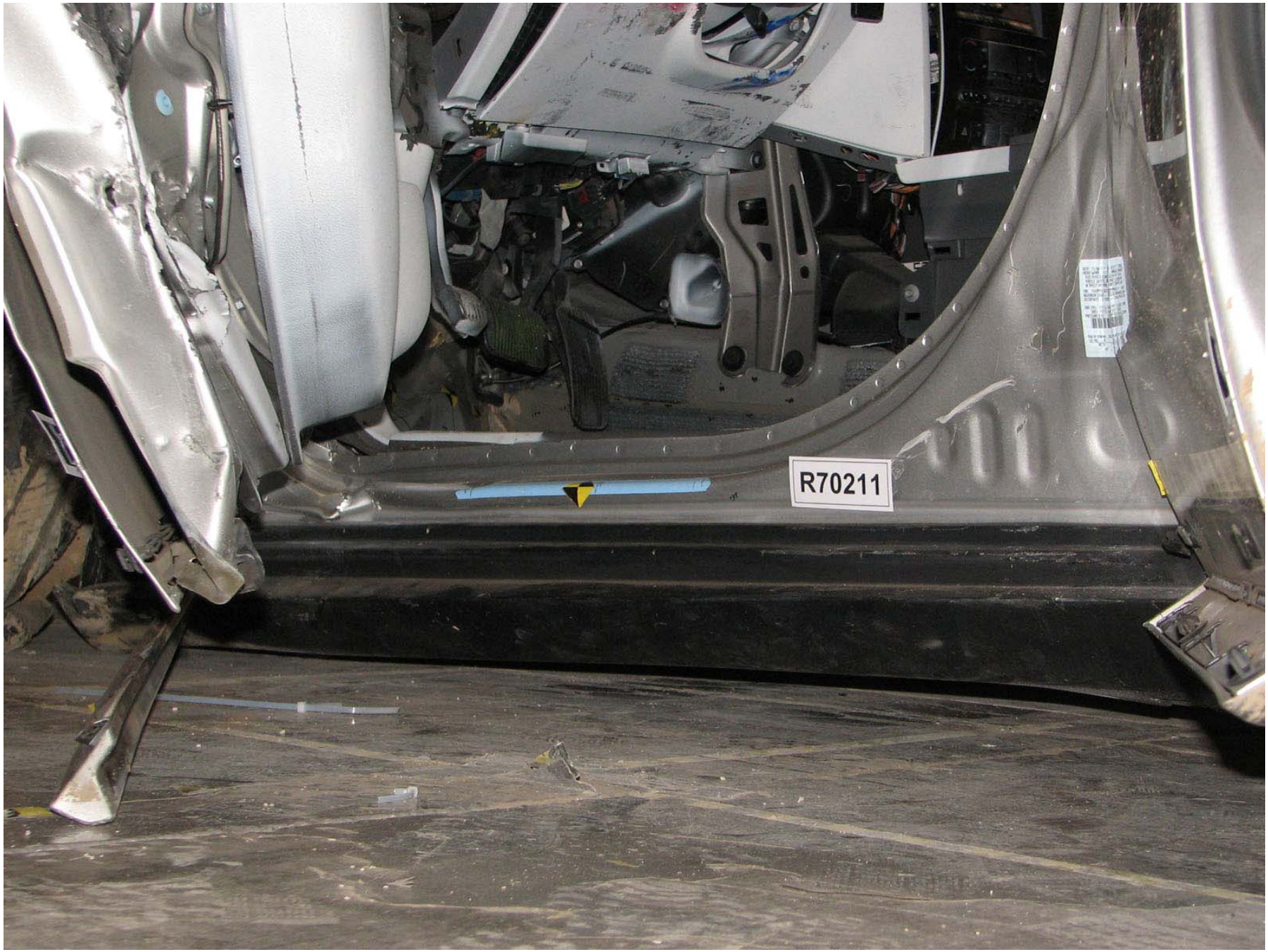

Figure A-100: Target Vehicle Post-Test Left Front Sill Rear ¾ View, Door Open

Figure A-101: Target Vehicle Pre-Test Left Rear Sill Side View, Door Closed

Figure A-102: Target Vehicle Post-Test Left Rear Sill Side View, Door Closed

Figure A-103: Target Vehicle Pre-Test Left Rear Sill Side View, Door Open

Figure A-104: Target Vehicle Post-Test Left Rear Sill Side View, Door Open

Figure A-105: Target Vehicle Pre-Test Left Rear Sill Rear ¾ View, Door Closed

Figure A-106: Target Vehicle Post-Test Left Rear Sill Rear ¾ View, Door Closed

Figure A-107: Target Vehicle Pre-Test Left Rear Sill Rear ¾ View, Door Open

Figure A-108: Target Vehicle Post-Test Left Rear Sill Rear ¾ View, Door Open

Figure A-109: Target Vehicle Pre-Test Right Side A-Pillar Side View

Figure A-110: Target Vehicle Post-Test Right Side A-Pillar Side View

Figure A-111: Target Vehicle Pre-Test Right Side A-Pillar Rear ¾ View

Figure A-112: Target Vehicle Post-Test Right Side A-Pillar Rear ¾ View

Figure A-113: Target Vehicle Pre-Test Right Side B-Pillar Side View

Figure A-114: Target Vehicle Post-Test Right Side B-Pillar Side View

Figure A-115: Target Vehicle Pre-Test Right Side B-Pillar Rear ¾ View

Figure A-116: Target Vehicle Post-Test Right Side B-Pillar Rear ¾ View

Figure A-117: Target Vehicle Pre-Test Right Side C-Pillar Side View

Figure A-118: Target Vehicle Post-Test Right Side C-Pillar Side View

Figure A-119: Target Vehicle Pre-Test Right Side C-Pillar Front ¾ View

Figure A-120: Target Vehicle Post-Test Right Side C-Pillar Front ¾ View

Figure A-121: Target Vehicle Pre-Test Right Front Sill Side View, Door Closed

Figure A-122: Target Vehicle Post-Test Right Front Sill Side View, Door Closed

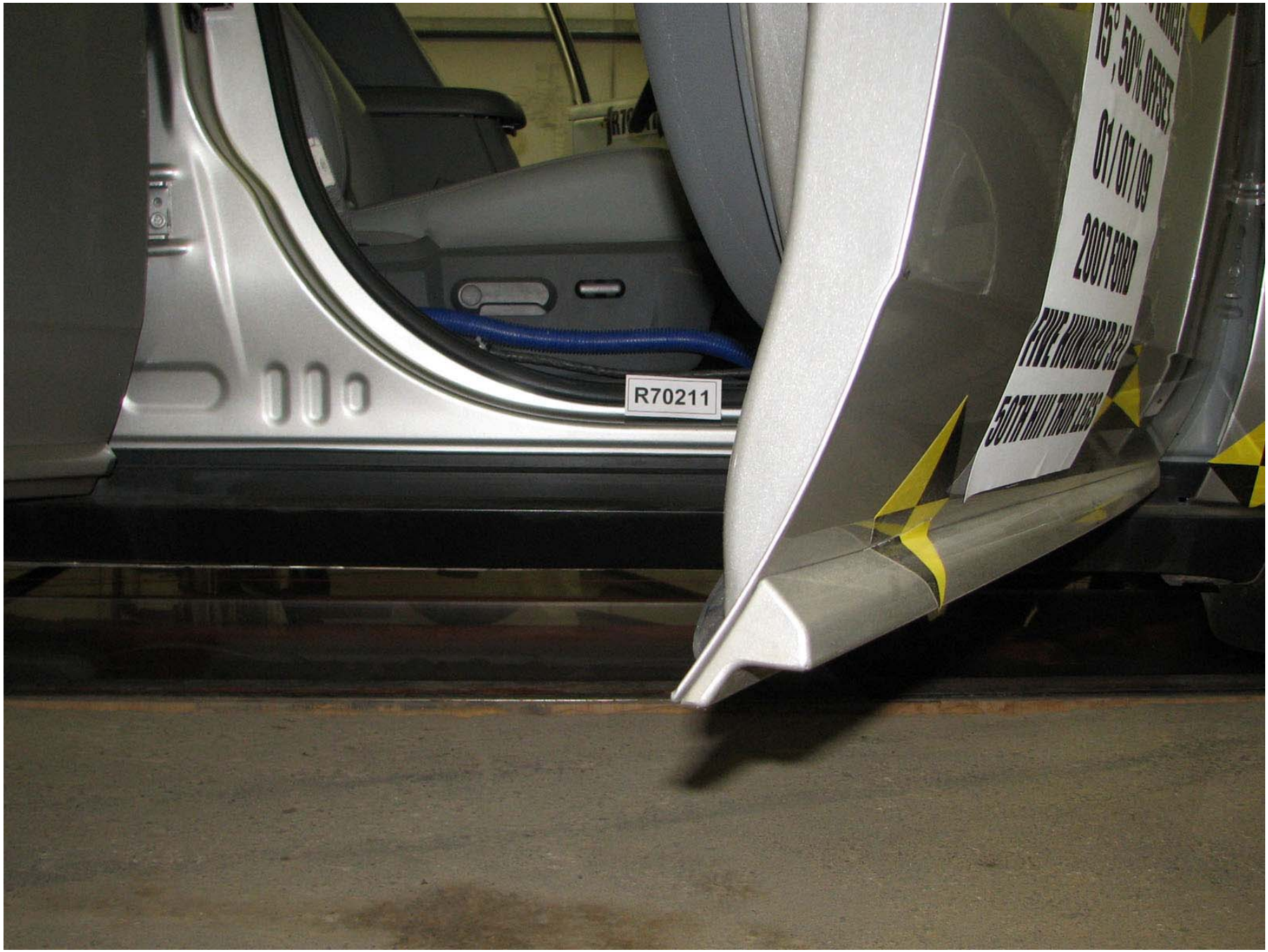

Figure A-123: Target Vehicle Pre-Test Right Front Sill Side View, Door Open

Figure A-124: Target Vehicle Post-Test Right Front Sill Side View, Door Open

Figure A-125: Target Vehicle Pre-Test Right Front Sill Rear ¾ View, Door Closed

Figure A-126: Target Vehicle Post-Test Right Front Sill Rear ¾ View, Door Closed

Figure A-127: Target Vehicle Pre-Test Right Front Sill Rear ¾ View, Door Open

Figure A-128: Target Vehicle Post-Test Right Front Sill Rear ¾ View, Door Open

Figure A-129: Target Vehicle Pre-Test Right Rear Sill Side View, Door Closed

Figure A-130: Target Vehicle Post-Test Right Rear Sill Side View, Door Closed

Figure A-131: Target Vehicle Pre-Test Right Rear Sill Side View, Door Open

Figure A-132: Target Vehicle Post-Test Right Rear Sill Side View, Door Open

Figure A-133: Target Vehicle Pre-Test Right Rear Sill Rear ¾ View, Door Closed

Figure A-134: Target Vehicle Post-Test Right Rear Sill Rear ¾ View, Door Closed

Figure A-135: Test Vehicle Pre-Test Right Rear Sill Rear ¾ View, Door Open

Figure A-136: Test Vehicle Post-Test Right Rear Sill Rear ¾ View, Door Open

Figure A-137: Target Vehicle Pre-Test Left Front Wheel Side View

Figure A-138: Target Vehicle Post-Test Left Front Wheel Side View

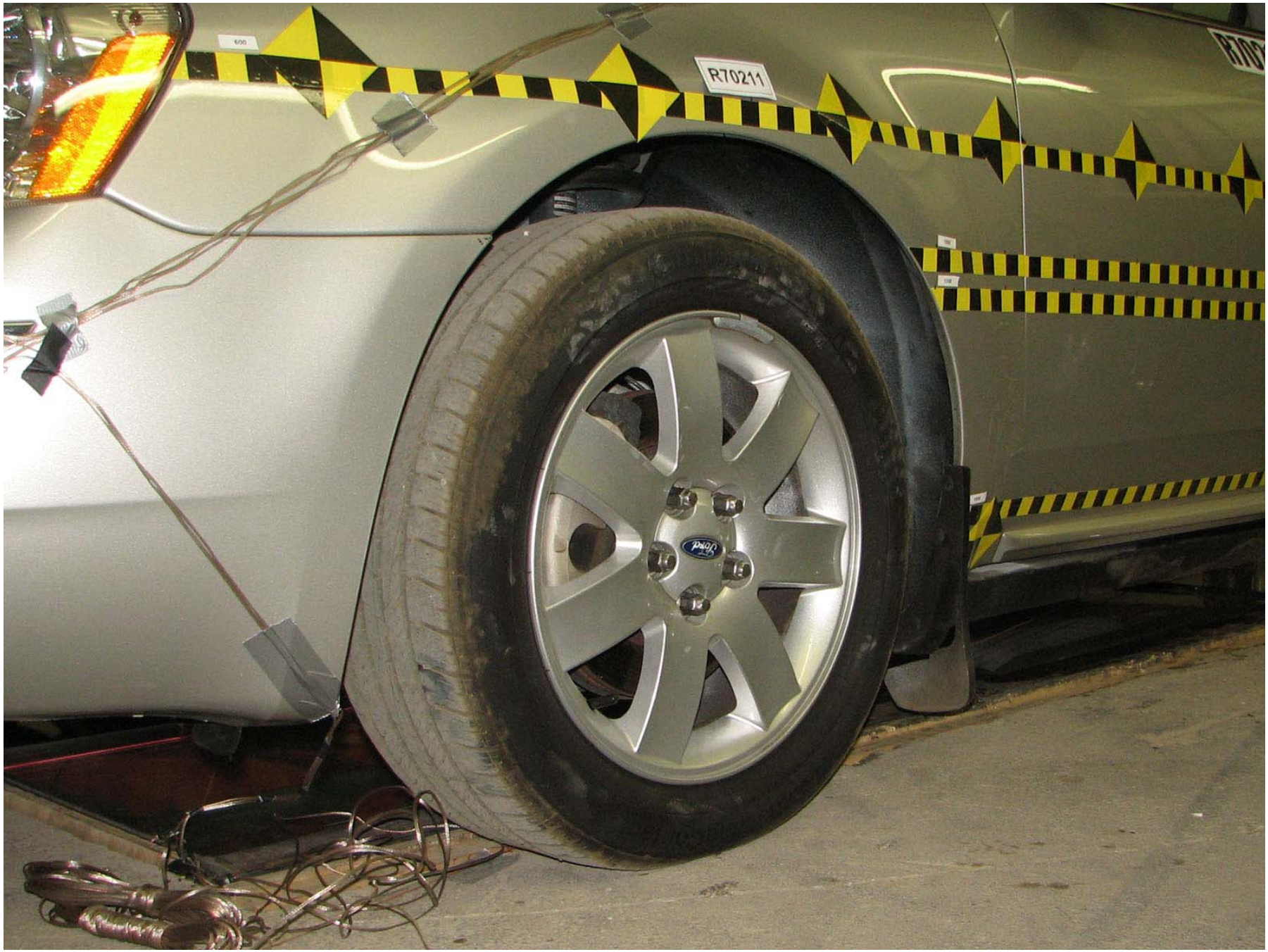

Figure A-139: Target Vehicle Pre-Test Left Front Wheel Front ¾ View

Figure A-140: Target Vehicle Post-Test Left Front Wheel Front ¾ View

Figure A-141: Target Vehicle Pre-Test Left Front Wheel Rear ¾ View

Figure A-142: Target Vehicle Post-Test Left Front Wheel Rear ¾ View

Figure A-143: Test Vehicle Pre-Test Left Front Wheel Top View

Figure A-144: Test Vehicle Post-Test Left Front Wheel Top View

Figure A-145: Target Vehicle Post-Test Left Front Wheel A-Pillar/Rocker Contact

Figure A-146: Target Vehicle Post-Test Left Front Wheel A-Pillar/Rocker Contact

Figure A-147: Target Vehicle Post-Test Left Front Wheel A-Pillar/Rocker Contact

Figure A-148: Target Vehicle Post-Test Left Front Wheel Damage (Outside)

Figure A-149: Target Vehicle Post-Test Left Front Wheel Damage (Inside)

Figure A-150: Target Vehicle Pre-Test Right Front Wheel Side View

Figure A-151: Target Vehicle Post-Test Right Front Wheel Side View

Figure A-152: Target Vehicle Pre-Test Right Front Wheel Front ¾ View

Figure A-153: Target Vehicle Post-Test Right Front Wheel Front ¾ View

Figure A-154: Target Vehicle Pre-Test Right Front Wheel Rear ¾ View

Figure A-155: Target Vehicle Post-Test Right Front Wheel Rear ¾ View

Figure A-156: Target Vehicle Pre-Test Right Front Wheel Top View

Figure A-157: Target Vehicle Post-Test Right Front Wheel Top View

Figure A-158: Target Vehicle Post-Test Right Front Wheel A-Pillar/Rocker Contact

Figure A-159: Target Vehicle Post-Test Right Front Wheel A-Pillar/Rocker Contact

Figure A-160: Target Vehicle Post-Test Right Front Wheel A-Pillar/Rocker Contact

Figure A-161: Target Vehicle Post-Test Right Front Wheel Damage (Outside)

Figure A-162: Target Vehicle Post-Test Right Front Wheel Damage (Inside)

Figure A-163: Target Vehicle Pre-Test Left Front Wheel Well (Tire On)

Figure A-164: Target Vehicle Post-Test Left Front Wheel Well (Tire On)

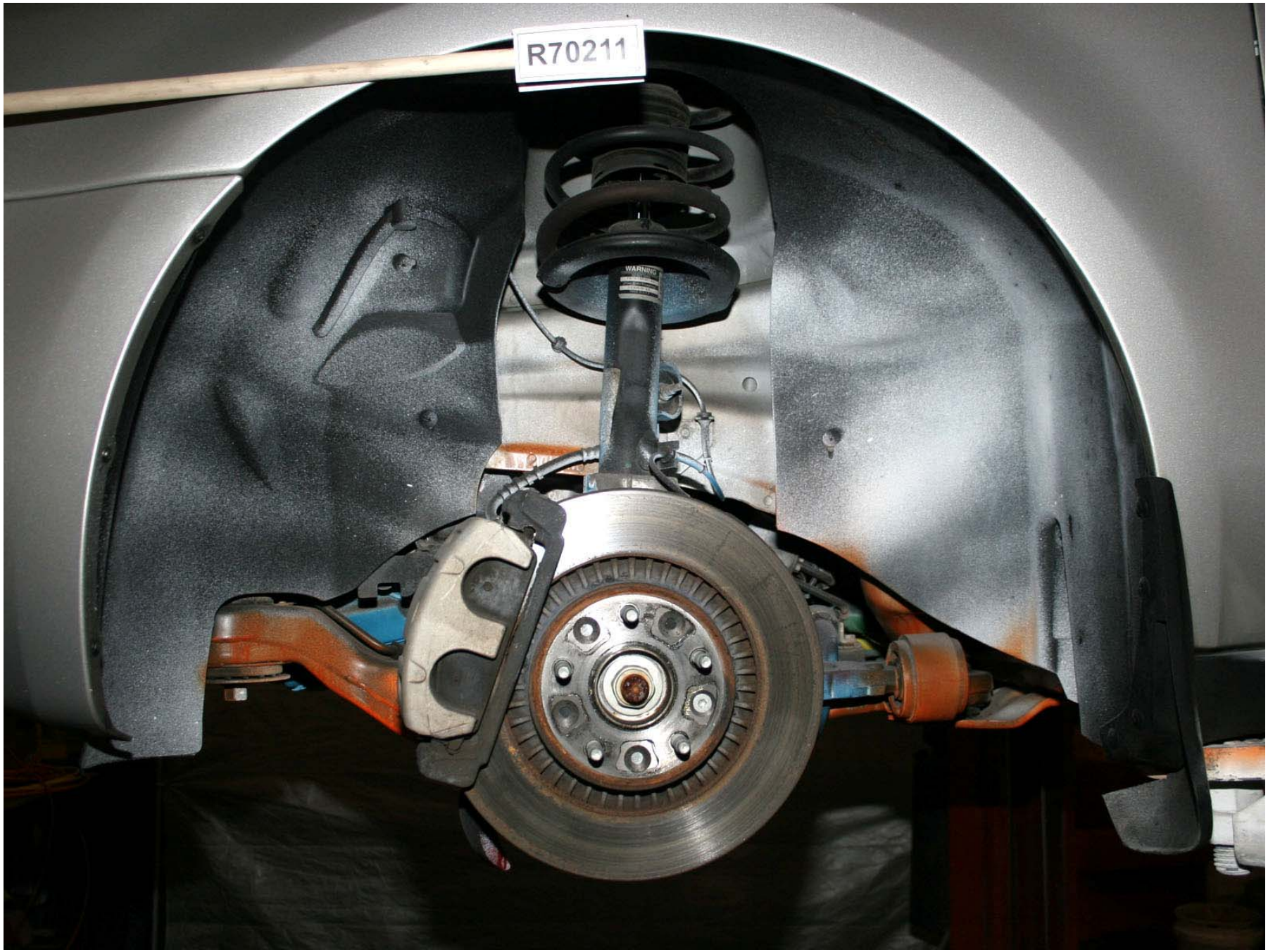

Figure A-165: Target Vehicle Pre-Test Left Front Wheel Well (Tire Off)

Figure A-166: Target Vehicle Post-Test Left Front Wheel Well (Tire Off)

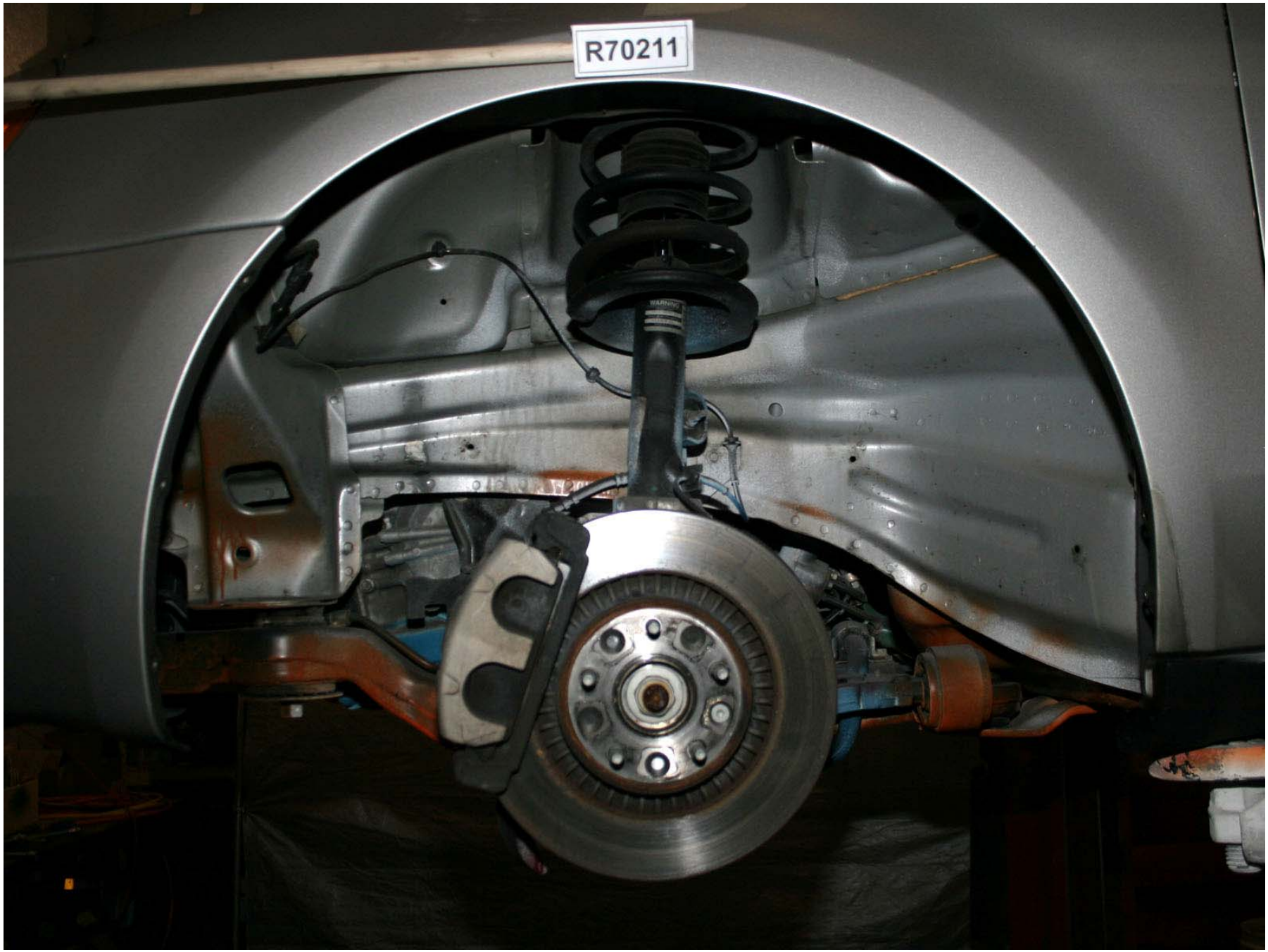

Figure A-167: Target Vehicle Pre-Test Left Front Wheel Well (Tire Off), Inner Fender Removed

Figure A-168: Target Vehicle Post-Test Left Front Wheel Well (Tire Off), Inner Fender Removed

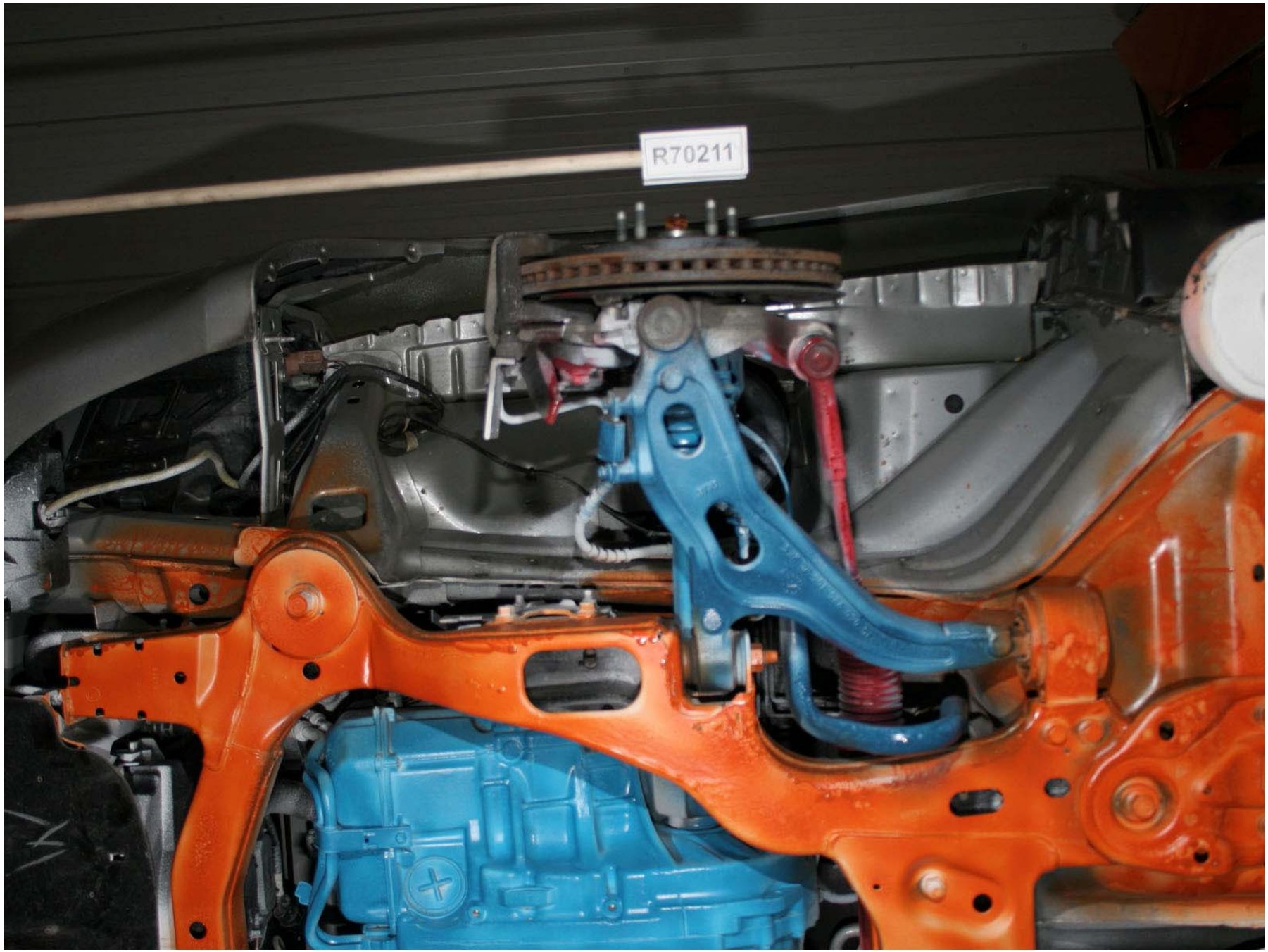

Figure A-169: Test Vehicle Pre-Test Left Inner Fender Well View

Figure A-170: Target Vehicle Post-Test Left Inner Fender Well View

Figure A-171: Target Vehicle Pre-Test Left Inner Fender Well View

Figure A-172: Target Vehicle Post-Test Left Inner Fender Well View

Figure A-173: Target Vehicle Pre-Test Left Inner Fender Well View

Figure A-174: Target Vehicle Post-Test Left Inner Fender Well View

Figure A-175: Target Vehicle Pre-Test Top Fender View

Figure A-176: Target Vehicle Post-Test Top Fender View

Figure A-177: Target Vehicle Pre-Test Left Front Frame Rail View

Figure A-178: Target Vehicle Post-Test Left Front Frame Rail View

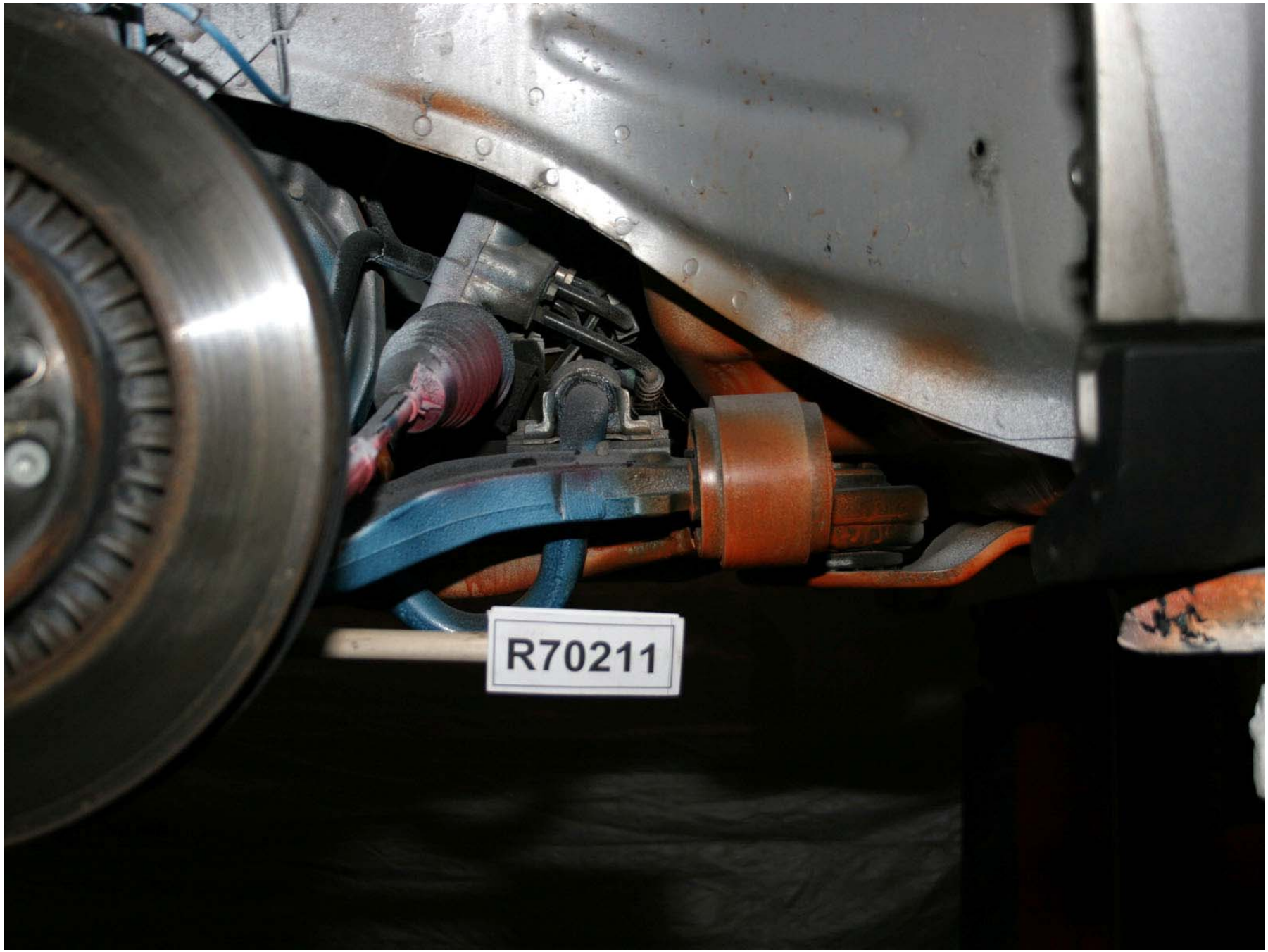

Figure A-179: Target Vehicle Pre-Test Left Front Frame Rail View

Figure A-180: Target Vehicle Post-Test Left Front Frame Rail View

Figure A-181: Target Vehicle Pre-Test Left Front Frame Rail View

Figure A-182: Target Vehicle Post-Test Left Front Frame Rail View

Figure A-183: Target Vehicle Pre-Test Left Side Tie Rod and Sway Bar Attachments Points

Figure A-184: Target Vehicle Post-Test Left Side Tie Rod and Sway Bar Attachments Points

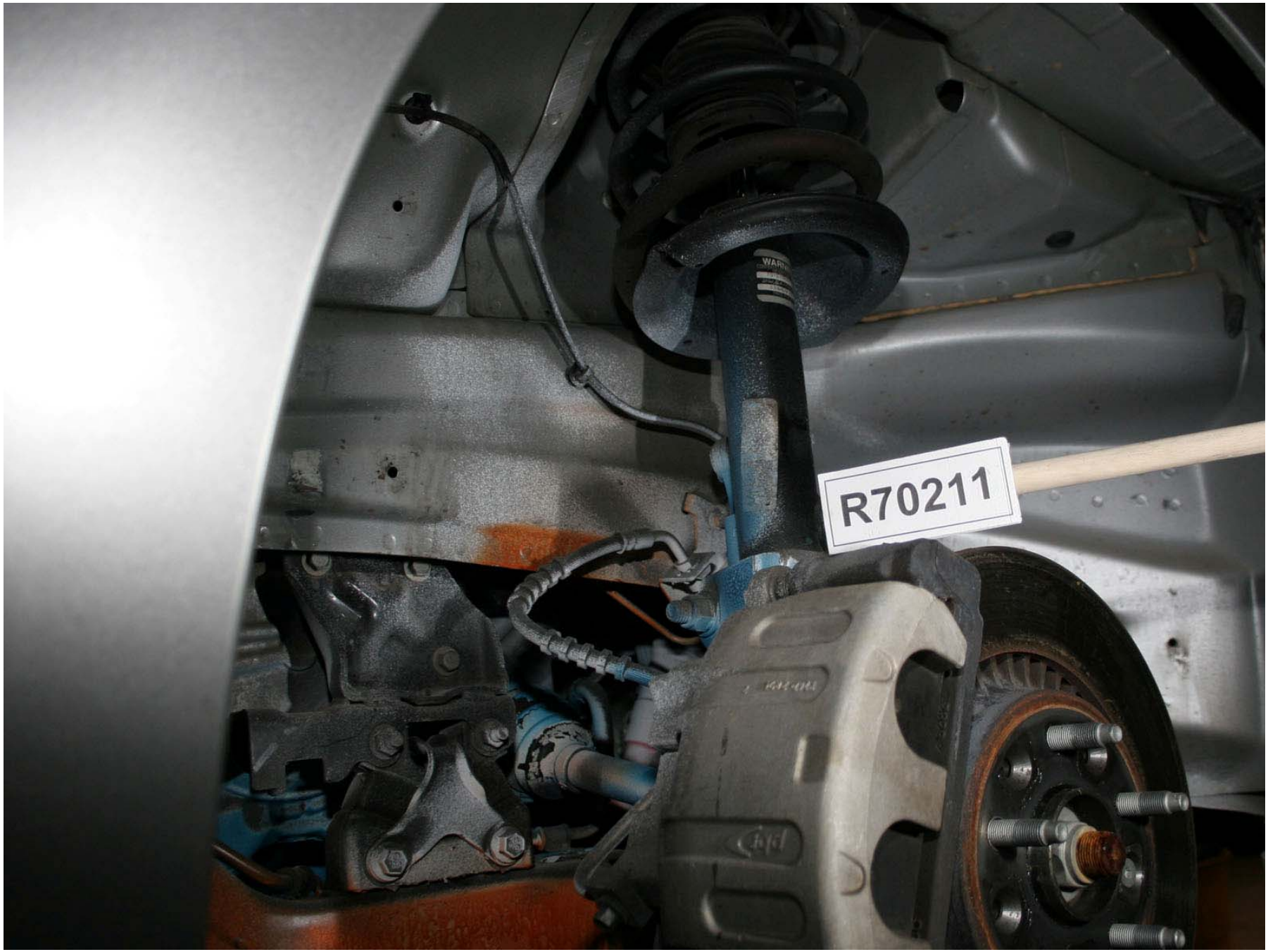

Figure A-185: Target Vehicle Pre-Test Left Side Upper Sway Bar Attachment Point

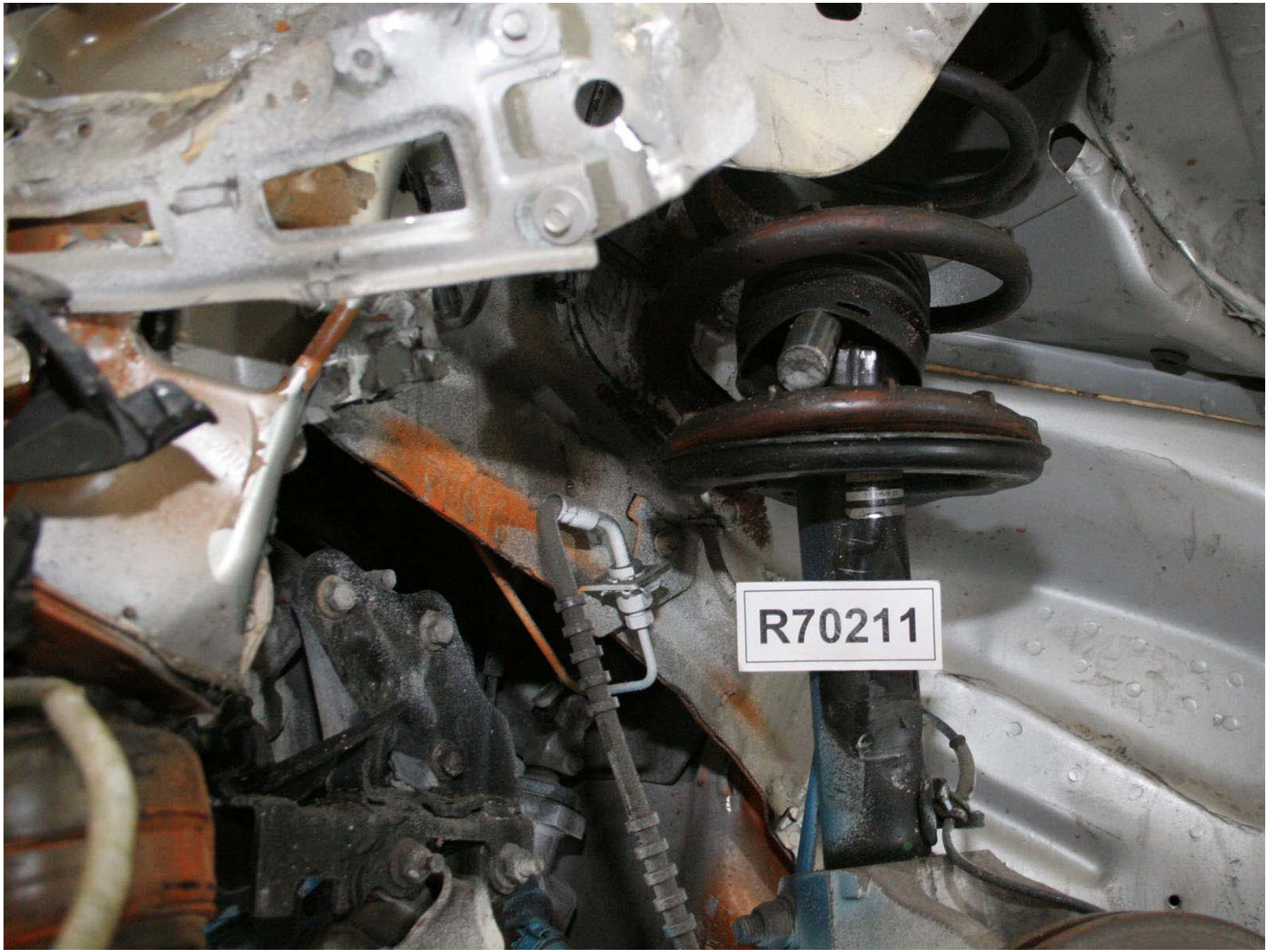

Figure A-186: Target Vehicle Post-Test Left Side Upper Sway Bar Attachment Point

Figure A-187: Target Vehicle Pre-Test Left Side Frame to A-Pillar Joint

Figure A-188: Target Vehicle Post-Test Left Side Frame to A-Pillar Joint

Figure A-189: Target Vehicle Pre-Test Left Side Crush Initiators

Figure A-190: Target Vehicle Post-Test Left Side Crush Initiators

Figure A-191: Target Vehicle Pre-Test Left Side Crush Initiators

Figure A-192: Target Vehicle Post-Test Left Side Crush Initiators

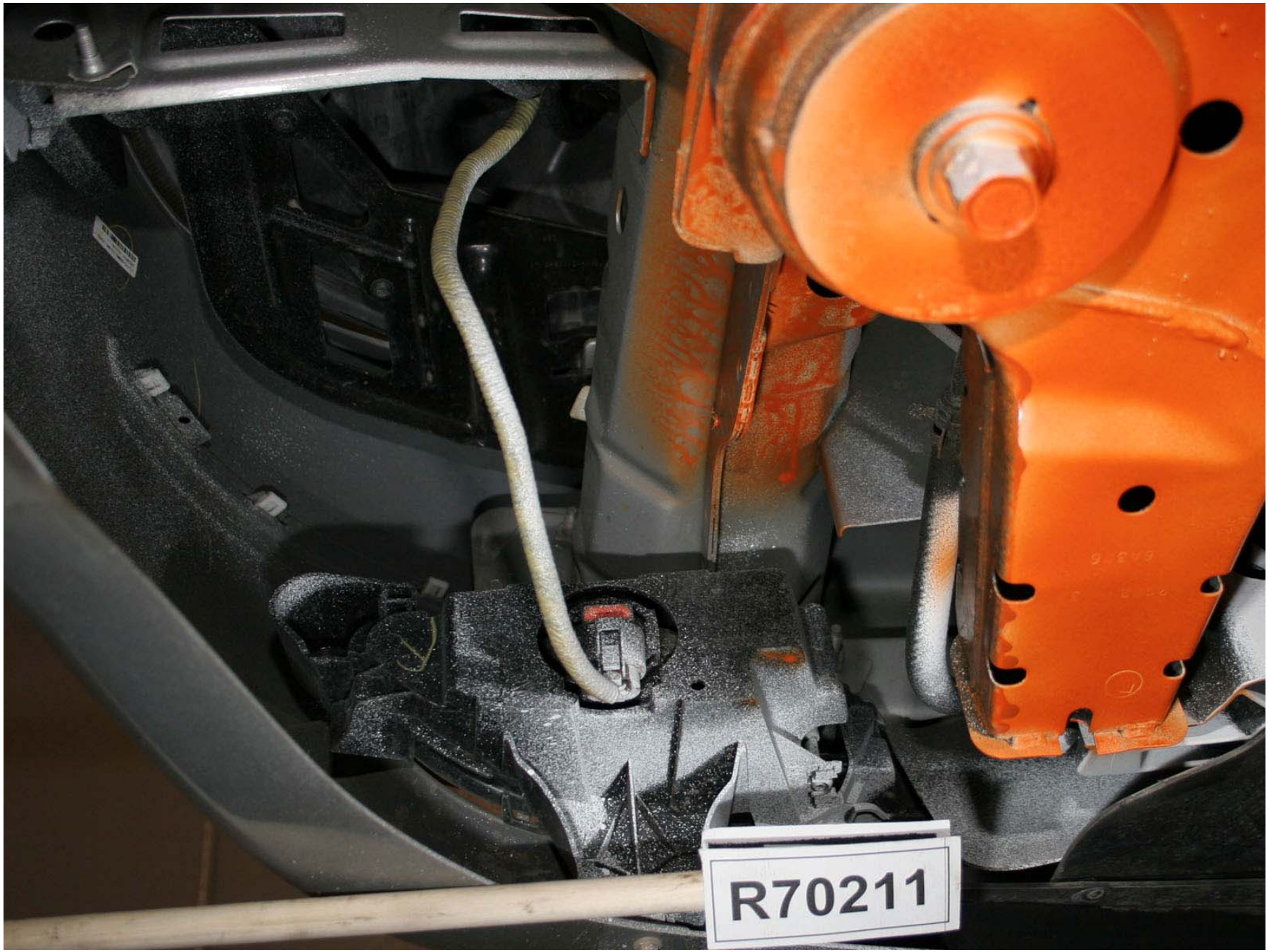

Figure A-193: Target Vehicle Pre-Test Left Side Bumper Attachment Point

Figure A-194: Target Vehicle Post-Test Left Side Bumper Attachment Point

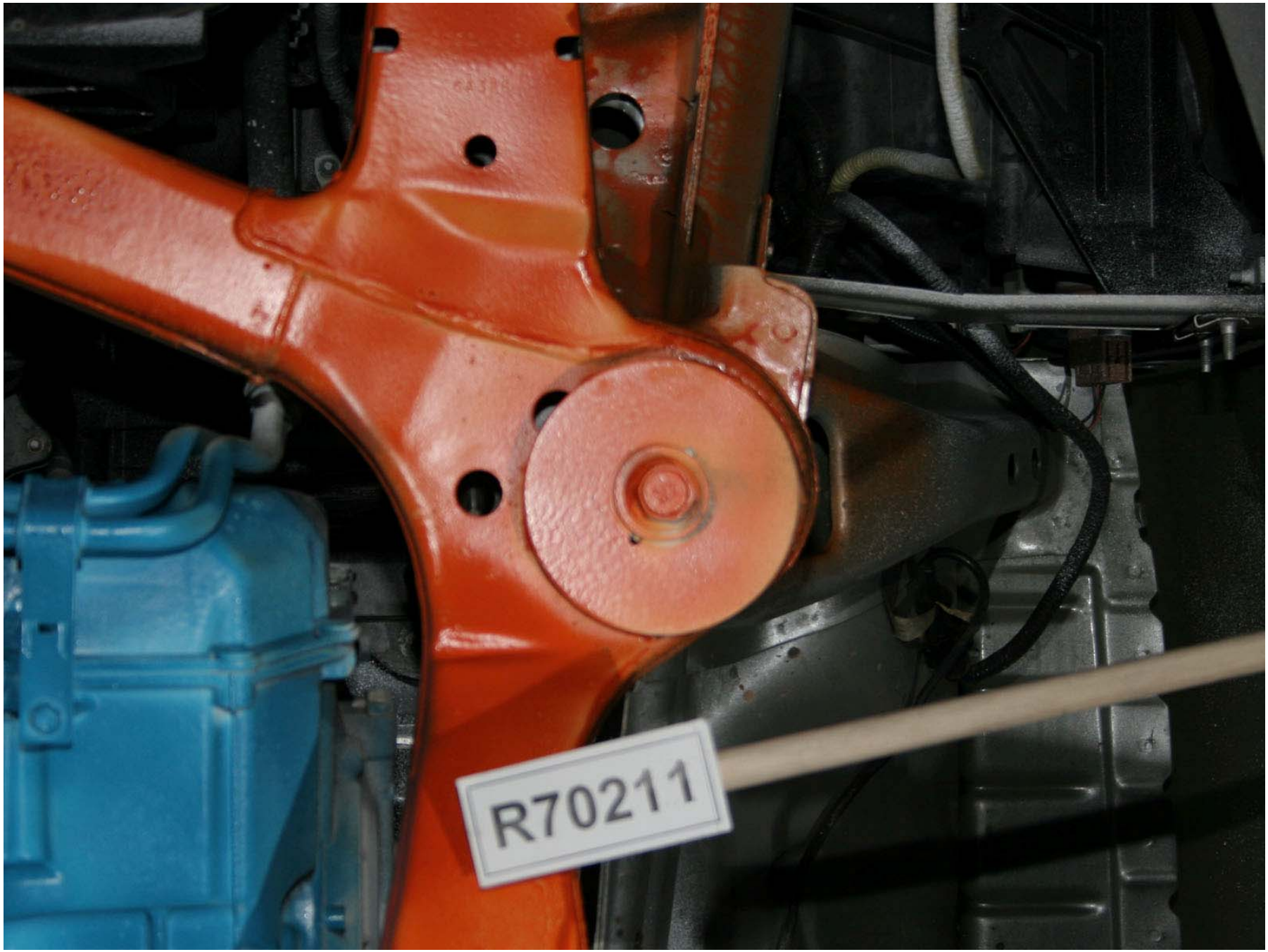

Figure A-195: Target Vehicle Pre-Test Left Front Sub-Frame Mounting Point

Figure A-196: Target Vehicle Post-Test Left Front Sub-Frame Mounting Point

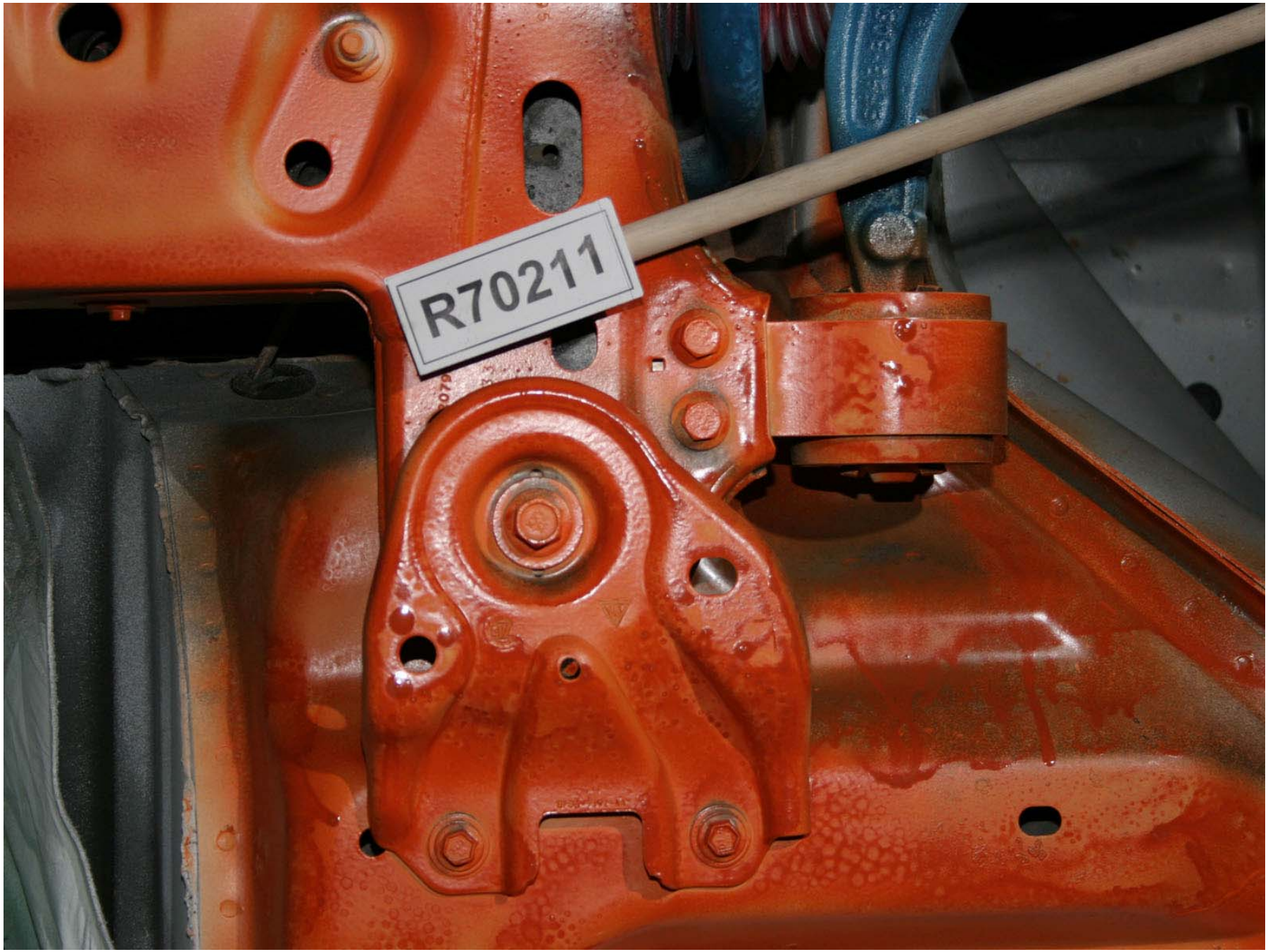

Figure A-197: Target Vehicle Pre-Test Left Rear Sub-Frame Mounting Point

Figure A-198: Target Vehicle Post-Test Left Rear Sub-Frame Mounting Point

Figure A-199: Target Vehicle Pre-Test Right Front Wheel Well (Tire On)

Figure A-200: Target Vehicle Post-Test Right Front Wheel Well (Tire On)

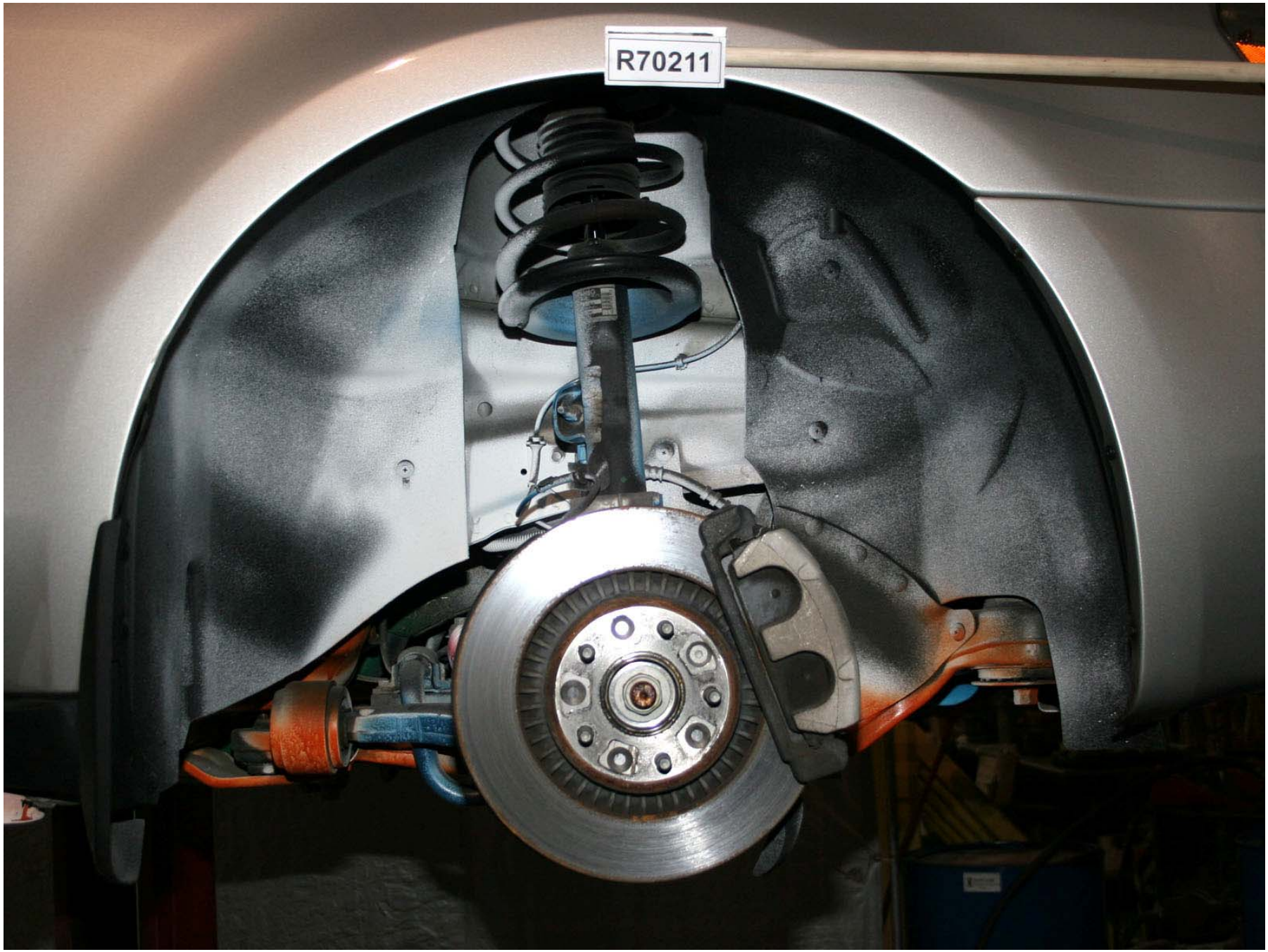

Figure A-201: Target Vehicle Pre-Test Right Front Wheel Well (Tire Off)

Figure A-202: Target Vehicle Post-Test Right Front Wheel Well (Tire Off)

Figure A-203: Target Vehicle Pre-Test Right Front Wheel Well (Tire Off), Inner Fender Removed

Figure A-204: Target Vehicle Post-Test Right Front Wheel Well (Tire Off), Inner Fender Removed

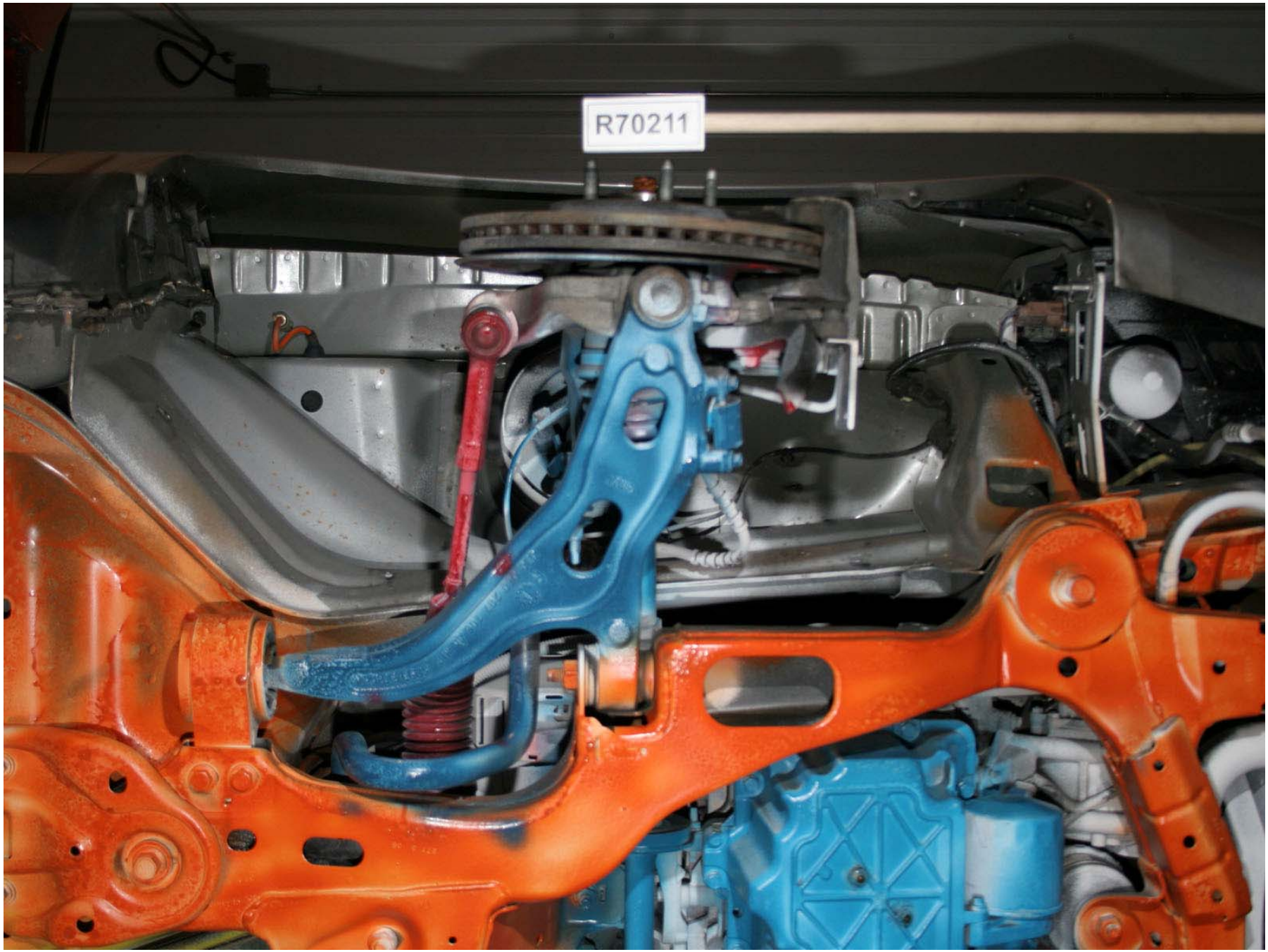

Figure A-205: Target Vehicle Pre-Test Right Inner Fender Well View

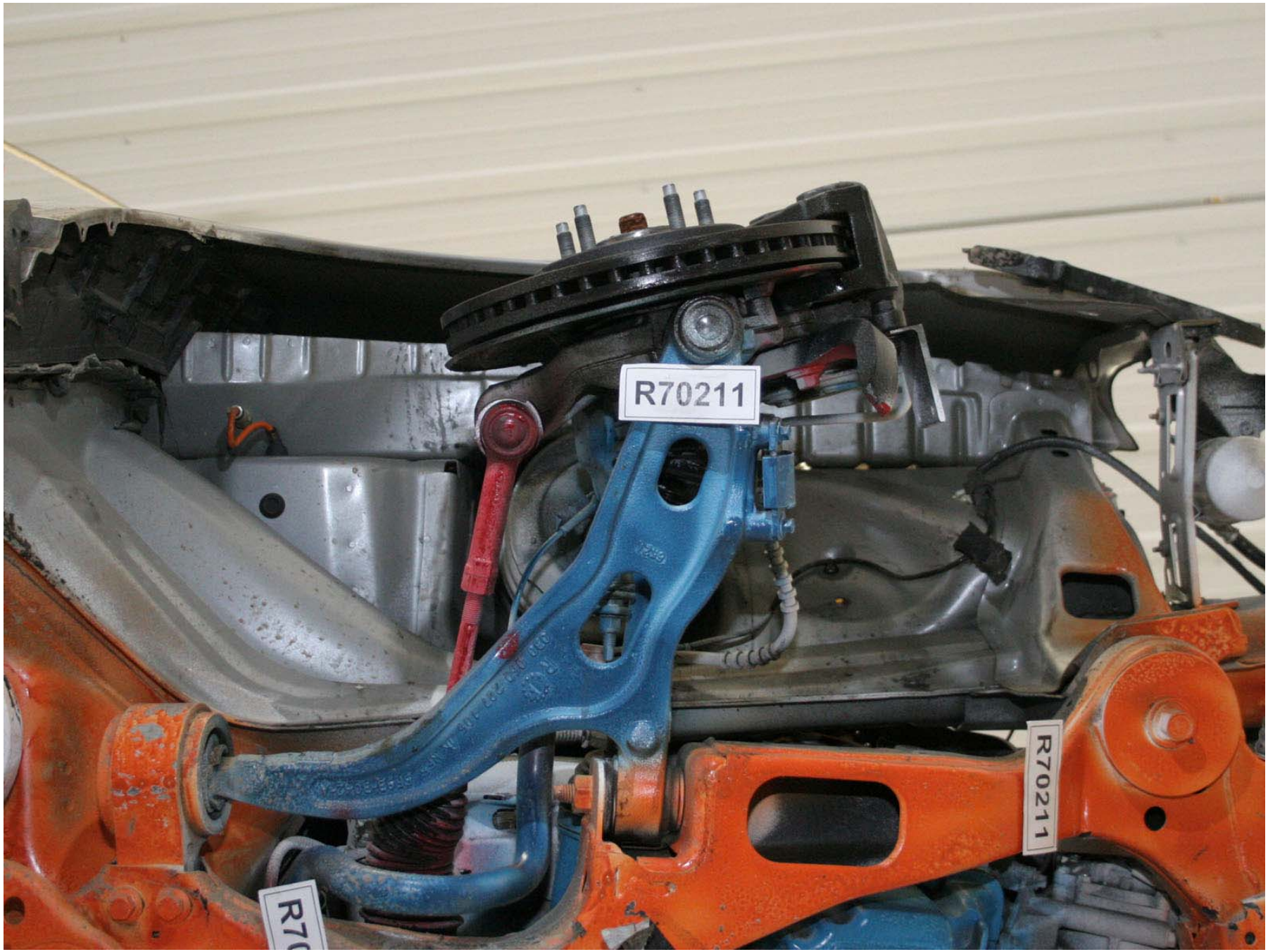

Figure A-206: Test Vehicle Post-Test Right Inner Fender Well View

Figure A-207: Test Vehicle Pre-Test Right Inner Fender Well View

Figure A-208: Target Vehicle Post-Test Right Inner Fender Well View

Figure A-209: Target Vehicle Pre-Test Right Inner Fender Well View

Figure A-210: Target Vehicle Post-Test Right Inner Fender Well View

Figure A-211: Target Vehicle Pre-Test Top Fender View

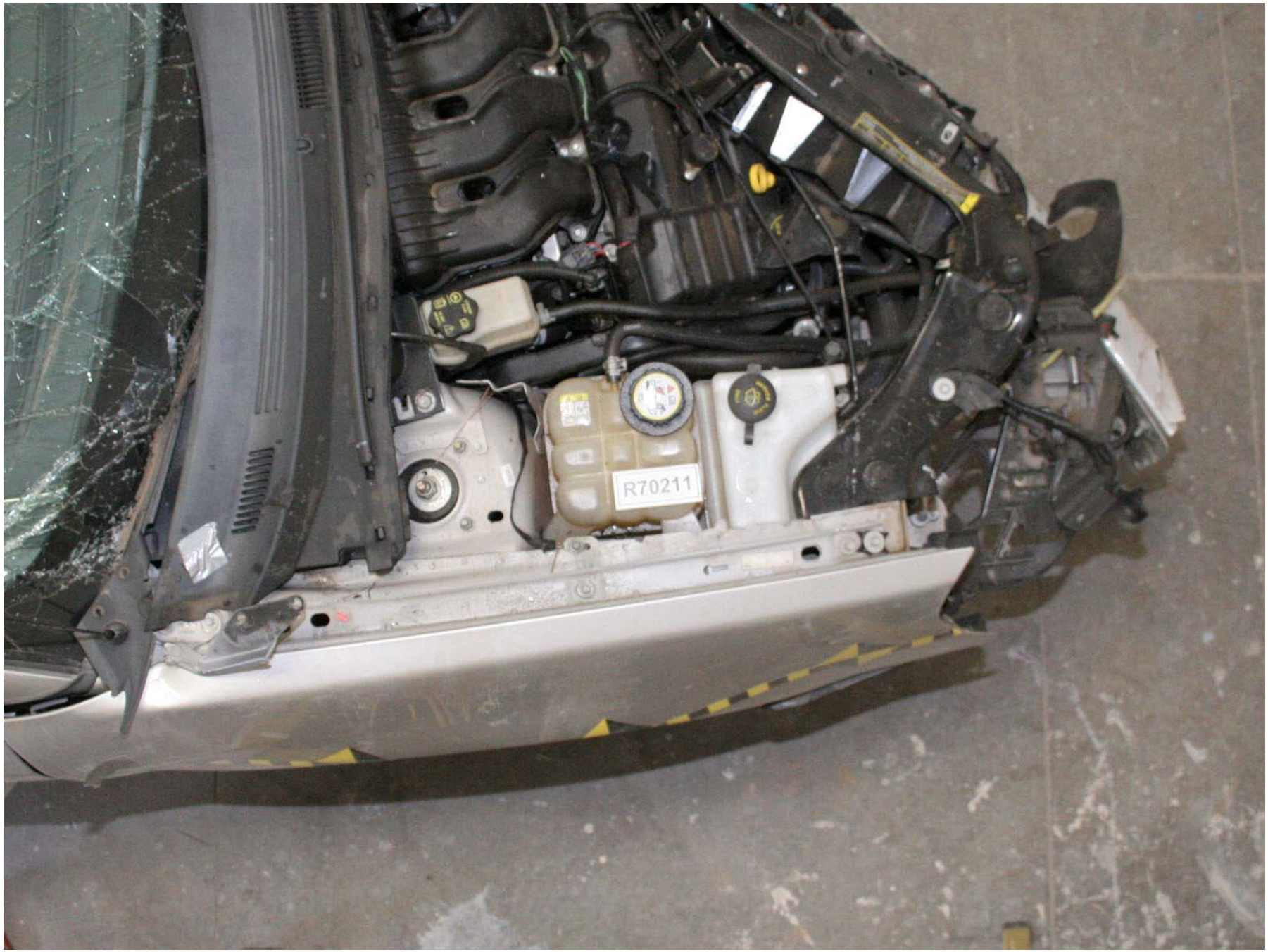

Figure A-212: Target Vehicle Post-Test Top Fender View

Figure A-213: Target Vehicle Pre-Test Right Front Frame Rail View

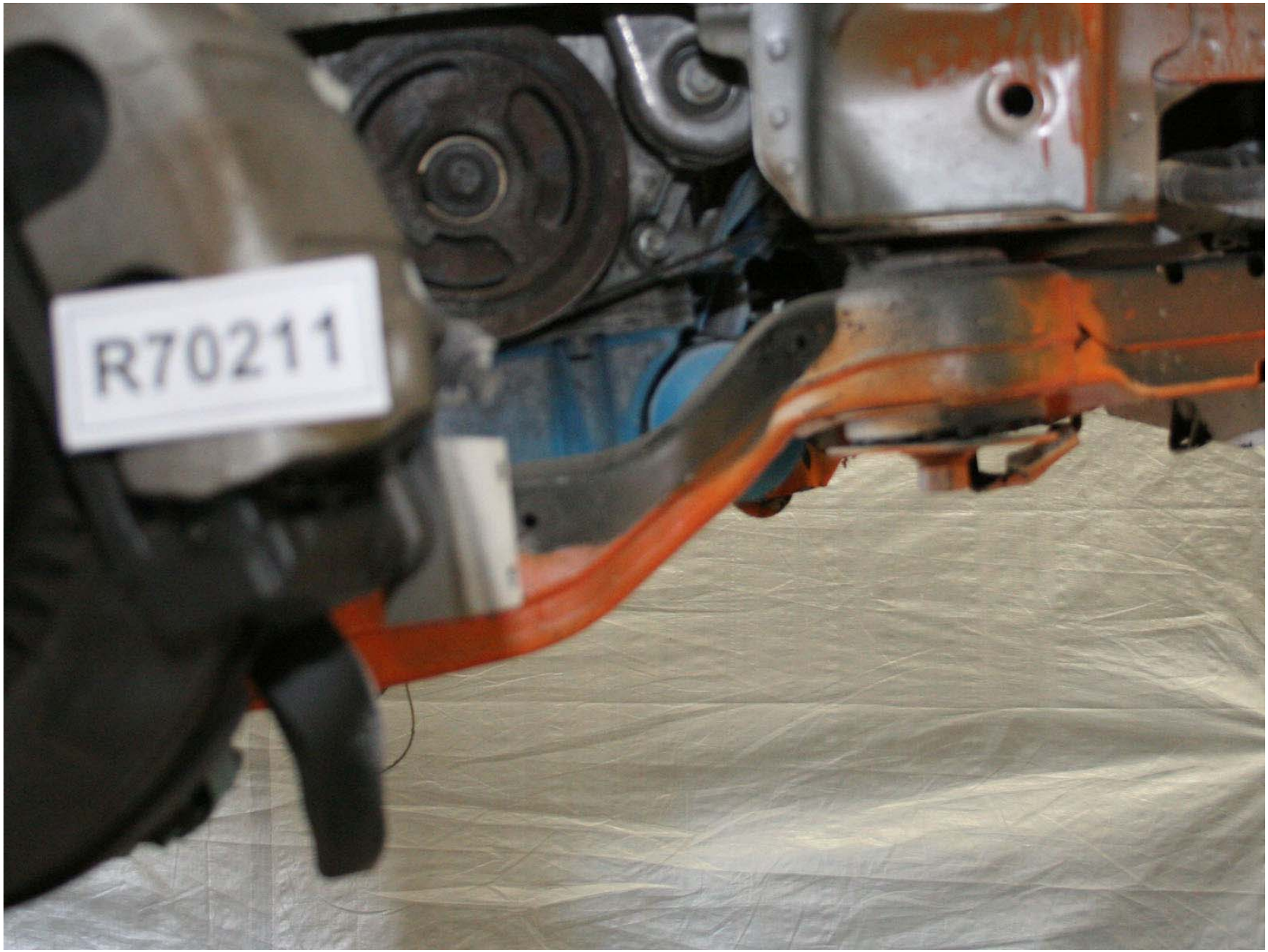

Figure A-214: Target Vehicle Post-Test Right Front Frame Rail View

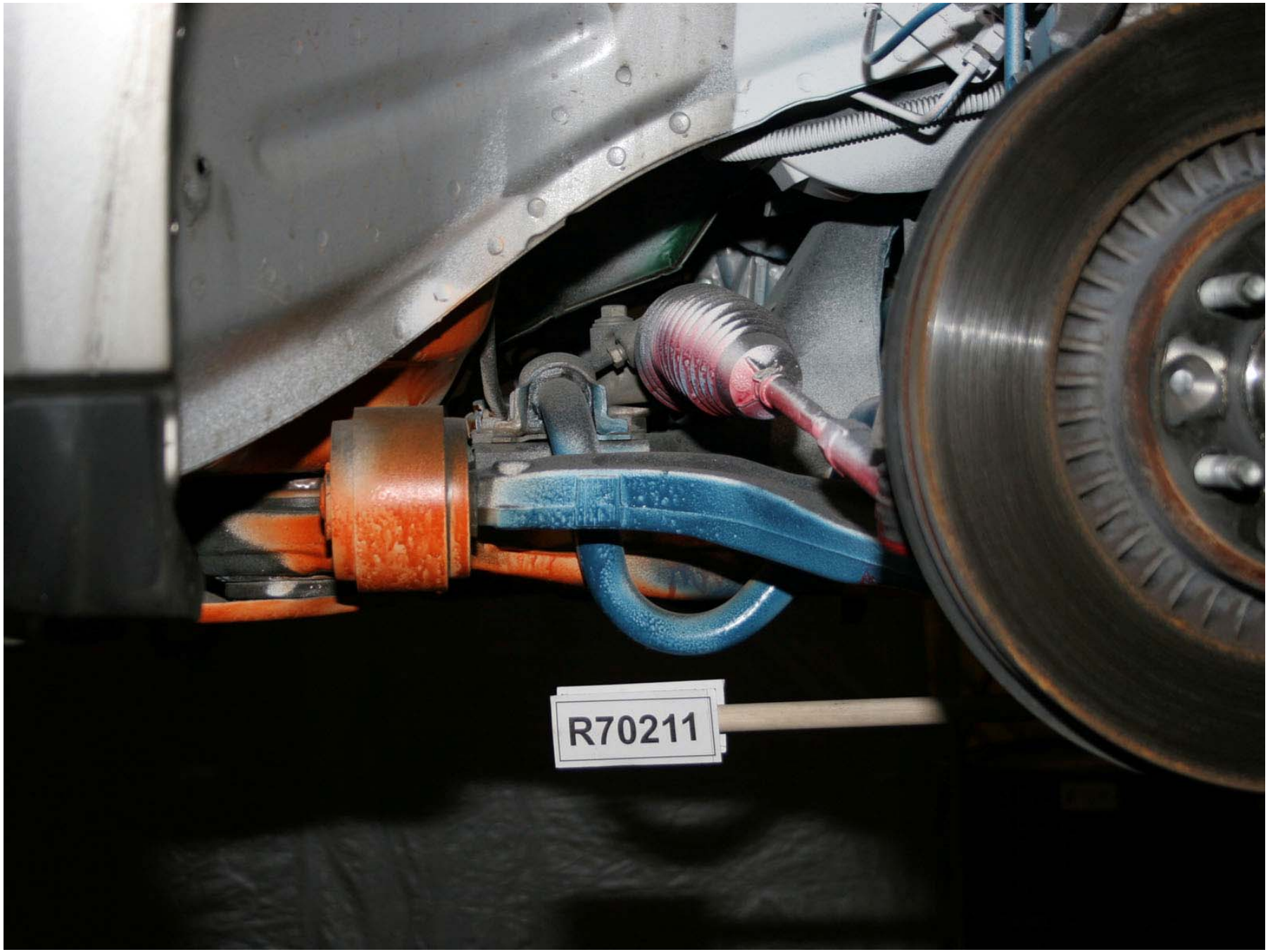

Figure A-215: Target Vehicle Pre-Test Right Front Frame Rail View

Figure A-216: Test Vehicle Post-Test Right Front Frame Rail View

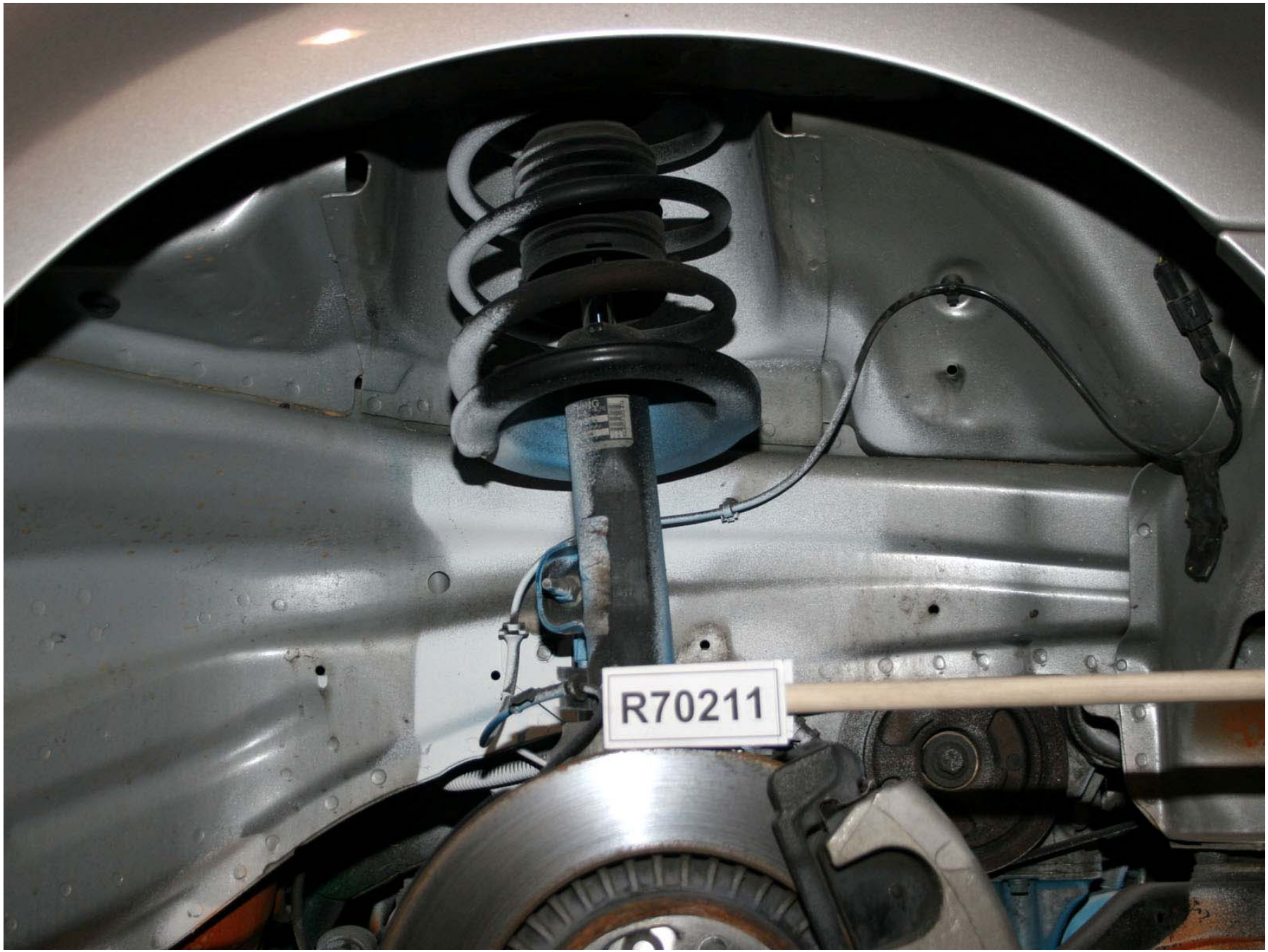

Figure A-217: Target Vehicle Pre-Test Right Front Frame Rail View

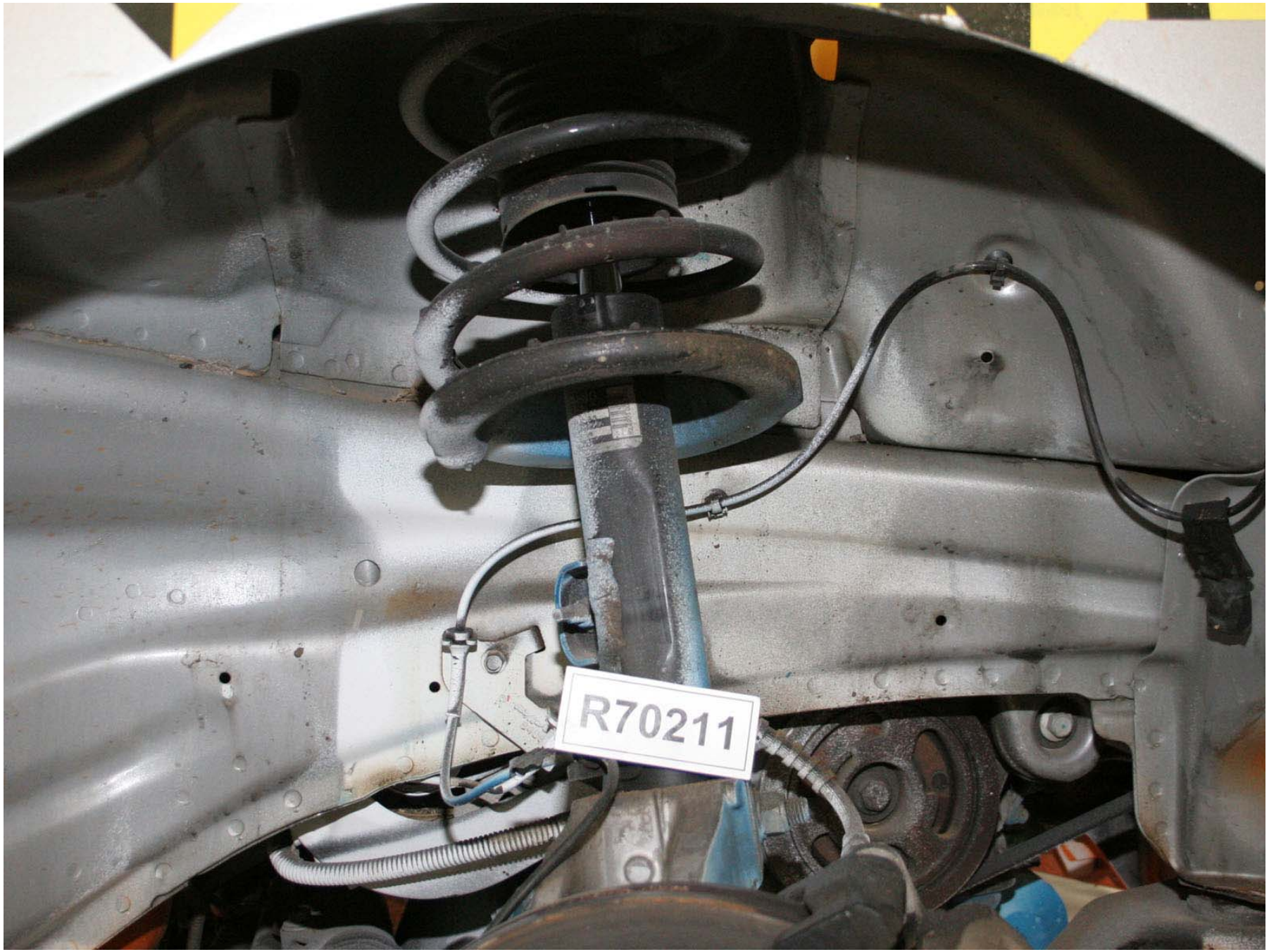

Figure A-218: Target Vehicle Post-Test Right Front Frame Rail View

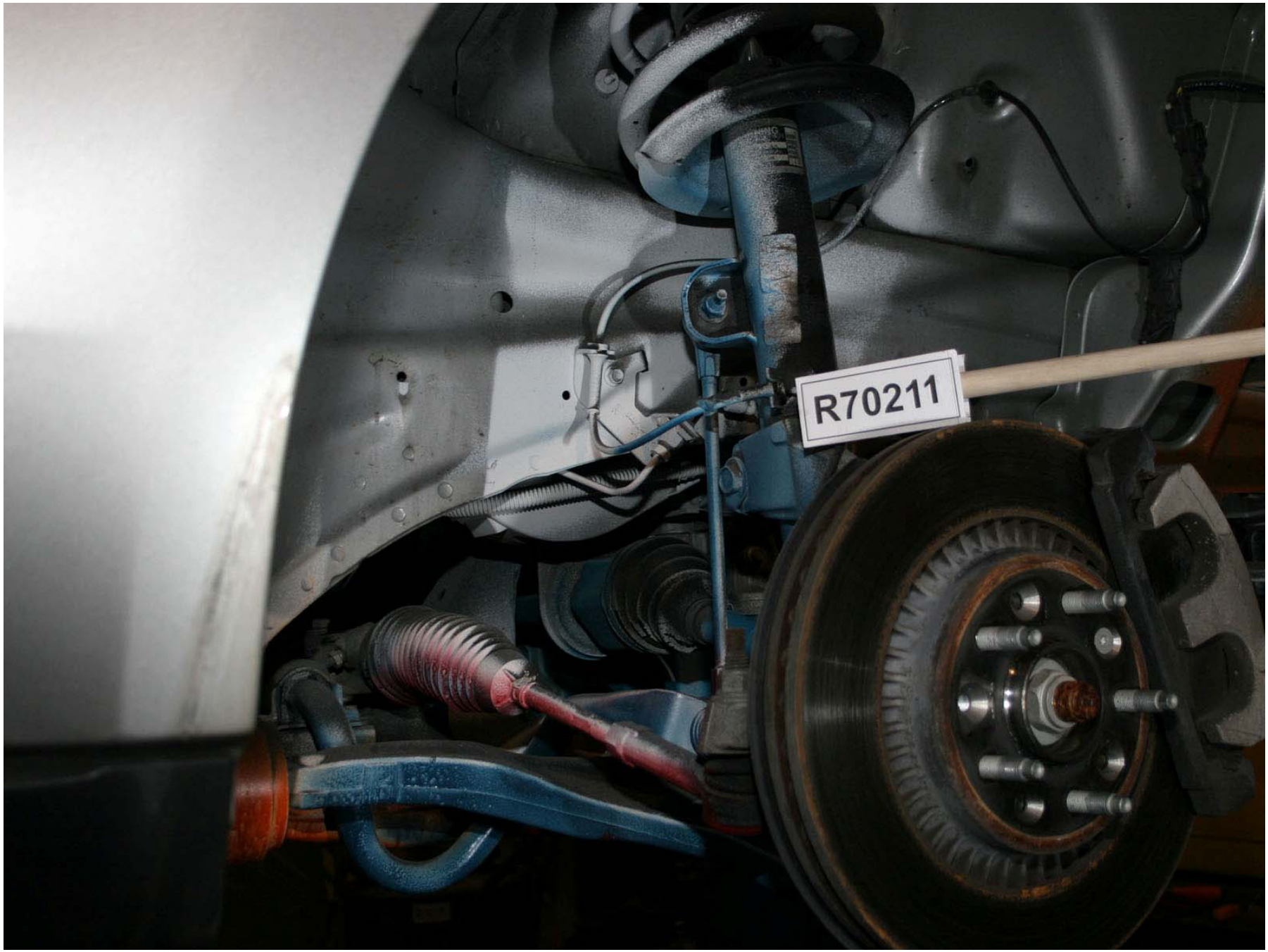

Figure A-219: Target Vehicle Pre-Test Right Side Tie Rod and Sway Bar Attachments Points

Figure A-220: Target Vehicle Post-Test Right Side Tie Rod and Sway Bar Attachments Points

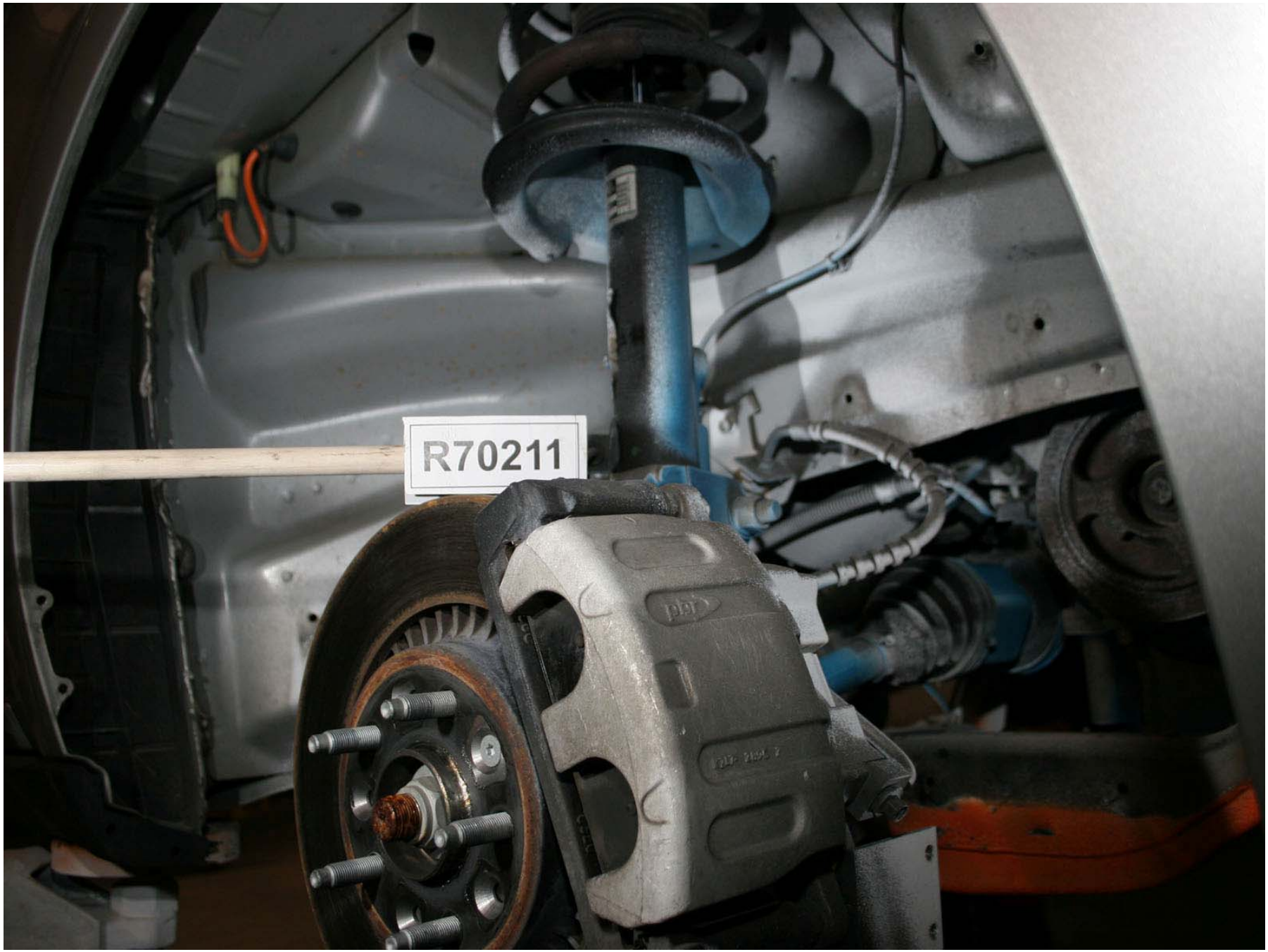

Figure A-221: Target Vehicle Pre-Test Right Side Upper Sway Bar Attachment Point

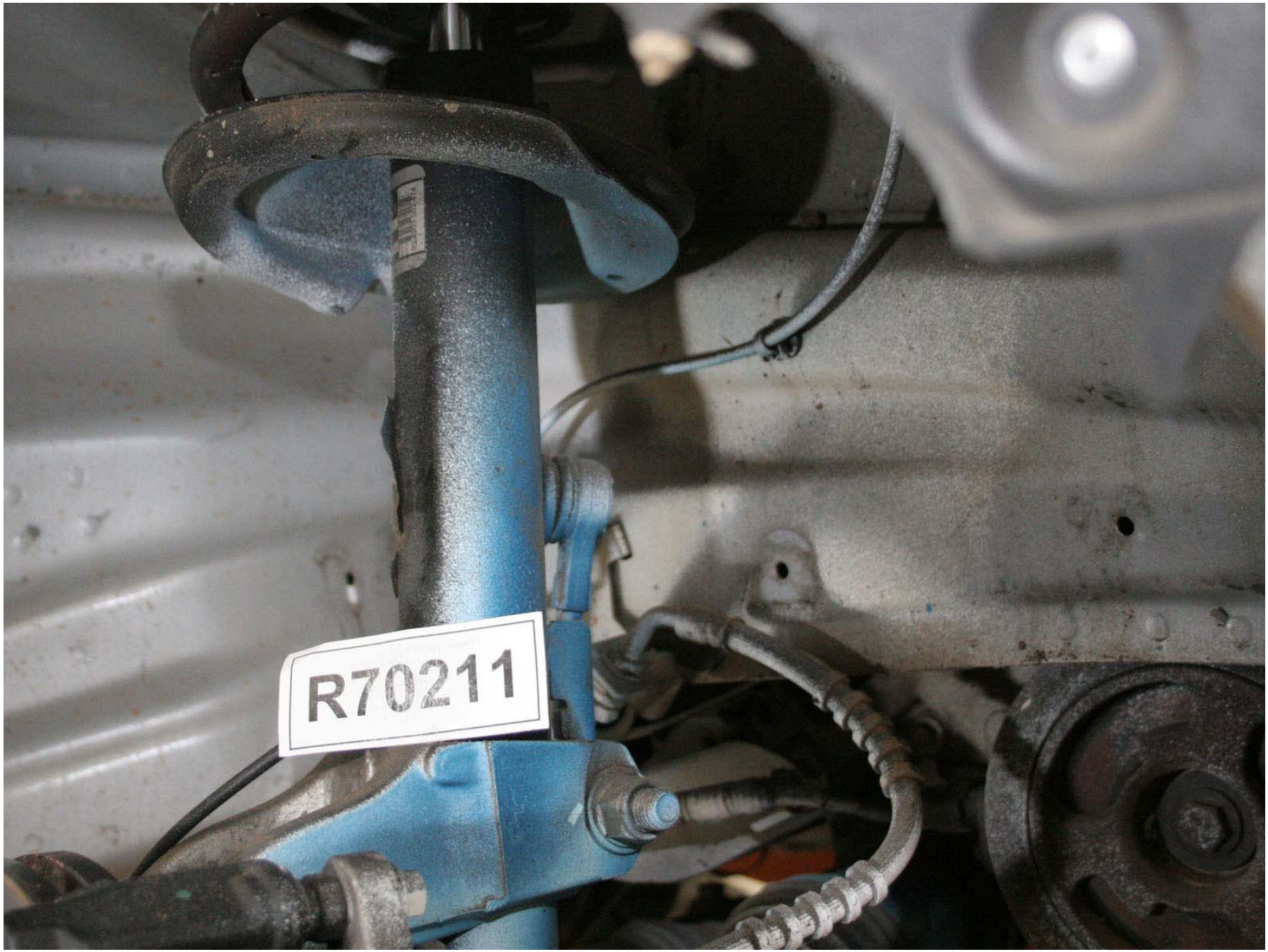

Figure A-222: Target Vehicle Post-Test Right Side Upper Sway Bar Attachment Point

Figure A-223: Target Vehicle Pre-Test Left Side Frame to A-Pillar Joint

Figure A-224: Target Vehicle Post-Test Left Side Frame to A-Pillar Joint

Figure A-225: Target Vehicle Pre-Test Right Side Crush Initiators

Figure A-226: Target Vehicle Post-Test Right Side Crush Initiators

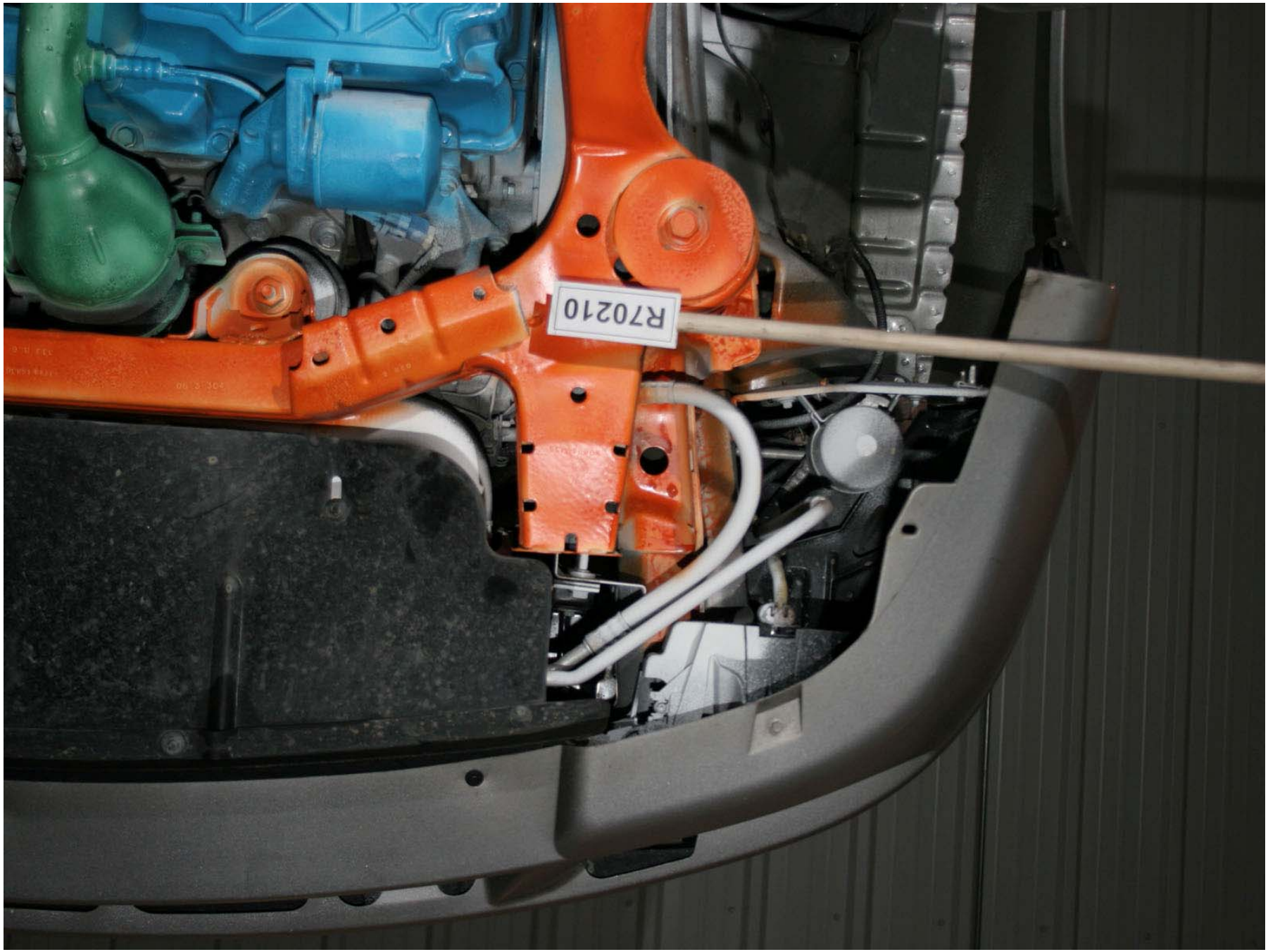

Figure A-227: Target Vehicle Pre-Test Right Side Crush Initiators

Figure A-228: Target Vehicle Post-Test Right Side Crush Initiators

Figure A-229: Target Vehicle Pre-Test Right Side Bumper Attachment Point

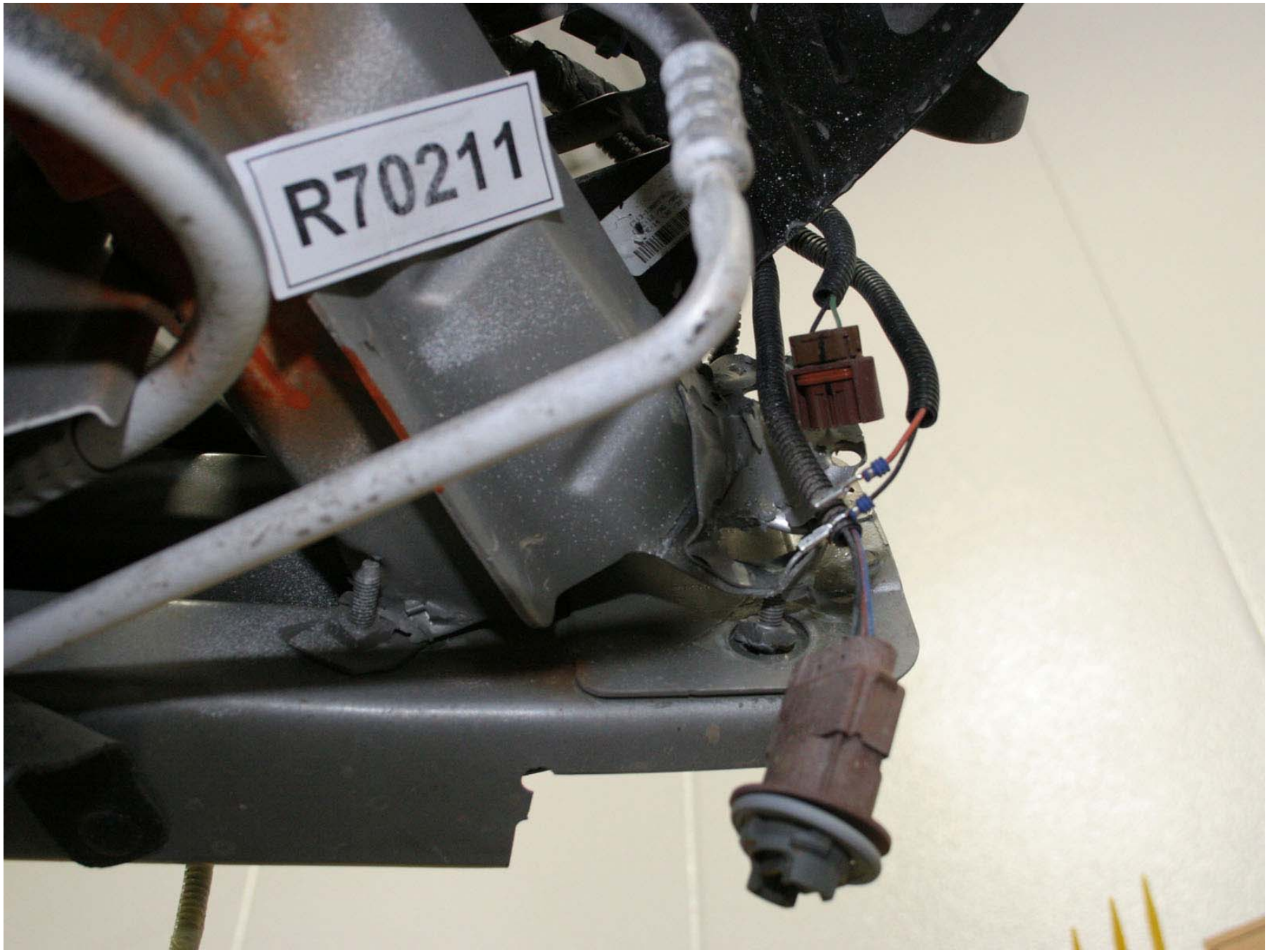

Figure A-230: Test Vehicle Post-Test Right Side Bumper Attachment Point

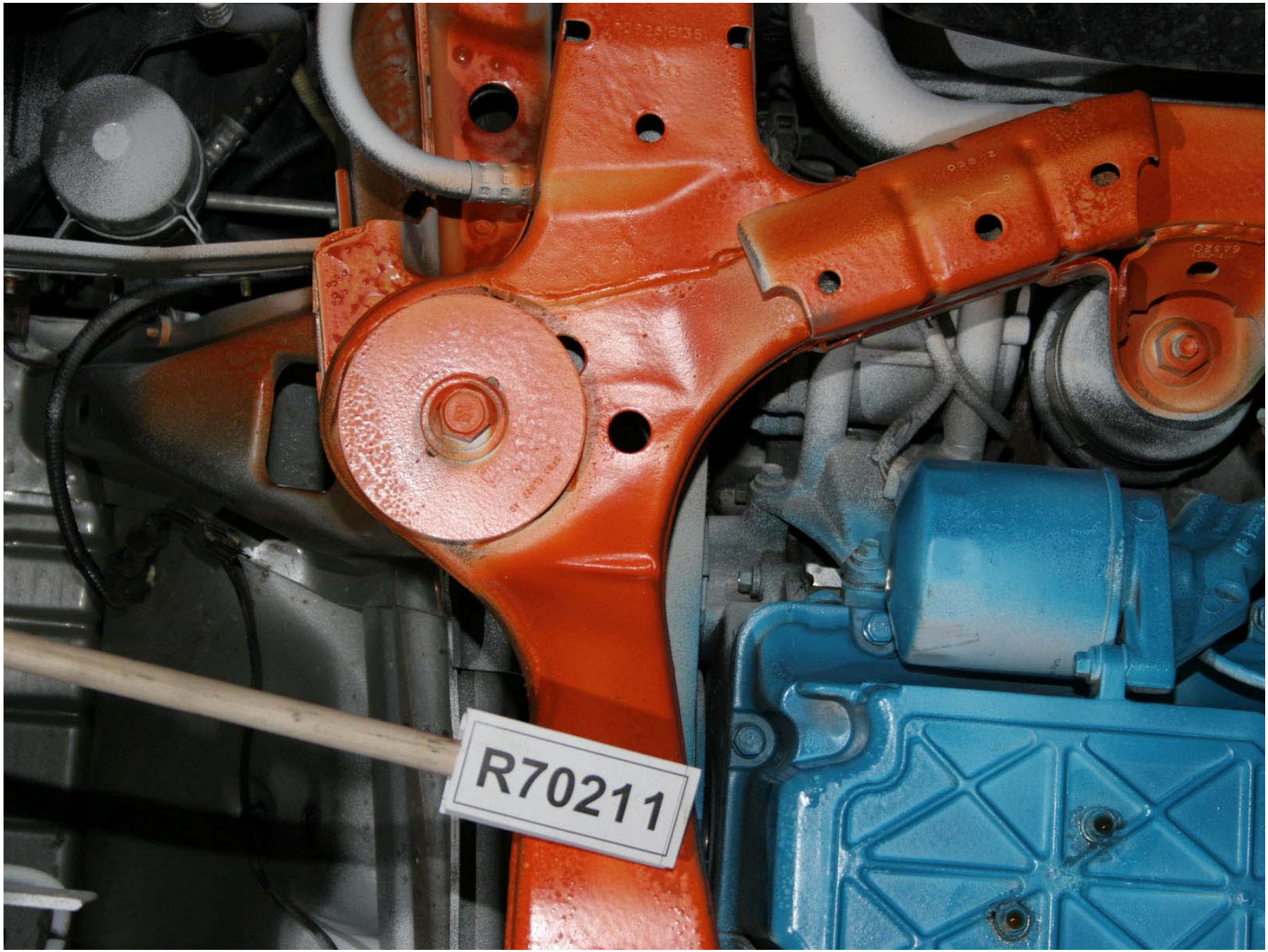

Figure A-231: Target Vehicle Pre-Test Right Front Sub-Frame Mounting Point

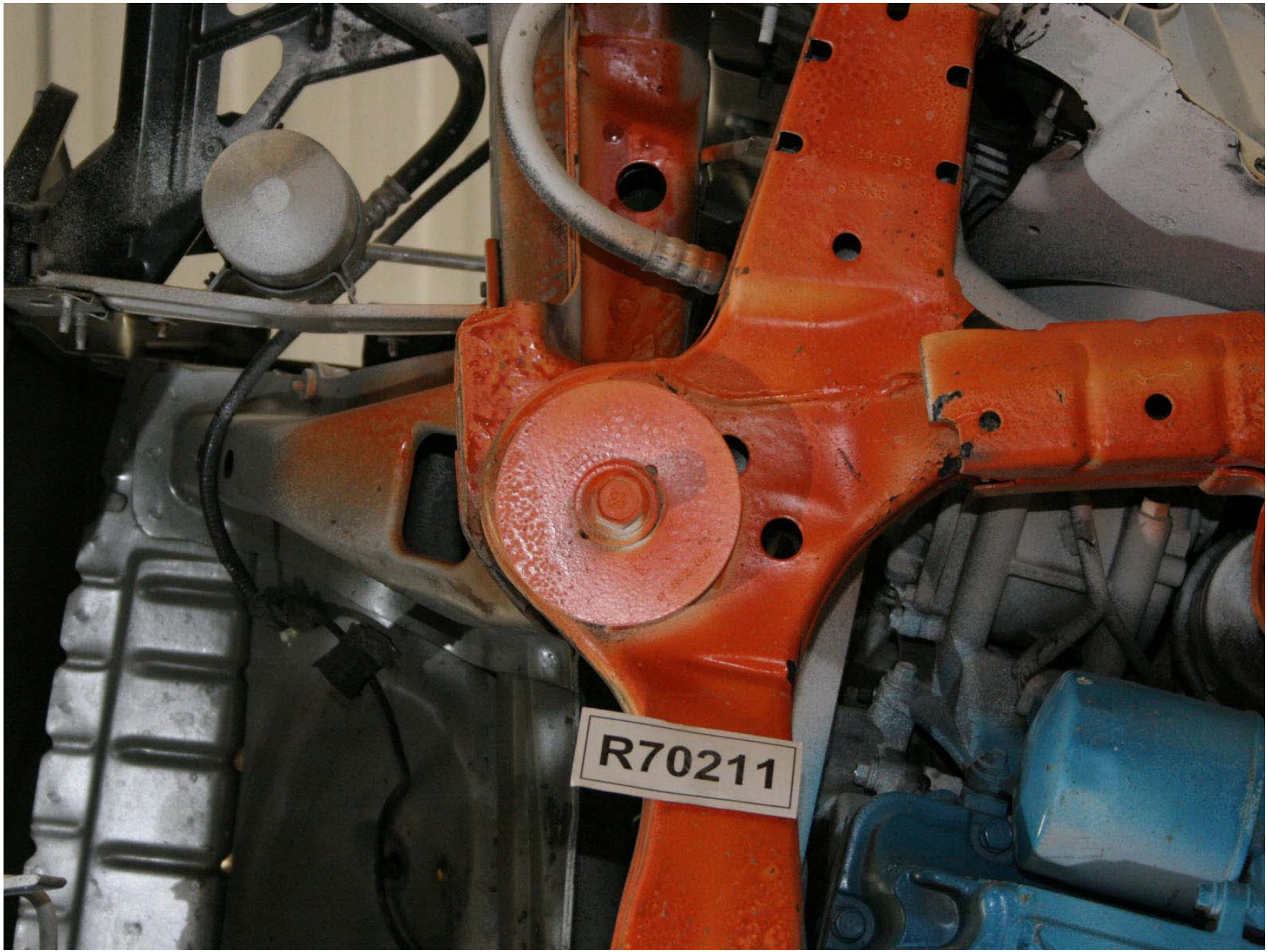

Figure A-232: Target Vehicle Post-Test Right Front Sub-Frame Mounting Point

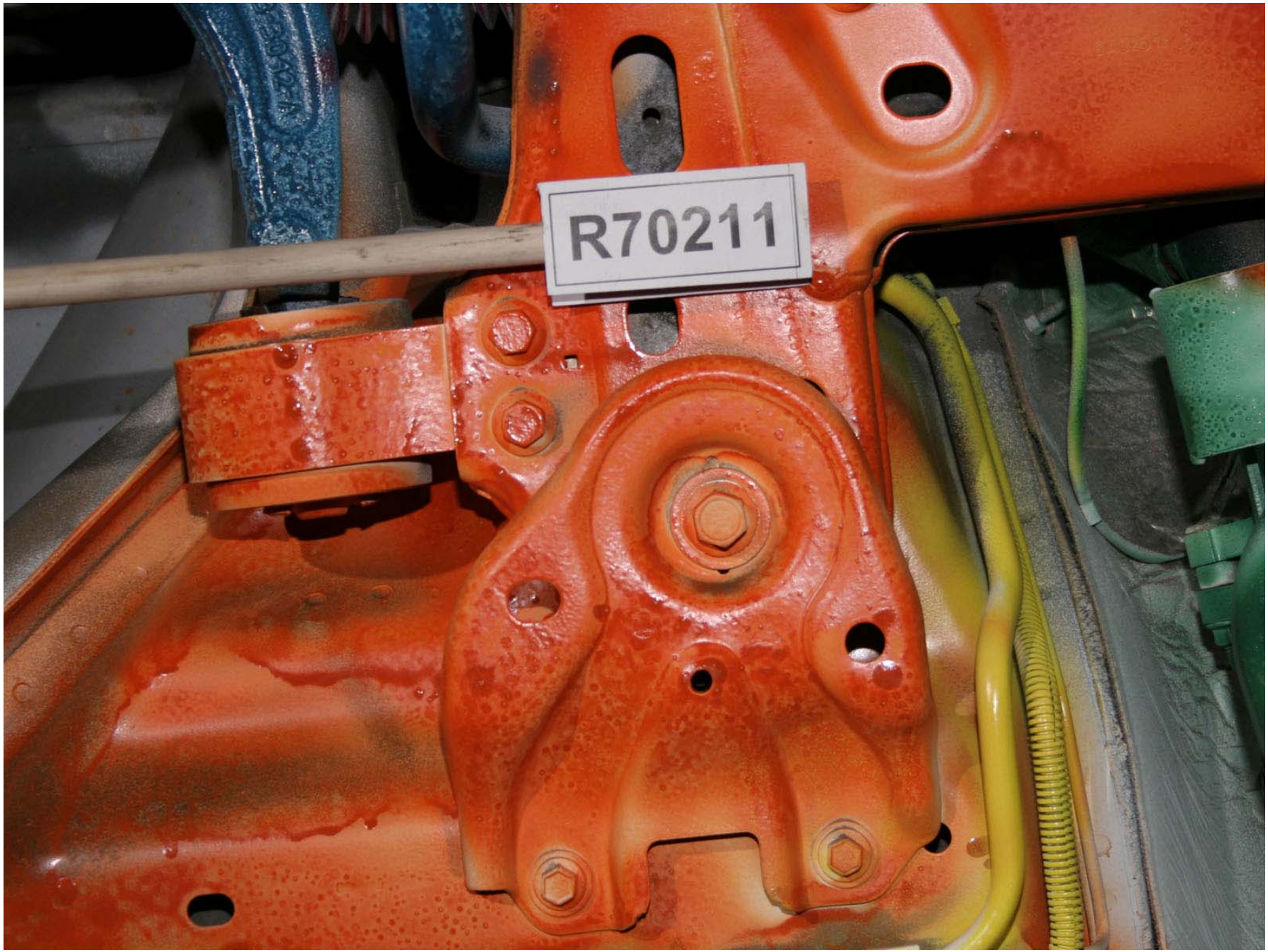

Figure A-233: Target Vehicle Pre-Test Right Rear Sub-Frame Mounting Point

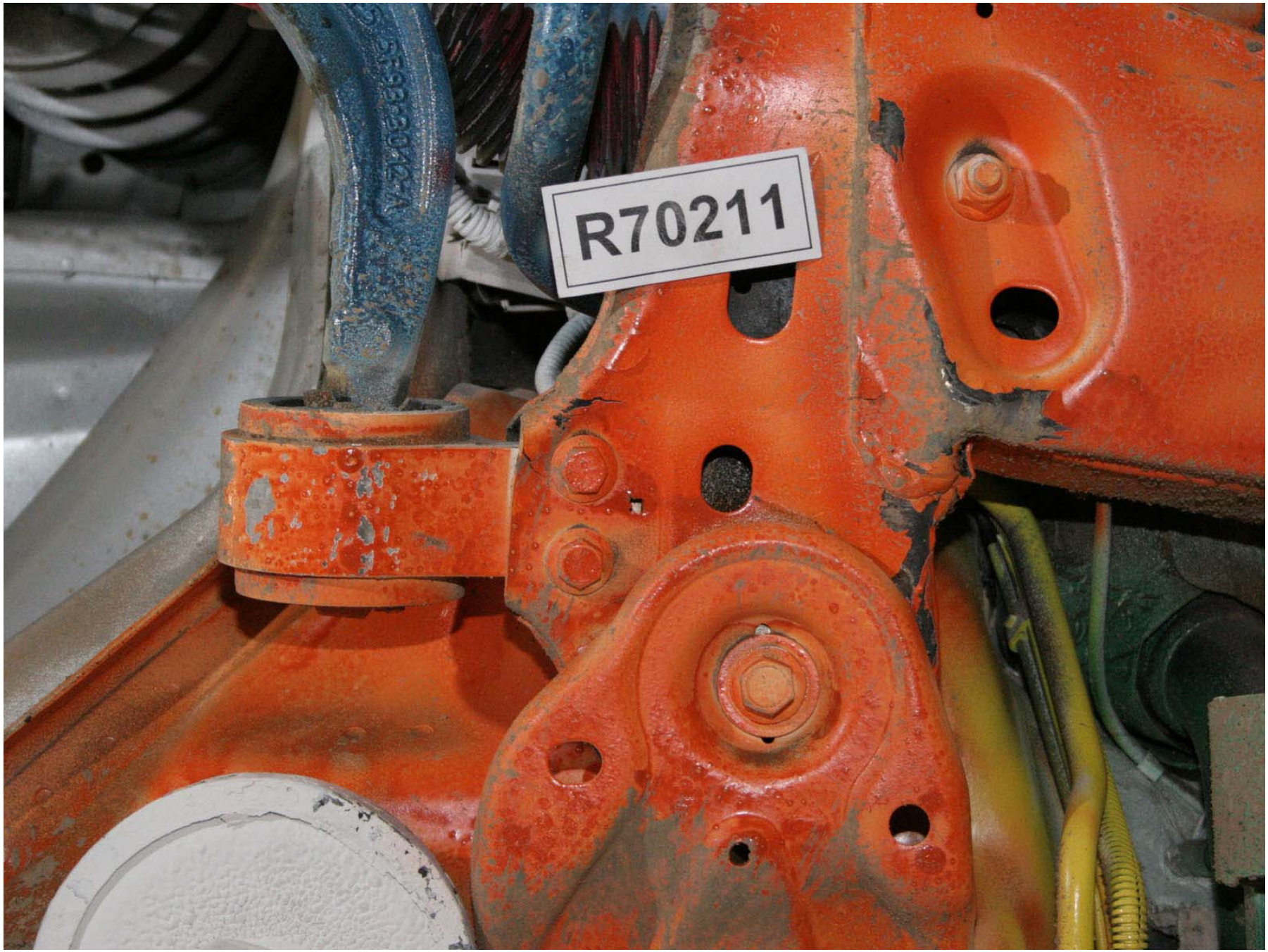

Figure A-234: Target Vehicle Post-Test Right Rear Sub-Frame Mounting Point

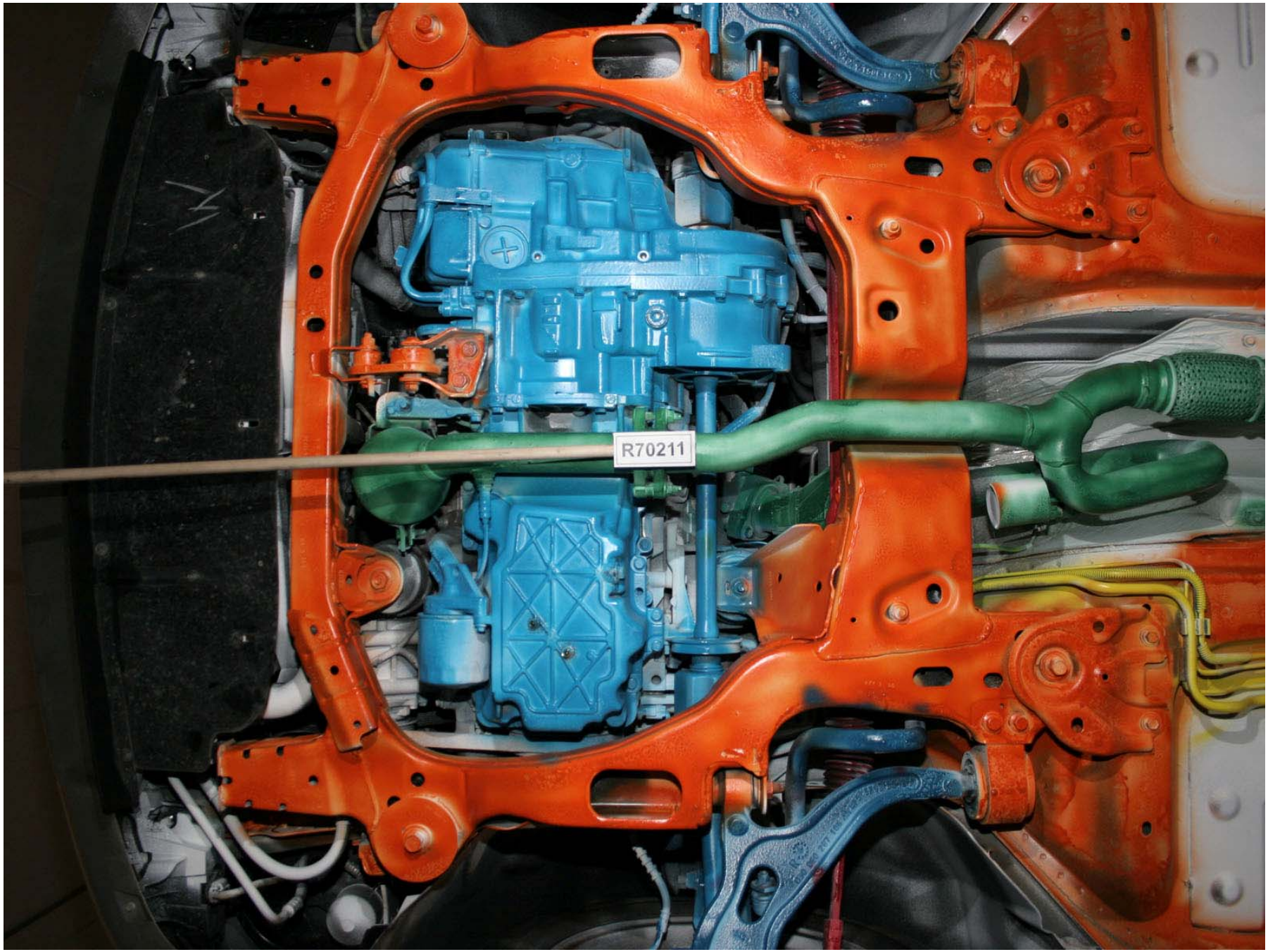

Figure A-235: Target Vehicle Pre-Test Front Underbody

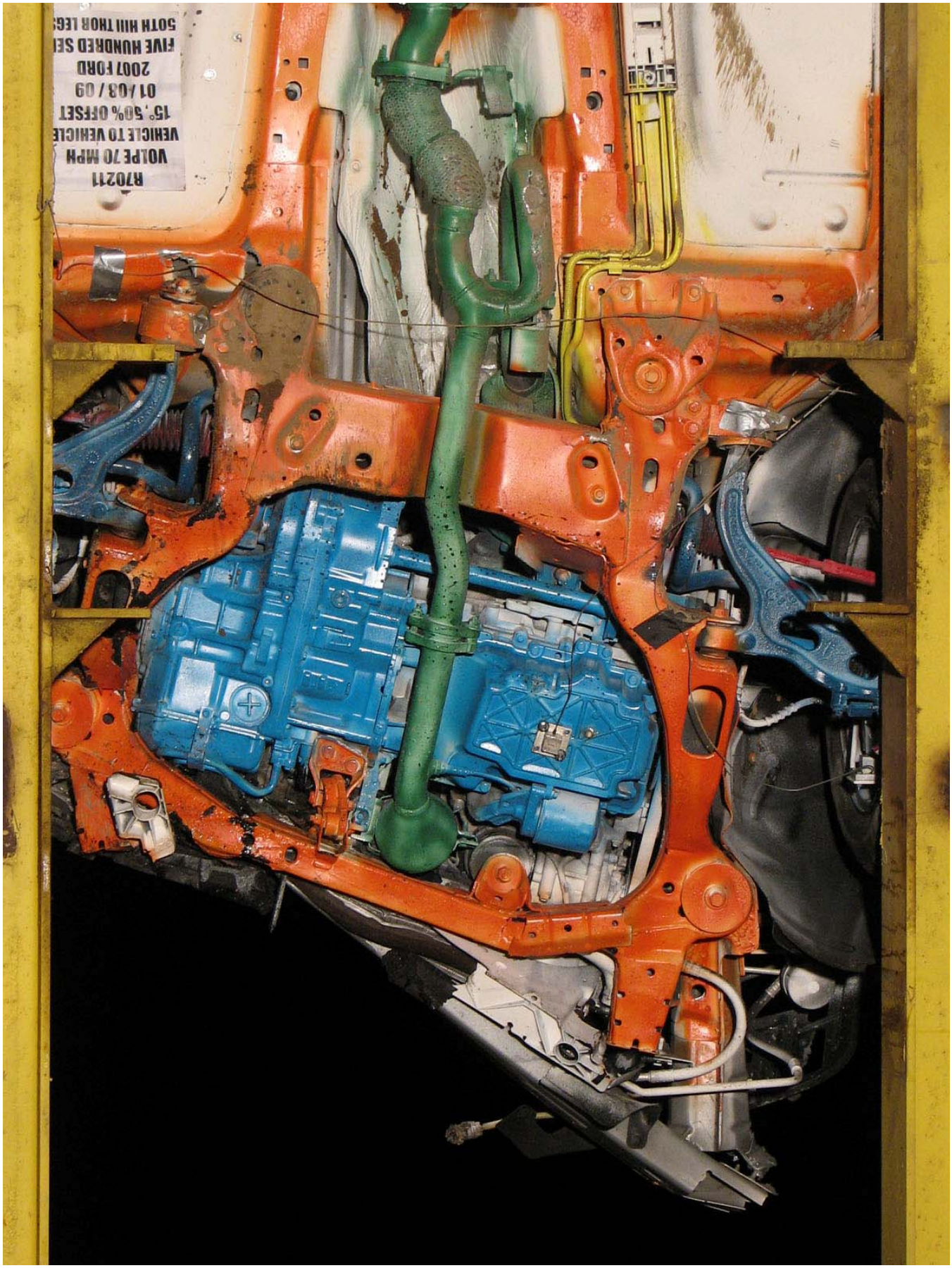

Figure A-236: Target Vehicle Post-Test Front Underbody

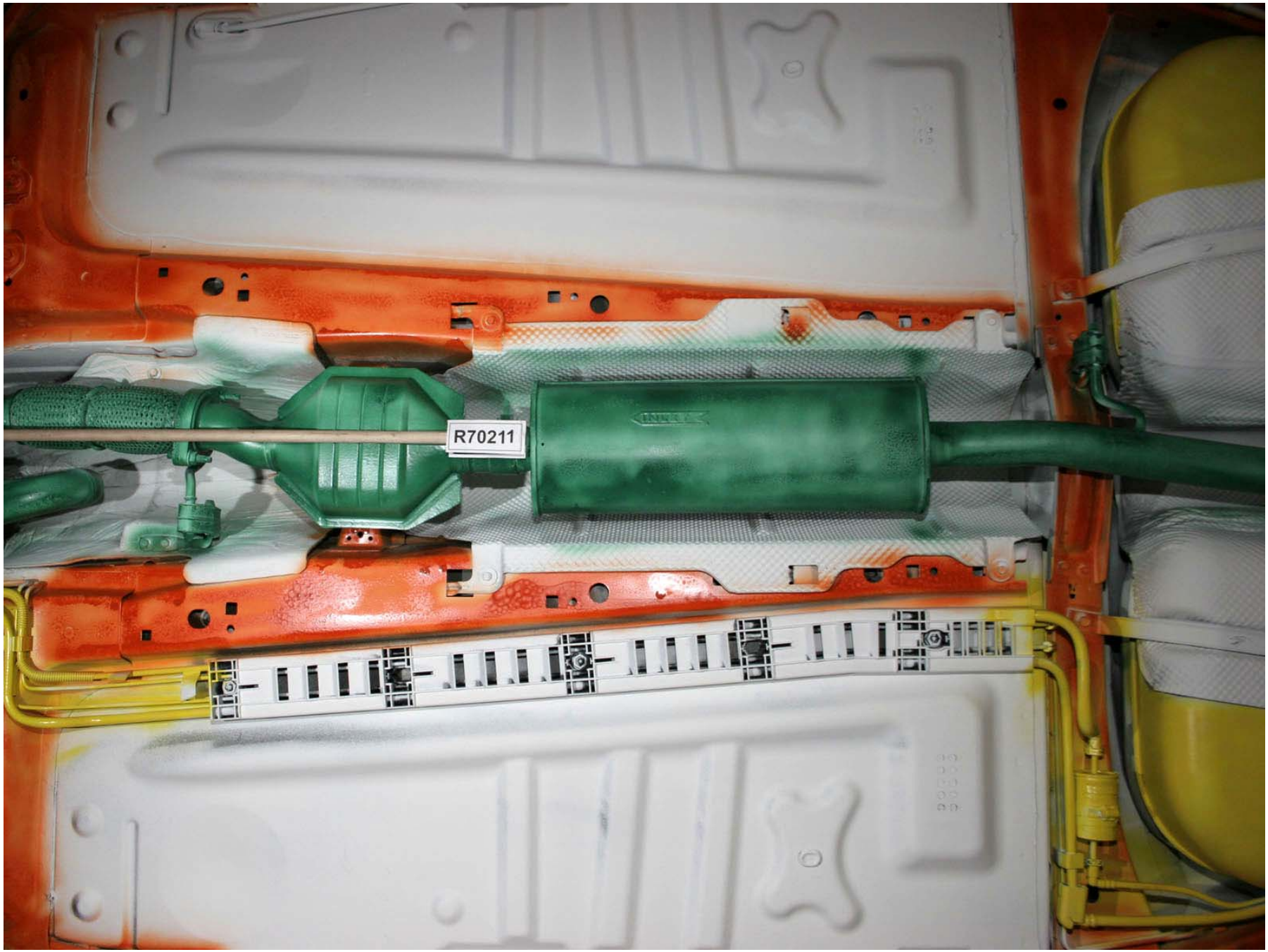

Figure A-237: Target Vehicle Pre-Test Mid Underbody

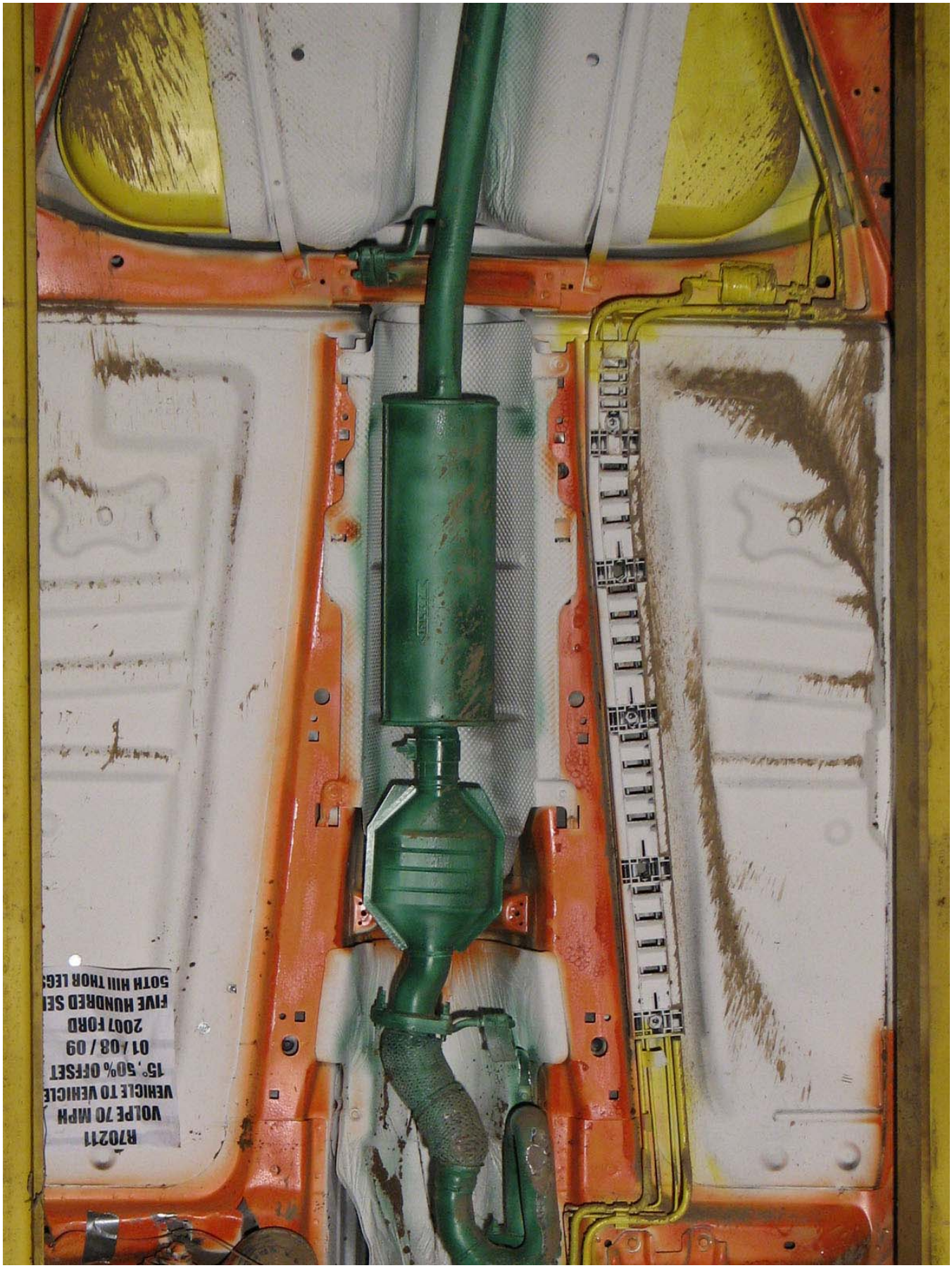

Figure A-238: Target Vehicle Post-Test Mid Underbody

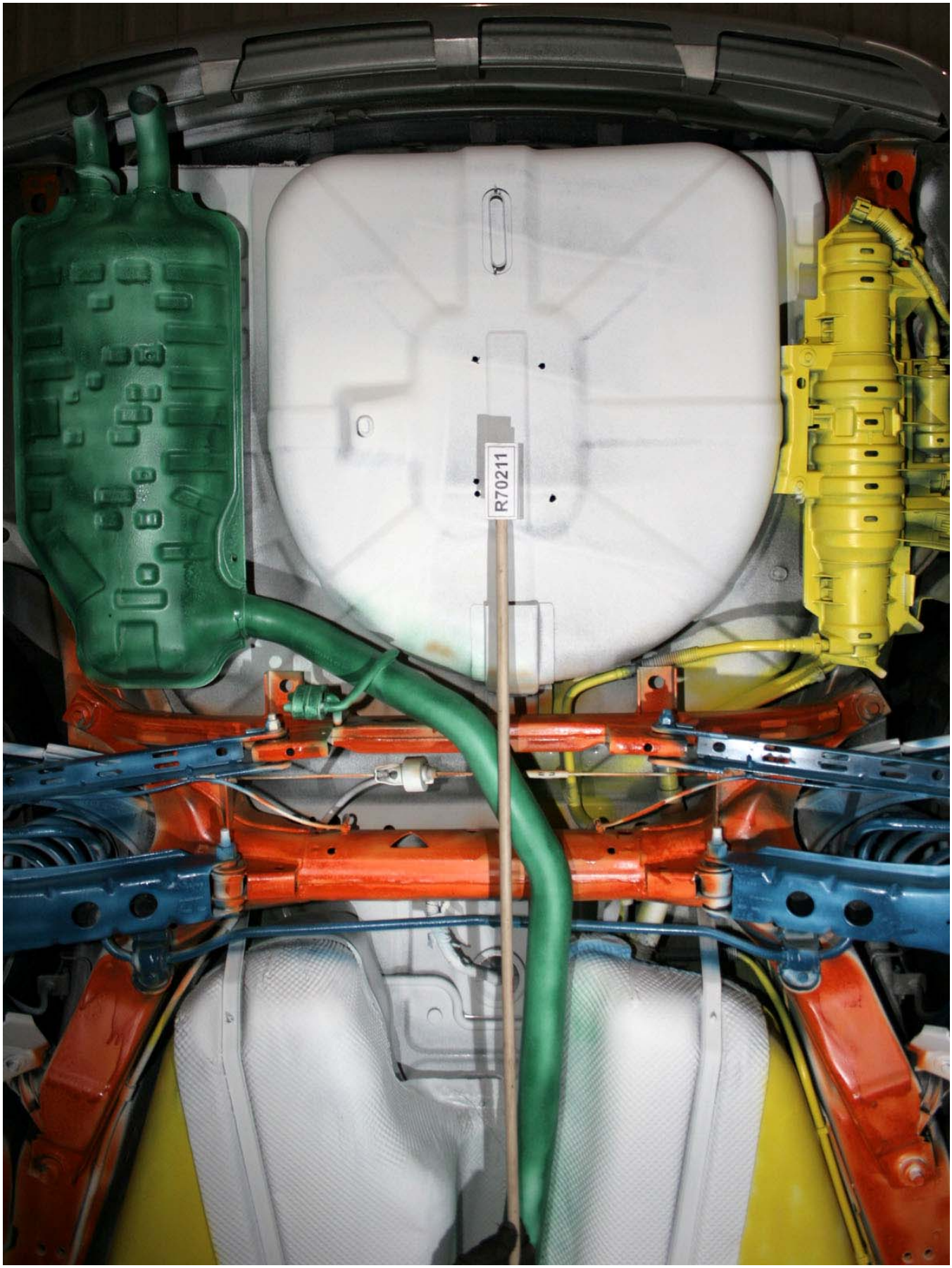

Figure A-239: Target Vehicle Pre-Test Rear Underbody

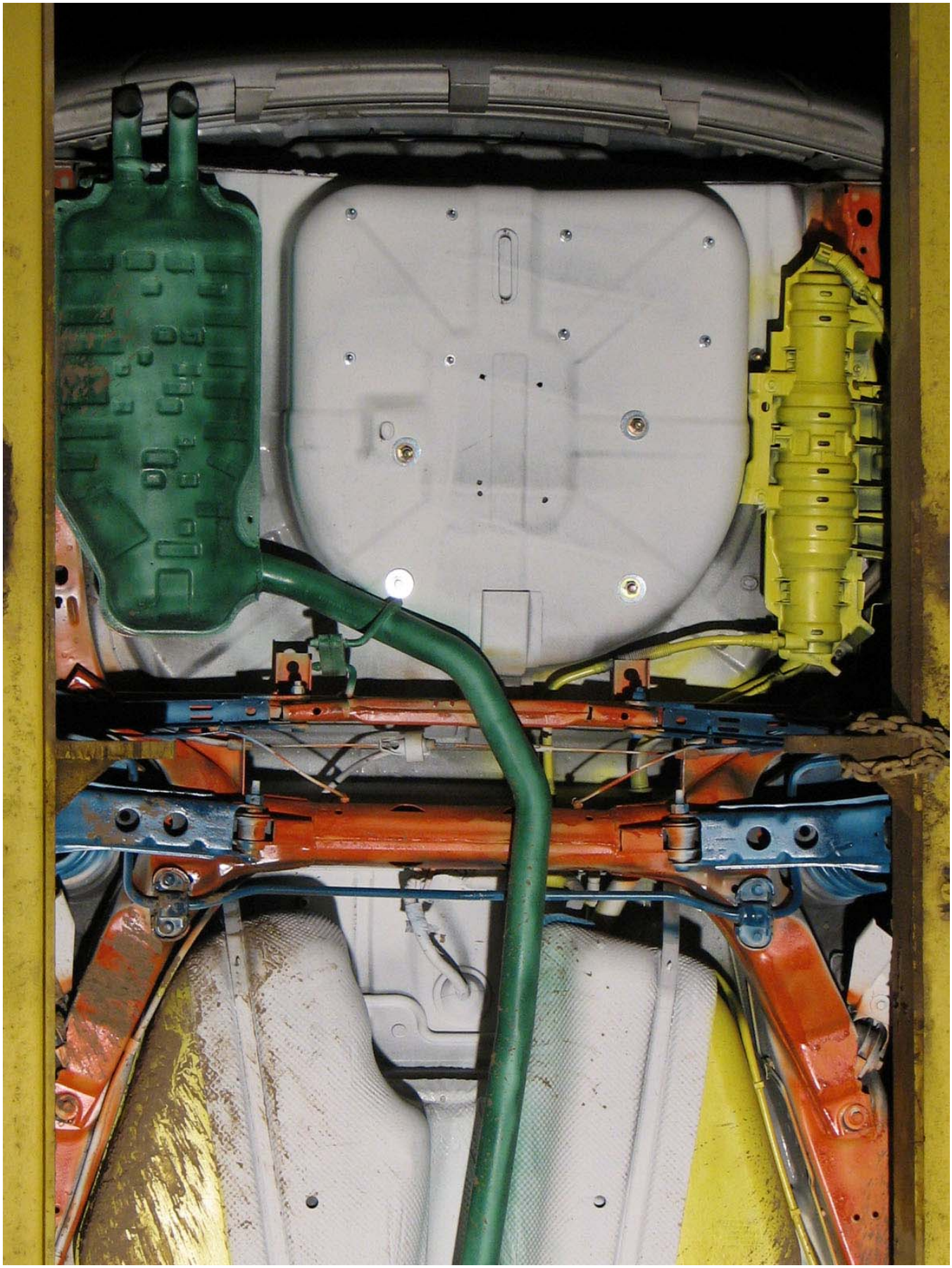

Figure A-240: Target Vehicle Post-Test Rear Underbody

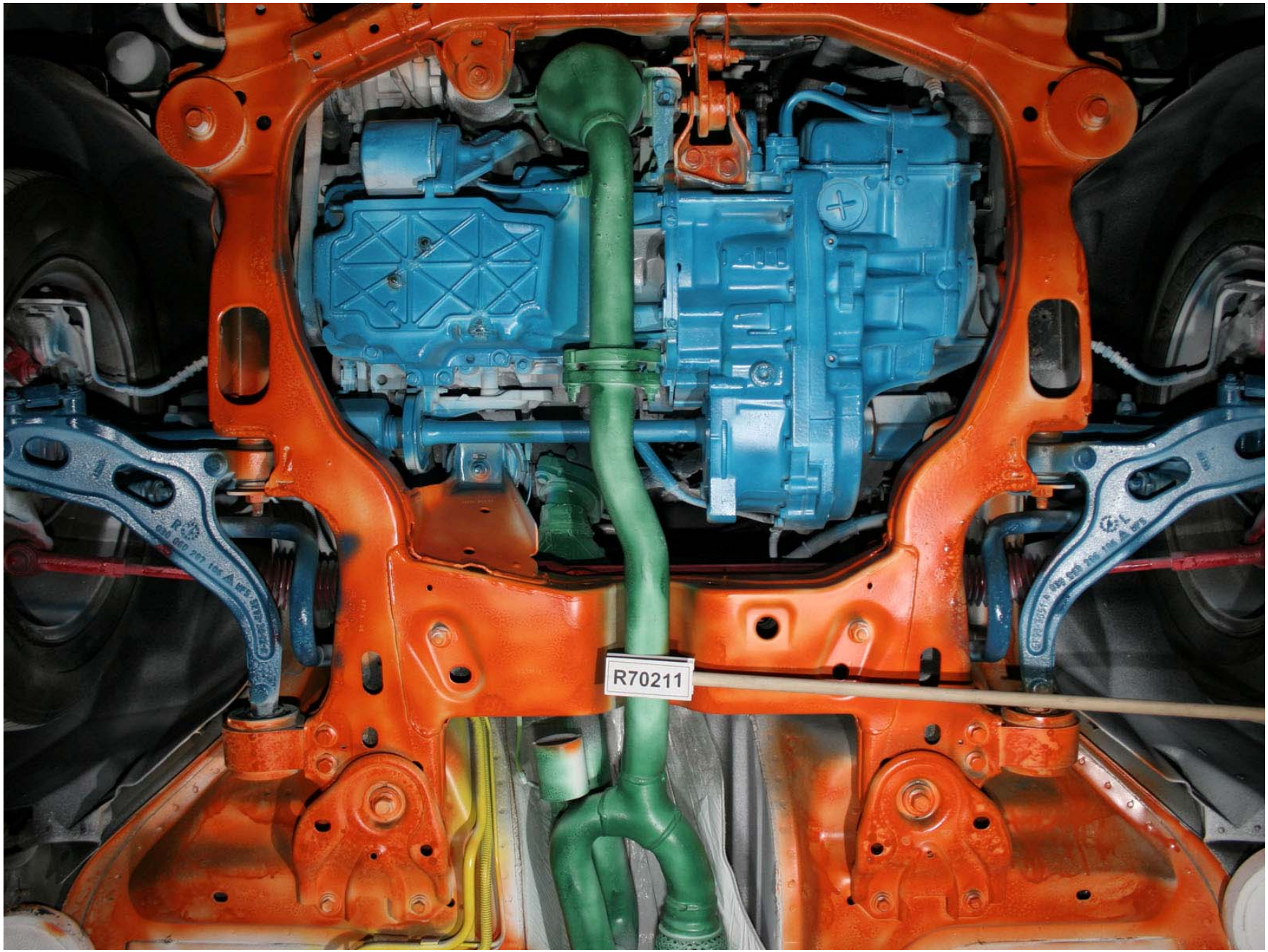

Figure A-241: Target Vehicle Pre-Test Steering Rack and Sway Bar View

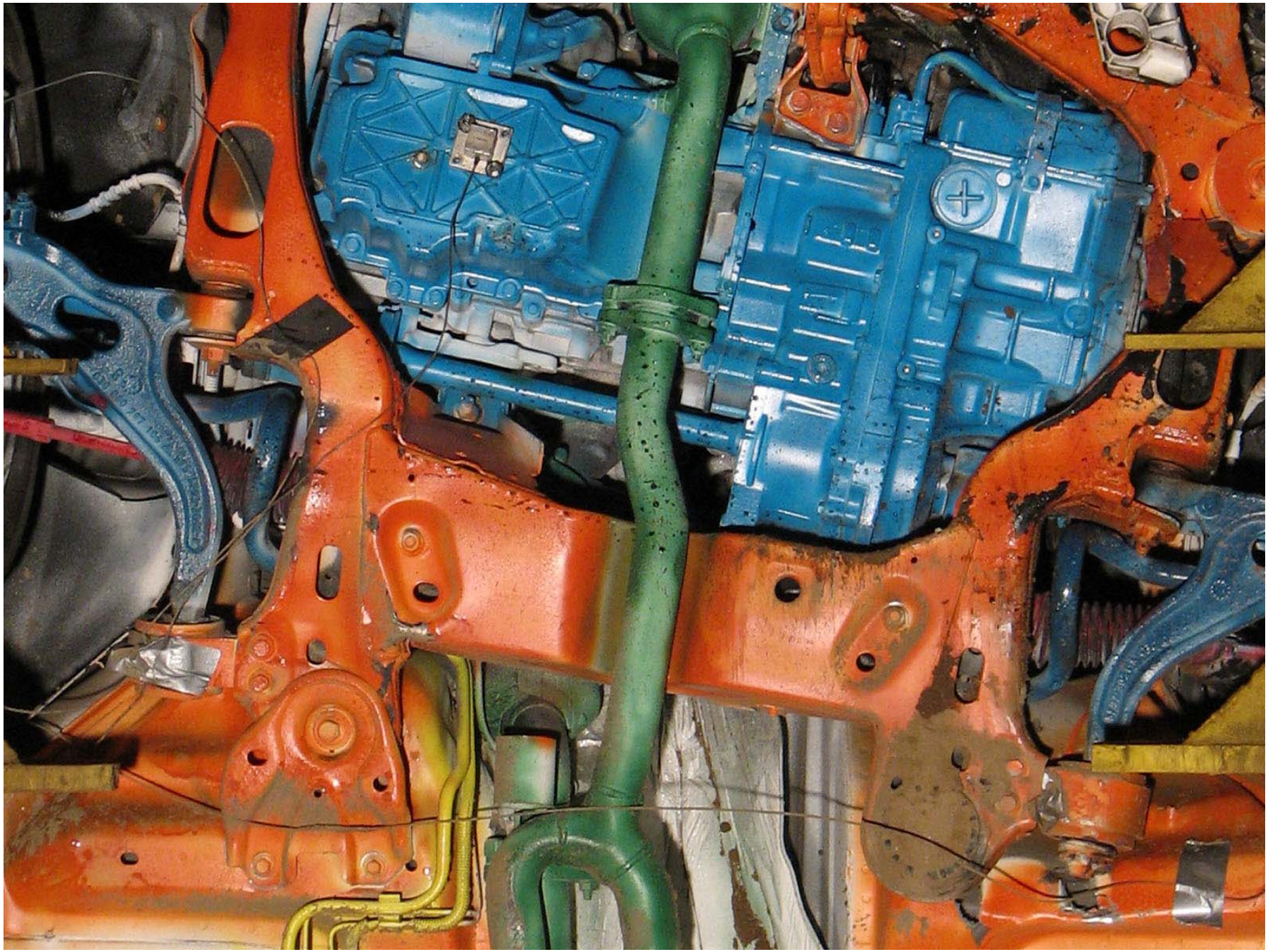

Figure A-242: Target Vehicle Post-Test Steering Rack and Sway Bar View

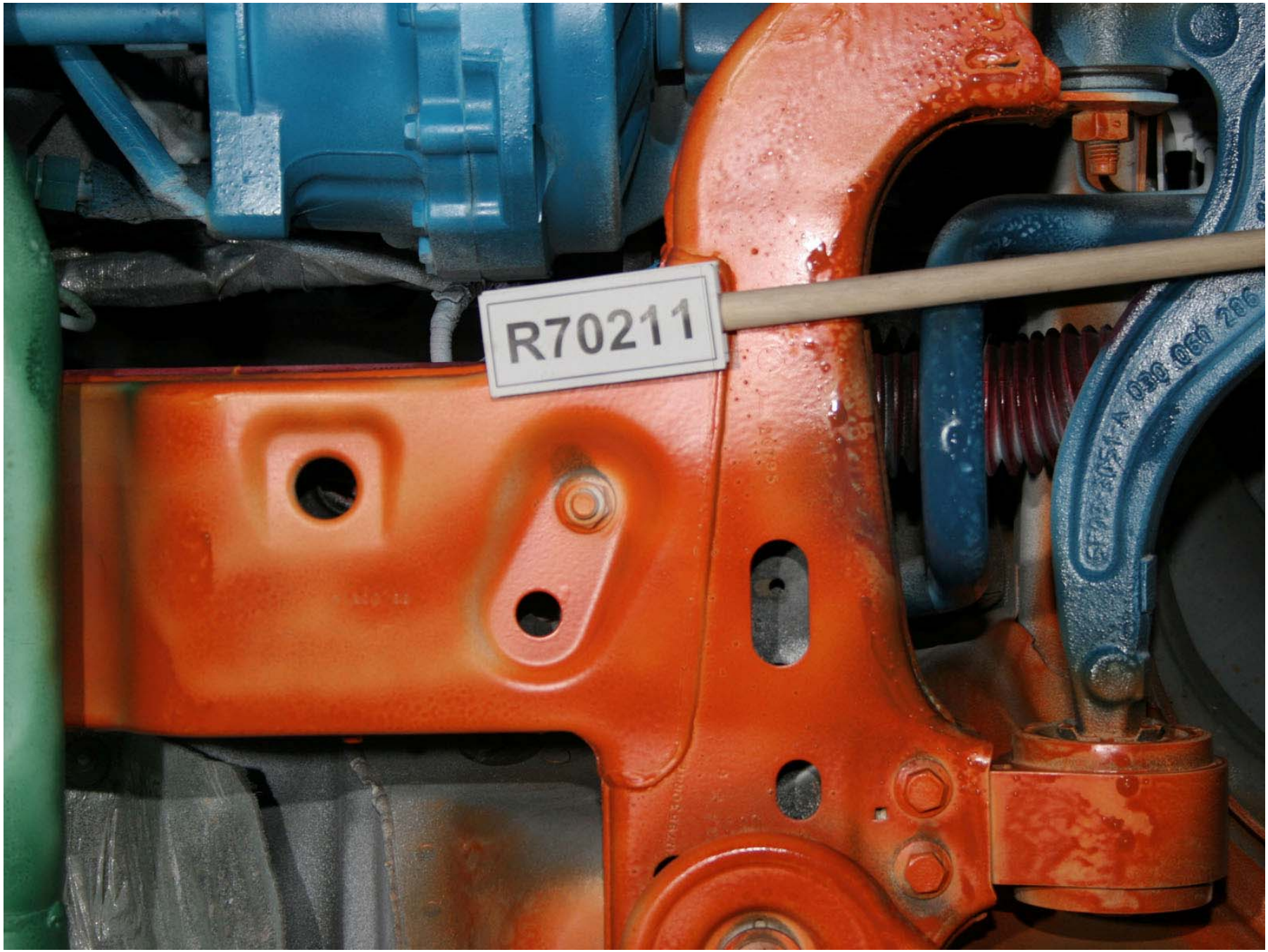

Figure A-243: Target Vehicle Pre-Test Steering Rack Left Side Mounting Bolt

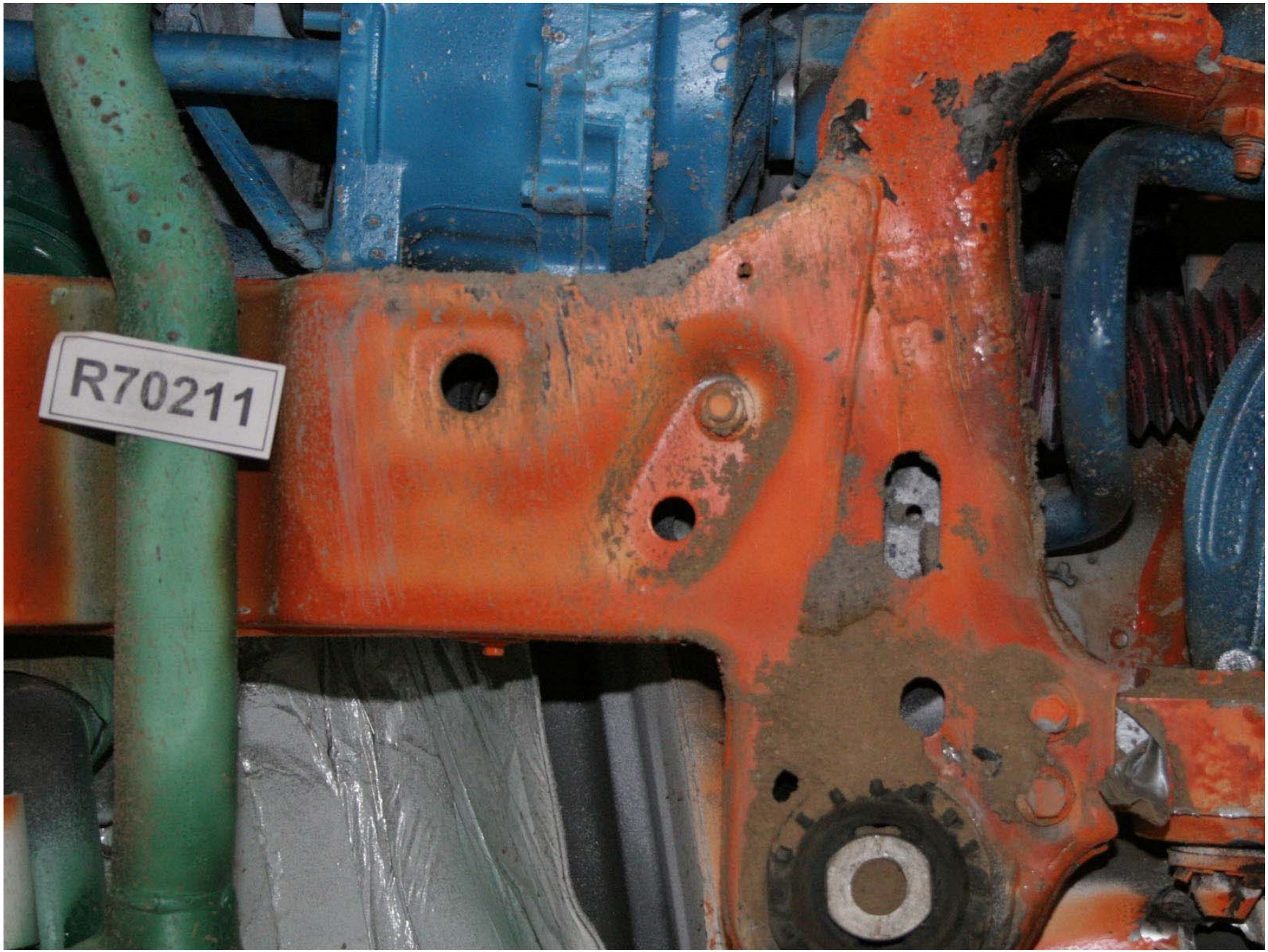

Figure A-244: Target Vehicle Post-Test Steering Rack Left Side Mounting Bolt

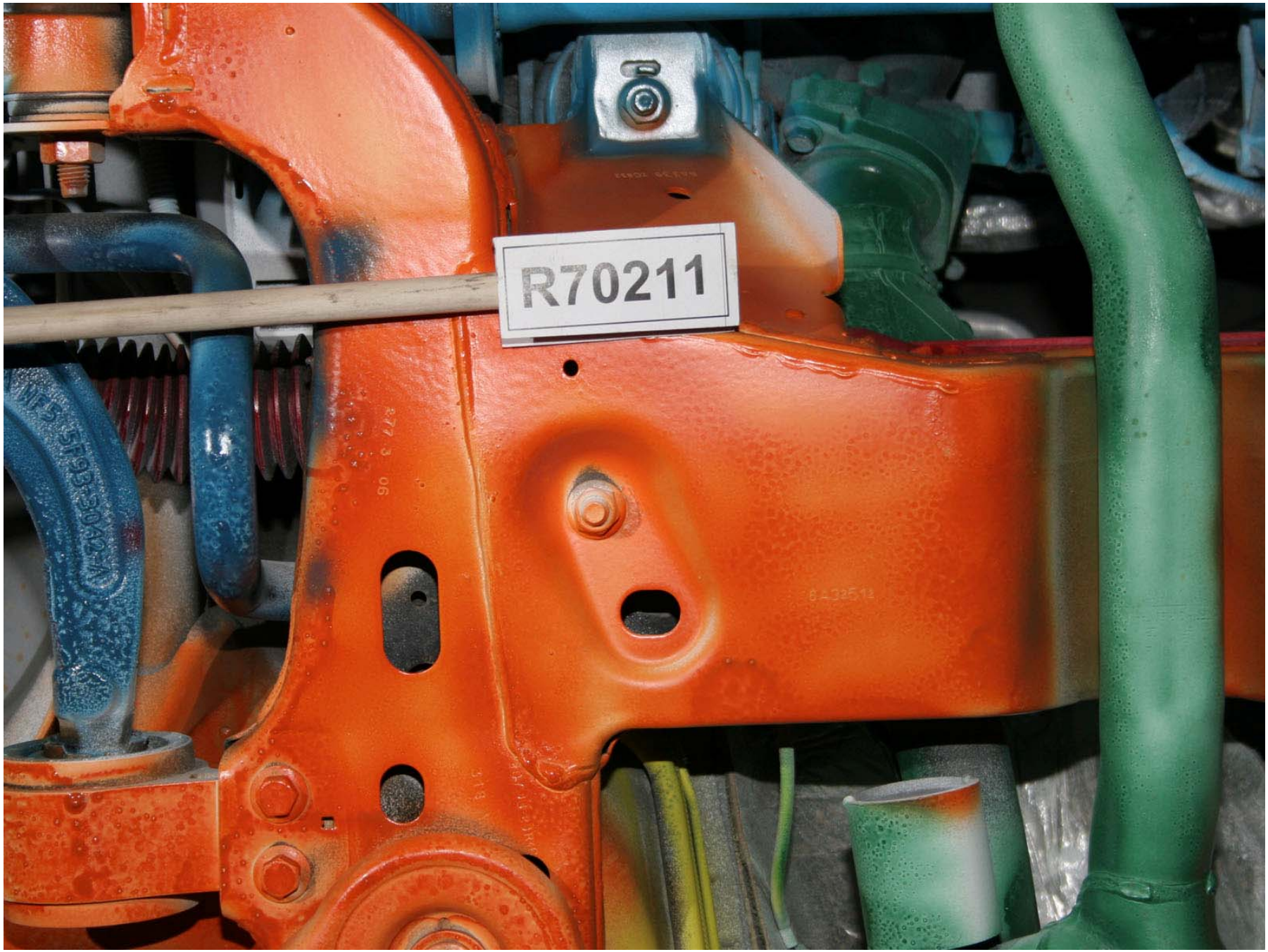

Figure A-245: Target Vehicle Pre-Test Steering Rack Right Side Mounting Bolt

Figure A-246: Target Vehicle Post-Test Steering Rack Right Side Mounting Bolt

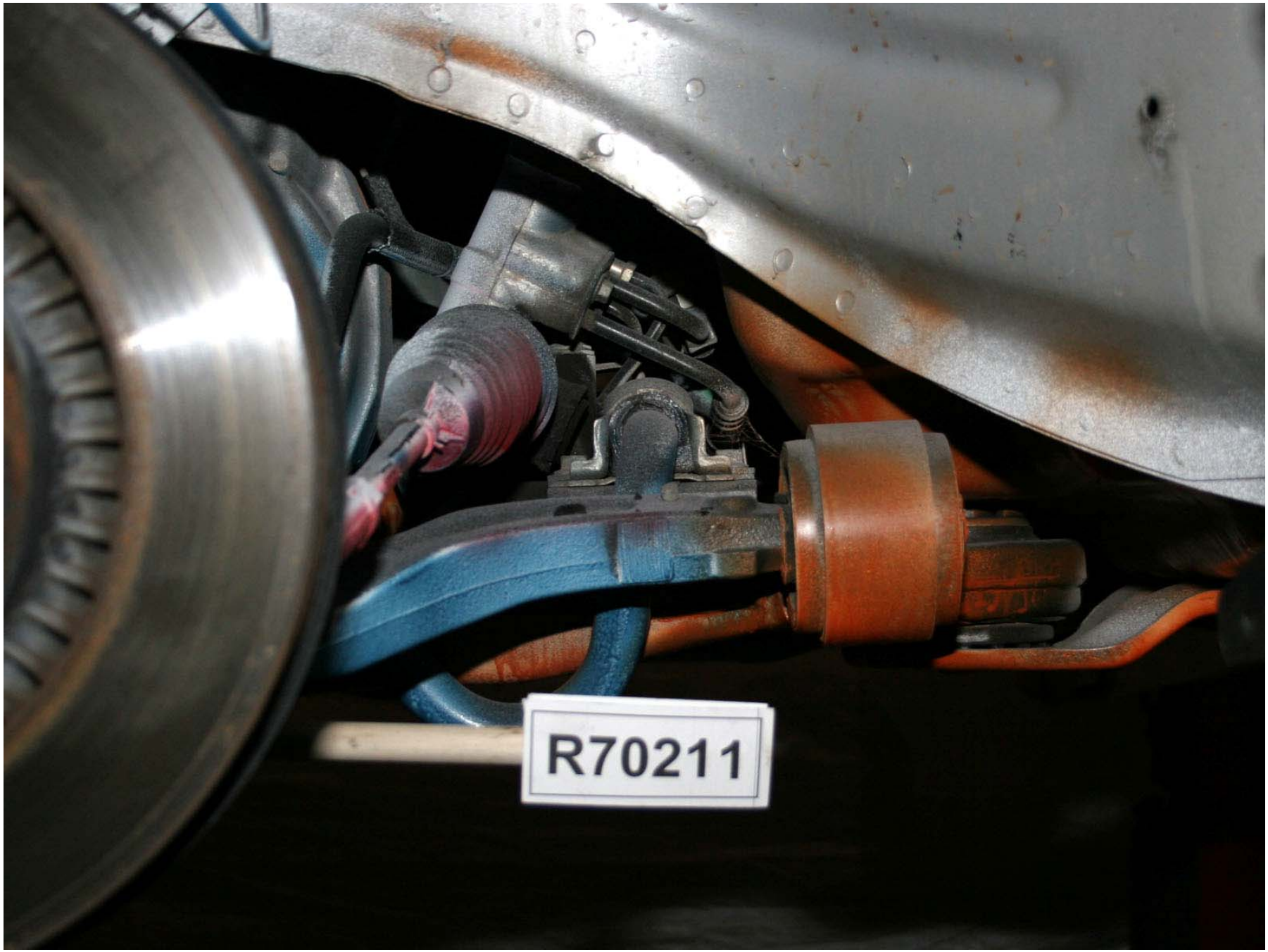

Figure A-247: Target Vehicle Pre-Test Sway Bar Left Side Mounting Bolts

Figure A-248: Target Vehicle Post-Test Sway Bar Left Side Mounting Bolts

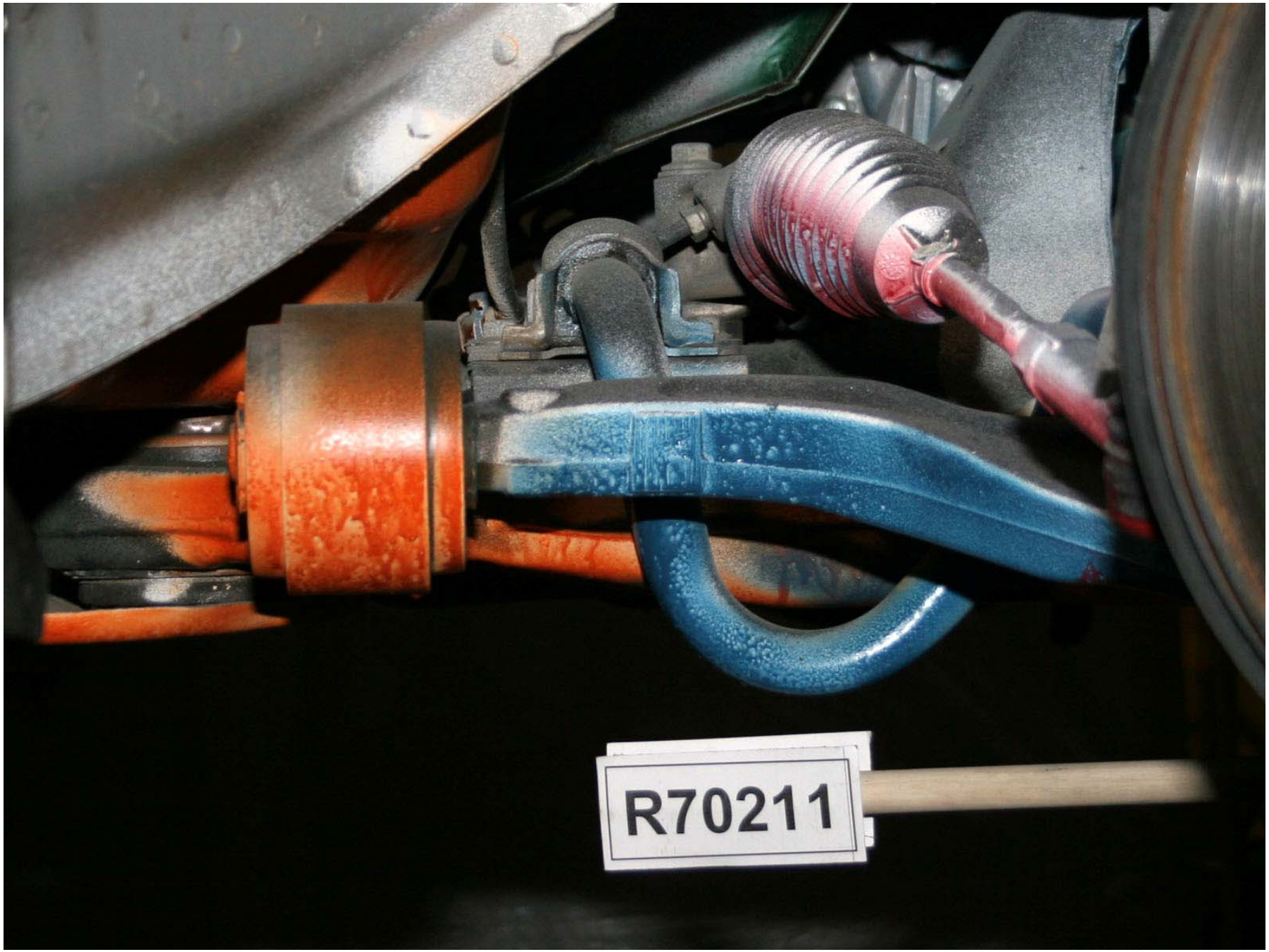

Figure A-249: Target Vehicle Pre-Test Sway Bar Right Side Mounting Bolts

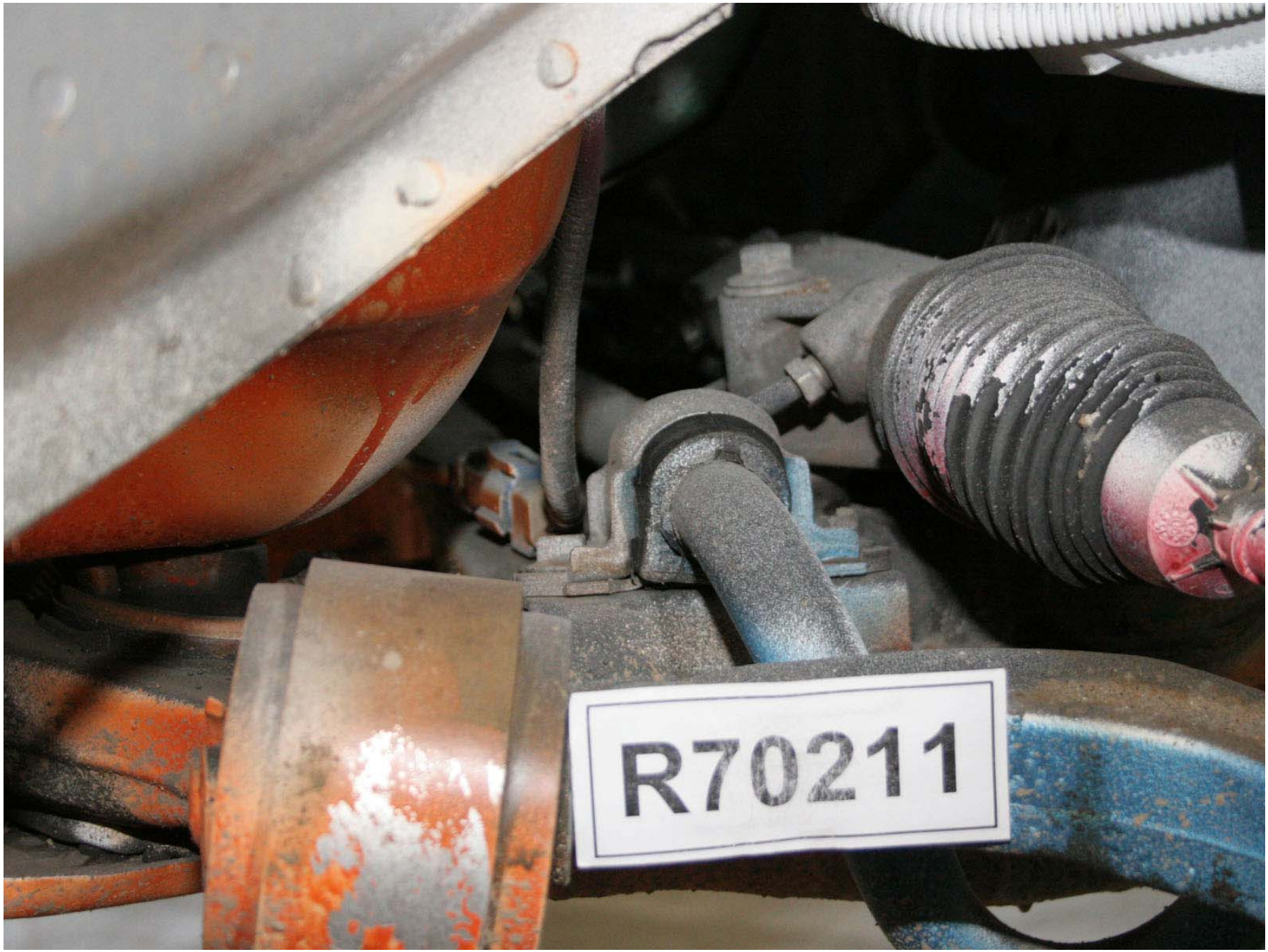

Figure A-250: Target Vehicle Post-Test Sway Bar Right Side Mounting Bolts

Figure A-251: Target Vehicle Pre-Test Front Door Panel

Figure A-252: Test Vehicle Post-Test Front Door Panel

Figure A-253: Target Vehicle Pre-Test Driver Dummy Right Side View

Figure A-254: Test Vehicle Post-Test Driver Dummy Right Side View

Figure A-255: Target Vehicle Pre-Test Driver Dummy Front View

Figure A-256: Target Vehicle Post-Test Driver Dummy Front View

Figure A-257: Target Vehicle Pre-Test Driver Dummy Left Side View (Door Open)

Figure A-258: Target Vehicle Post-Test Driver Dummy Left Side View (Door Open)

Figure A-259: Target Vehicle Pre-Test Driver Dummy Abdomen Front View

Figure A-260: Target Vehicle Post-Test Driver Dummy Abdomen Front View

Figure A-261: Target Vehicle Pre-Test Driver Dummy Abdomen Side View

Figure A-262: Target Vehicle Post-Test Driver Dummy Abdomen Side View

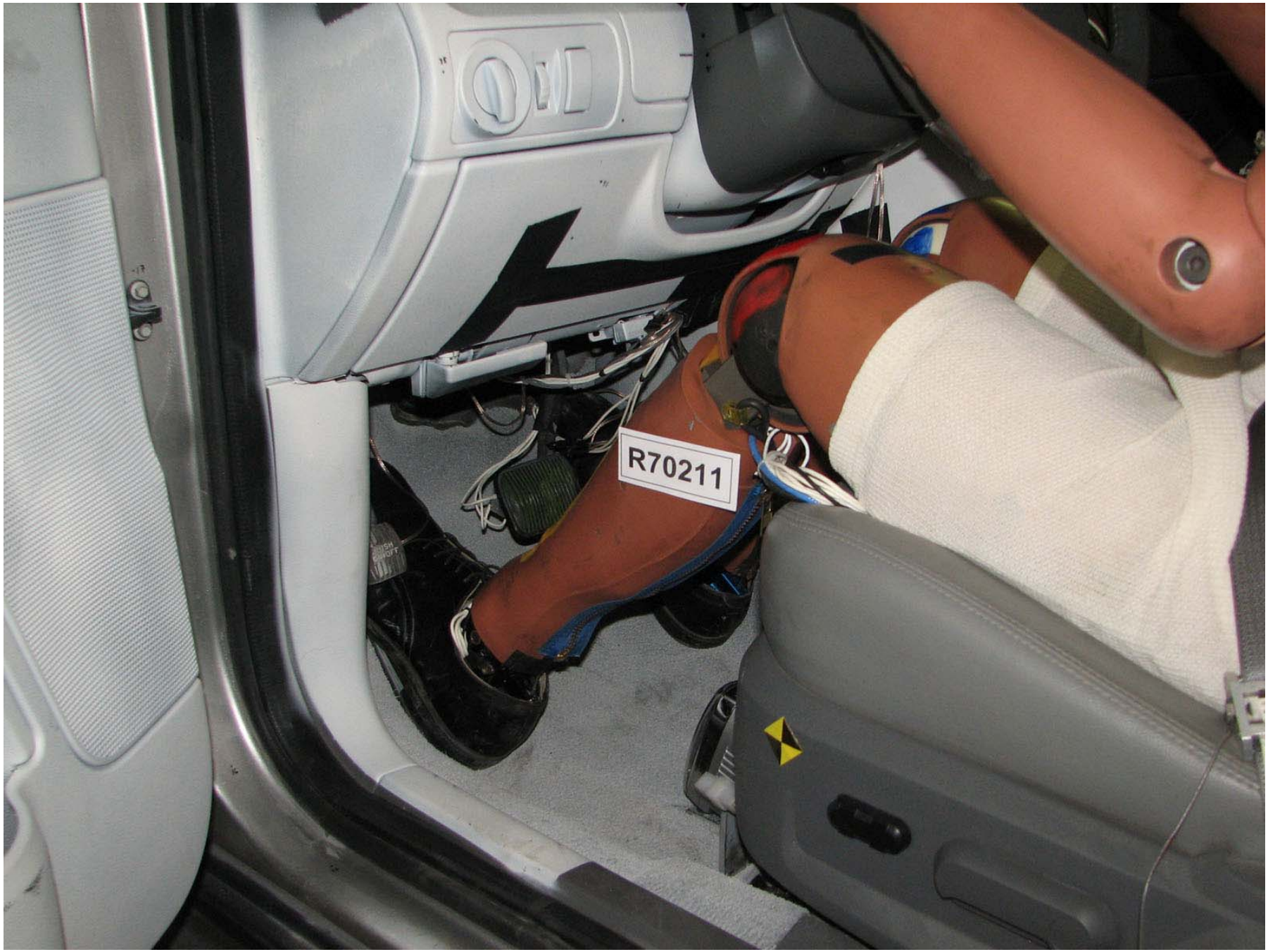

Figure A-263: Target Vehicle Pre-Test Driver Dummy Feet Positioning

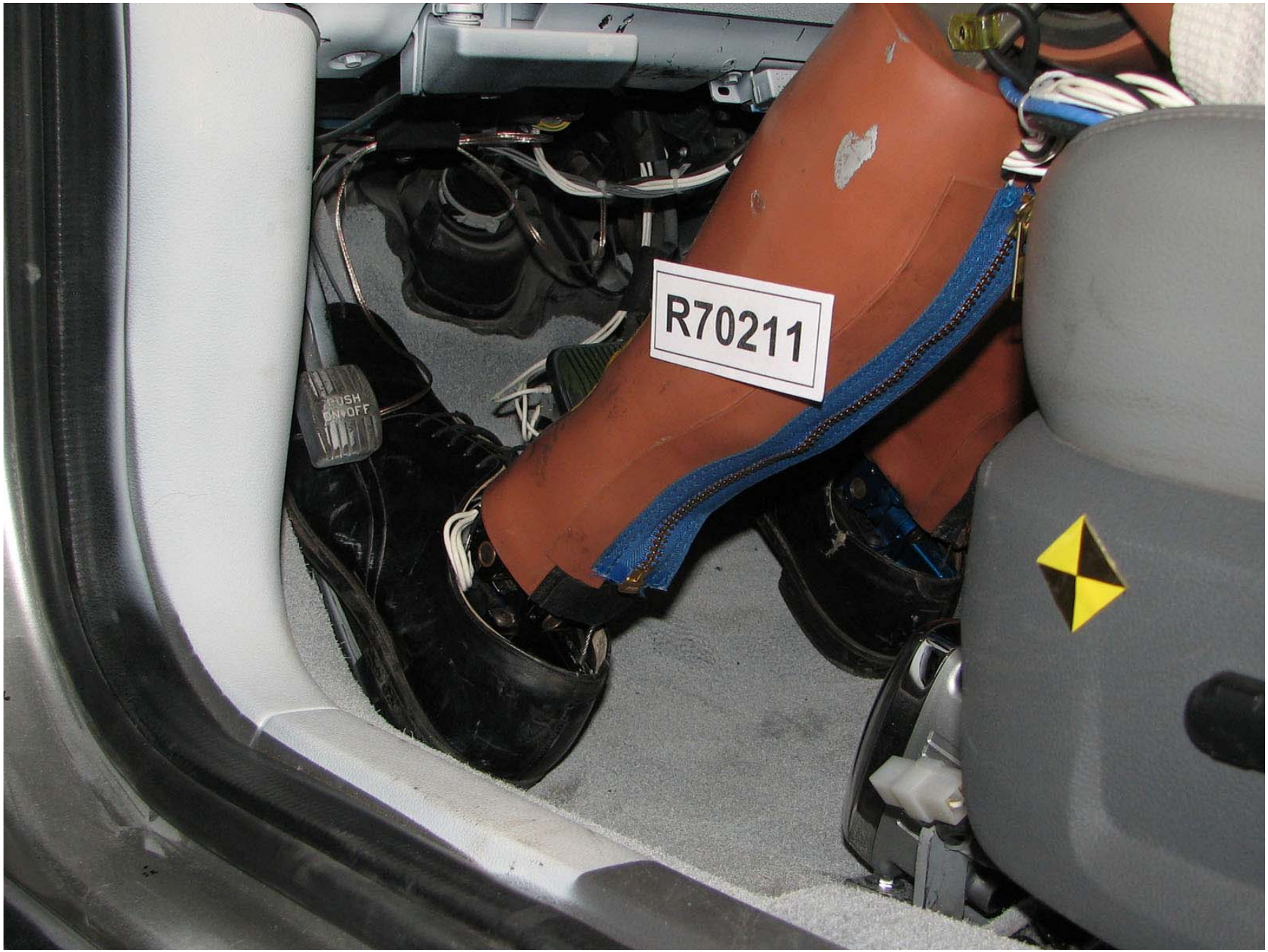

Figure A-264: Target Vehicle Pre-Test Driver Dummy Feet Positioning

Figure A-265: Target Vehicle Pre-Test Driver Dummy Feet Positioning

Figure A-266: Target Vehicle Post-Test Driver Dummy Feet Positioning

Figure A-267: Target Vehicle Post-Test Driver Dummy Feet Positioning

Figure A-268: Target Vehicle Post-Test Driver Dummy Feet Positioning

Figure A-269: Target Vehicle Pre-Test Driver Dummy Left Side View (Through Window)

Figure A-270: Target Vehicle Post-Test Driver Dummy Left Side View (Through Window)

Figure A-271: Target Vehicle Pre-Test Driver Dummy Clearance from Door

Figure A-272: Target Vehicle Post-Test Driver Dummy Clearance from Door

Figure A-273: Target Vehicle Pre-Test Driver's Side Knee Bolster

Figure A-274: Target Vehicle Post-Test Driver's Side Knee Bolster

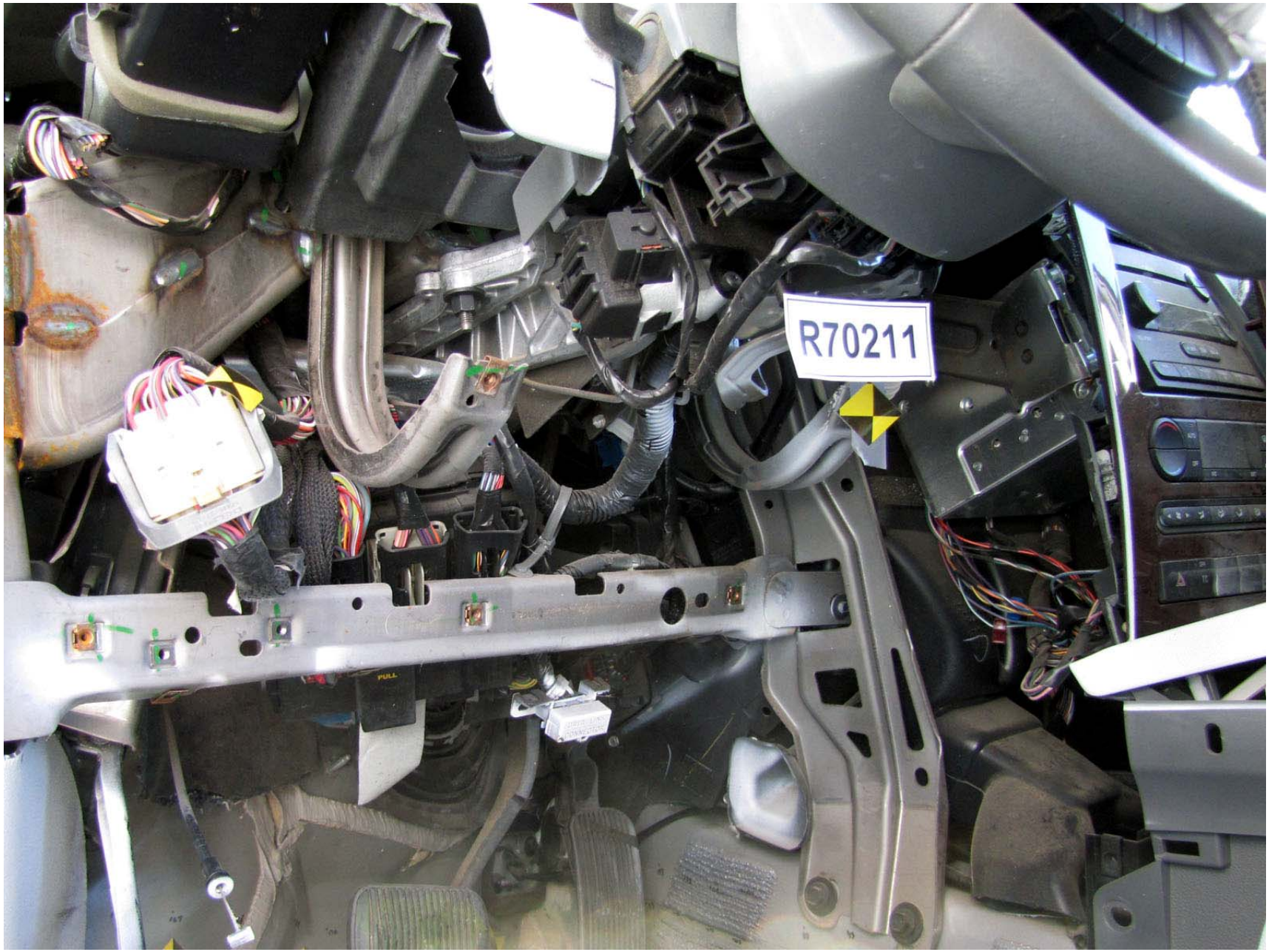

Figure A-275: Target Vehicle Post-Test Driver's Side Knee Bolster, ¾ View

Figure A-276: Target Vehicle Post-Test Driver's Side Knee Bolster

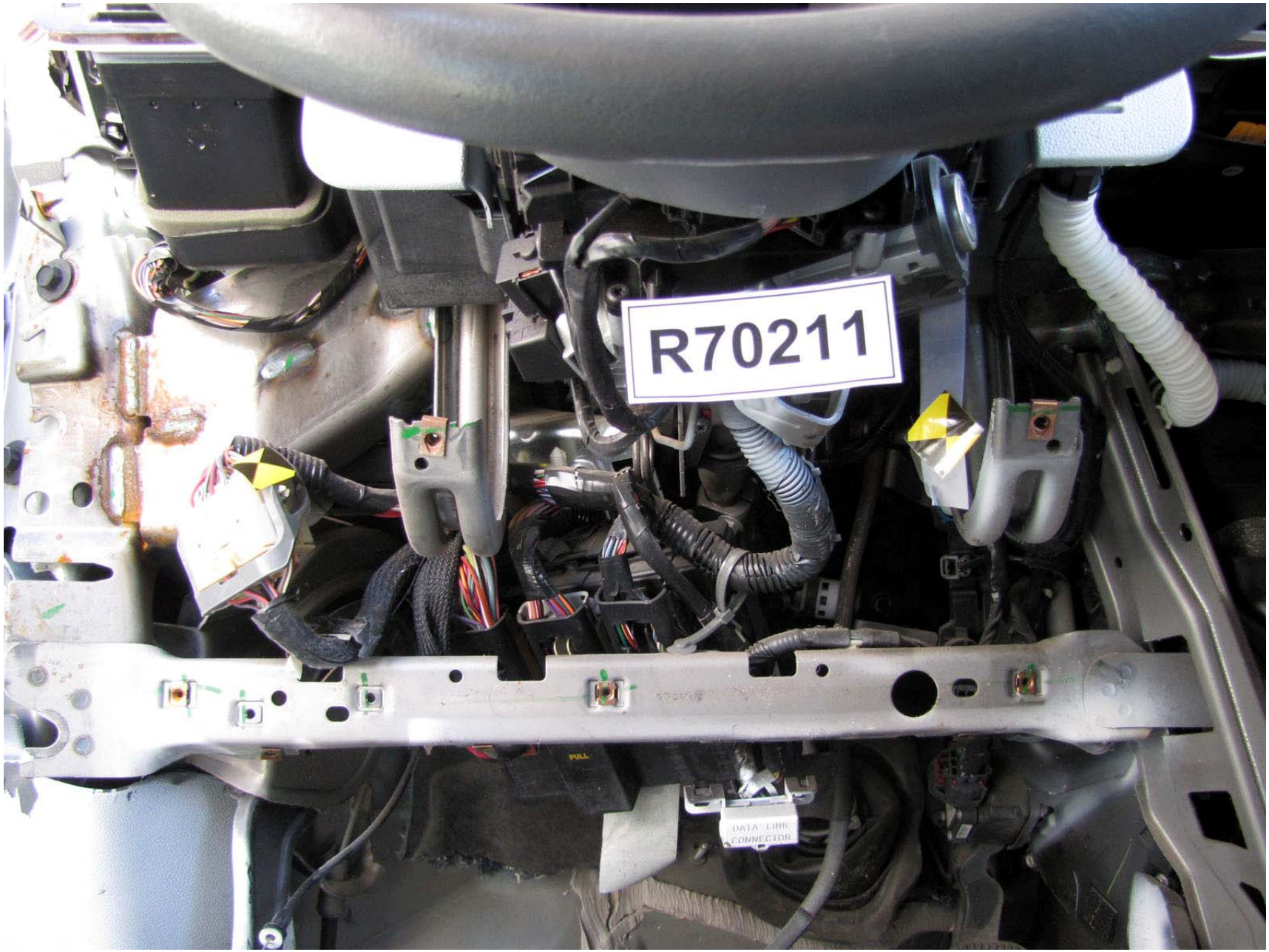

Figure A-277: Target Vehicle Post-Test Driver's Side Knee Bolster

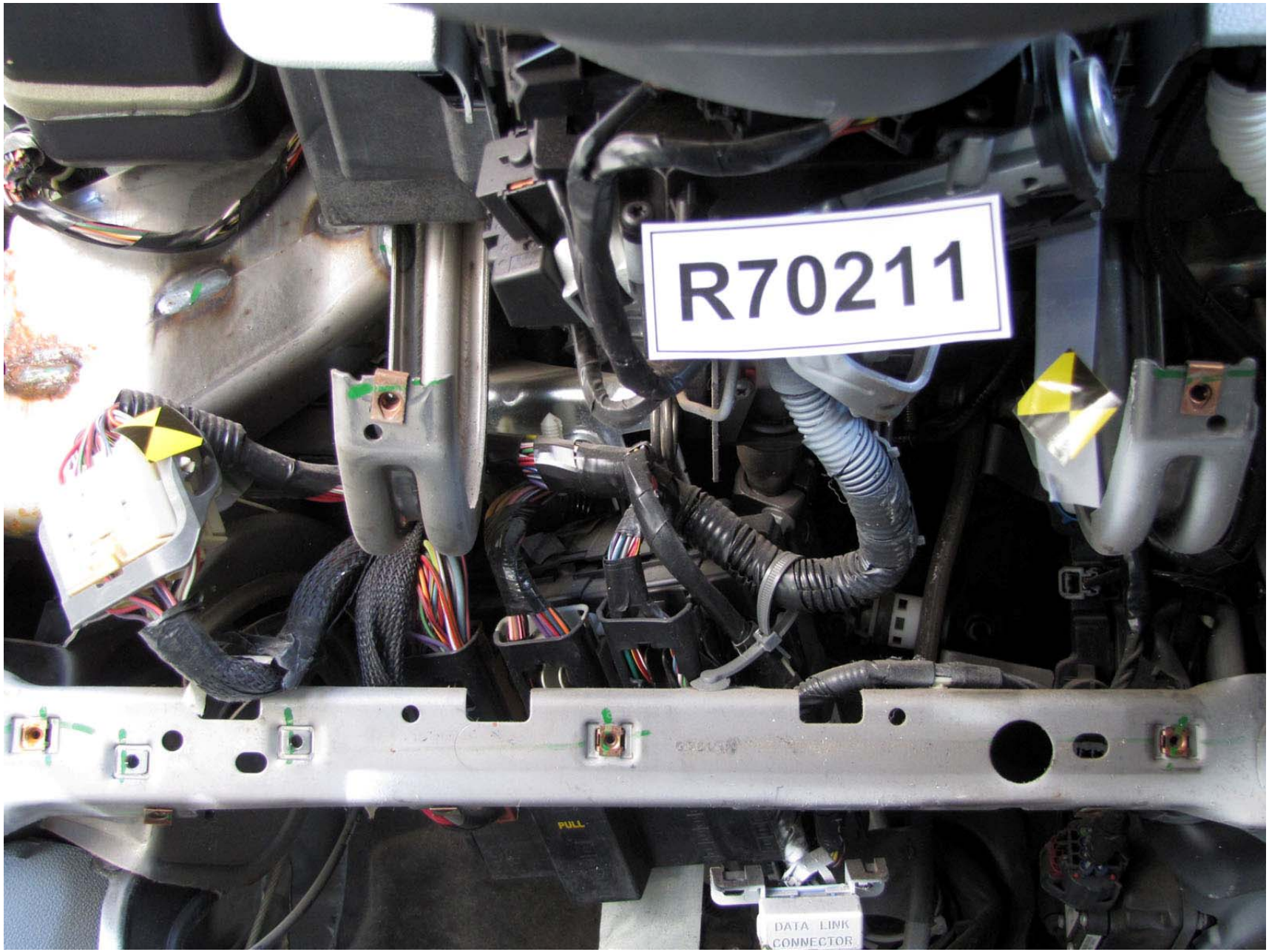

Figure A-278: Target Vehicle Post-Test Driver's Side Knee Bolster

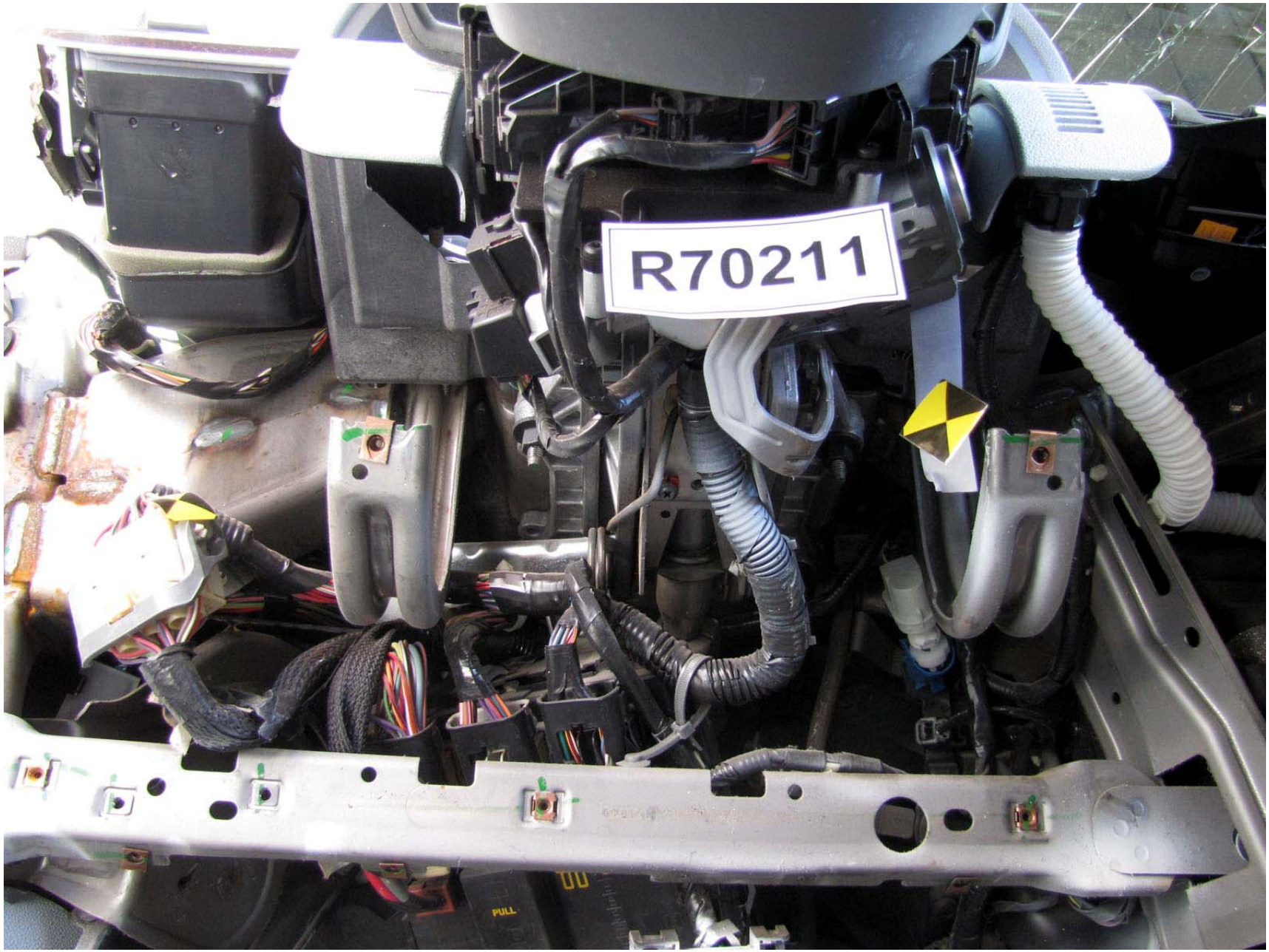

Figure A-279: Target Vehicle Post-Test Driver's Side Knee Bolster

Figure A-280: Target Vehicle Pre-Test Driver Dummy Head

Figure A-281: Target Vehicle Post-Test Driver Dummy Head

Figure A-282: Target Vehicle Post-Test Driver Dummy Contact, Airbag

Figure A-283: Target Vehicle Post-Test Driver Dummy Contact, Headrest

Figure A-284: Target Vehicle Post-Test Driver Dummy Contact, Right Arm

Figure A-285: Target Vehicle Post-Test Driver Dummy Contact, Left Arm

Figure A-286: Target Vehicle Post-Test Driver Dummy Contact, Door Panel

Figure A-287: Target Vehicle Post-Test Driver Dummy Contact, Driver Door Panel

Figure A-288: Target Vehicle Pre-Test Rear Door Panel

Figure A-289: Target Vehicle Post-Test Rear Door Panel

Figure A-290: Target Vehicle Pre-Test Passenger Dummy Right Side View

Figure A-291: Target Vehicle Post-Test Passenger Dummy Right Side View

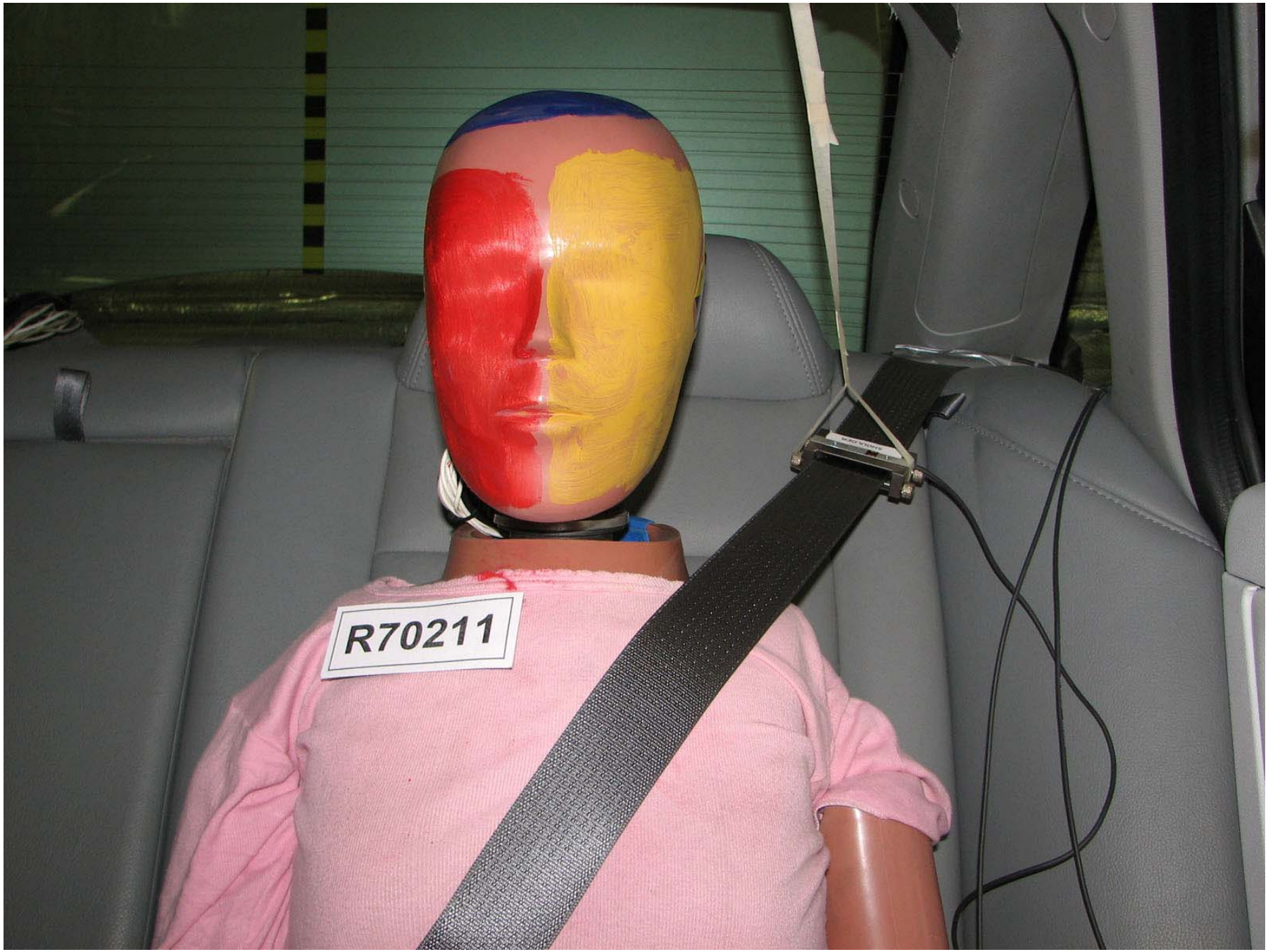

Figure A-292: Target Vehicle Pre-Test Passenger Dummy Front View

Figure A-293: Target Vehicle Post-Test Passenger Dummy Front View

Figure A-294: Target Vehicle Pre-Test Passenger Dummy Left Side View (Door Open)

Figure A-295: Target Vehicle Post-Test Passenger Dummy Left Side View (Door Open)

Figure A-296: Target Vehicle Pre-Test Passenger Dummy Feet Positioning

Figure A-297: Target Vehicle Pre-Test Passenger Dummy Feet Positioning

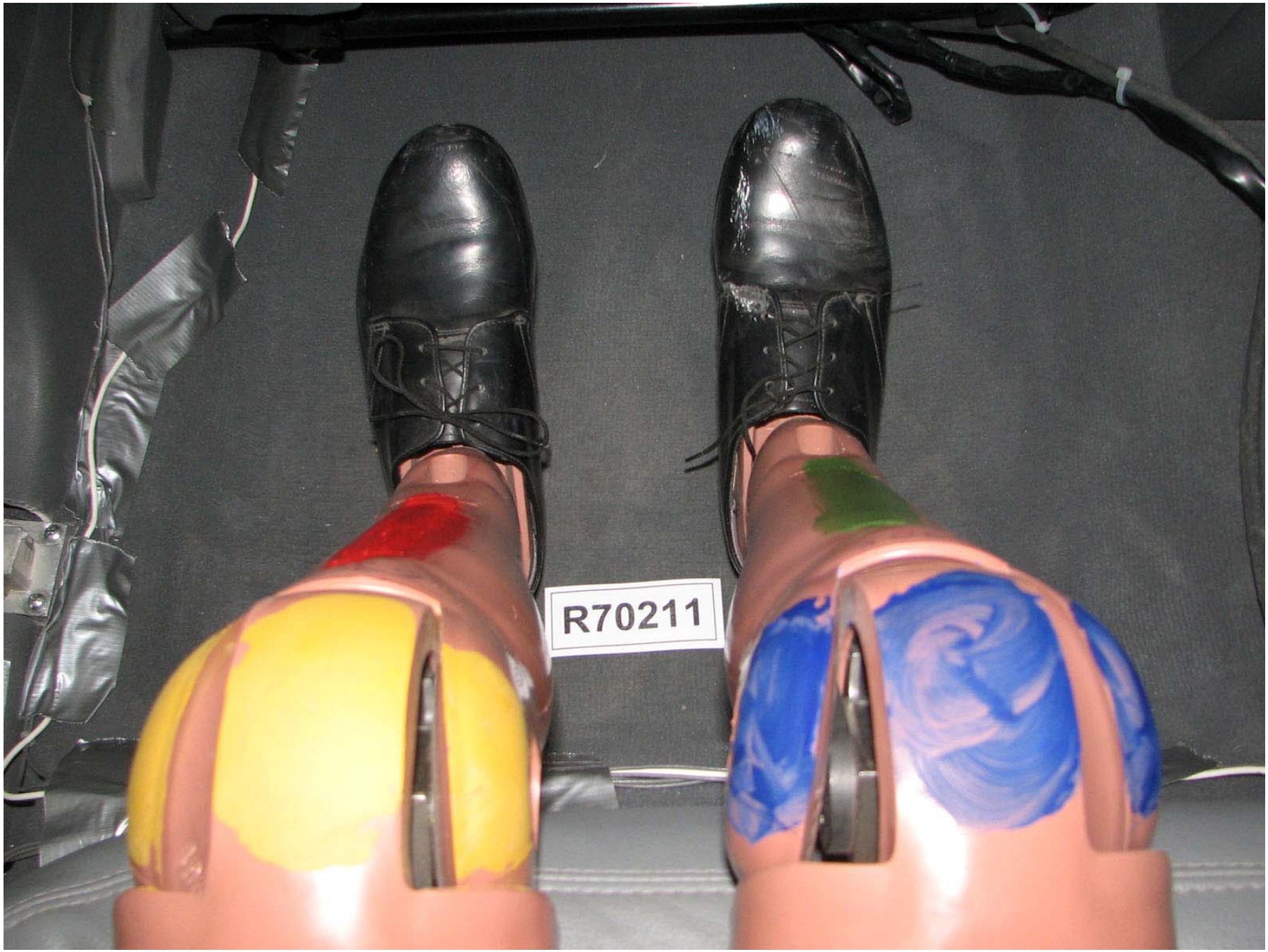

Figure A-298: Target Vehicle Pre-Test Passenger Dummy Feet Positioning

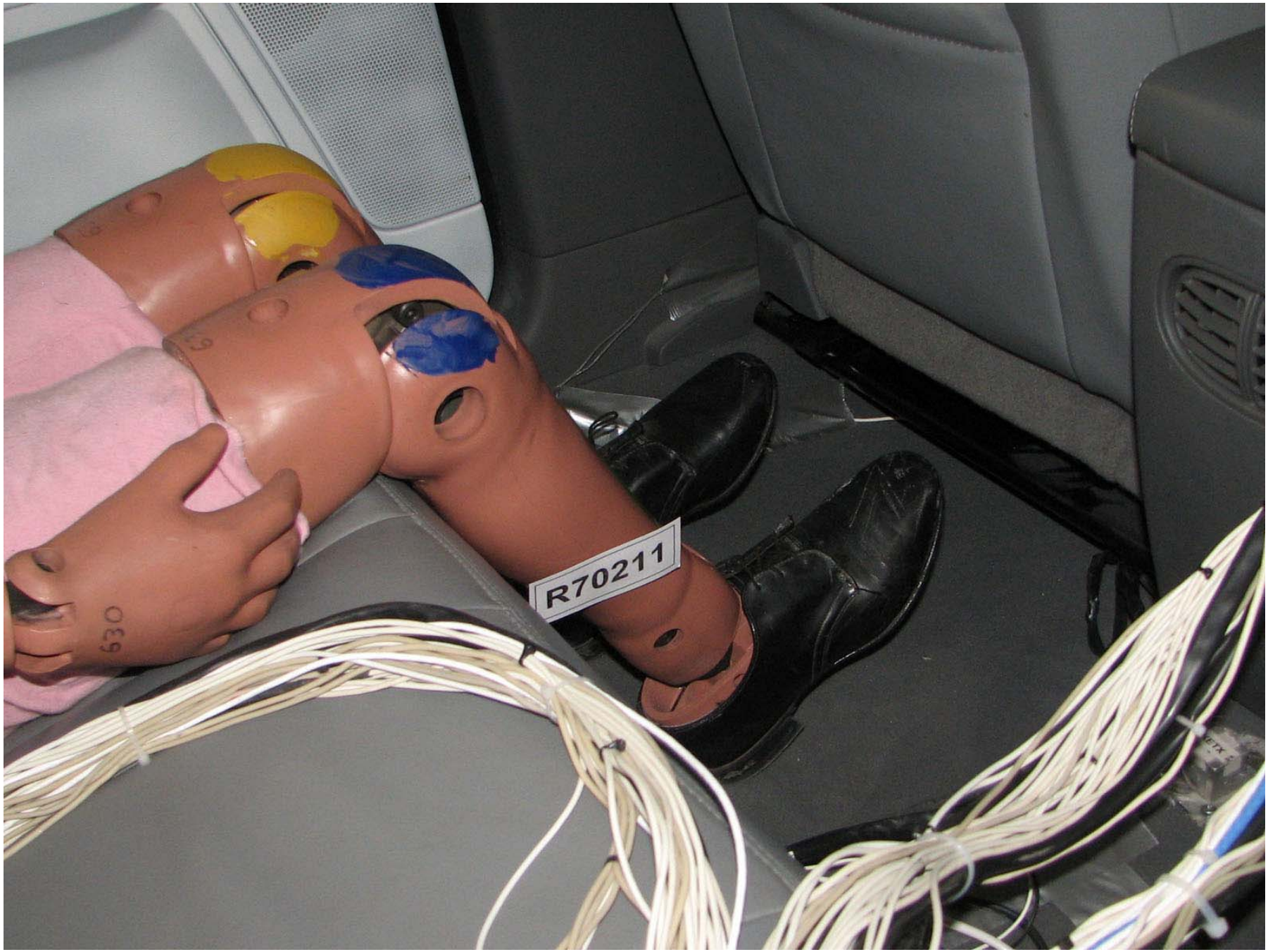

Figure A-299: Target Vehicle Pre-Test Passenger Dummy Feet Positioning

Figure A-300: Target Vehicle Post-Test Passenger Dummy Feet Positioning

Figure A-301: Target Vehicle Post-Test Passenger Dummy Feet Positioning

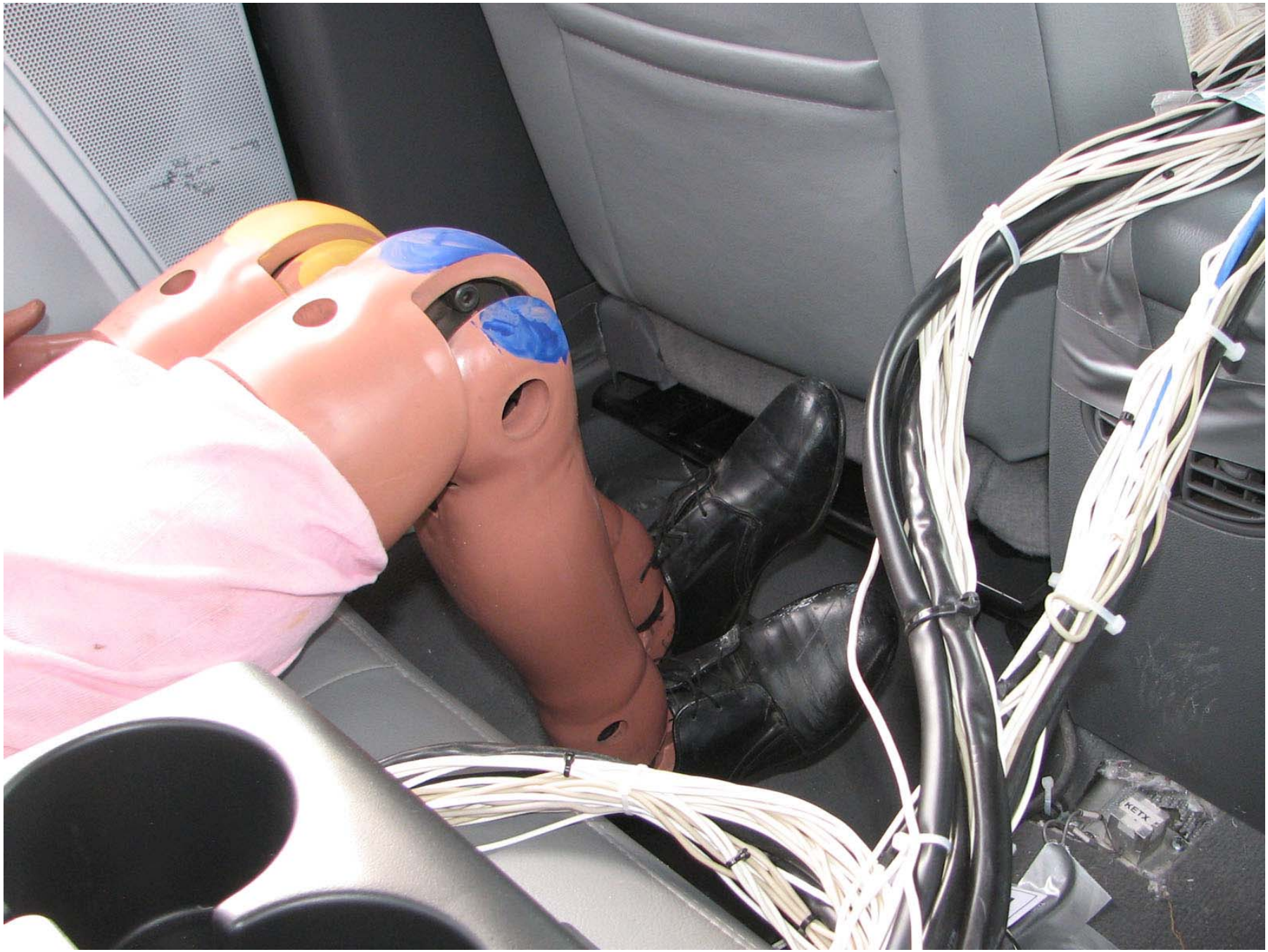

Figure A-302: Target Vehicle Post-Test Passenger Dummy Feet Positioning

Figure A-303: Target Vehicle Pre-Test Passenger Dummy Left Side View (Through Window)

Figure A-304: Target Vehicle Post-Test Passenger Dummy Left Side View (Through Window)

Figure A-305: Target Vehicle Pre-Test Passenger Dummy Clearance from Door

Figure A-306: Target Vehicle Pre-Test Passenger's Side Knee Bolster

Figure A-307: Target Vehicle Post-Test Passenger Dummy Clearance from Door

Figure A-308: Test Vehicle Post-Test Passenger's Side Knee Bolster

Figure A-309: Target Vehicle Pre-Test Passenger Dummy Head

Figure A-310: Target Vehicle Post-Test Passenger Dummy Head

Figure A-311: Target Vehicle Post-Test Passenger Dummy Contact, Seat Back

Figure A-312: Target Vehicle Post-Test Passenger Dummy Contact, Seat Back

Figure A-313: Target Vehicle Post-Test Passenger Dummy Contact, Door Panel

Figure A-314: Target Vehicle Pre-Test Driver Floorpan

Figure A-315: Target Vehicle Post-Test Driver Floorpan

Figure A-316: Target Vehicle Pre-Test Driver Floorpan Left ¾ View, Seat Cushion Height

Figure A-317: Target Vehicle Post-Test Driver Floorpan Left ¾ View, Seat Cushion Height

Figure A-318: Target Vehicle Pre-Test Driver Floorpan Left ¾ View, Sill Height

Figure A-319: Target Vehicle Post-Test Driver Floorpan Left ¾ View, Sill Height

Figure A-320: Target Vehicle Pre-Test Driver Floorpan, Seat Cushion Height

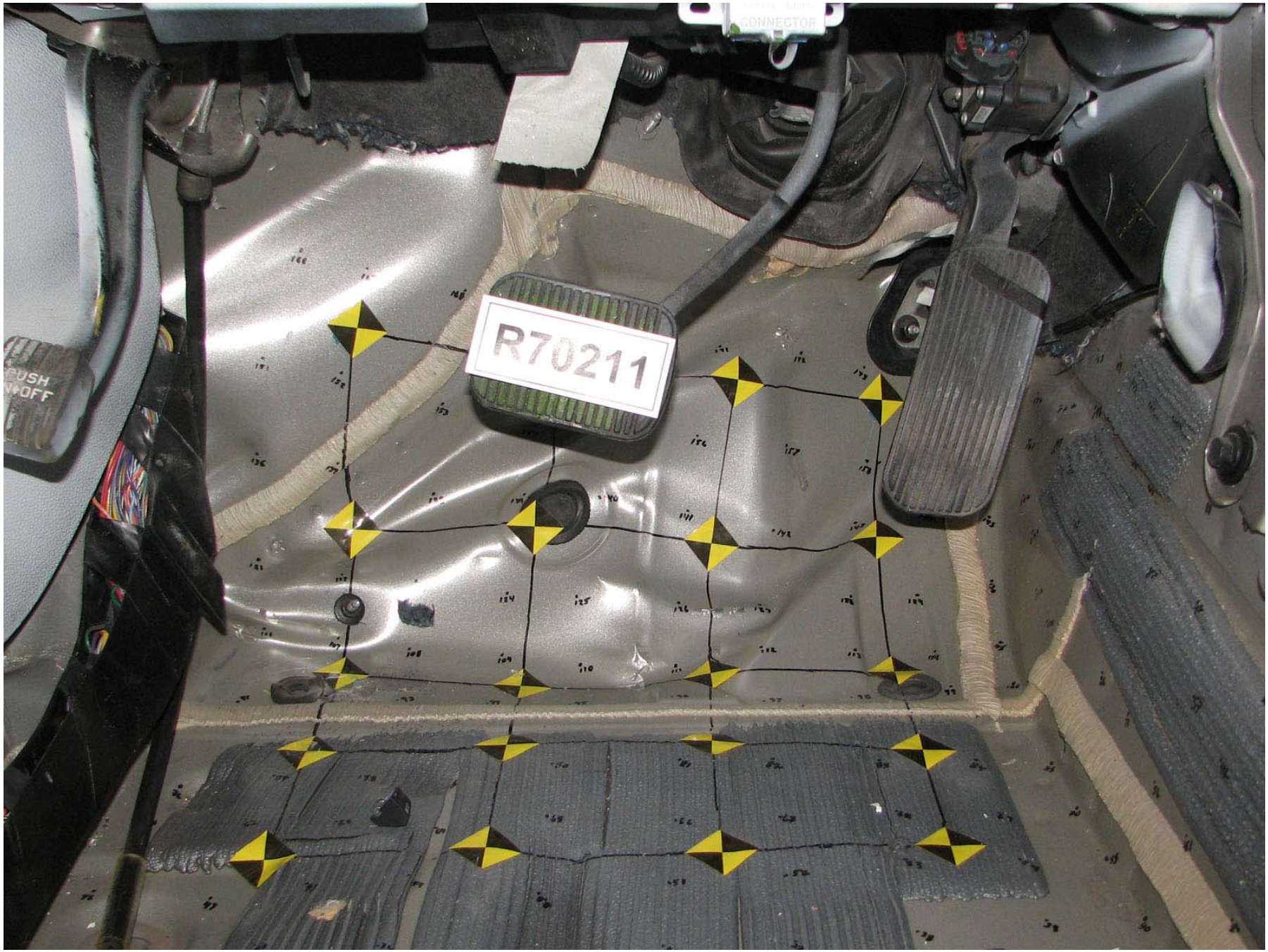

Figure A-321: Target Vehicle Post-Test Driver Floorpan, Seat Cushion Height

Figure A-322: Target Vehicle Pre-Test Driver Floorpan, Sill Height

Figure A-323: Target Vehicle Post-Test Driver Floorpan, Sill Height

Figure A-324: Target Vehicle Pre-Test Driver Floorpan Right ¾ View, Seat Cushion Height

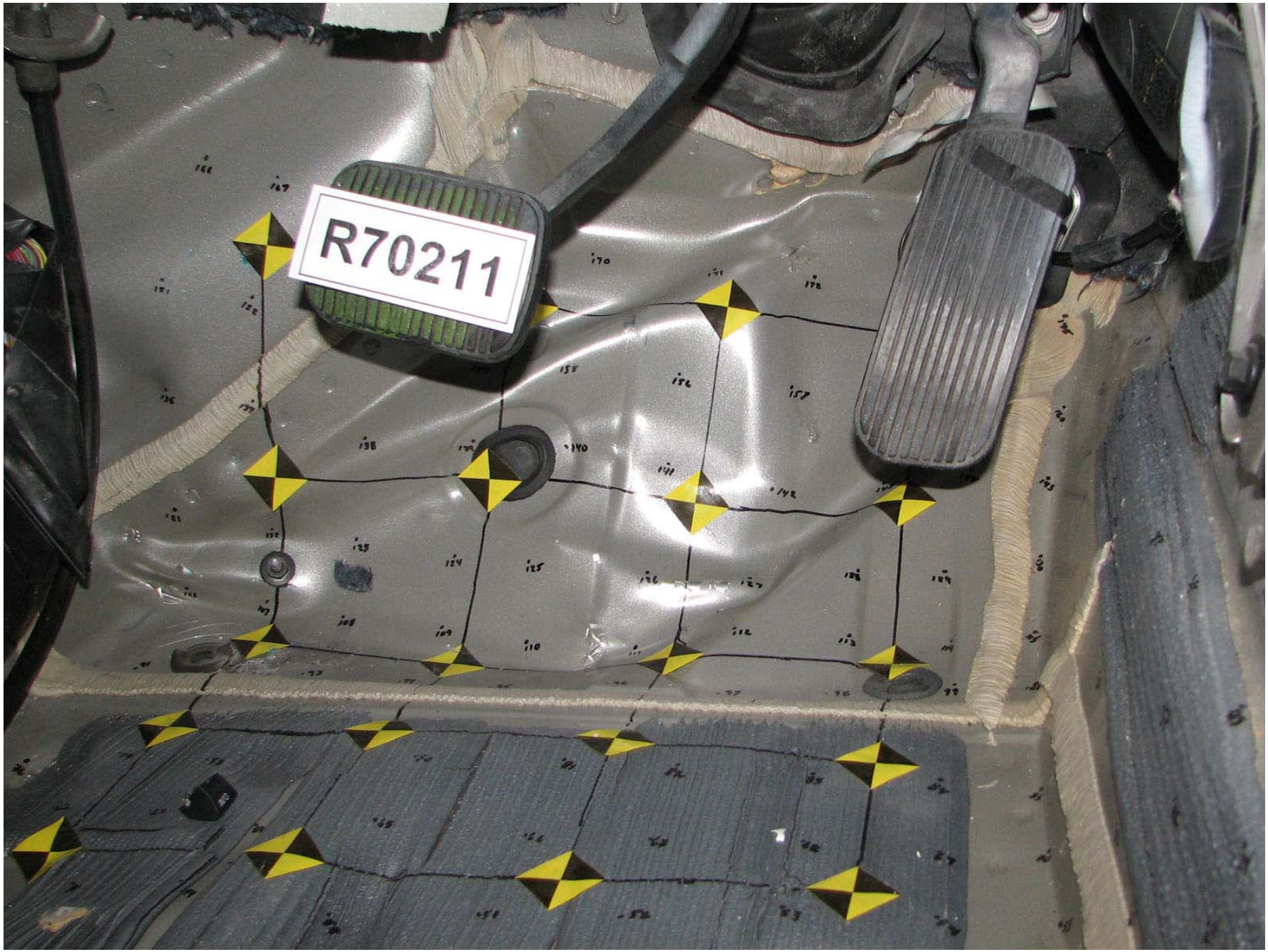

Figure A-325: Target Vehicle Post-Test Driver Floorpan Right ¾ View, Seat Cushion Height

Figure A-326: Target Vehicle Pre-Test Driver Floorpan Right ¾ View, Sill Height

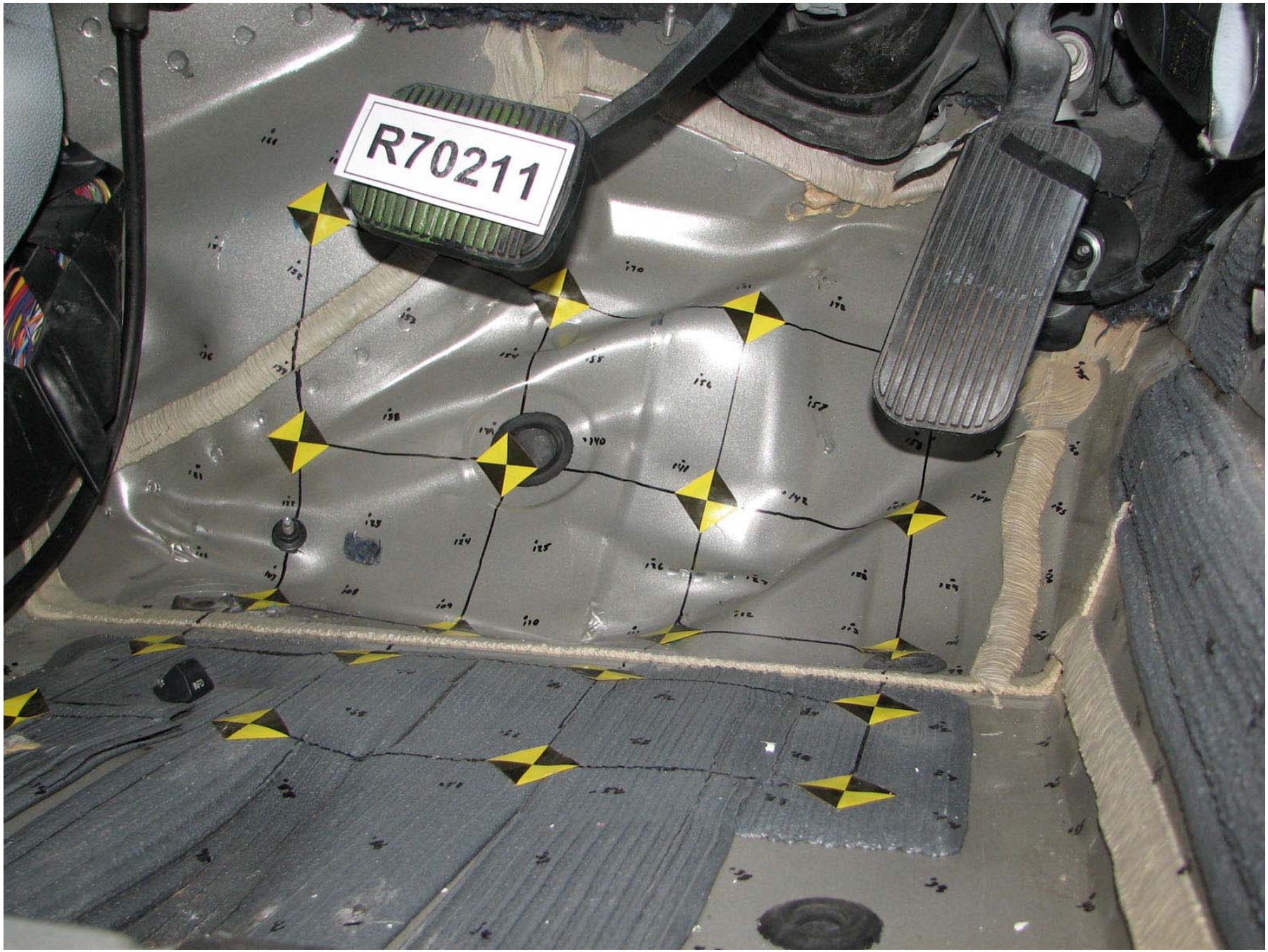

Figure A-327: Target Vehicle Post-Test Driver Floorpan Right ¾ View, Sill Height

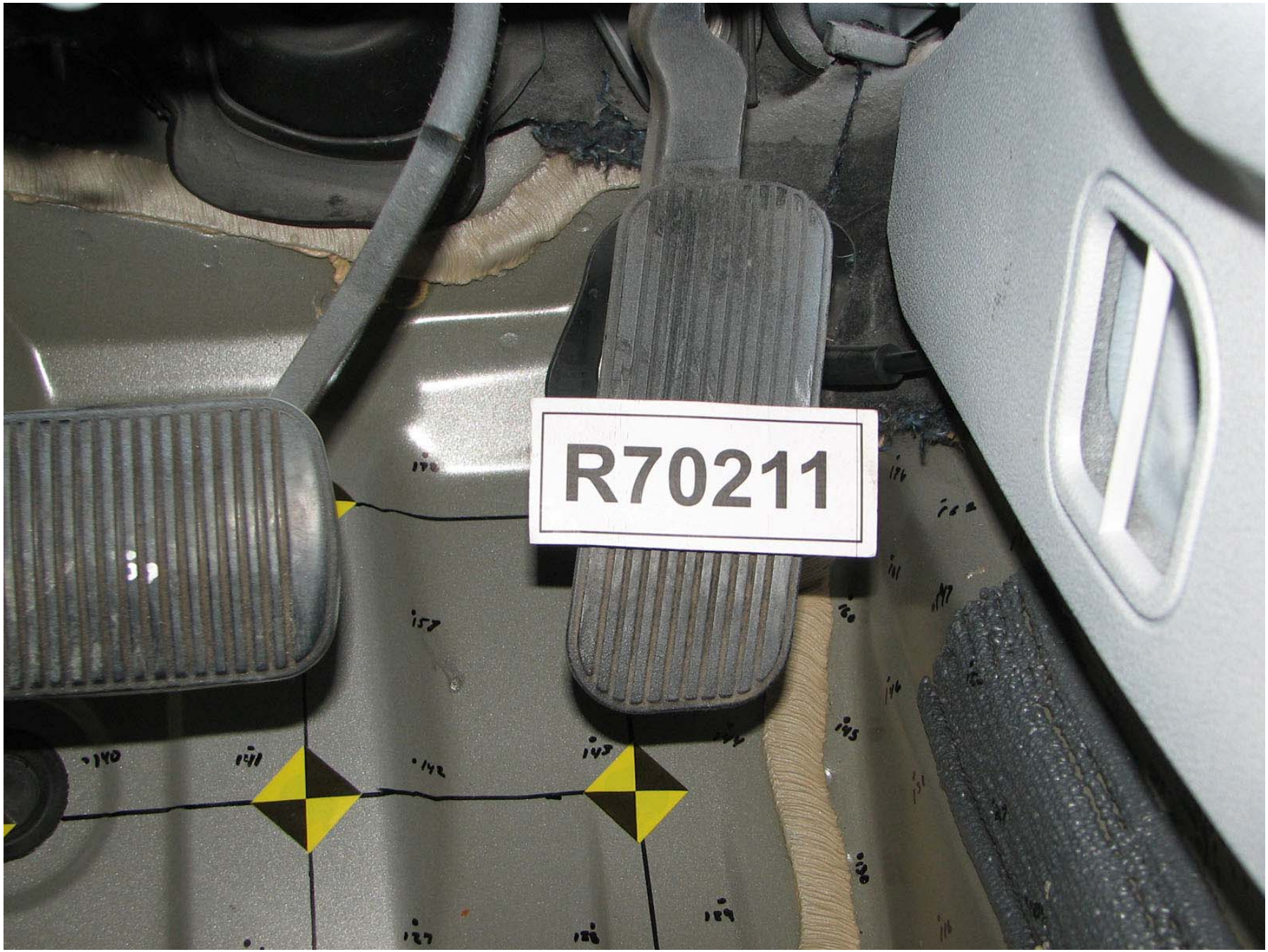

Figure A-328: Target Vehicle Pre-Test Accelerator Pedal, Seat Cushion Height

Figure A-329: Target Vehicle Post-Test Accelerator Pedal, Seat Cushion Height

Figure A-330: Target Vehicle Pre-Test Accelerator Pedal Side View, In Front of Brake Pedal

Figure A-331: Target Vehicle Pre-Test Accelerator Pedal Side View, In Front of Brake Pedal

Figure A-332: Target Vehicle Pre-Test Accelerator Pedal Side View, Behind Brake Pedal

Figure A-333: Target Vehicle Post-Test Accelerator Pedal Side View, Behind Brake Pedal

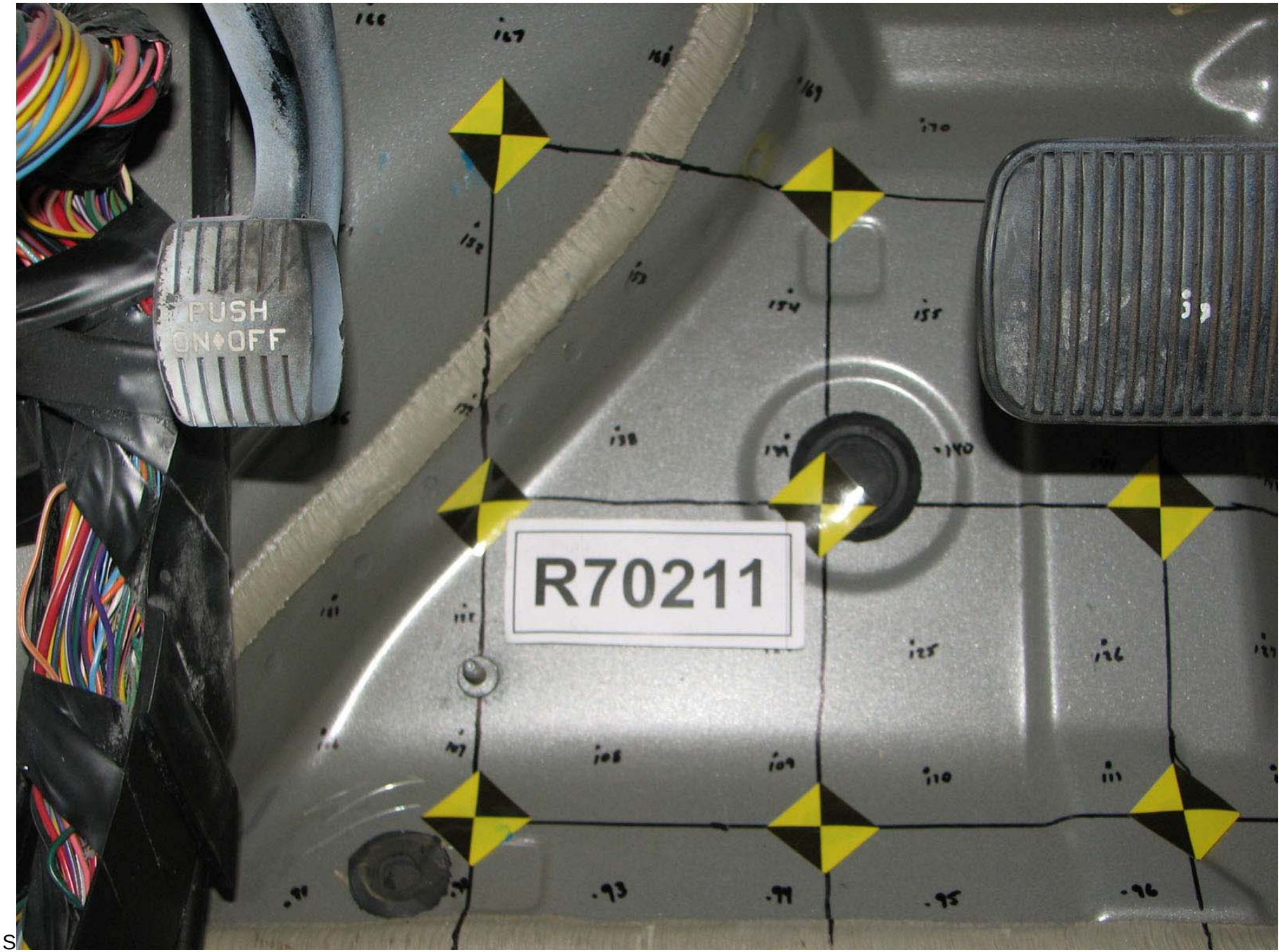

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Figure A-334: Target Vehicle Pre-Test Foot Rest, Seat Cushion Height

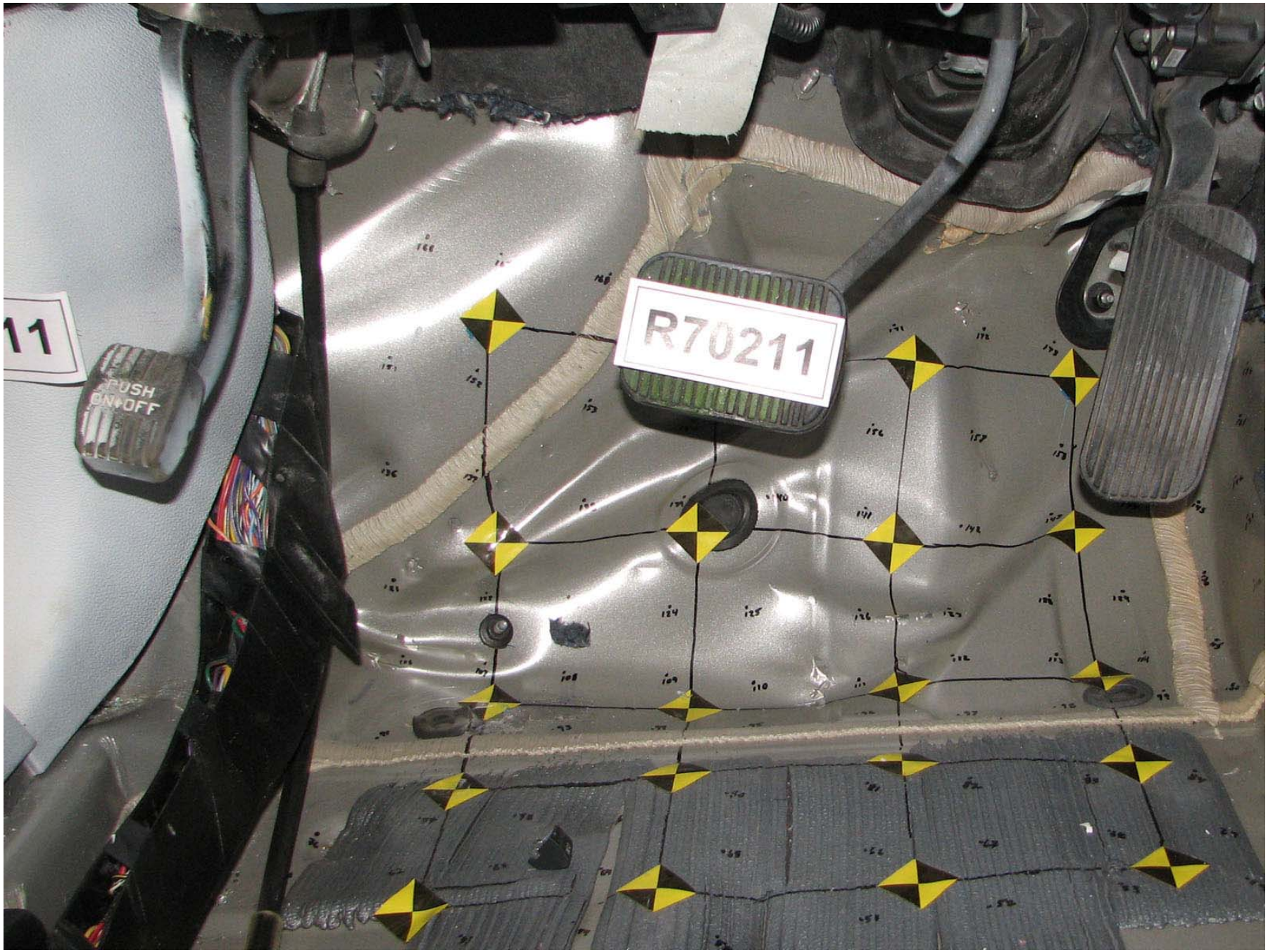

Figure A-335: Target Vehicle Post-Test Foot Rest, Seat Cushion Height

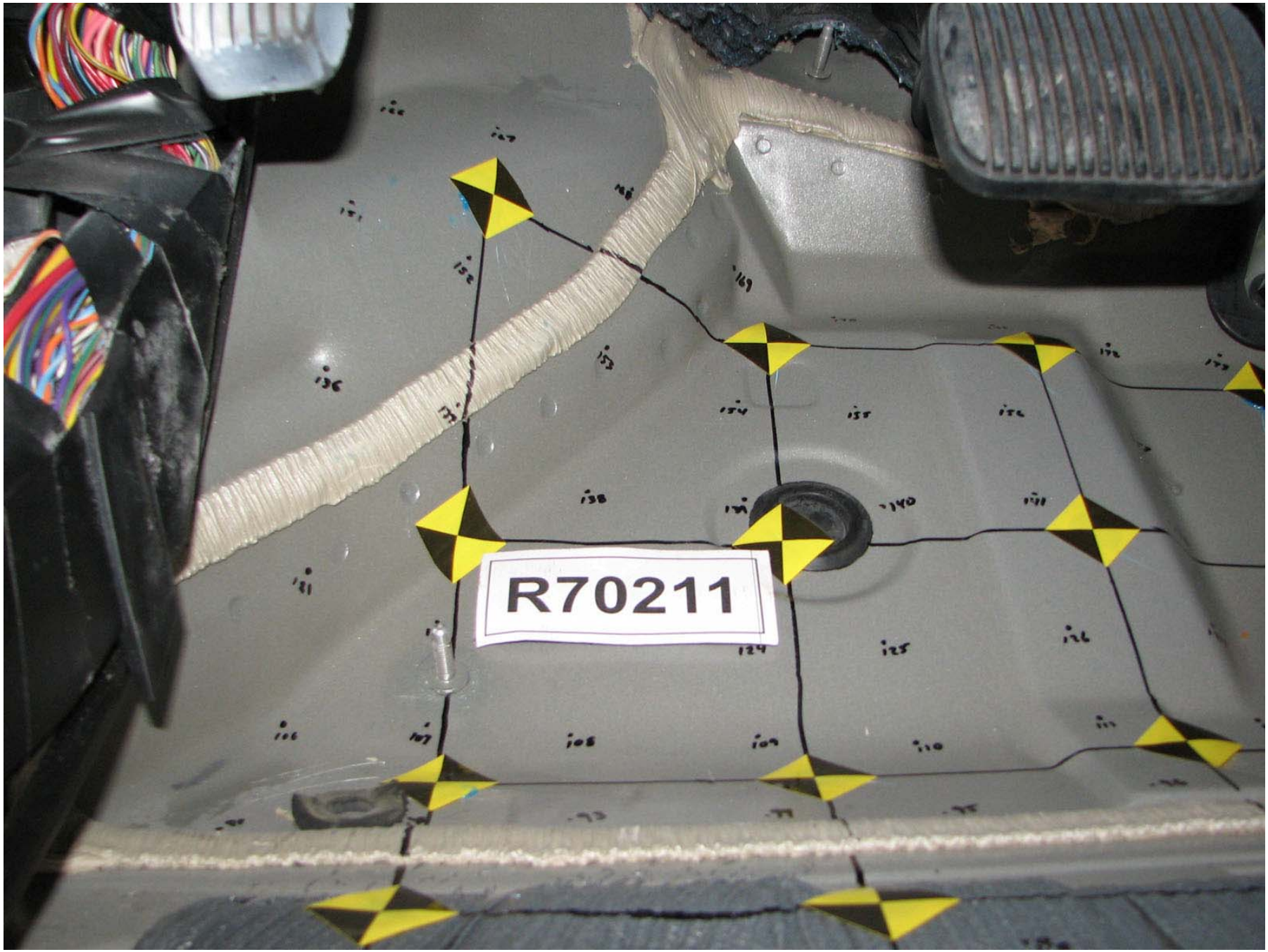

Figure A-336: Target Vehicle Pre-Test Foot Rest, Sill Height

Figure A-337: Target Vehicle Post-Test Foot Rest, Sill Height

Figure A-338: Target Vehicle Pre-Test Structural Member Crush Measurement

Figure A-339: Target Vehicle Post-Test Structural Member Crush Measurement

Figure A-340: Target Vehicle Pre-Test Structural Member Crush Measurement

Figure A-341: Target Vehicle Post-Test Structural Member Crush Measurement

Figure A-342: Target Vehicle Pre-Test Structural Member Crush Measurement

Figure A-343: Target Vehicle Post-Test Structural Member Crush Measurement

Figure A-344: Target Vehicle Pre-Test Structural Member Crush Measurement

Figure A-345: Target Vehicle Pre-Test Structural Member Crush Measurement

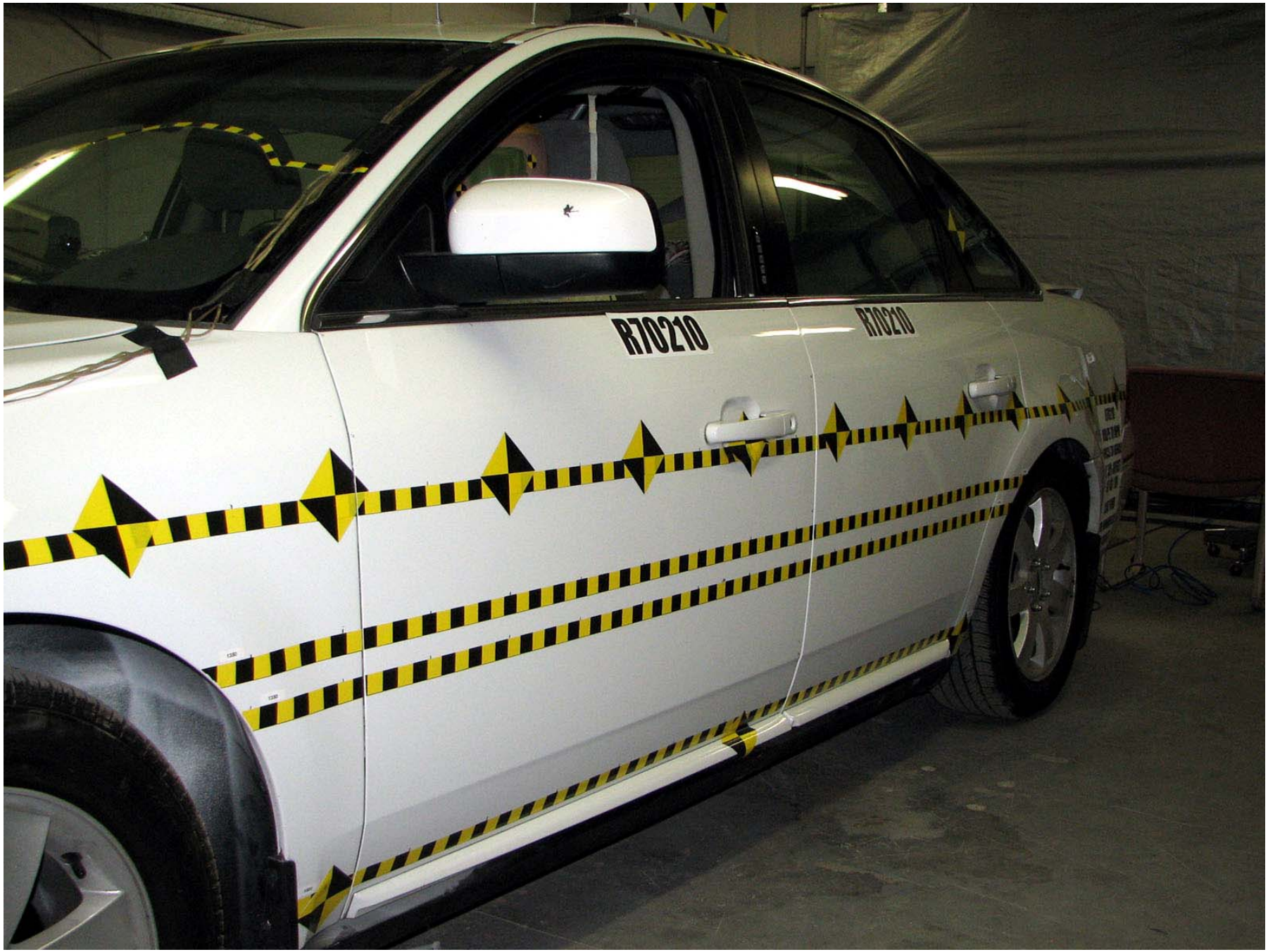

Figure A-346: Bullet Vehicle Pre-Test Front ¾ View of Left Side Doors

Figure A-347: Bullet Vehicle Post-Test Front ¾ View of Left Side Doors

Figure A-348: Bullet Vehicle Pre-Test Rear ¾ View of Left Side Doors

Figure A-349: Bullet Vehicle Post-Test Rear ¾ View of Left Side Doors

Figure A-350: Bullet Vehicle Pre-Test Front ¾ View of Right Side Doors

Figure A-351: Bullet Vehicle Post-Test Front ¾ View of Right Side Doors

Figure A-352: Bullet Vehicle Pre-Test Rear ¾ View of Right Side Doors

Figure A-353: Bullet Vehicle Post-Test Rear ¾ View of Right Side Doors

Figure A-354: Bullet Vehicle Pre-Test Left Front Door

Figure A-355: Bullet Vehicle Post-Test Left Front Door

Figure A-356: Bullet Vehicle Pre-Test Left Rear Door

Figure A-357: Bullet Vehicle Post-Test Left Rear Door

Figure A-358: Bullet Vehicle Pre-Test Right Front Door

Figure A-359: Bullet Vehicle Post-Test Right Front Door

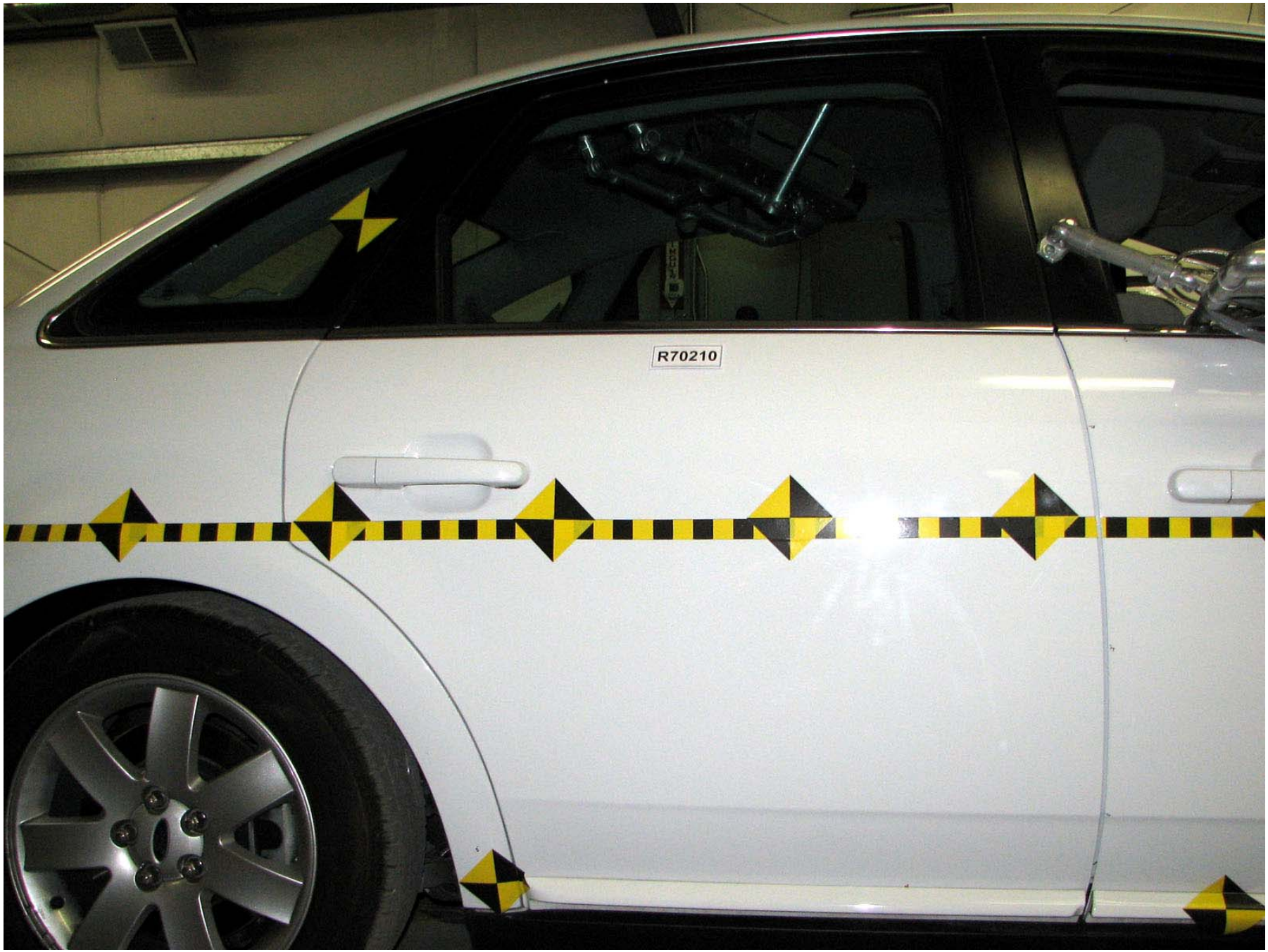

Figure A-360: Bullet Vehicle Pre-Test Right Rear Door

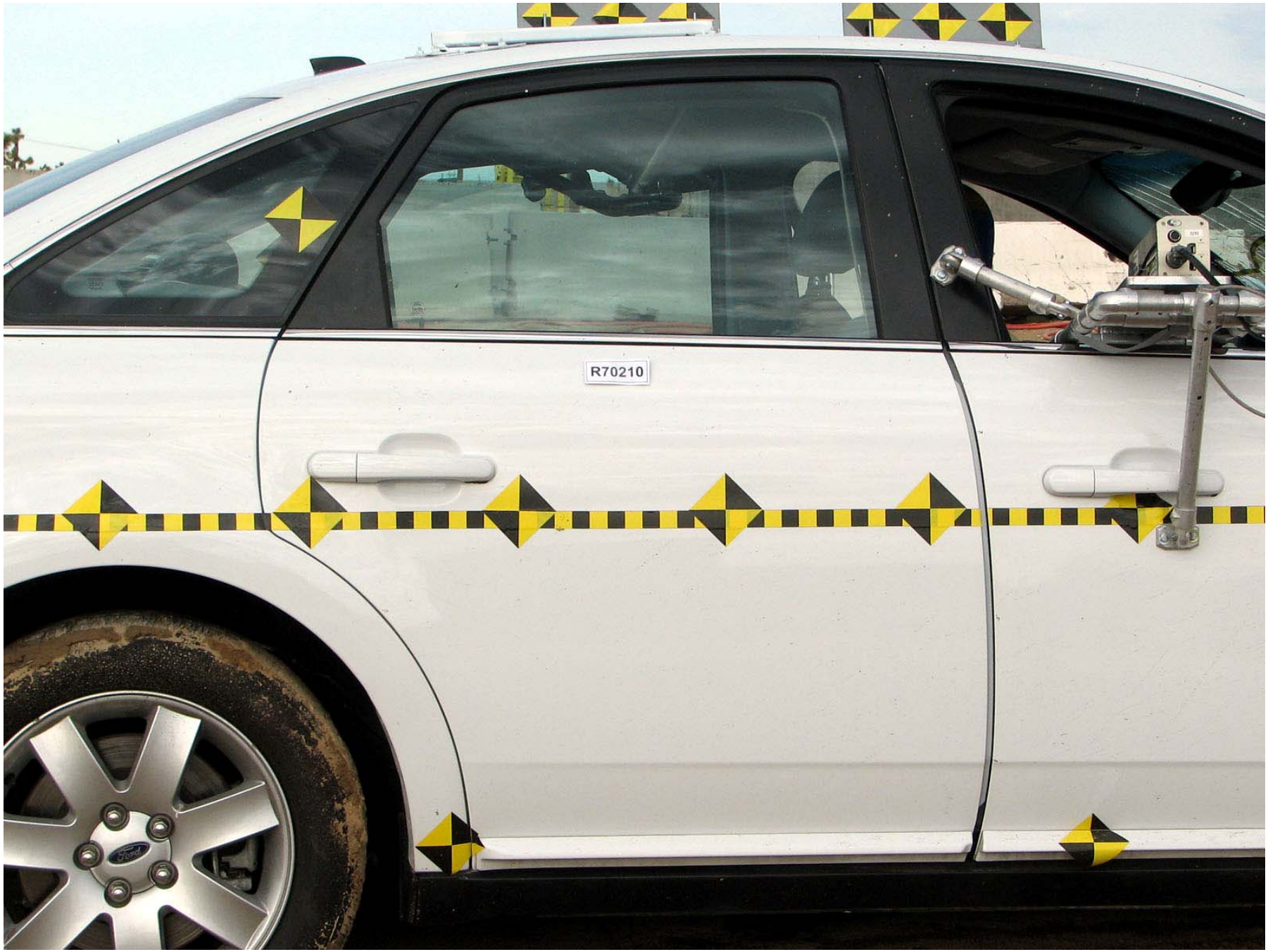

Figure A-361: Bullet Vehicle Post-Test Right Rear Door

Figure A-362: Bullet Vehicle Pre-Test Windshield View

Figure A-363: Bullet Vehicle Post-Test Windshield View

Figure A-364: Bullet Vehicle Pre-Test Engine Compartment View

Figure A-365: Bullet Vehicle Post-Test Engine Compartment View

Figure A-366: Bullet Vehicle Pre-Test Fuel Filler Cap View

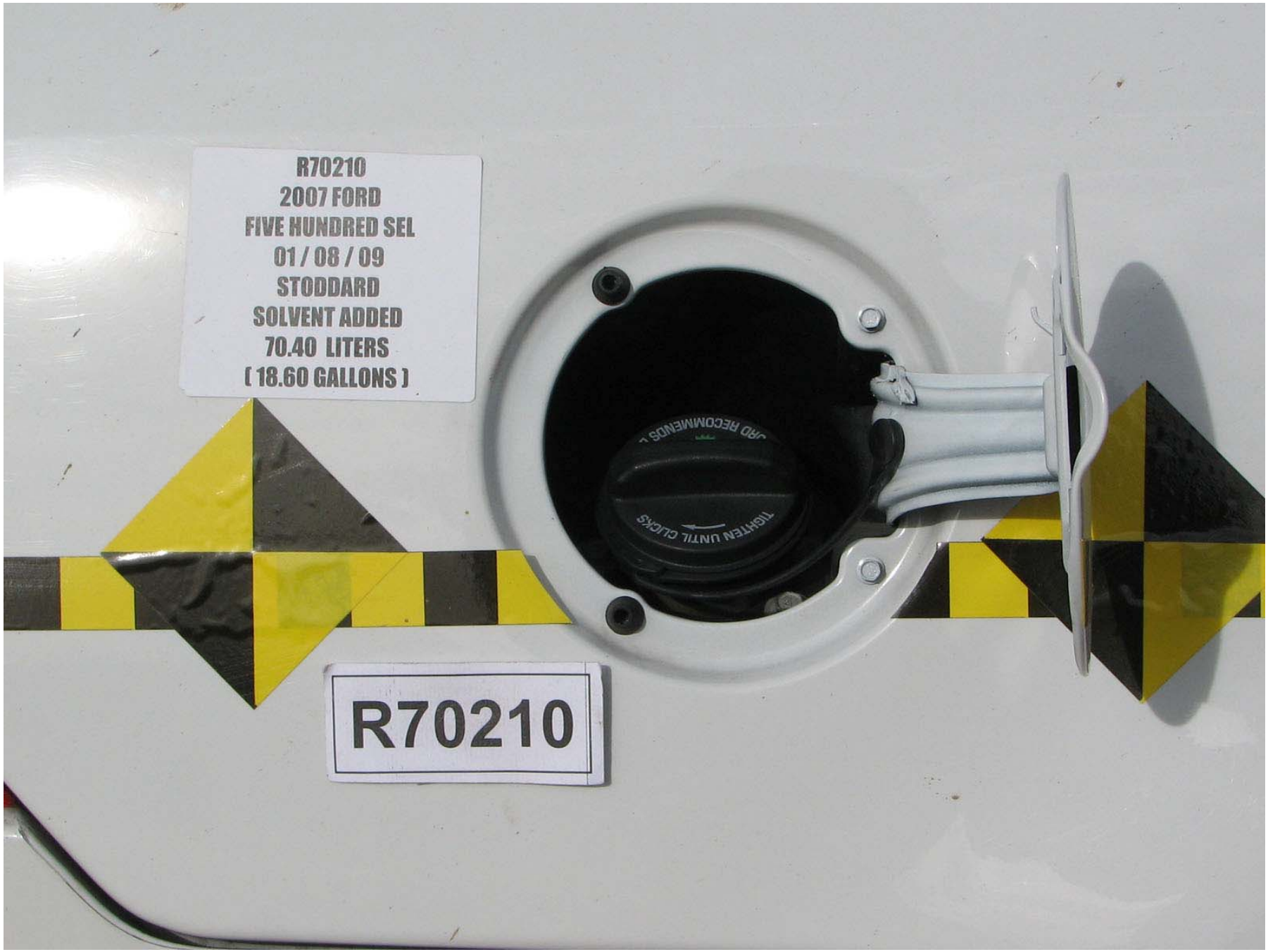

Figure A-367: Bullet Vehicle Post-Test Fuel Filler Cap View

Figure A-368: Bullet Vehicle Pre-Test Left Side A-Pillar Side View

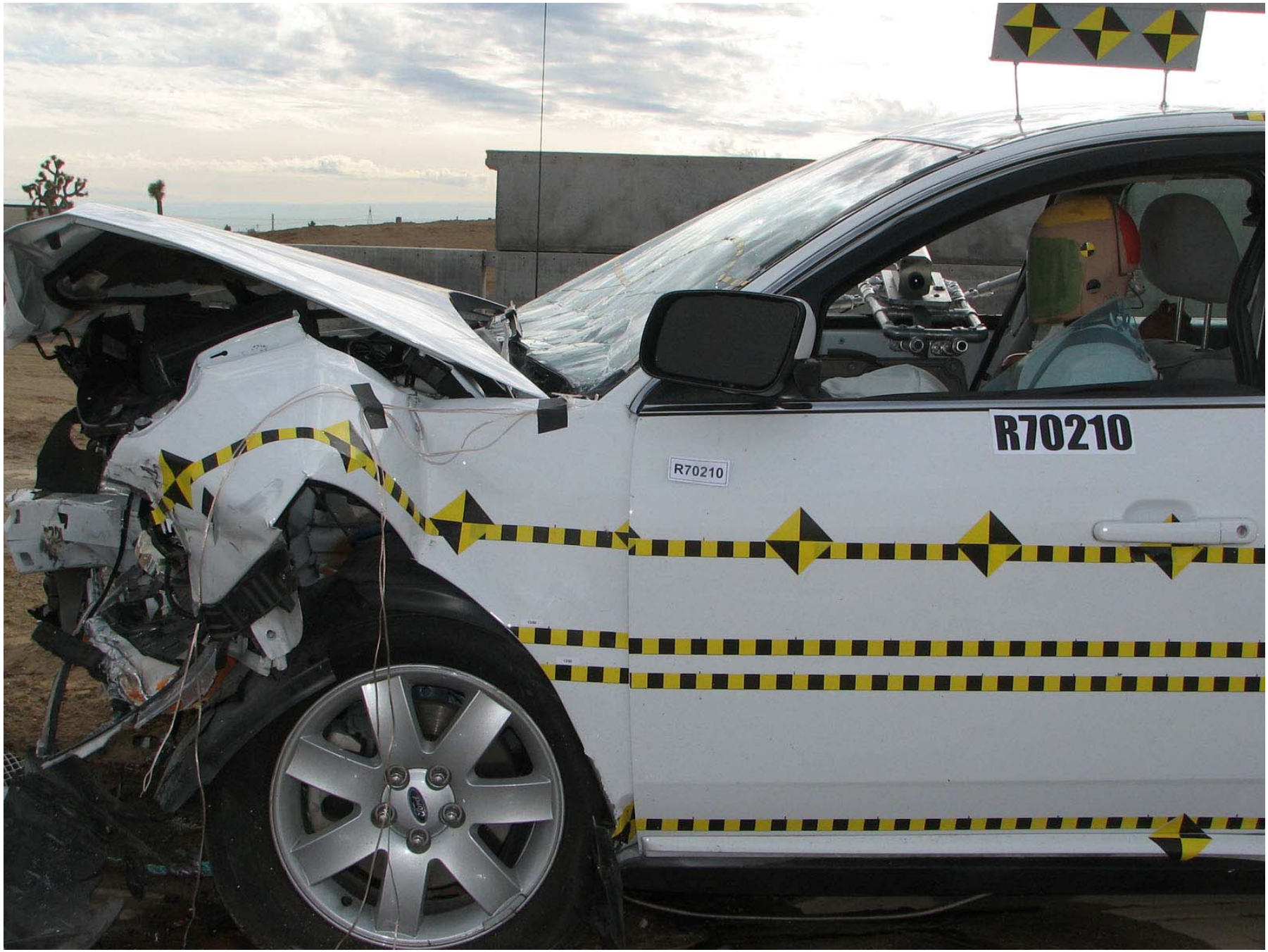

Figure A-369: Bullet Vehicle Post-Test Left Side A-Pillar Side View

Figure A-370: Bullet Vehicle Pre-Test Left Side A-Pillar Rear ¾ View

Figure A-371: Bullet Vehicle Post-Test Left Side A-Pillar Rear ¾ View

Figure A-372: Bullet Vehicle Pre-Test Left Side B-Pillar Side View

Figure A-373: Bullet Vehicle Post-Test Left Side B-Pillar Side View

Figure A-374: Bullet Vehicle Pre-Test Left Side B-Pillar Rear ¾ View

Figure A-375: Bullet Vehicle Post-Test Left Side B-Pillar Rear ¾ View

Figure A-376: Bullet Vehicle Pre-Test Left Side C-Pillar Side View

Figure A-377: Bullet Vehicle Post-Test Left Side C-Pillar Side View

Figure A-378: Bullet Vehicle Pre-Test Left Side C-Pillar Front ¾ View

Figure A-379: Bullet Vehicle Post-Test Left Side C-Pillar Front ¾ View

Figure A-380: Bullet Vehicle Pre-Test Left Front Sill Side View, Door Closed

Figure A-381: Bullet Vehicle Post-Test Left Front Sill Side View, Door Closed

Figure A-382: Bullet Vehicle Pre-Test Left Front Sill Side View, Door Open

Figure A-383: Bullet Vehicle Post-Test Left Front Sill Side View, Door Open

Figure A-384: Bullet Vehicle Pre-Test Left Front Sill Rear ¾ View, Door Closed

Figure A-385: Bullet Vehicle Post-Test Left Front Sill Rear ¾ View, Door Closed

Figure A-386: Bullet Vehicle Pre-Test Left Front Sill Rear ¾ View, Door Open

Figure A-387: Bullet Vehicle Post-Test Left Front Sill Rear ¾ View, Door Open

Figure A-388: Bullet Vehicle Pre-Test Left Rear Sill Side View, Door Closed

Figure A-389: Bullet Vehicle Post-Test Left Rear Sill Side View, Door Closed

Figure A-390: Bullet Vehicle Pre-Test Left Rear Sill Side View, Door Open

Figure A-391: Bullet Vehicle Post-Test Left Rear Sill Side View, Door Open

Figure A-392: Bullet Vehicle Pre-Test Left Rear Sill Rear ¾ View, Door Closed

Figure A-393: Bullet Vehicle Post-Test Left Rear Sill Rear ¾ View, Door Closed

Figure A-394: Bullet Vehicle Pre-Test Left Rear Sill Rear ¾ View, Door Open

Figure A-395: Bullet Vehicle Post-Test Left Rear Sill Rear ¾ View, Door Open

Figure A-396: Bullet Vehicle Pre-Test Right Side A-Pillar Side View

Figure A-397: Bullet Vehicle Post-Test Right Side A-Pillar Side View

Figure A-398: Bullet Vehicle Pre-Test Right Side A-Pillar Rear ¾ View

Figure A-399: Bullet Vehicle Post-Test Right Side A-Pillar Rear ¾ View

Figure A-400: Bullet Vehicle Pre-Test Right Side B-Pillar Side View

Figure A-401: Bullet Vehicle Post-Test Right Side B-Pillar Side View

Figure A-402: Bullet Vehicle Pre-Test Right Side B-Pillar Rear ¾ View

Figure A-403: Bullet Vehicle Post-Test Right Side B-Pillar Rear ¾ View

Figure A-404: Bullet Vehicle Pre-Test Right Side C-Pillar Side View

Figure A-405: Bullet Vehicle Post-Test Right Side C-Pillar Side View

Figure A-406: Bullet Vehicle Pre-Test Right Side C-Pillar Front ¾ View

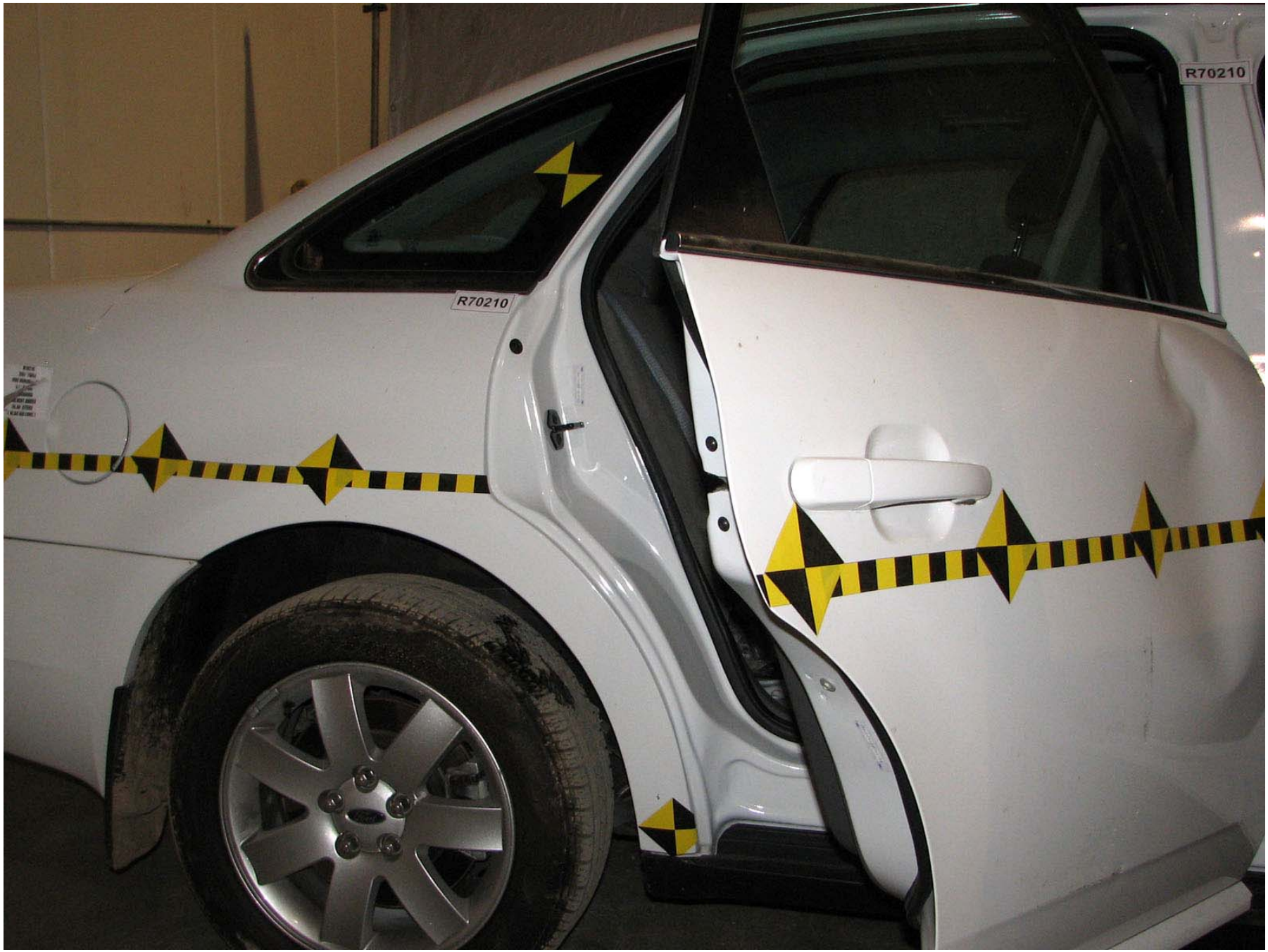

Figure A-407: Bullet Vehicle Post-Test Right Side C-Pillar Front ¾ View

Figure A-408: Bullet Vehicle Pre-Test Right Front Sill Side View, Door Closed

Figure A-409: Bullet Vehicle Post-Test Right Front Sill Side View, Door Closed

Figure A-410: Bullet Vehicle Pre-Test Right Front Sill Side View, Door Open

Figure A-411: Bullet Vehicle Post-Test Right Front Sill Side View, Door Open

Figure A-412: Bullet Vehicle Pre-Test Right Front Sill Rear ¾ View, Door Closed

Figure A-413: Bullet Vehicle Post-Test Right Front Sill Rear ¾ View, Door Closed

Figure A-414: Bullet Vehicle Pre-Test Right Front Sill Rear ¾ View, Door Open

Figure A-415: Bullet Vehicle Post-Test Right Front Sill Rear ¾ View, Door Open

Figure A-416: Bullet Vehicle Pre-Test Right Rear Sill Side View, Door Closed

Figure A-417: Bullet Vehicle Post-Test Right Rear Sill Side View, Door Closed

Figure A-418: Bullet Vehicle Pre-Test Right Rear Sill Side View, Door Open

Figure A-419: Bullet Vehicle Post-Test Right Rear Sill Side View, Door Open

Figure A-420: Bullet Vehicle Pre-Test Right Rear Sill Rear ¾ View, Door Closed

Figure A-421: Bullet Vehicle Post-Test Right Rear Sill Rear ¾ View, Door Closed

Figure A-422: Bullet Vehicle Pre-Test Right Rear Sill Rear ¾ View, Door Open

Figure A-423: Bullet Vehicle Post-Test Right Rear Sill Rear ¾ View, Door Open

Figure A-424: Bullet Vehicle Pre-Test Left Front Wheel Side View

Figure A-425: Bullet Vehicle Post-Test Left Front Wheel Side View

Figure A-426: Bullet Vehicle Pre-Test Left Front Wheel Front ¾ View

Figure A-427: Bullet Vehicle Post-Test Left Front Wheel Front ¾ View

Figure A-428: Bullet Vehicle Pre-Test Left Front Wheel Rear ¾ View

Figure A-429: Bullet Vehicle Post-Test Left Front Wheel Rear ¾ View

Figure A-430: Bullet Vehicle Pre-Test Left Front Wheel Top View

Figure A-431: Bullet Vehicle Post-Test Left Front Wheel Top View

Figure A-432: Bullet Vehicle Post-Test Left Front Wheel A-Pillar/Rocker Contact

Figure A-433: Bullet Vehicle Post-Test Left Front Wheel A-Pillar/Rocker Contact

Figure A-434: Bullet Vehicle Post-Test Left Front Wheel A-Pillar/Rocker Contact

Figure A-435: Bullet Vehicle Post-Test Left Front Wheel Damage (Outside)

Figure A-436: Bullet Vehicle Post-Test Left Front Wheel Damage (Inside)

Figure A-437: Bullet Vehicle Pre-Test Right Front Wheel Side View

Figure A-438: Bullet Vehicle Post-Test Right Front Wheel Side View

Figure A-439: Bullet Vehicle Pre-Test Right Front Wheel Front ¾ View

Figure A-440: Bullet Vehicle Post-Test Right Front Wheel Front ¾ View

Figure A-441: Bullet Vehicle Pre-Test Right Front Wheel Rear ¾ View

Figure A-442: Bullet Vehicle Post-Test Right Front Wheel Rear ¾ View

Figure A-443: Bullet Vehicle Pre-Test Right Front Wheel Top View

Figure A-444: Bullet Vehicle Post-Test Right Front Wheel Top View

Figure A-445: Bullet Vehicle Post-Test Right Front Wheel A-Pillar/Rocker Contact

Figure A-446: Bullet Vehicle Post-Test Right Front Wheel A-Pillar/Rocker Contact

Figure A-447: Bullet Vehicle Post-Test Right Front Wheel A-Pillar/Rocker Contact

Figure A-448: Bullet Vehicle Post-Test Right Front Wheel Damage (Outside)

Figure A-449: Bullet Vehicle Post-Test Right Front Wheel Damage (Inside)

Figure A-450: Bullet Vehicle Pre-Test Left Front Wheel Well (Tire On)

Figure A-451: Bullet Vehicle Post-Test Left Front Wheel Well (Tire On)

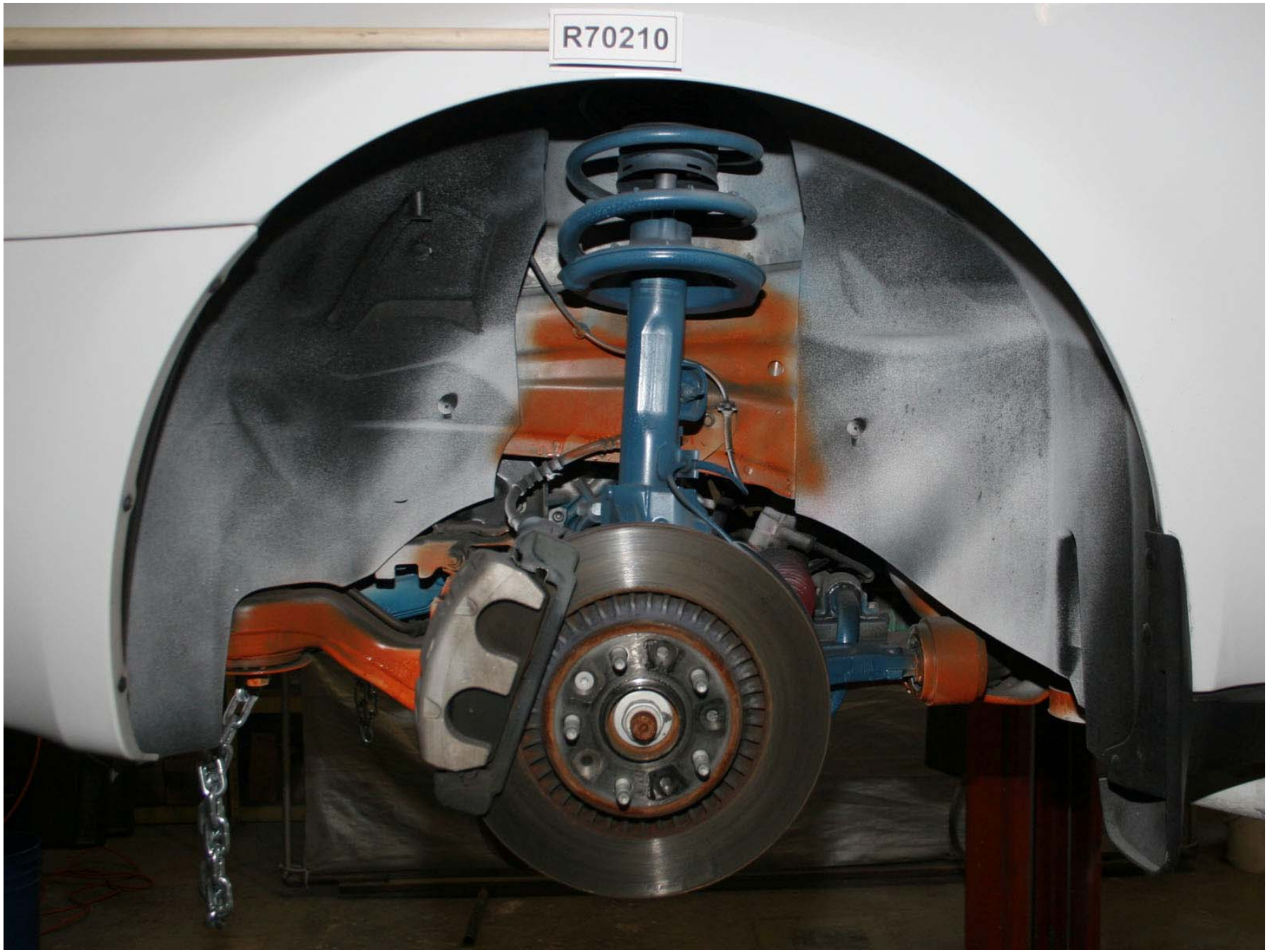

Figure A-452: Bullet Vehicle Pre-Test Left Front Wheel Well (Tire Off)

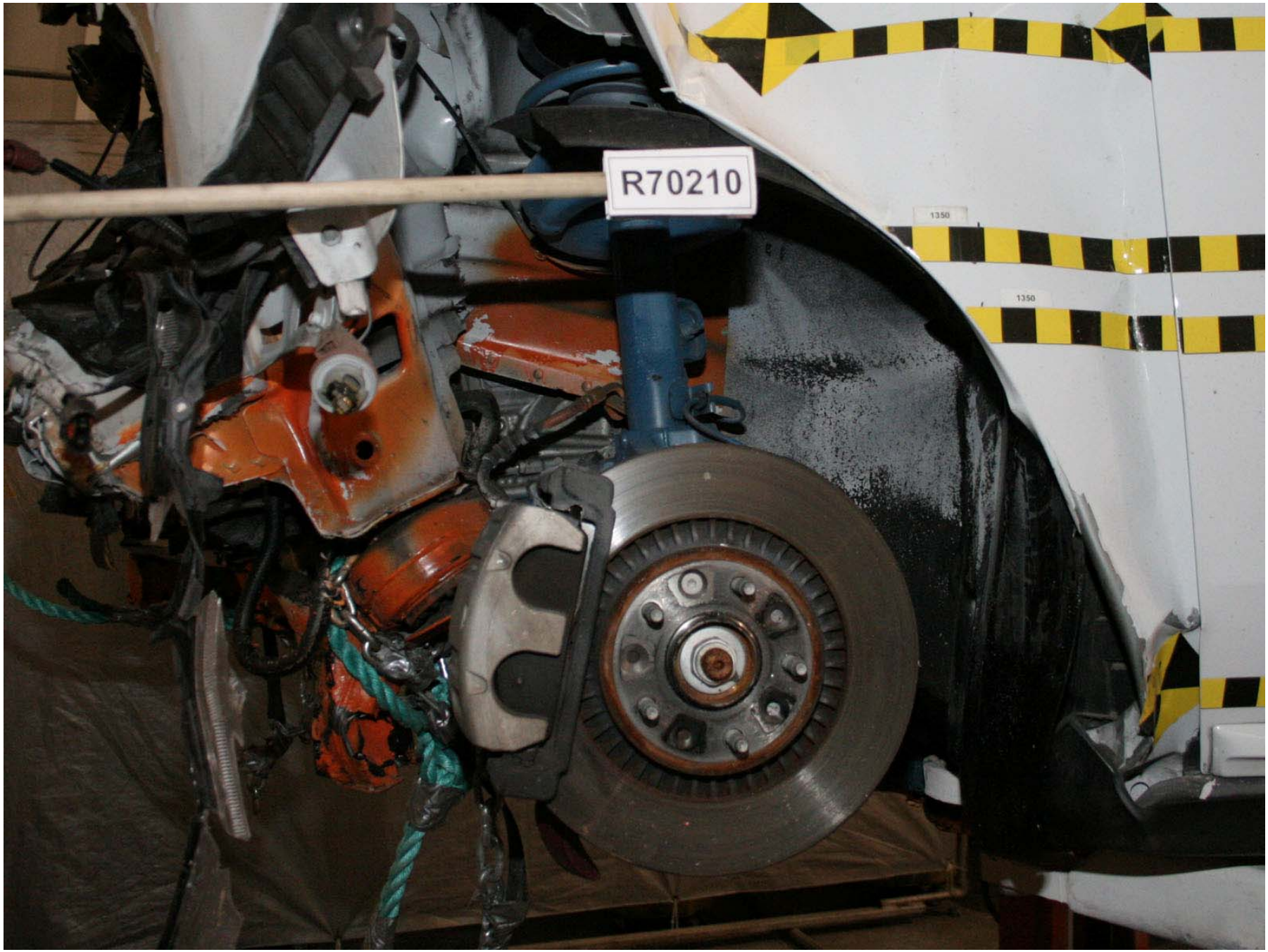

Figure A-453: Bullet Vehicle Post-Test Left Front Wheel Well (Tire Off)

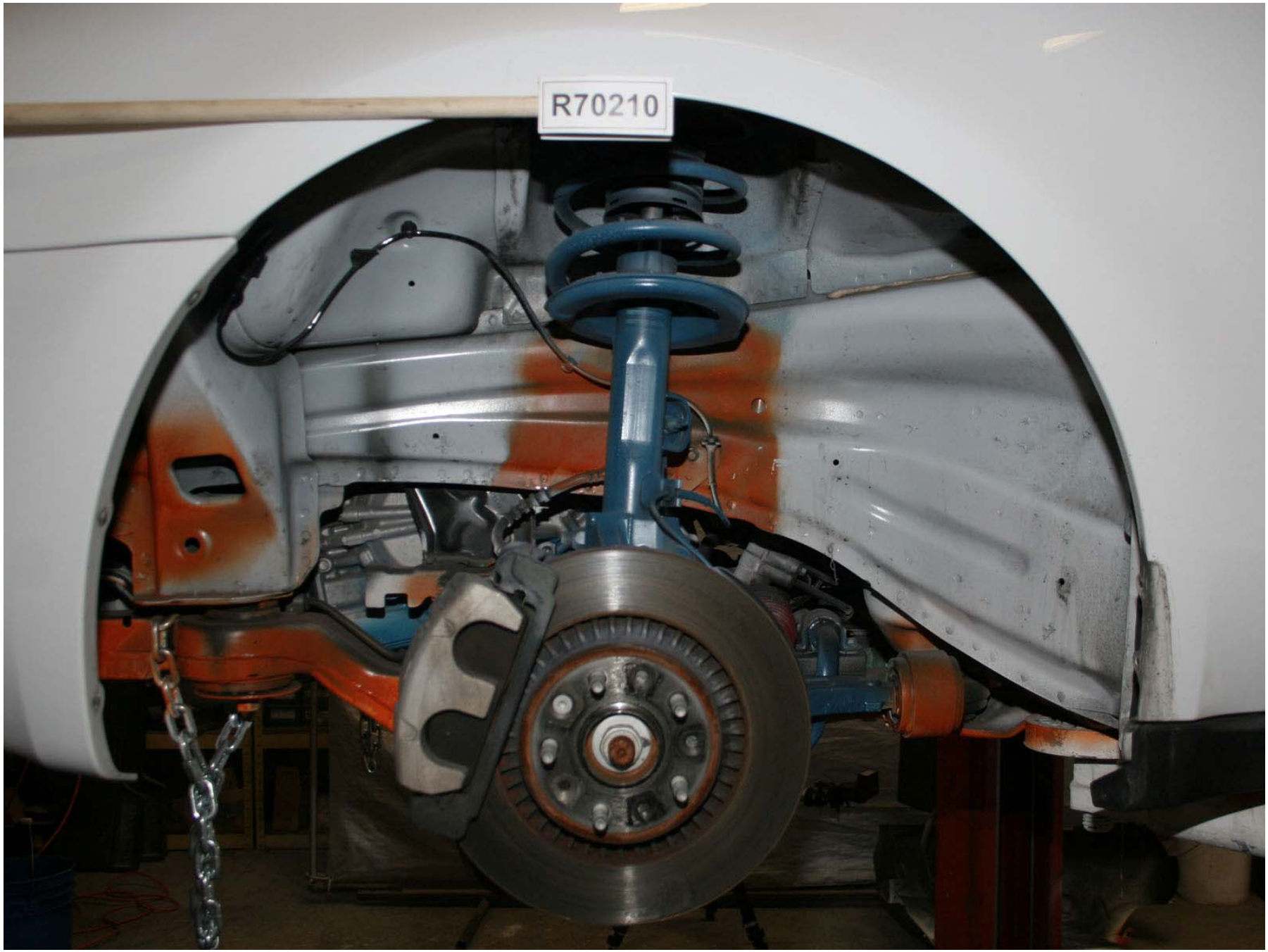

Figure A-454: Bullet Vehicle Pre-Test Left Front Wheel Well (Tire Off), Inner Fender Removed

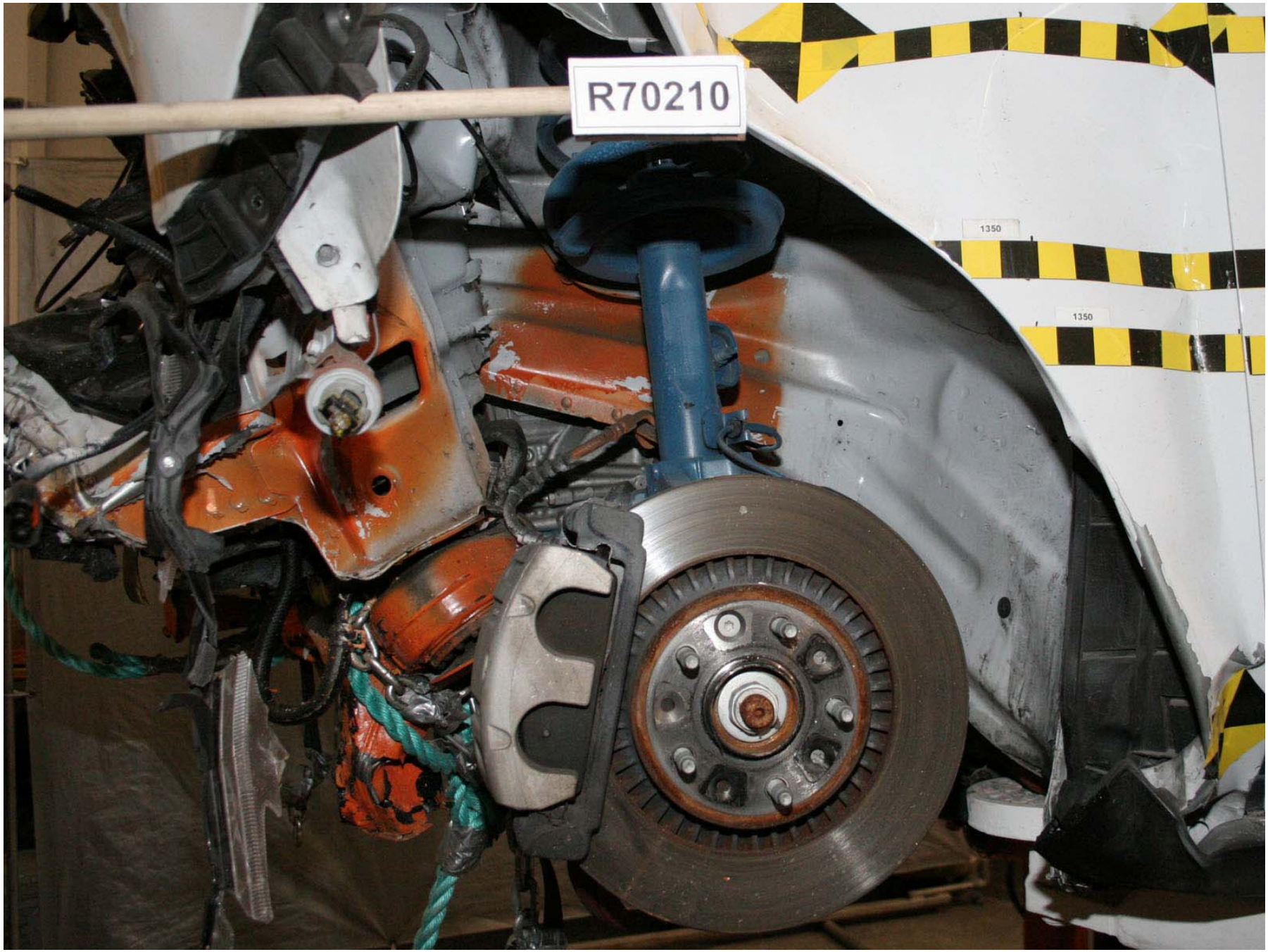

Figure A-455: Bullet Vehicle Post-Test Left Front Wheel Well (Tire Off), Inner Fender Removed

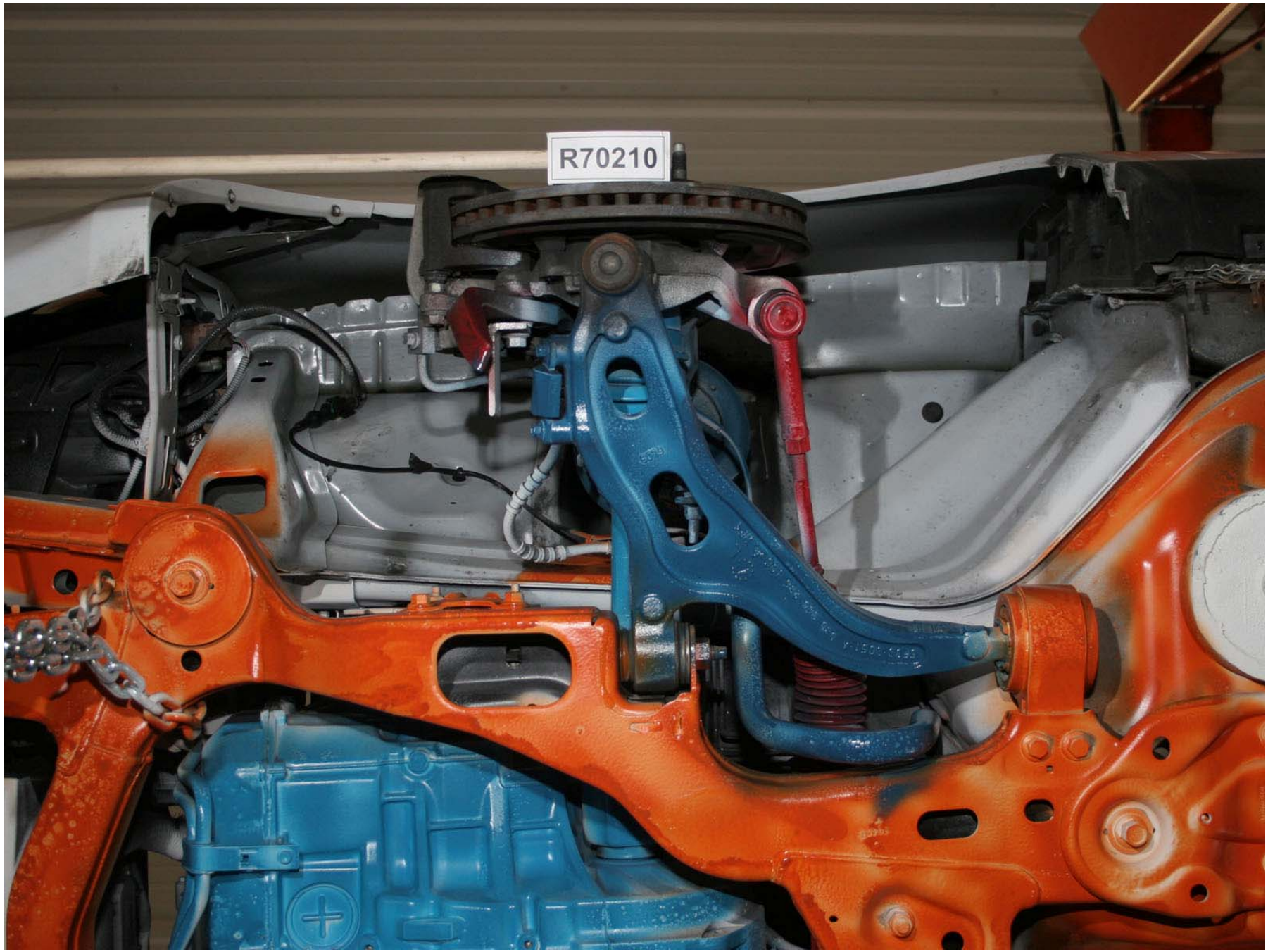

Figure A-456: Bullet Vehicle Pre-Test Left Inner Fender Well View

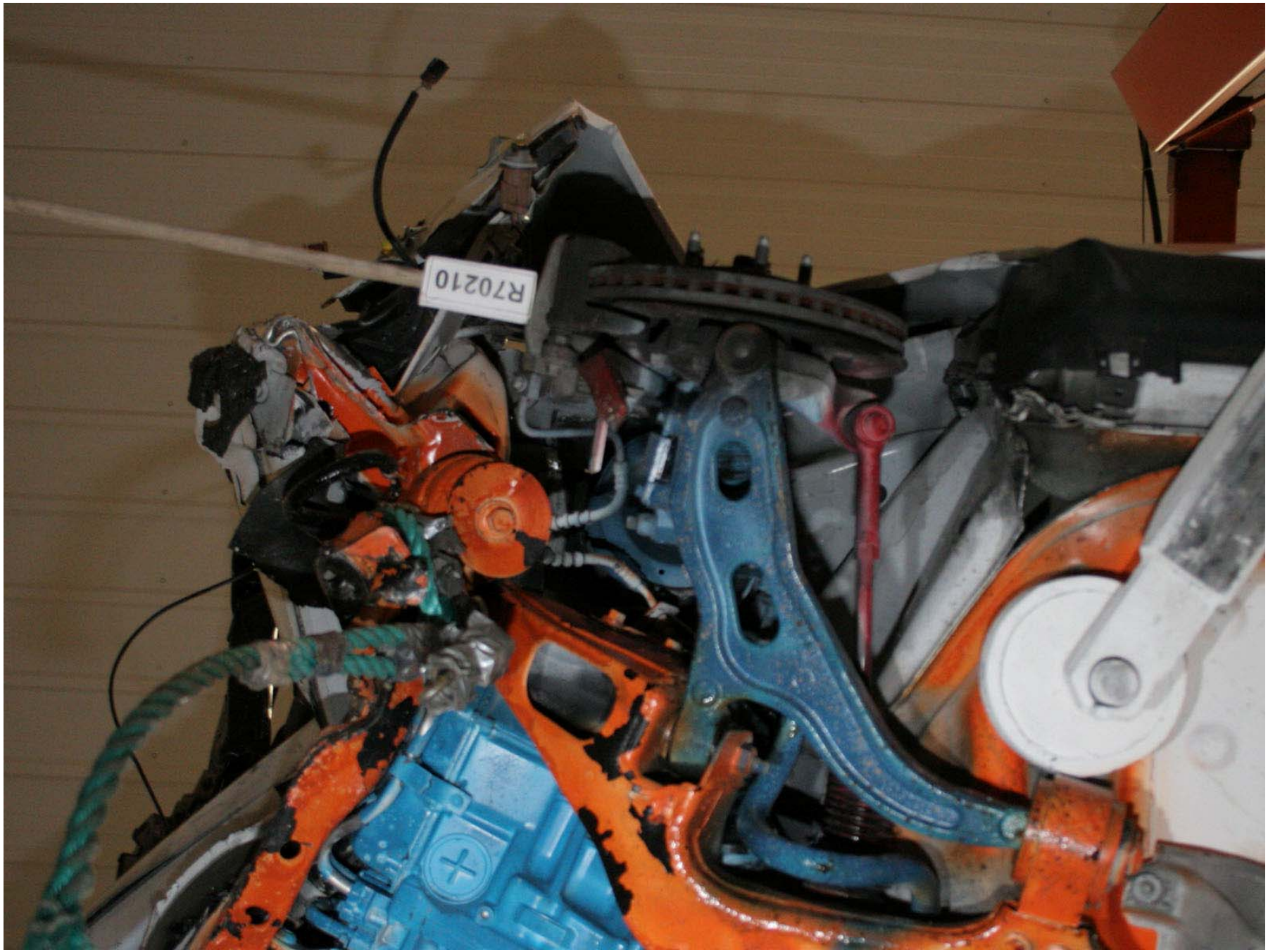

Figure A-457: Bullet Vehicle Post-Test Left Inner Fender Well View

Figure A-458: Bullet Vehicle Pre-Test Left Inner Fender Well View

Figure A-459: Bullet Vehicle Post-Test Left Inner Fender Well View

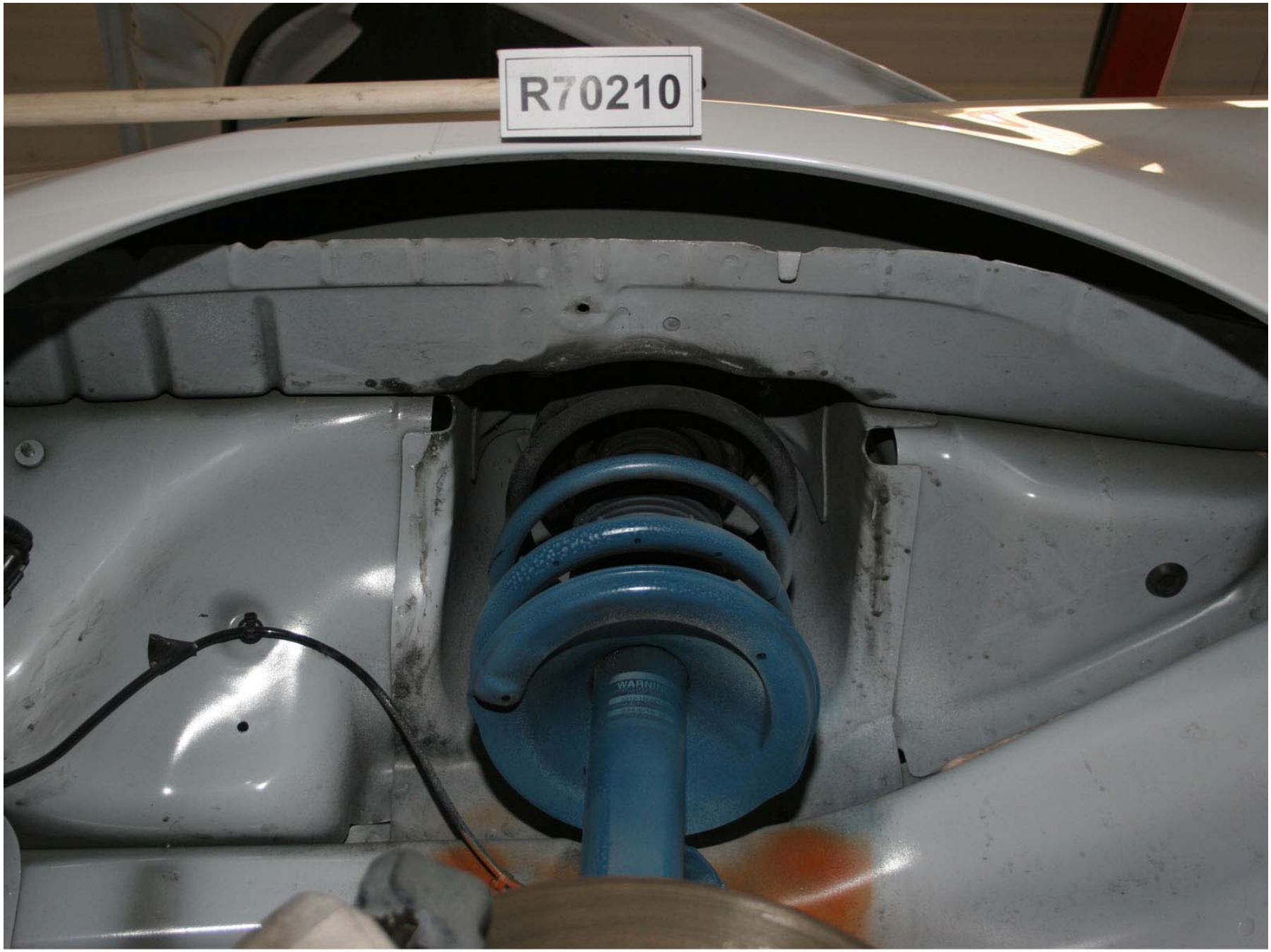

Figure A-460: Bullet Vehicle Pre-Test Left Inner Fender Well View

Figure A-461: Bullet Vehicle Post-Test Left Inner Fender Well View

Figure A-462: Bullet Vehicle Pre-Test Top Fender View

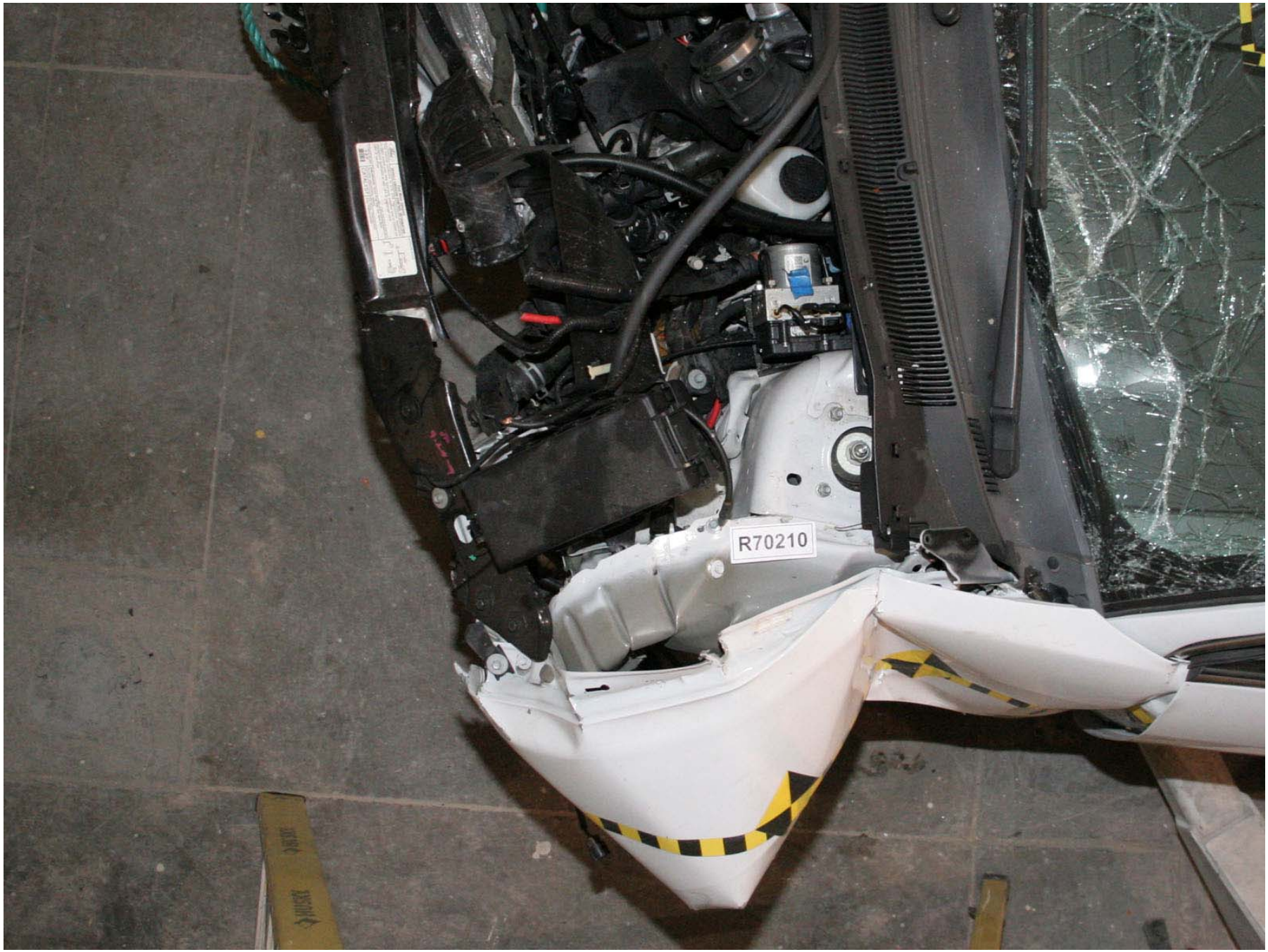

Figure A-463: Bullet Vehicle Post-Test Top Fender View

Figure A-464: Bullet Vehicle Pre-Test Left Front Frame Rail View

Figure A-465: Bullet Vehicle Post-Test Left Front Frame Rail View

Figure A-466: Bullet Vehicle Pre-Test Left Front Frame Rail View

Figure A-467: Bullet Vehicle Post-Test Left Front Frame Rail View

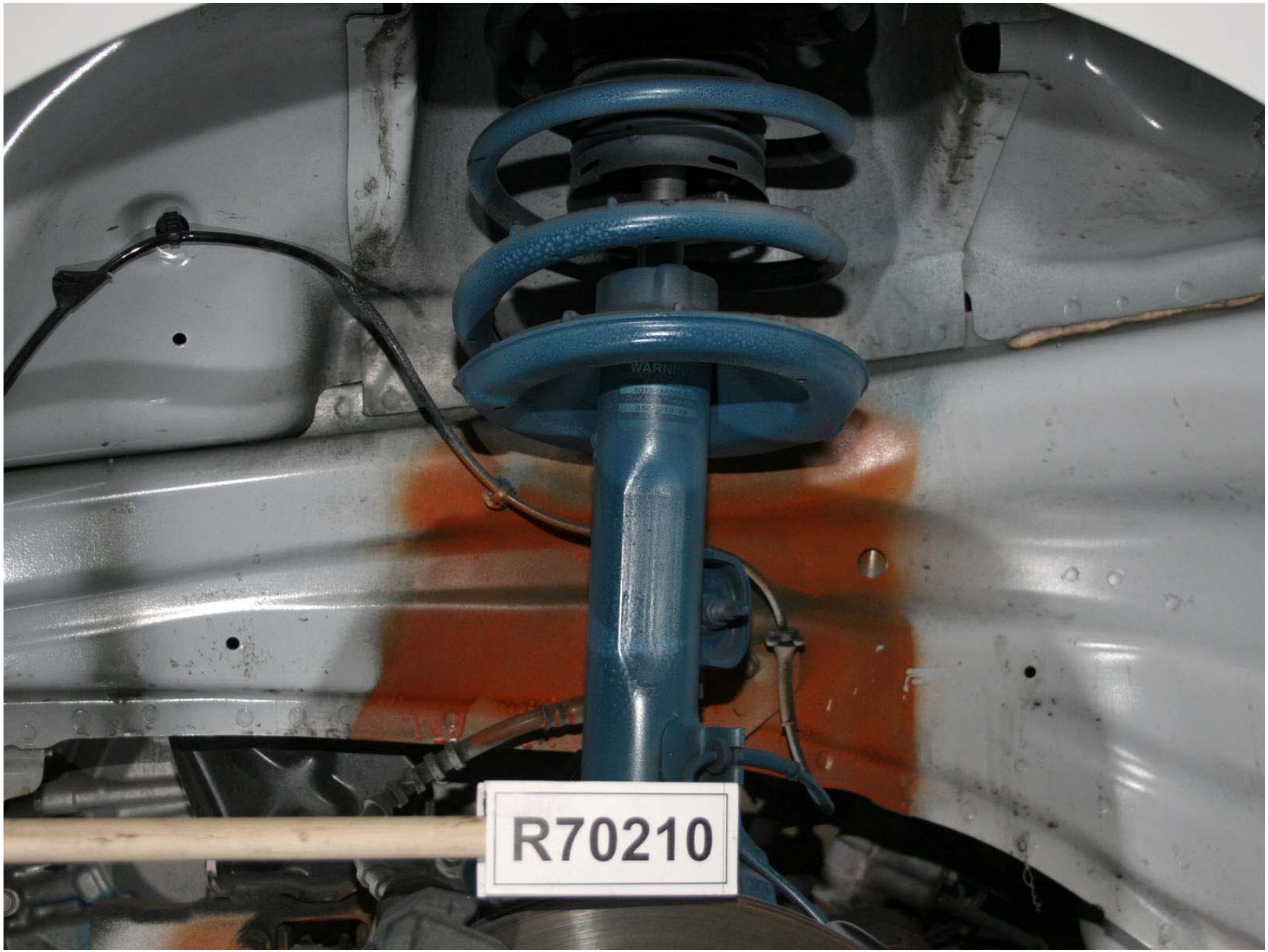

Figure A-468: Bullet Vehicle Pre-Test Left Front Frame Rail View

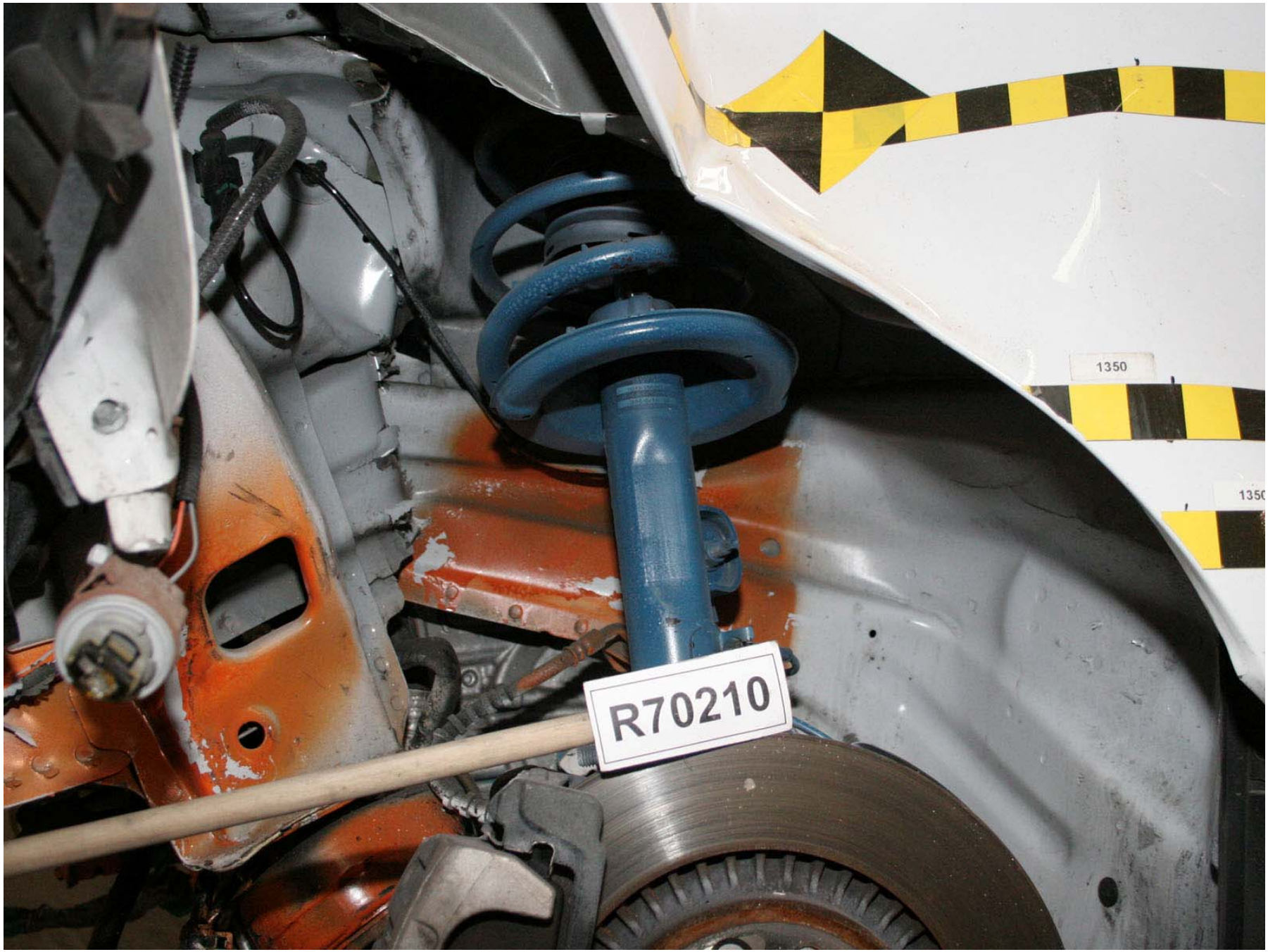

Figure A-469: Bullet Vehicle Post-Test Left Front Frame Rail View

Figure A-470: Bullet Vehicle Pre-Test Left Side Tie Rod and Sway Bar Attachments Points

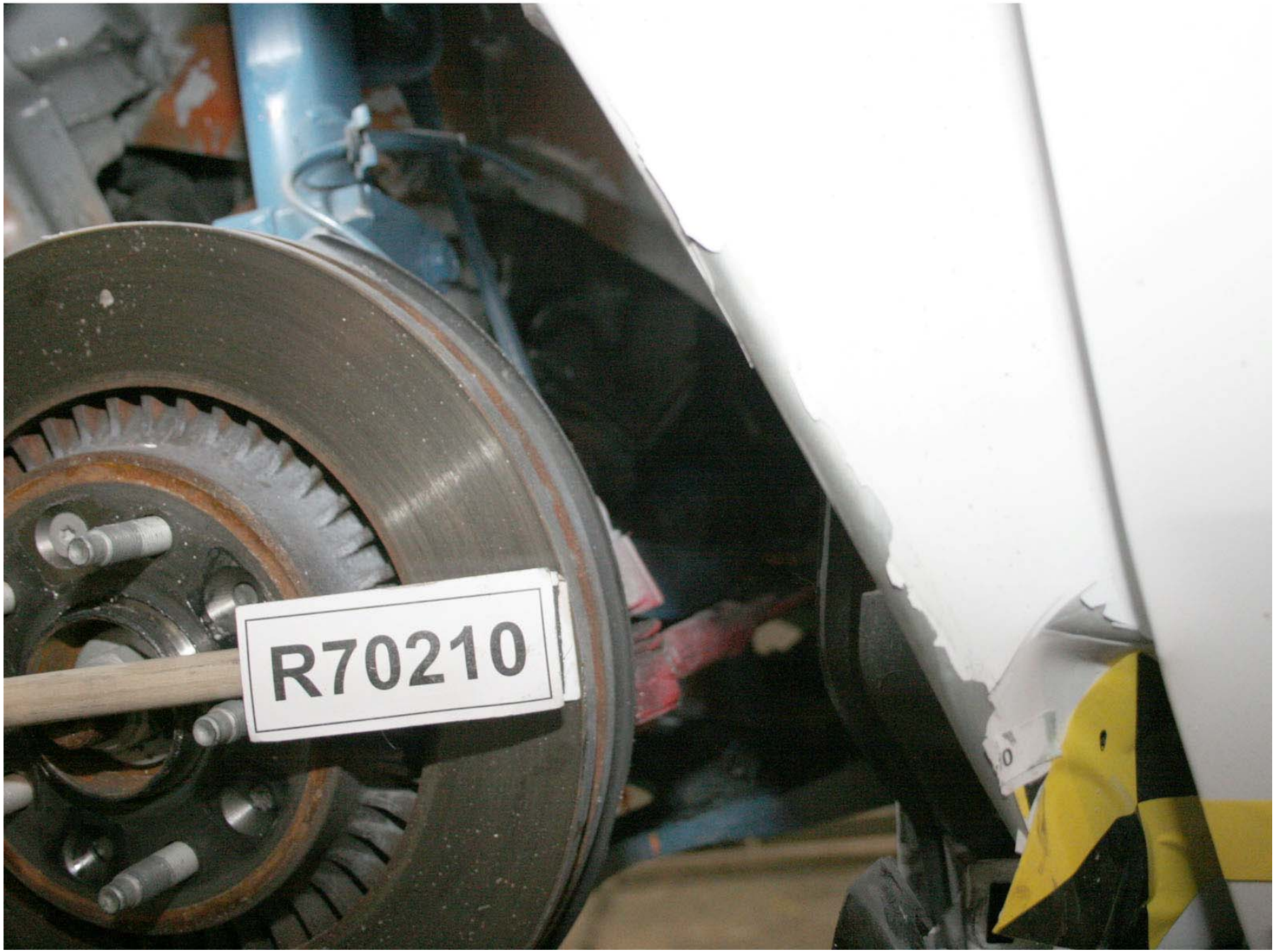

Figure A-471: Bullet Vehicle Post-Test Left Side Tie Rod and Sway Bar Attachments Points

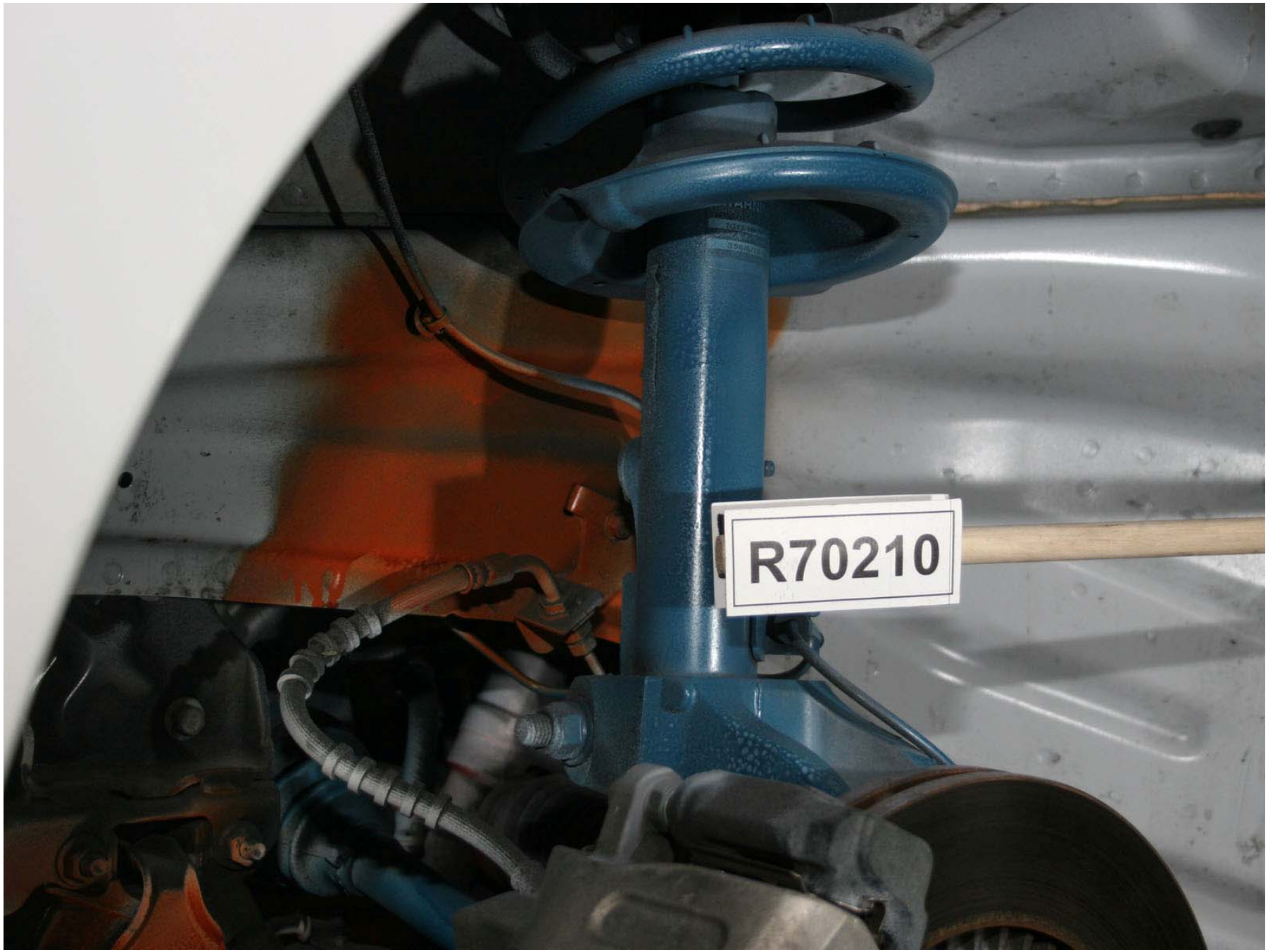

Figure A-472: Bullet Vehicle Pre-Test Left Side Upper Sway Bar Attachment Point

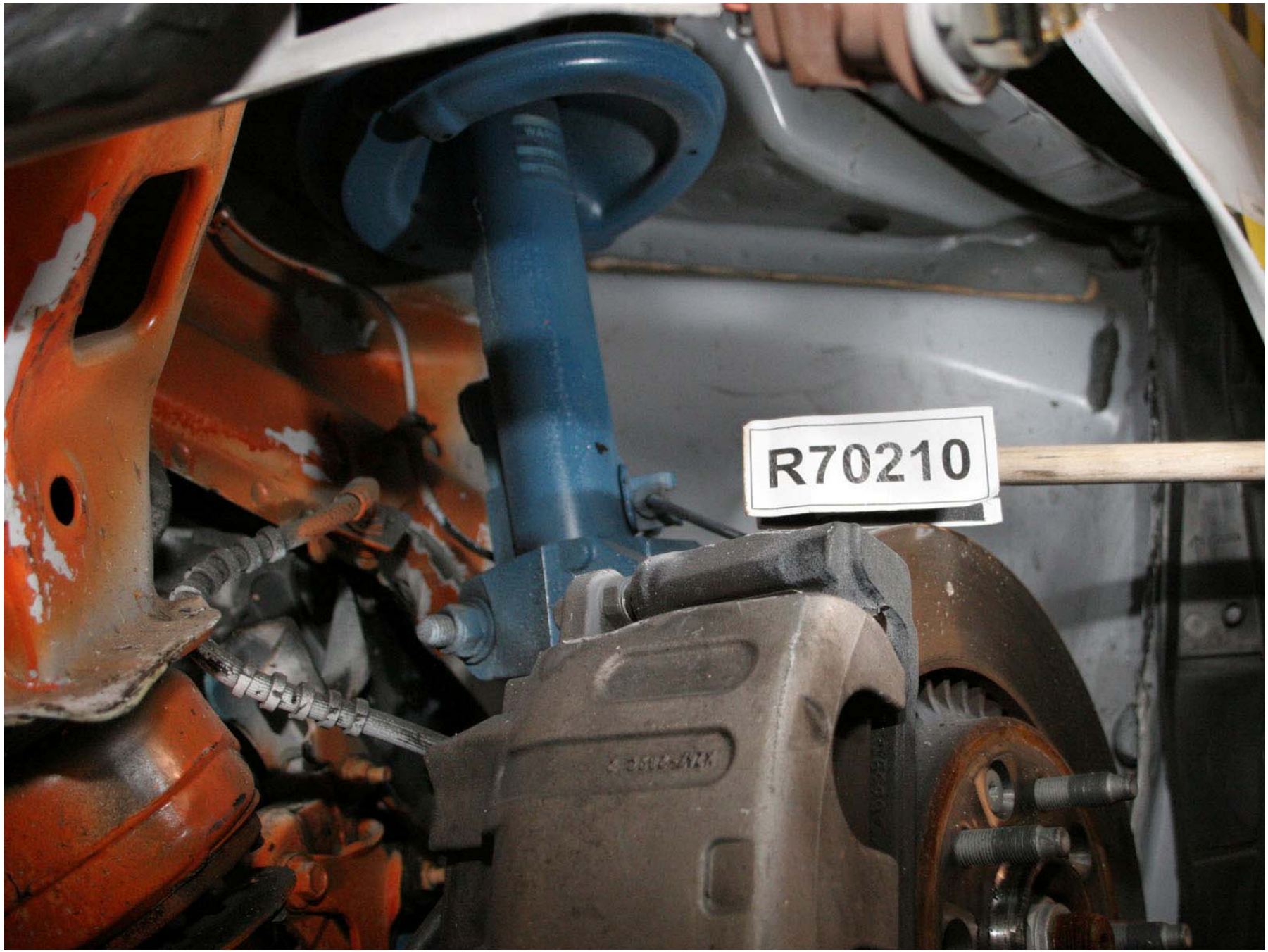

Figure A-473: Bullet Vehicle Post-Test Left Side Upper Sway Bar Attachment Point

Figure A-474: Bullet Vehicle Pre-Test Left Side Frame to A-Pillar Joint

Figure A-475: Bullet Vehicle Post-Test Left Side Frame to A-Pillar Joint

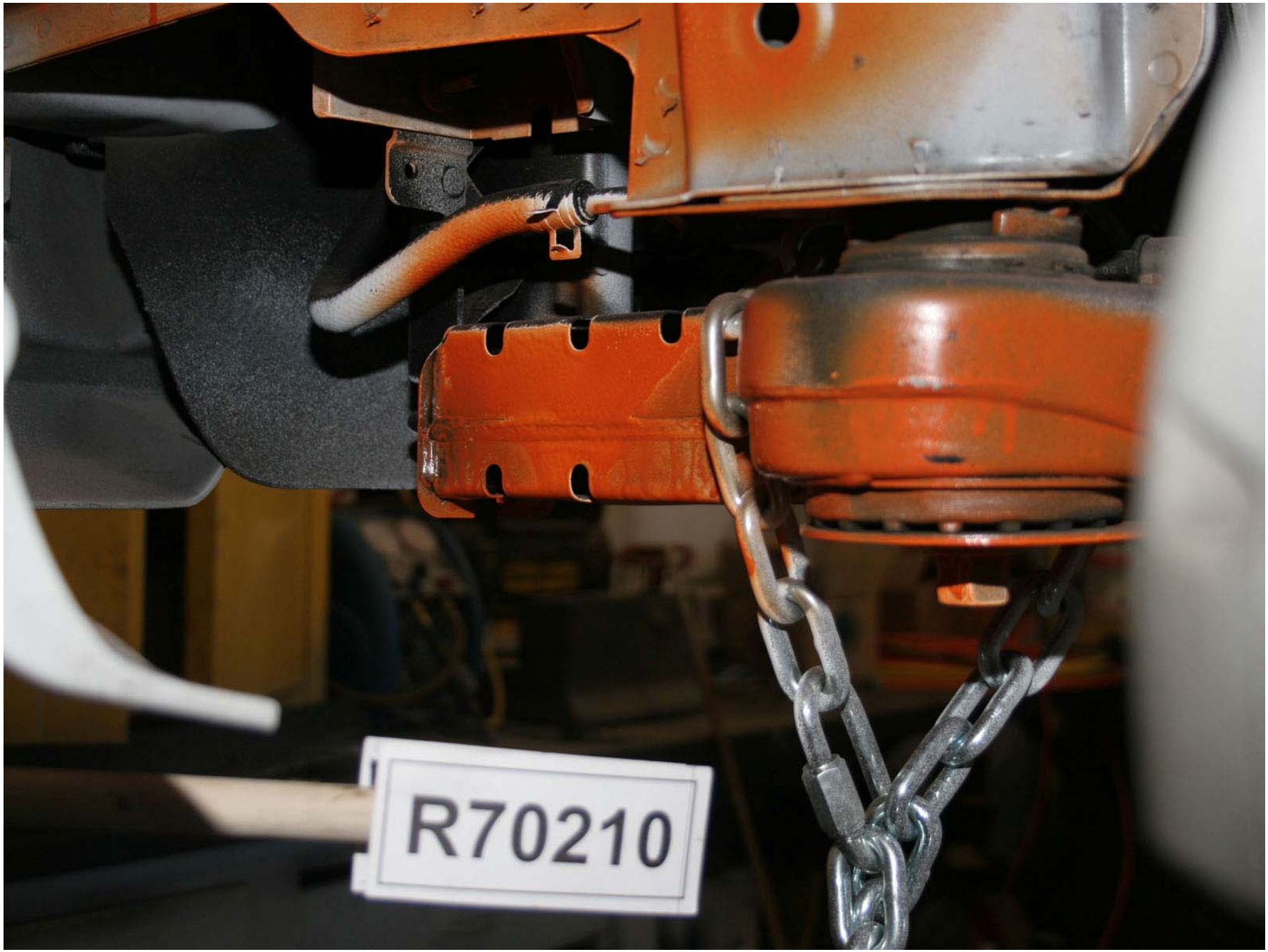

Figure A-476: Bullet Vehicle Pre-Test Left Side Crush Initiators

Figure A-477: Bullet Vehicle Post-Test Left Side Crush Initiators

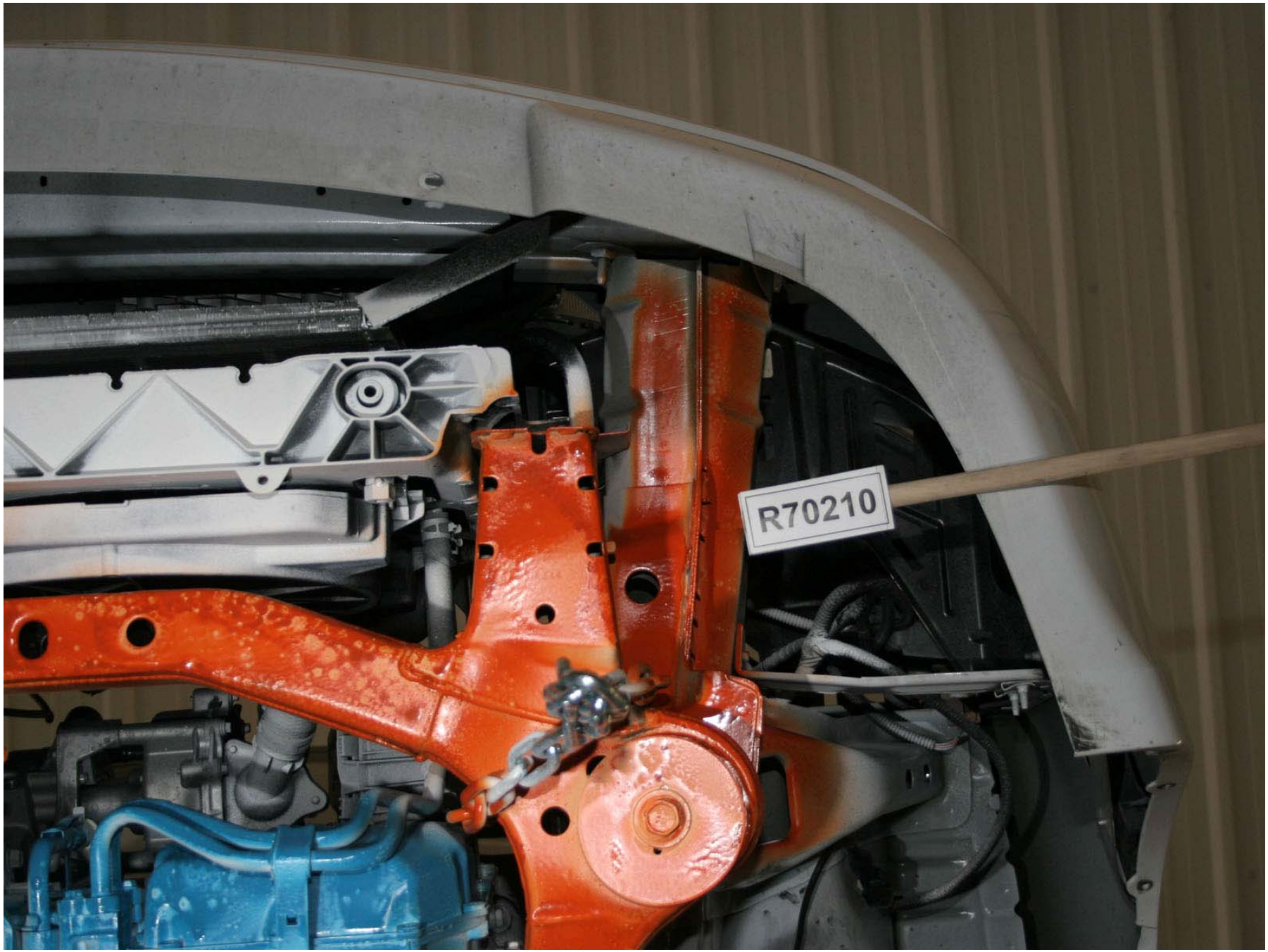

Figure A-478: Bullet Vehicle Pre-Test Left Side Crush Initiators

Figure A-479: Bullet Vehicle Post-Test Left Side Crush Initiators

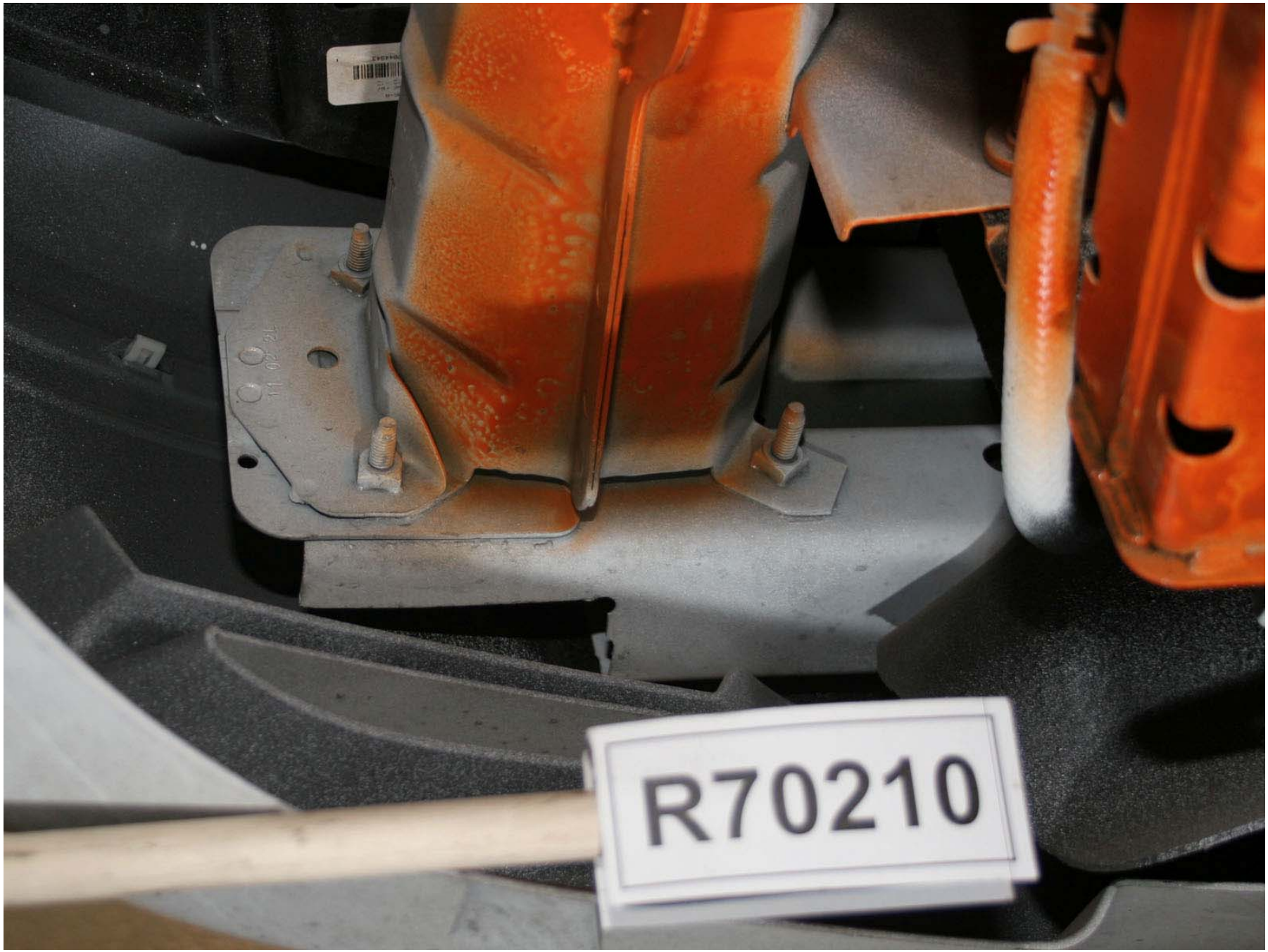

Figure A-480: Bullet Vehicle Pre-Test Left Side Bumper Attachment Point

Figure A-481: Bullet Vehicle Post-Test Left Side Bumper Attachment Point

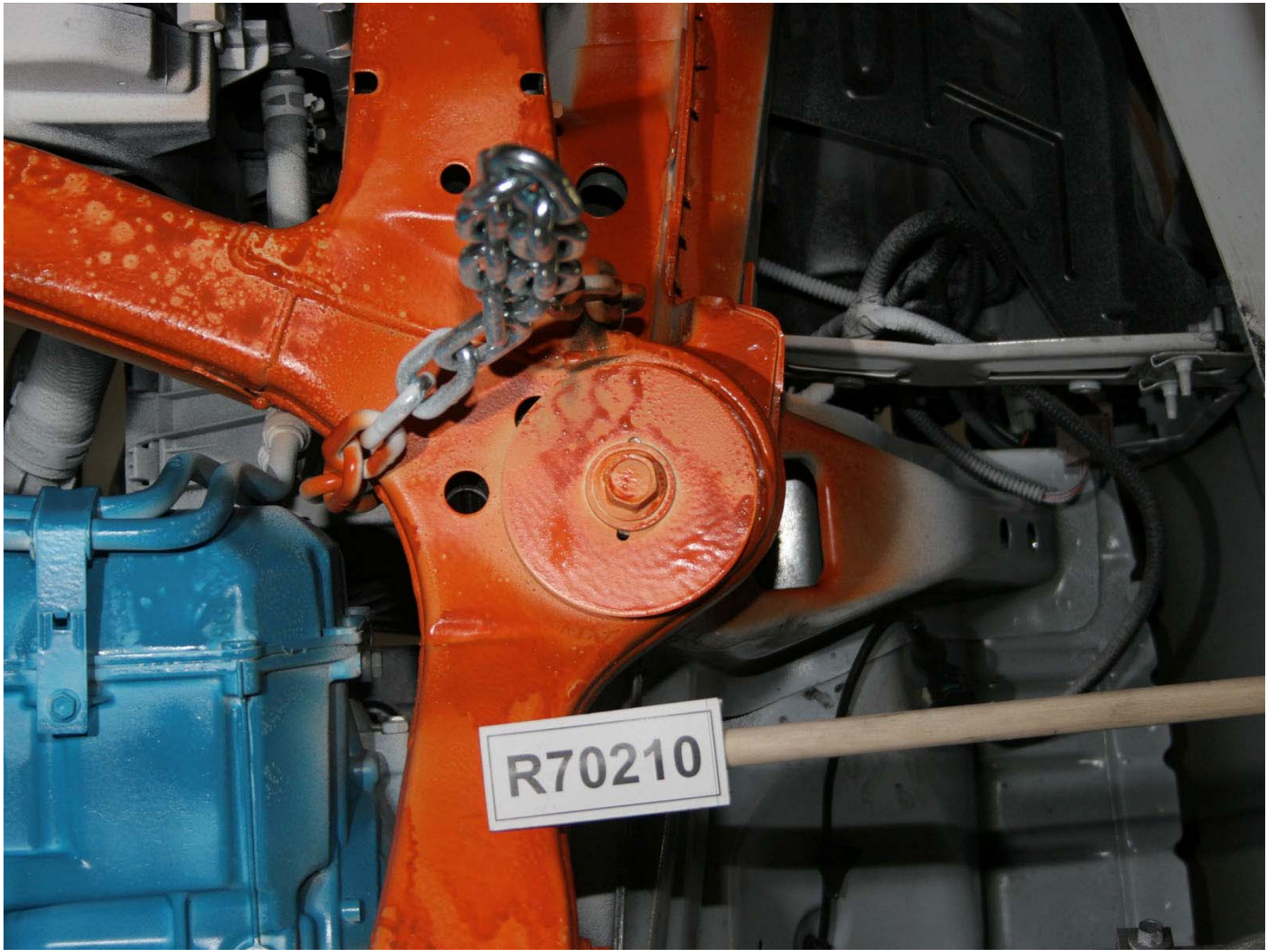

Figure A-482: Bullet Vehicle Pre-Test Left Front Sub-Frame Mounting Point

Figure A-483: Bullet Vehicle Post-Test Left Front Sub-Frame Mounting Point

Figure A-484: Bullet Vehicle Pre-Test Left Rear Sub-Frame Mounting Point

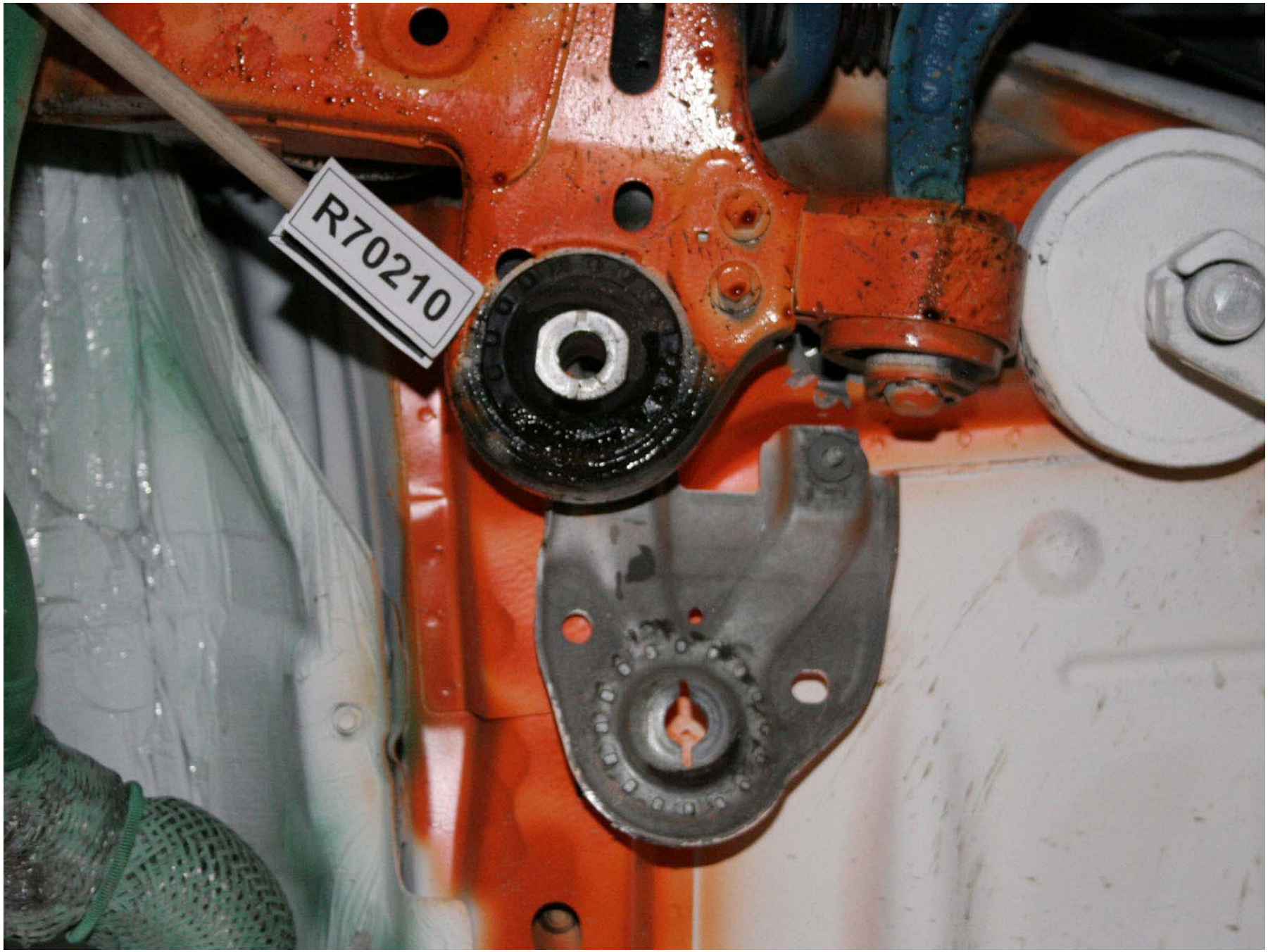

Figure A-485: Bullet Vehicle Post-Test Left Rear Sub-Frame Mounting Point

Figure A-486: Bullet Vehicle Pre-Test Right Front Wheel Well (Tire On)

Figure A-487: Bullet Vehicle Post-Test Right Front Wheel Well (Tire On)

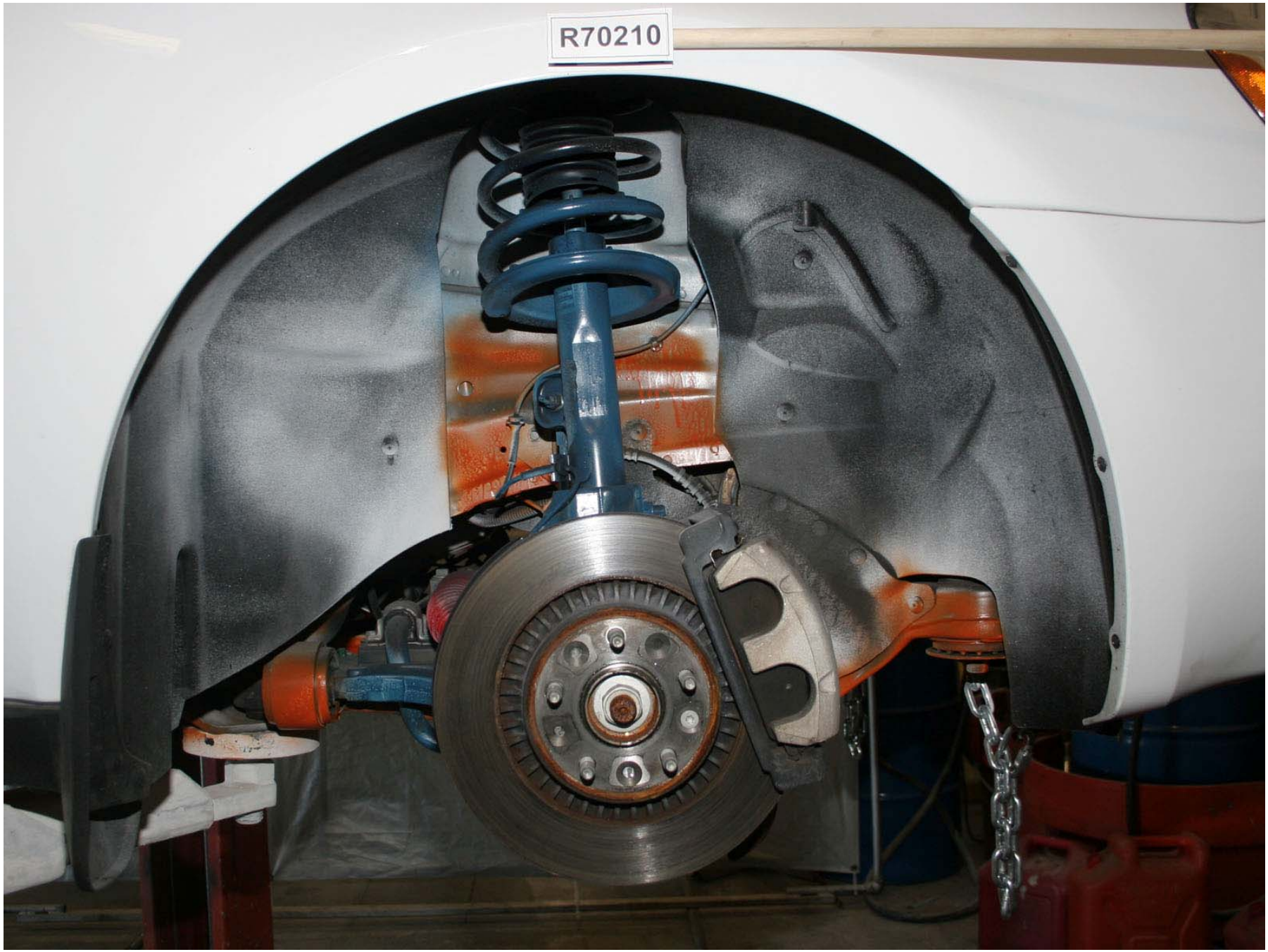

Figure A-488: Bullet Vehicle Pre-Test Right Front Wheel Well (Tire Off)

Figure A-489: Bullet Vehicle Post-Test Right Front Wheel Well (Tire Off)

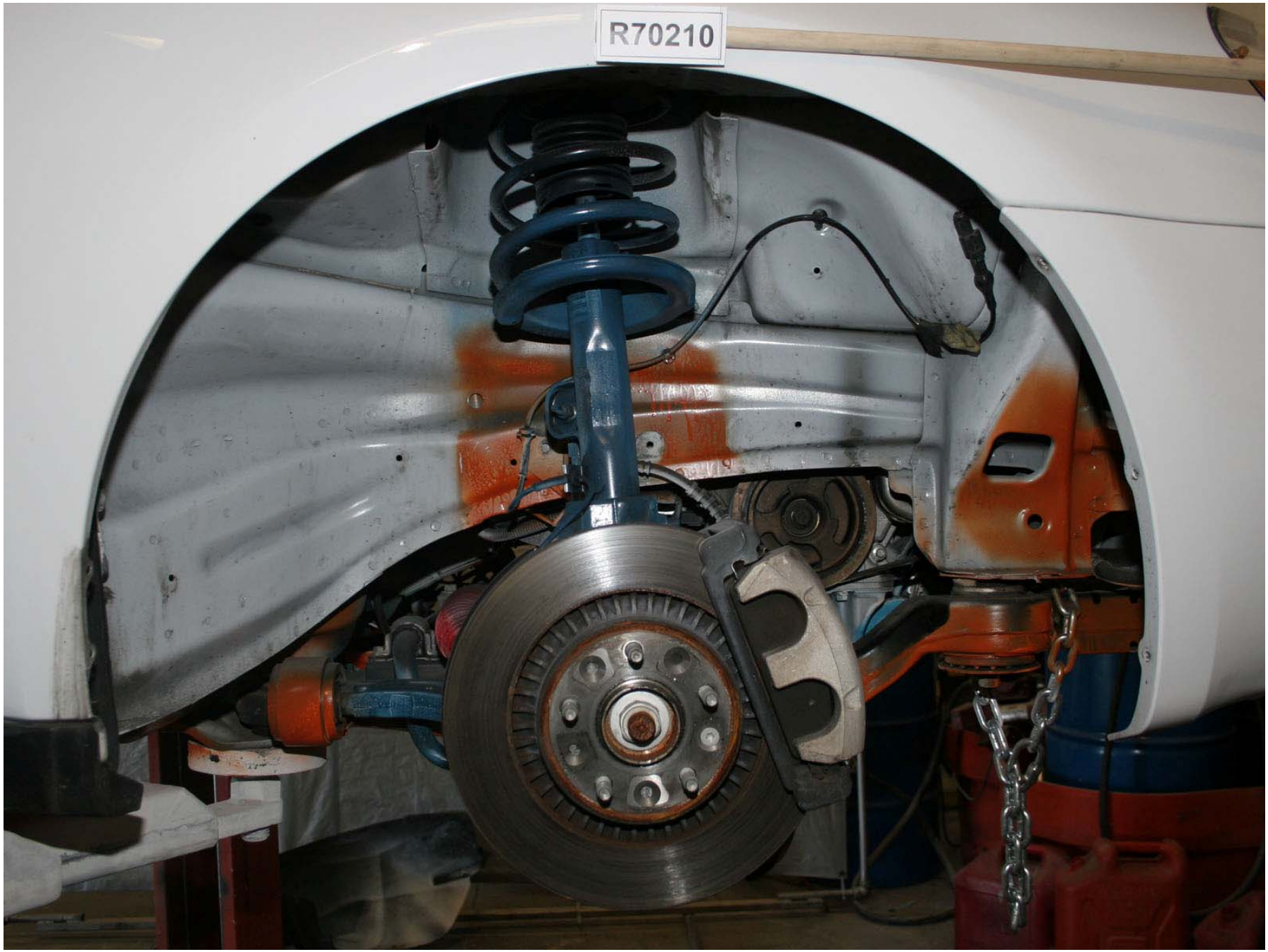

Figure A-490: Bullet Vehicle Pre-Test Right Front Wheel Well (Tire Off), Inner Fender Removed

Figure A-491: Bullet Vehicle Post-Test Right Front Wheel Well (Tire Off), Inner Fender Removed

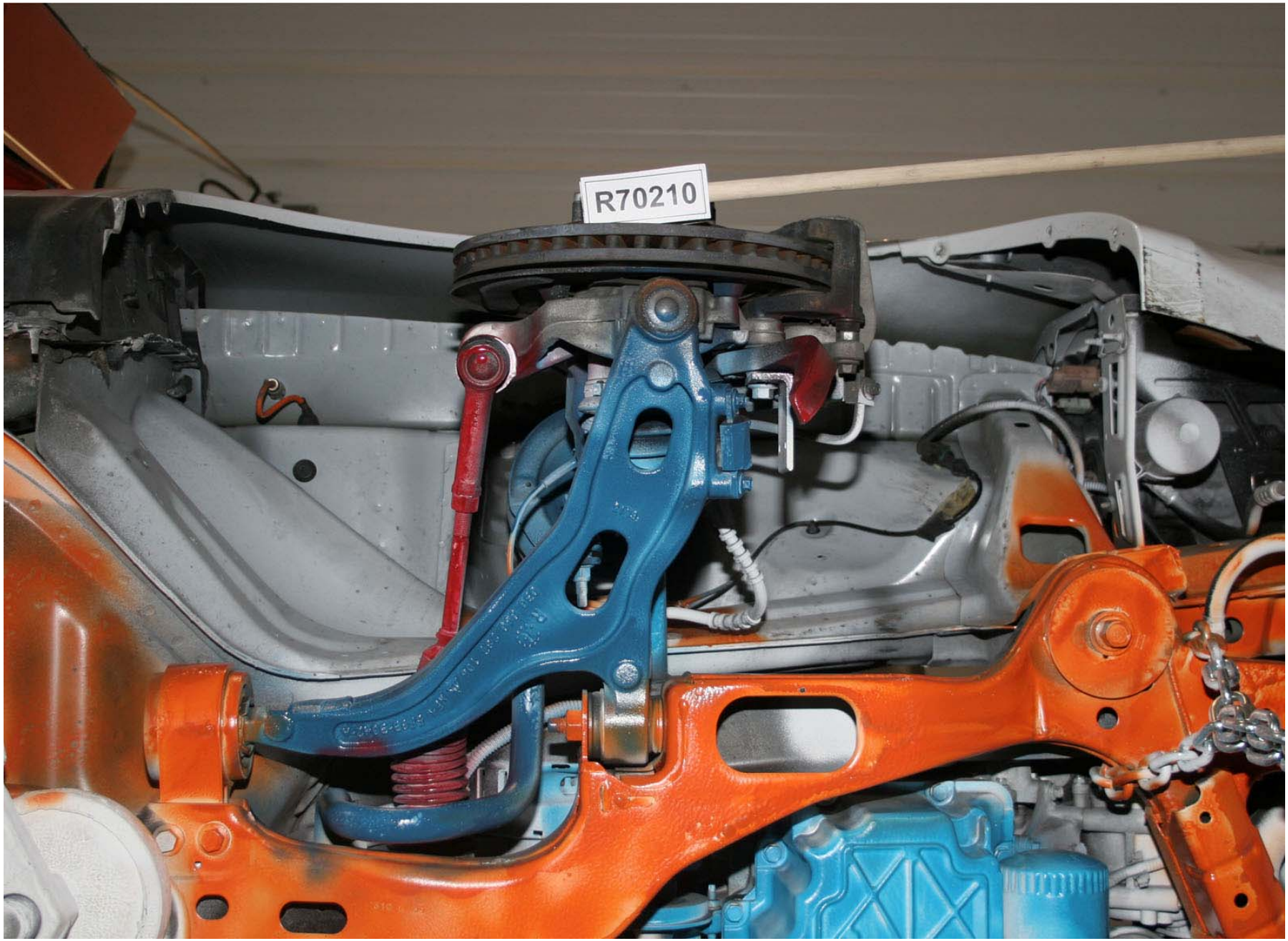

Figure A-492: Bullet Vehicle Pre-Test Right Inner Fender Well View

Figure A-493: Test Vehicle Post-Test Right Inner Fender Well View

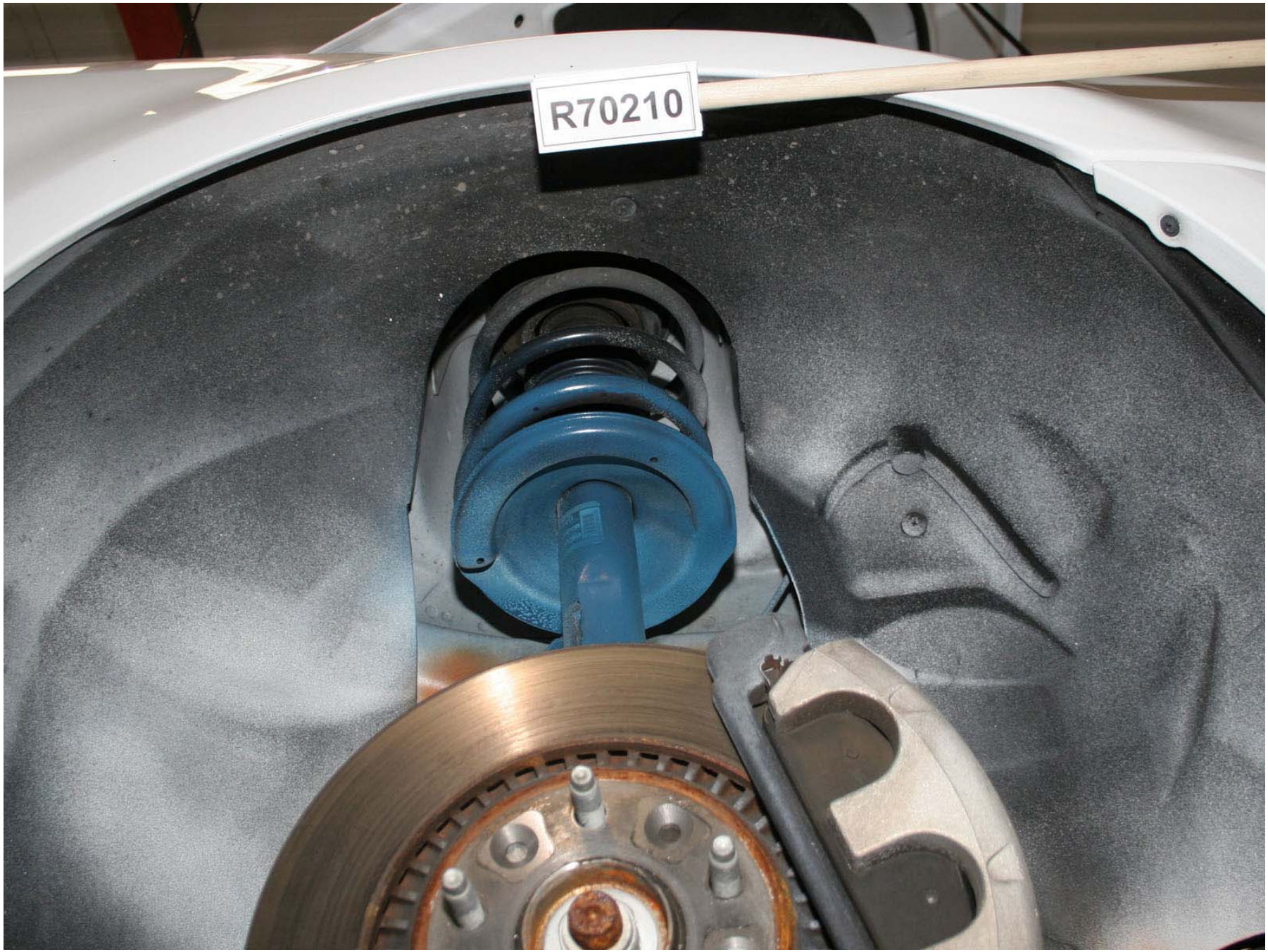

Figure A-494: Test Vehicle Pre-Test Right Inner Fender Well View

Figure A-495: Bullet Vehicle Post-Test Right Inner Fender Well View

Figure A-496: Bullet Vehicle Pre-Test Right Inner Fender Well View

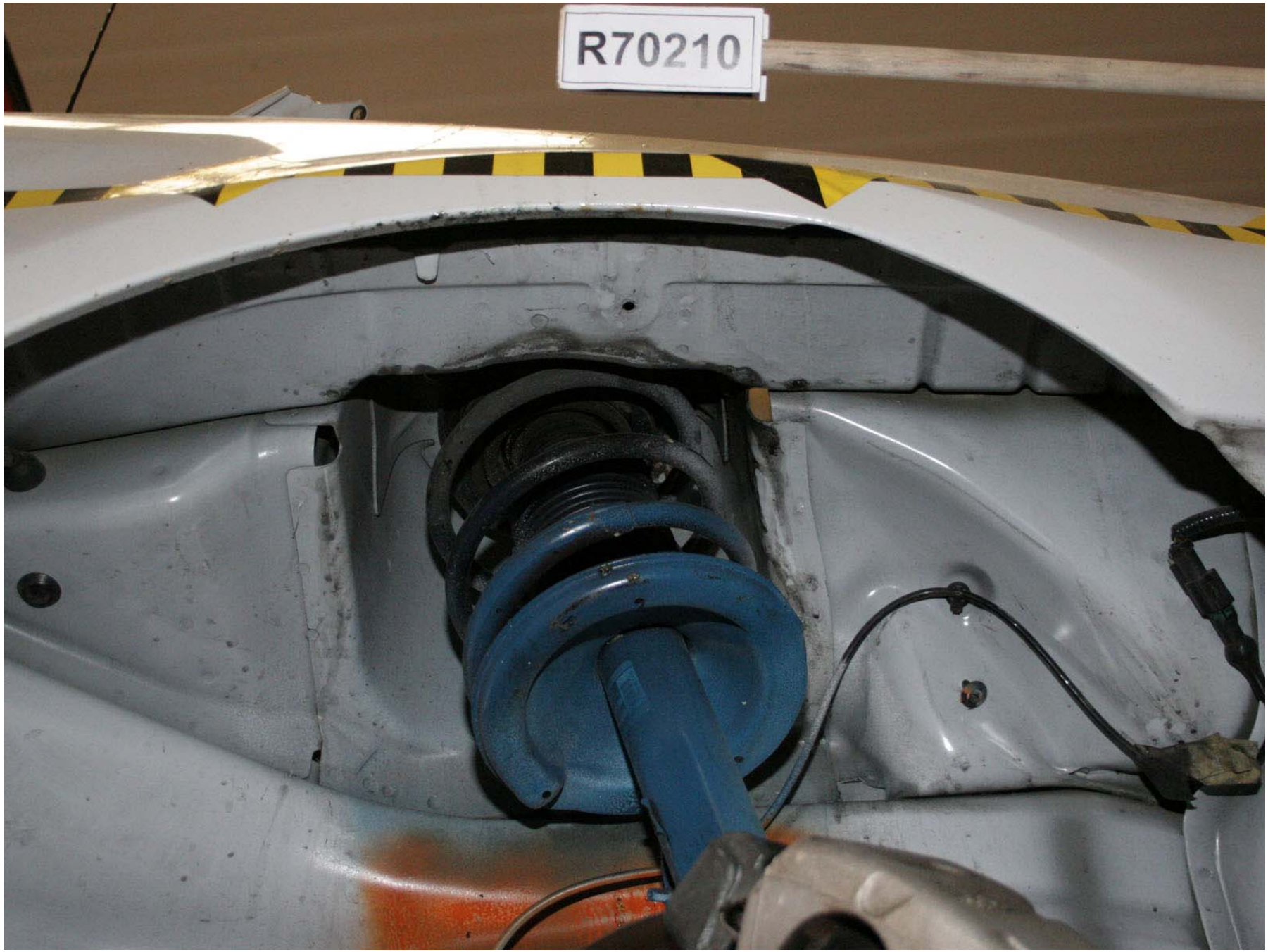

Figure A-497: Bullet Vehicle Post-Test Right Inner Fender Well View

Figure A-498: Bullet Vehicle Pre-Test Top Fender View

Figure A-499: Bullet Vehicle Post-Test Top Fender View

Figure A-500: Bullet Vehicle Pre-Test Right Front Frame Rail View

Figure A-501: Bullet Vehicle Post-Test Right Front Frame Rail View

Figure A-502: Bullet Vehicle Pre-Test Right Front Frame Rail View

Figure A-503: Test Vehicle Post-Test Right Front Frame Rail View

Figure A-504: Bullet Vehicle Pre-Test Right Front Frame Rail View

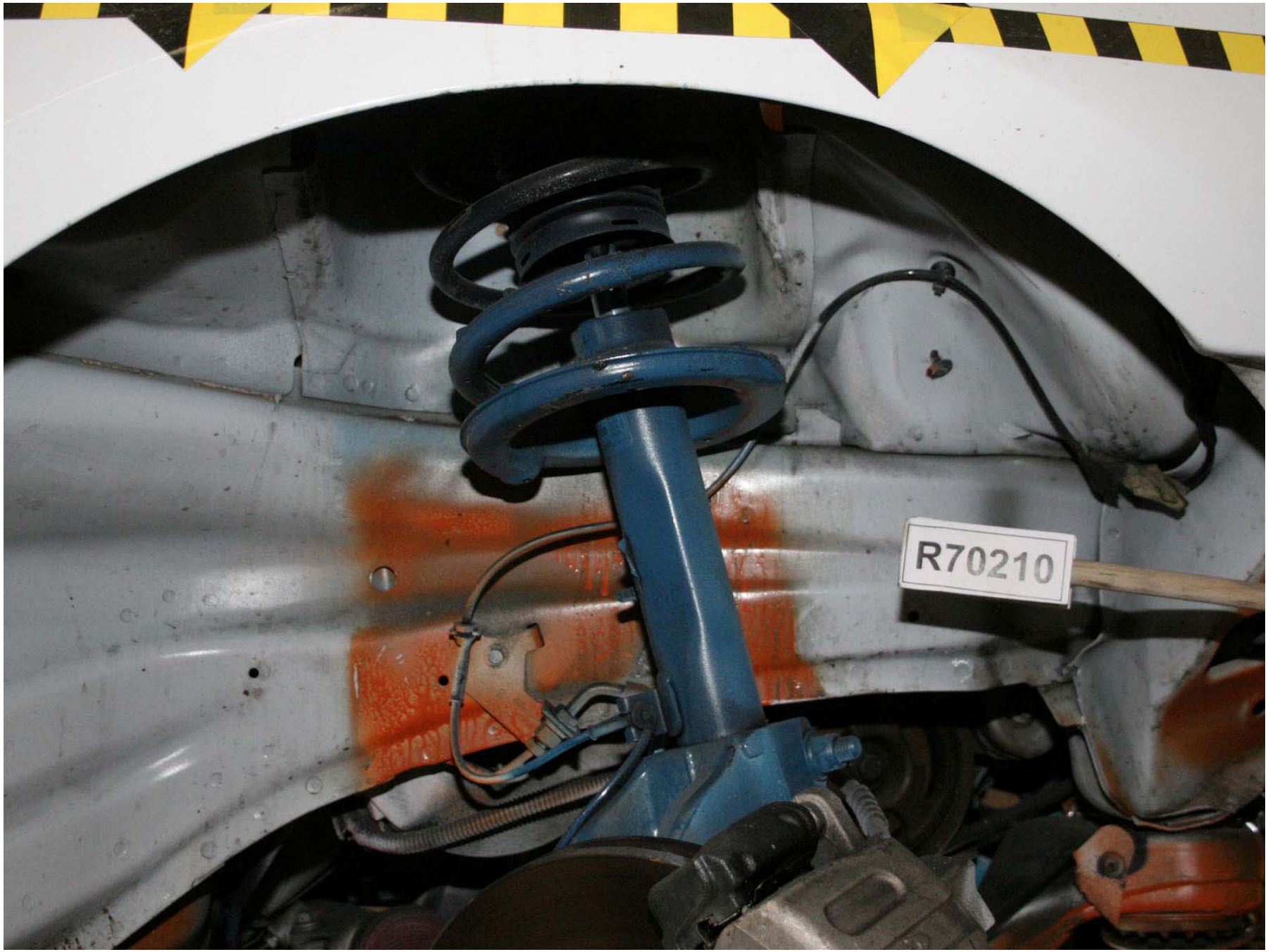

Figure A-505: Bullet Vehicle Post-Test Right Front Frame Rail View

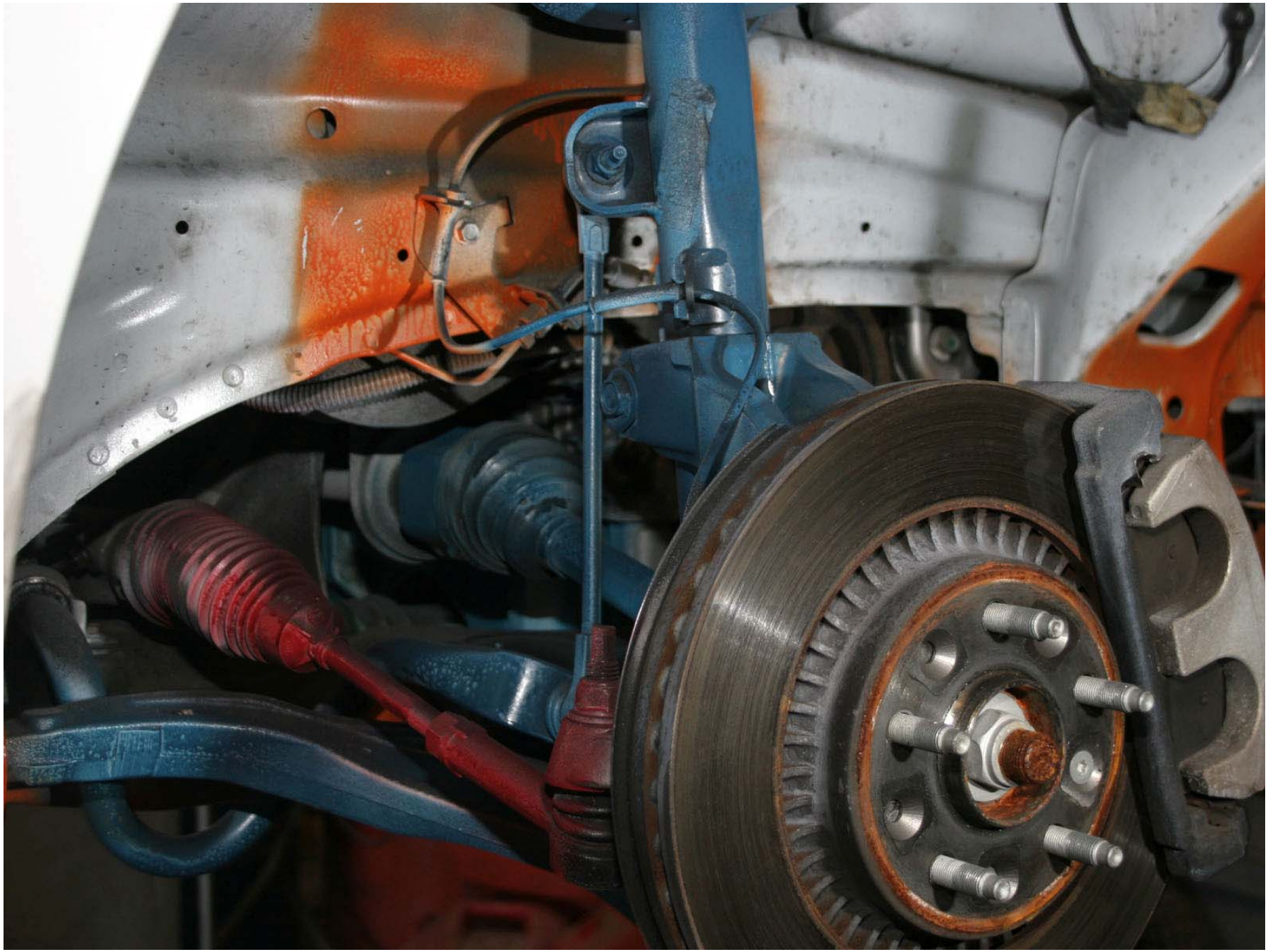

Figure A-506: Bullet Vehicle Pre-Test Right Side Tie Rod and Sway Bar Attachments Points

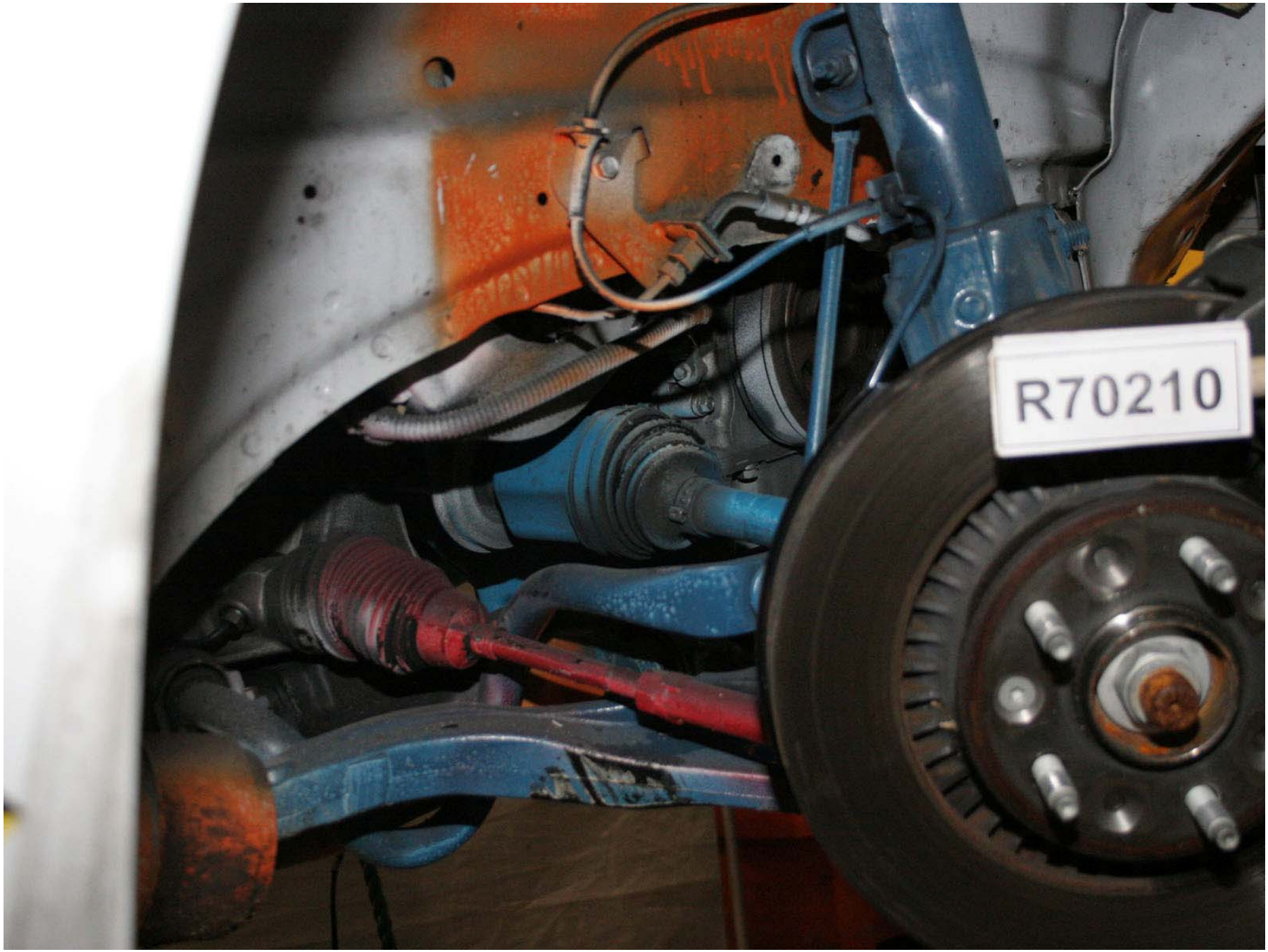

Figure A-507: Bullet Vehicle Post-Test Right Side Tie Rod and Sway Bar Attachments Points

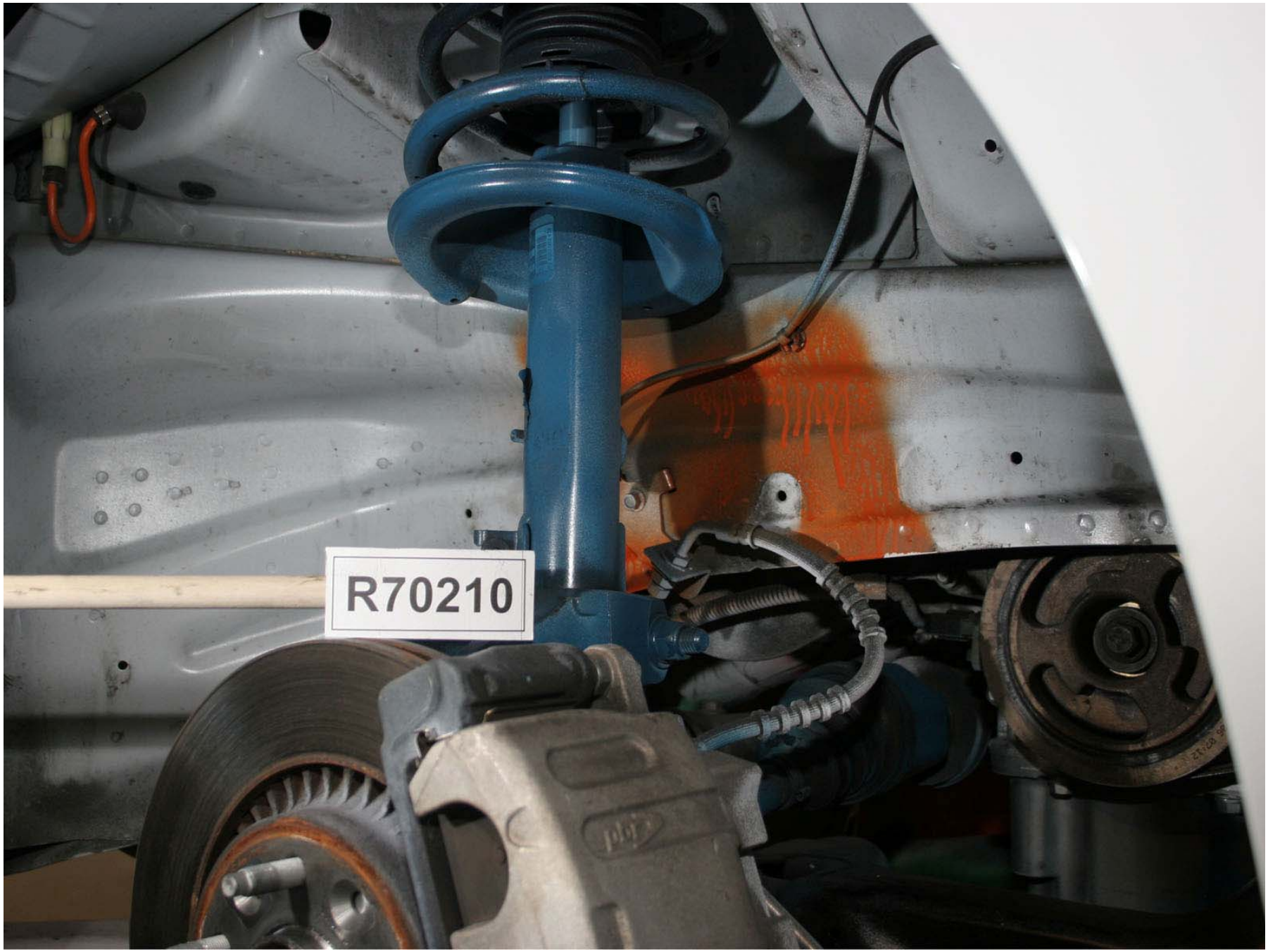

Figure A-508: Bullet Vehicle Pre-Test Right Side Upper Sway Bar Attachment Point

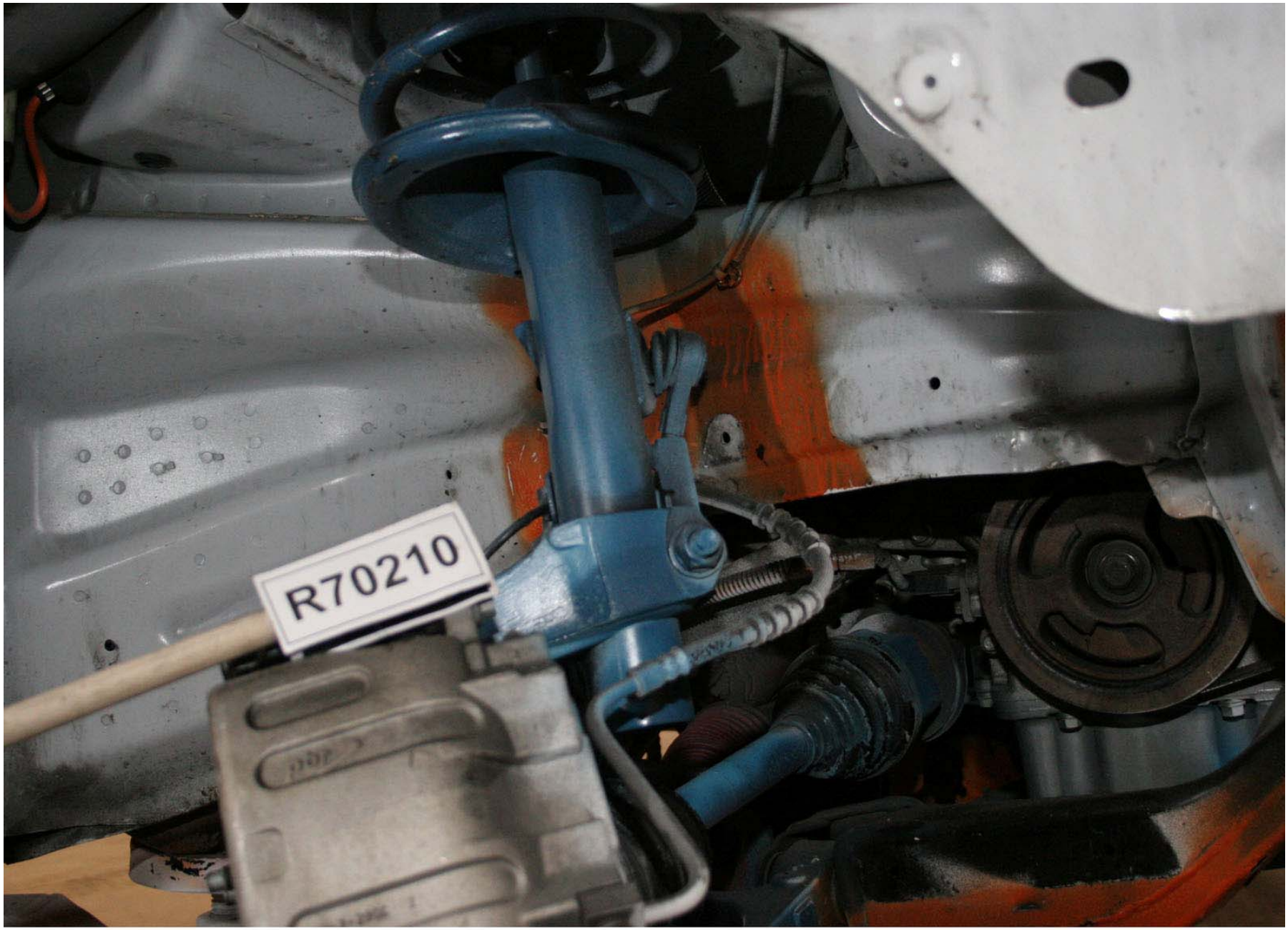

Figure A-509: Bullet Vehicle Post-Test Right Side Upper Sway Bar Attachment Point

Figure A-510: Bullet Vehicle Pre-Test Left Side Frame to A-Pillar Joint

Figure A-511: Bullet Vehicle Post-Test Left Side Frame to A-Pillar Joint

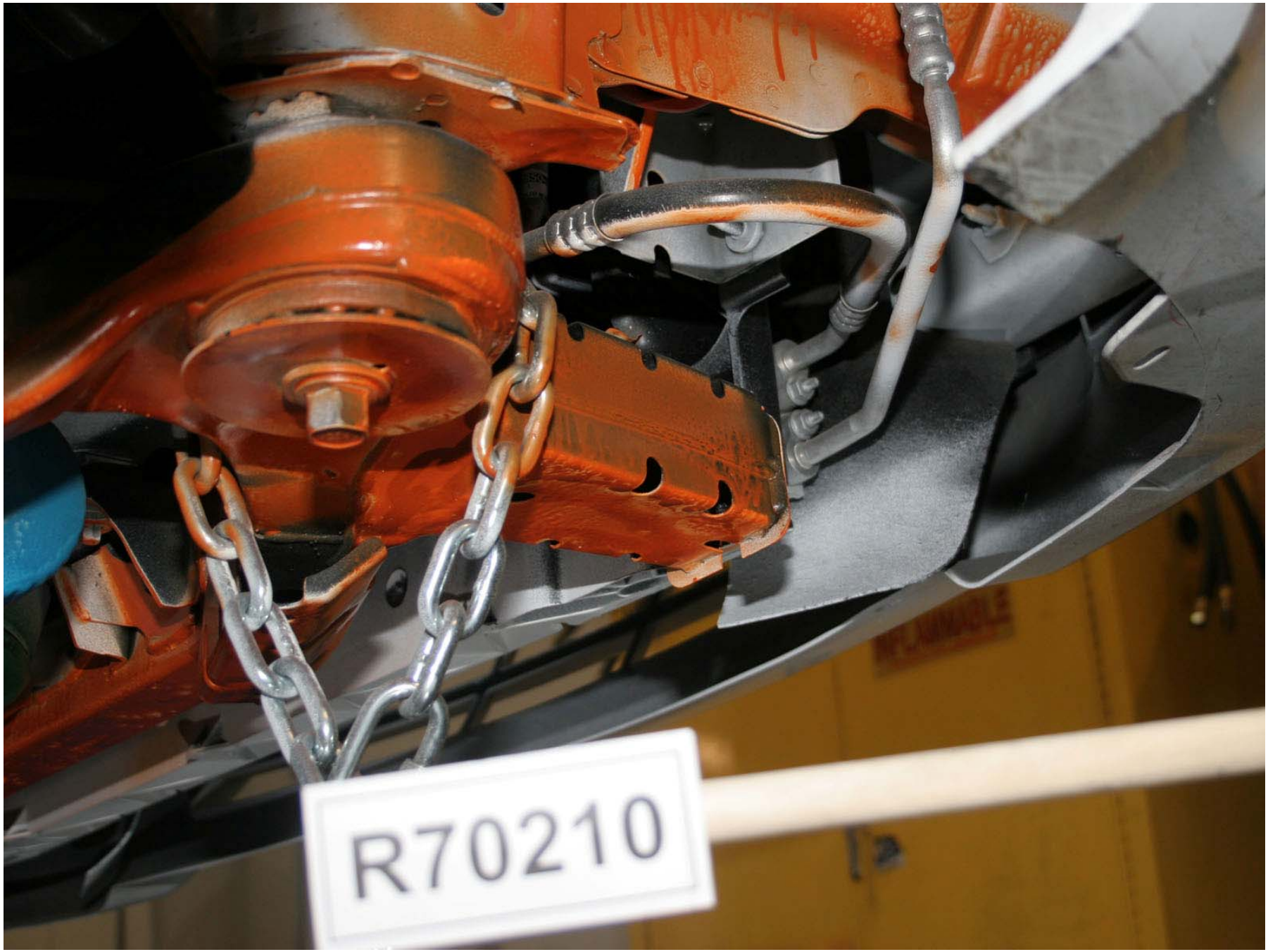

Figure A-512: Bullet Vehicle Pre-Test Right Side Crush Initiators

Figure A-513: Bullet Vehicle Post-Test Right Side Crush Initiators

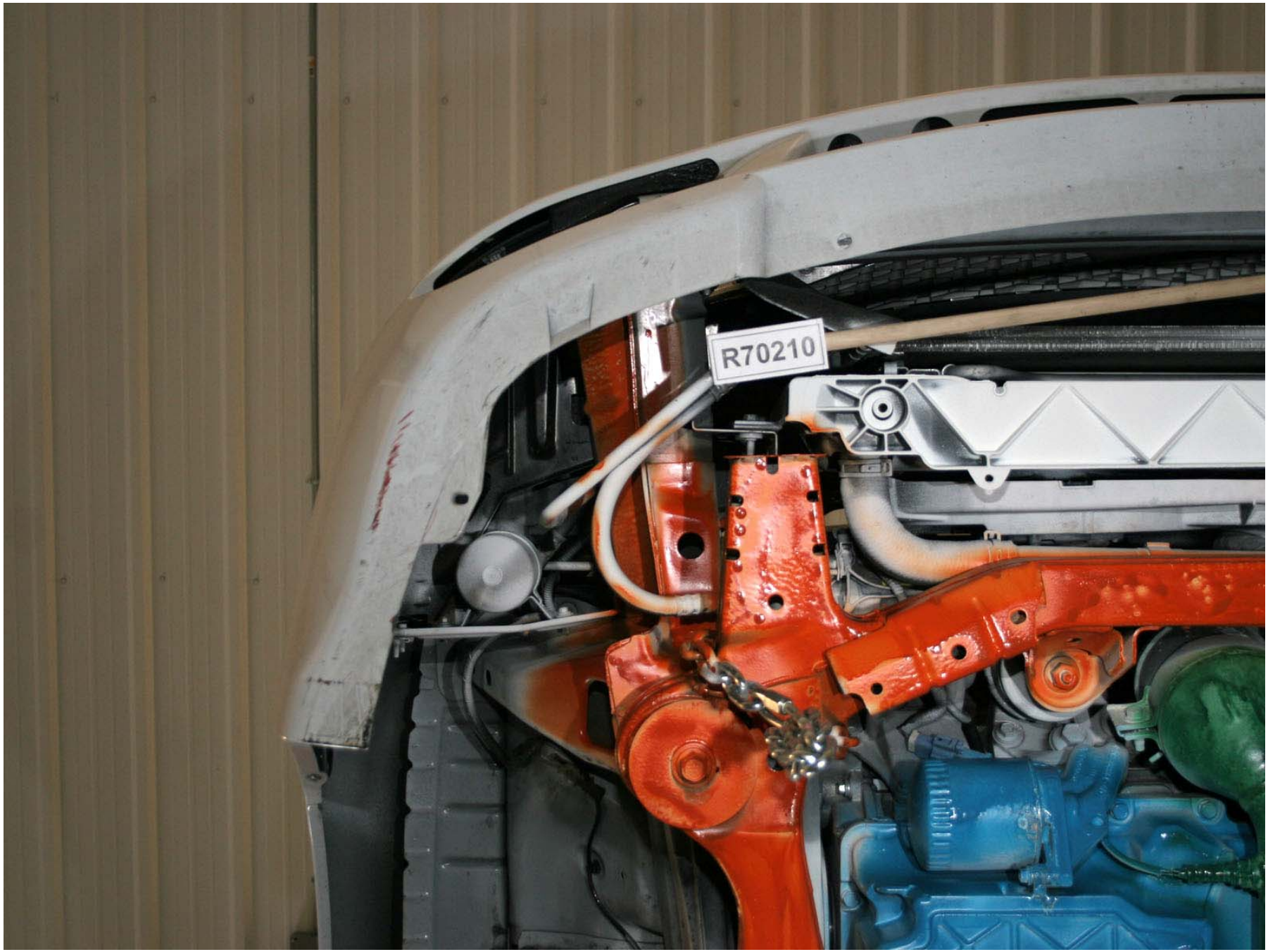

Figure A-514: Bullet Vehicle Pre-Test Right Side Crush Initiators

Figure A-515: Bullet Vehicle Post-Test Right Side Crush Initiators

Figure A-516: Bullet Vehicle Pre-Test Right Side Bumper Attachment Point

Figure A-517: Test Vehicle Post-Test Right Side Bumper Attachment Point

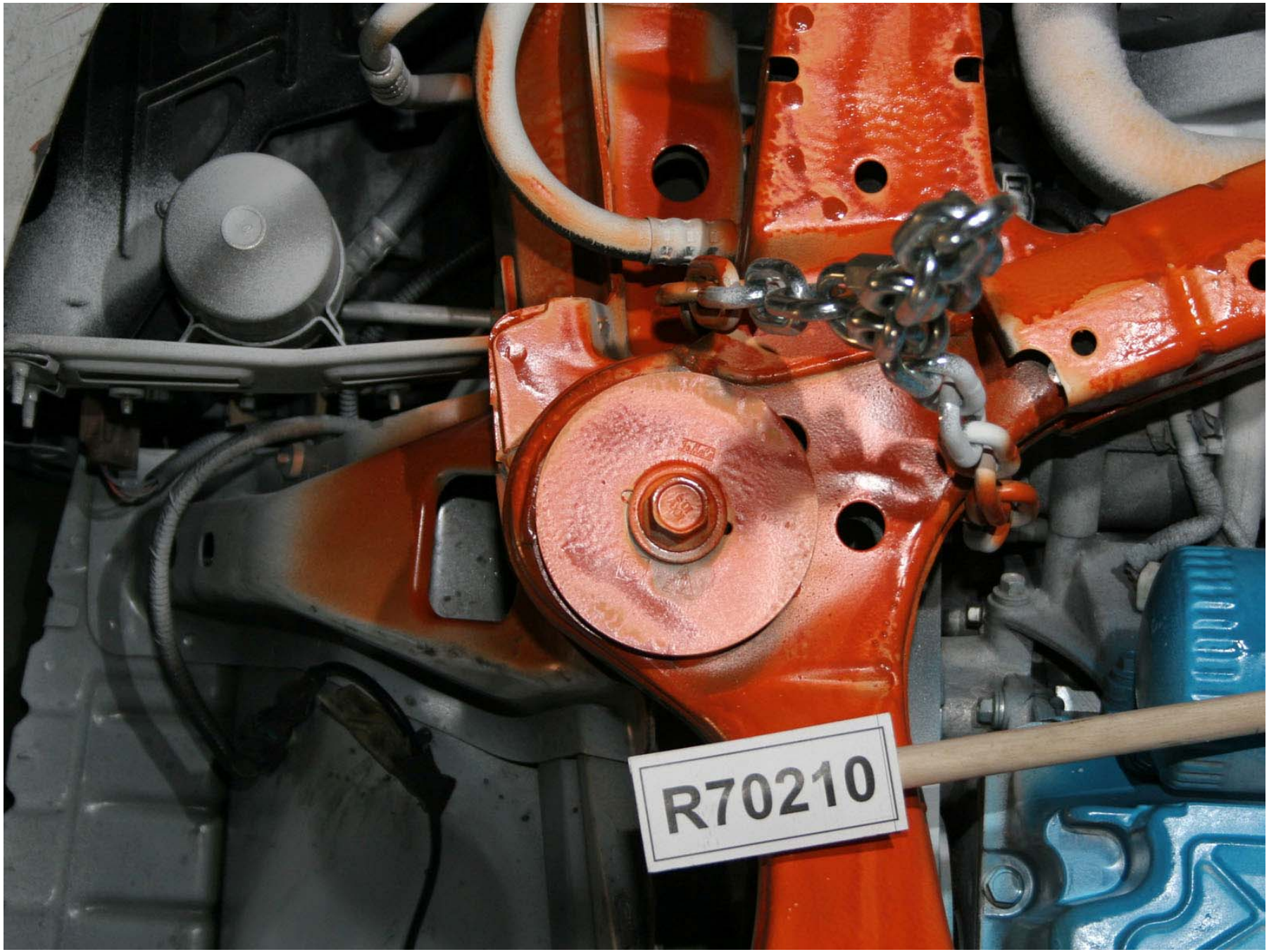

Figure A-518: Bullet Vehicle Pre-Test Right Front Sub-Frame Mounting Point

Figure A-519: Bullet Vehicle Post-Test Right Front Sub-Frame Mounting Point

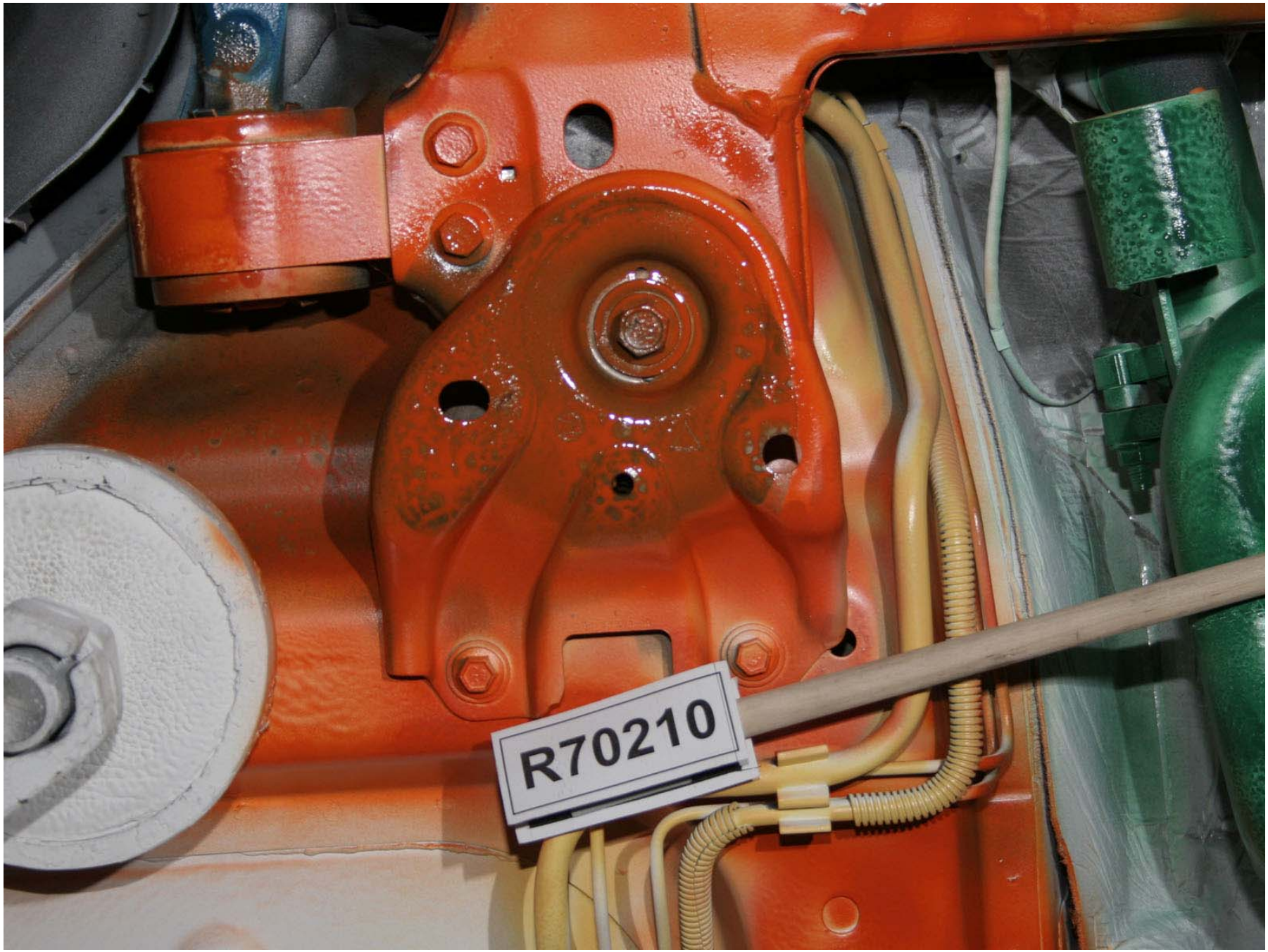

Figure A-520: Bullet Vehicle Pre-Test Right Rear Sub-Frame Mounting Point

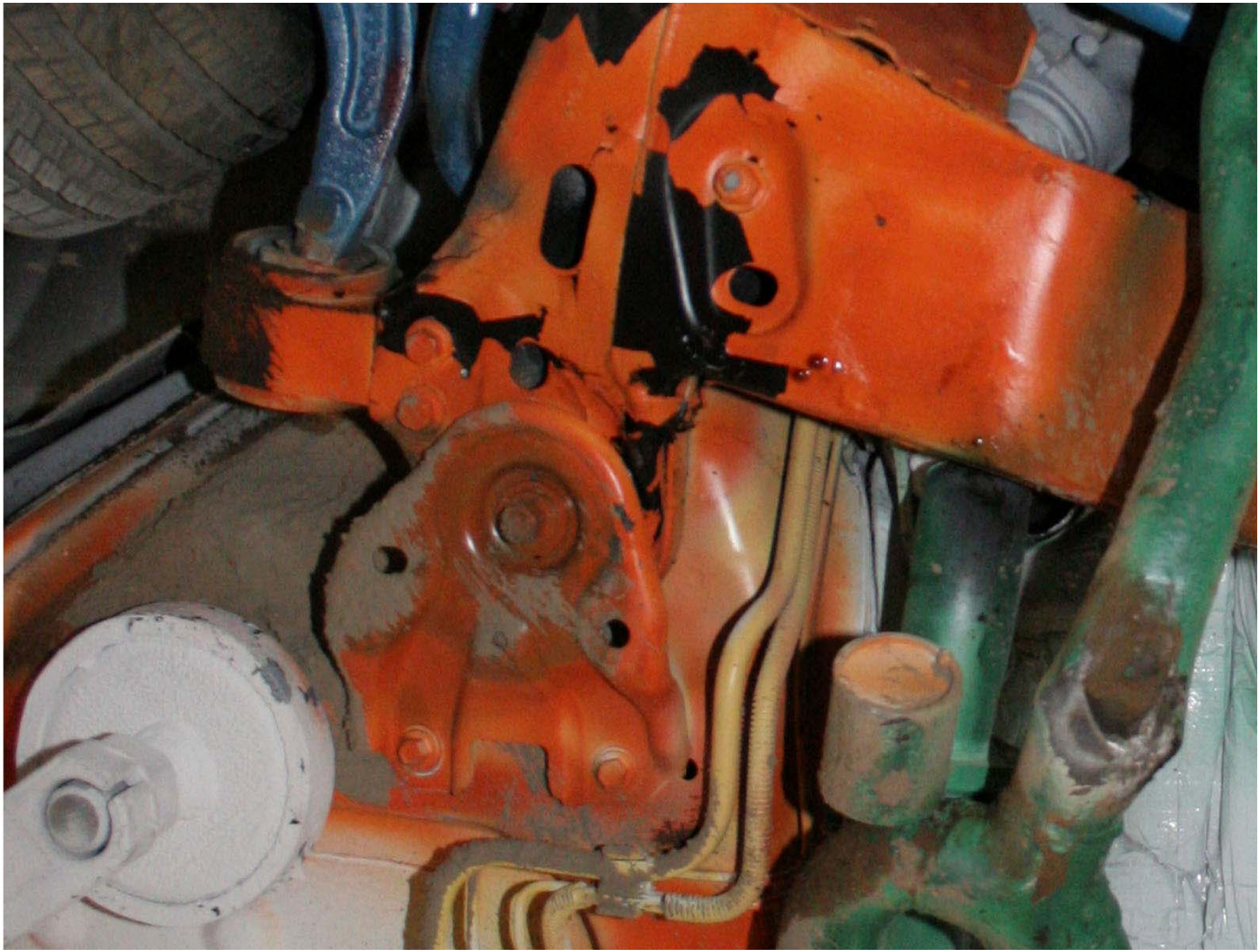

Figure A-521: Bullet Vehicle Post-Test Right Rear Sub-Frame Mounting Point

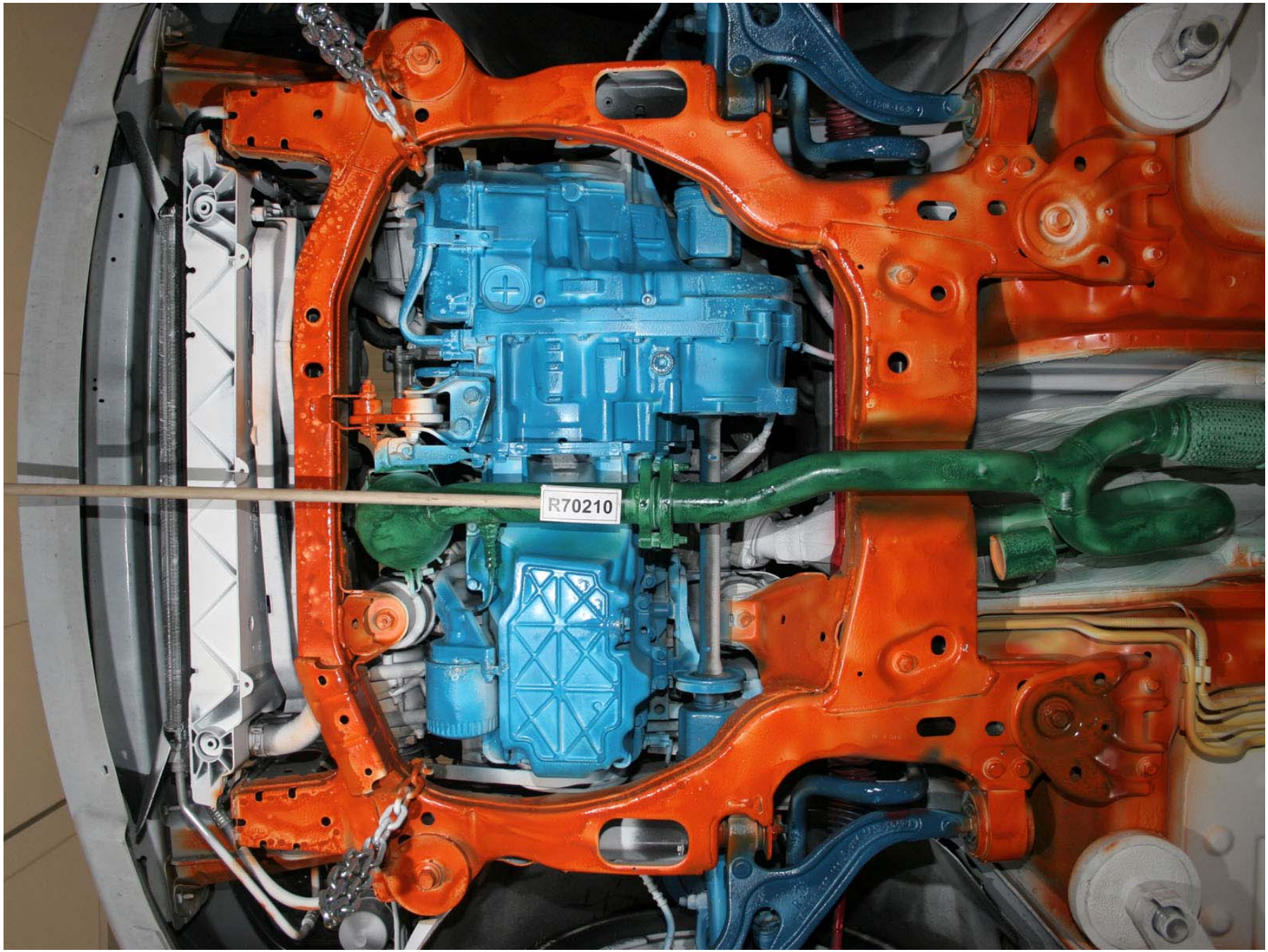

Figure A-522: Bullet Vehicle Pre-Test Front Underbody

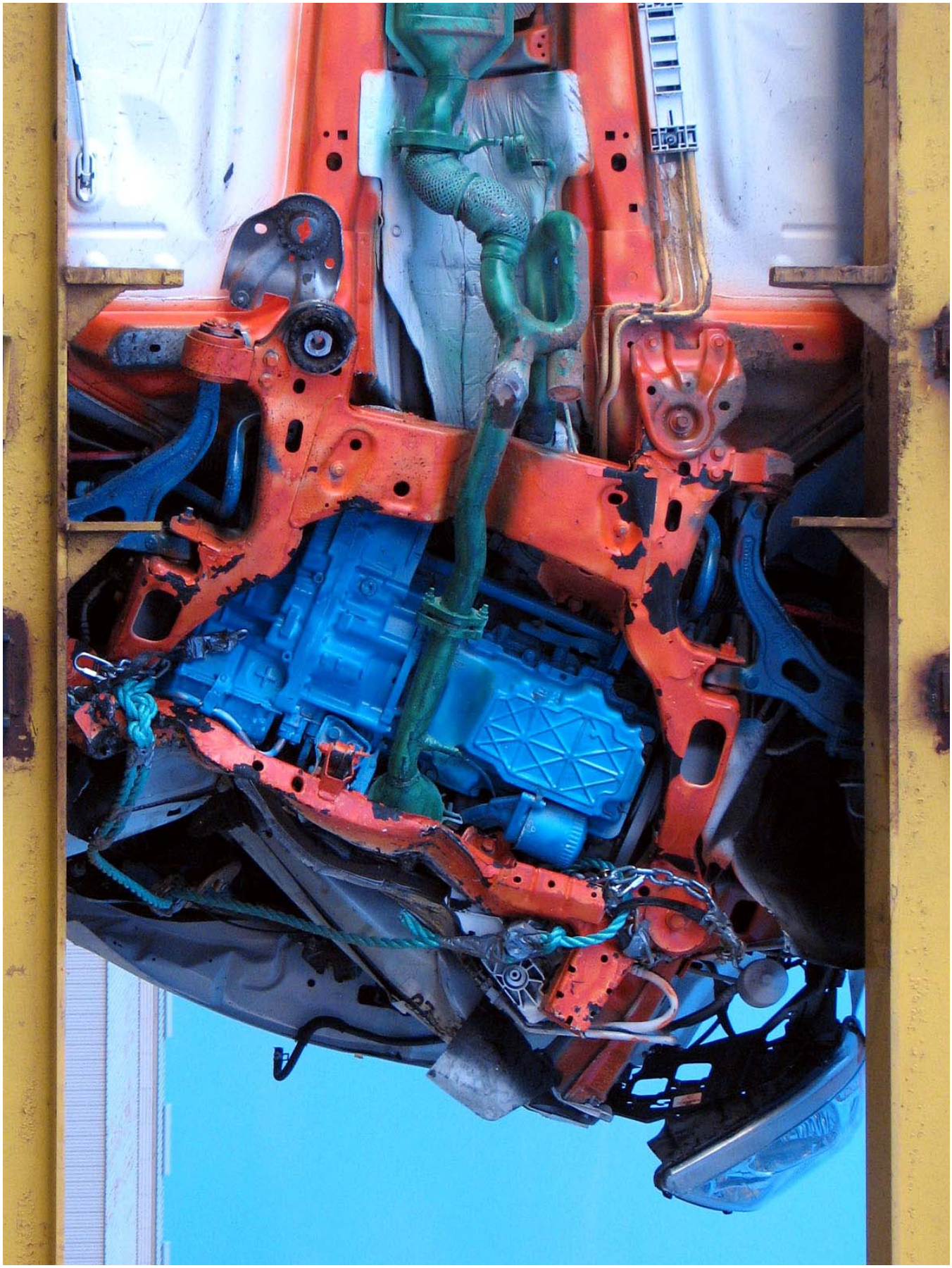

Figure A-523: Bullet Vehicle Post-Test Front Underbody

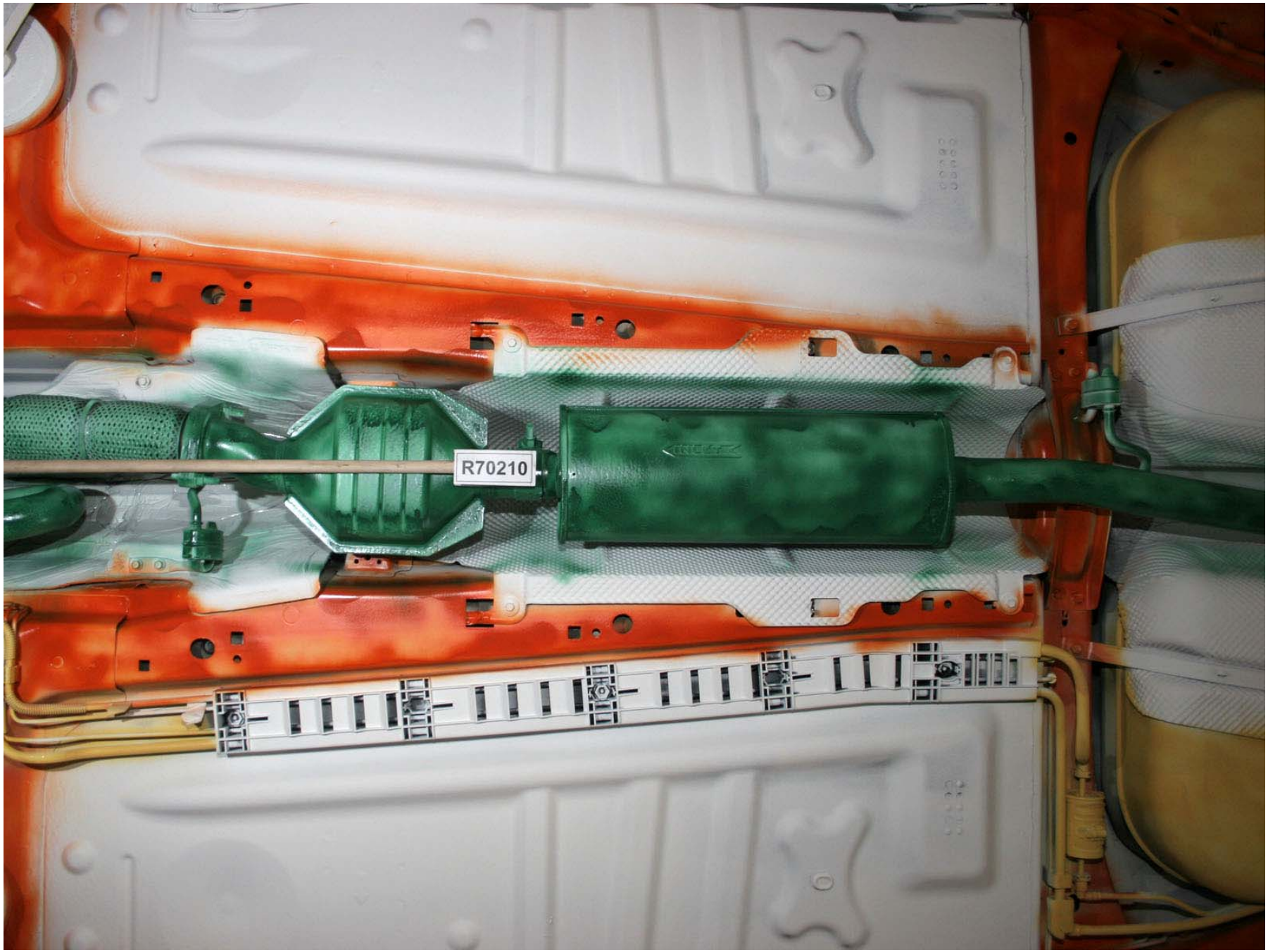

Figure A-524: Bullet Vehicle Pre-Test Mid Underbody

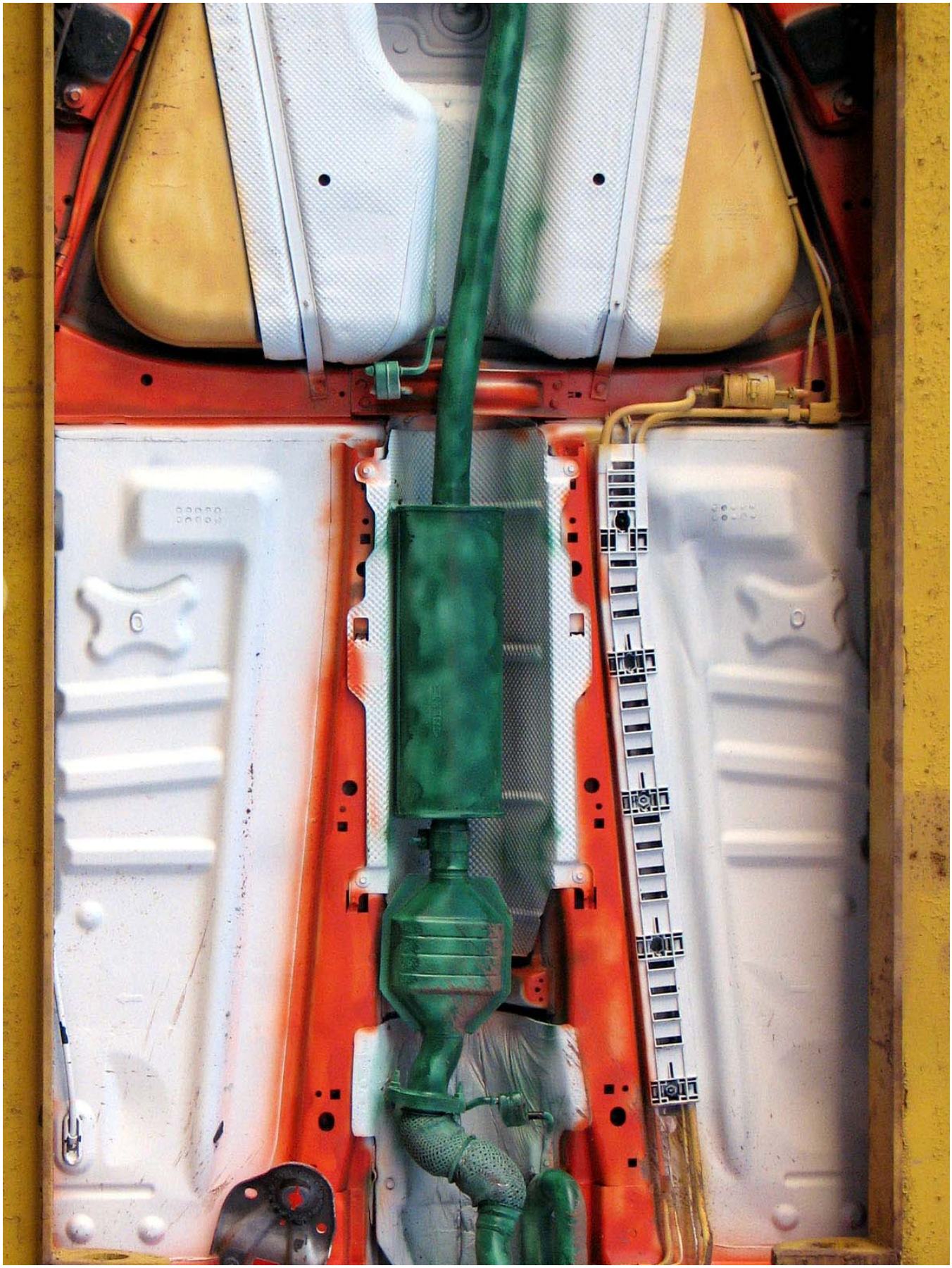

Figure A-525: Bullet Vehicle Post-Test Mid Underbody

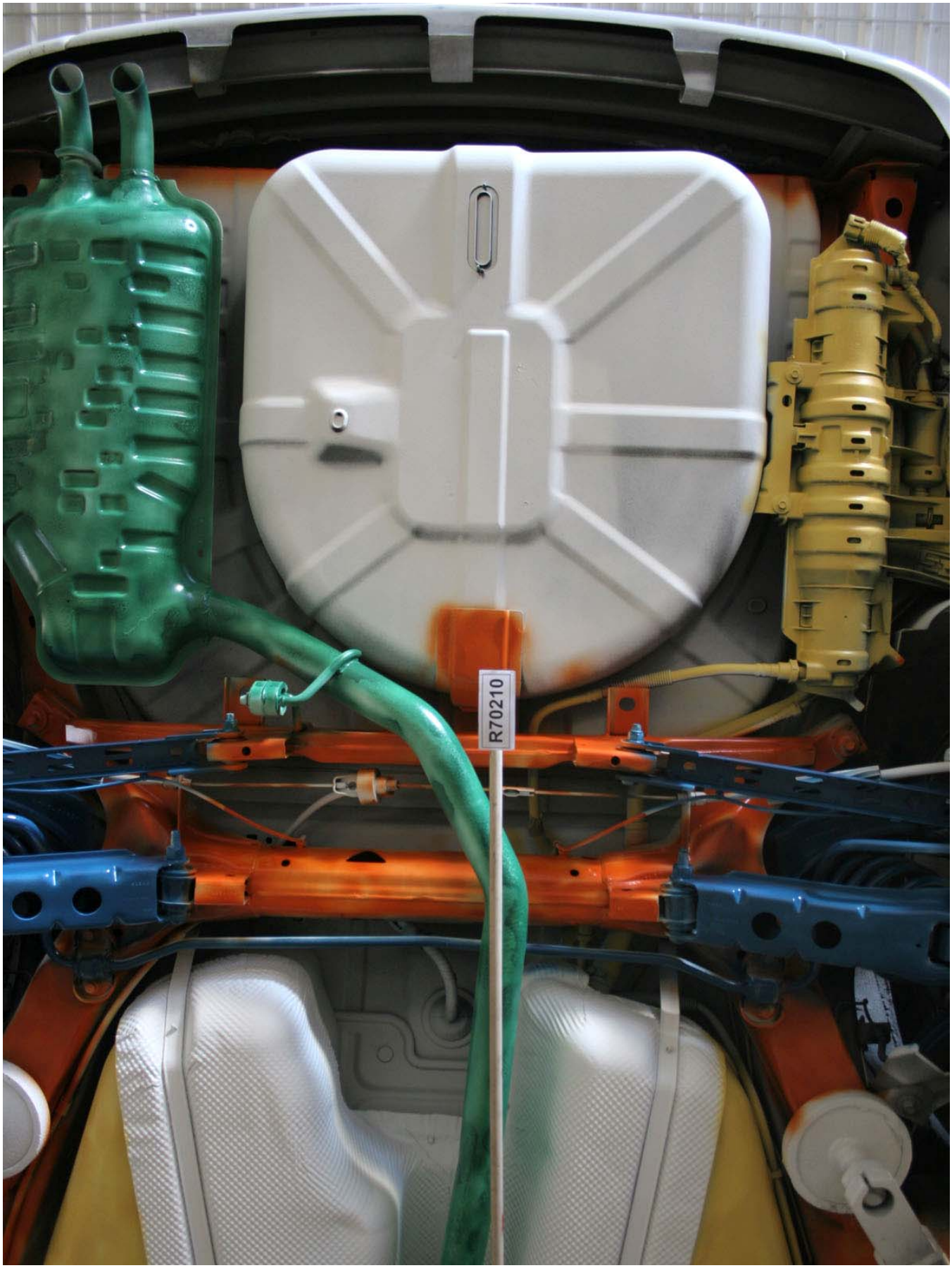

Figure A-526: Bullet Vehicle Pre-Test Rear Underbody

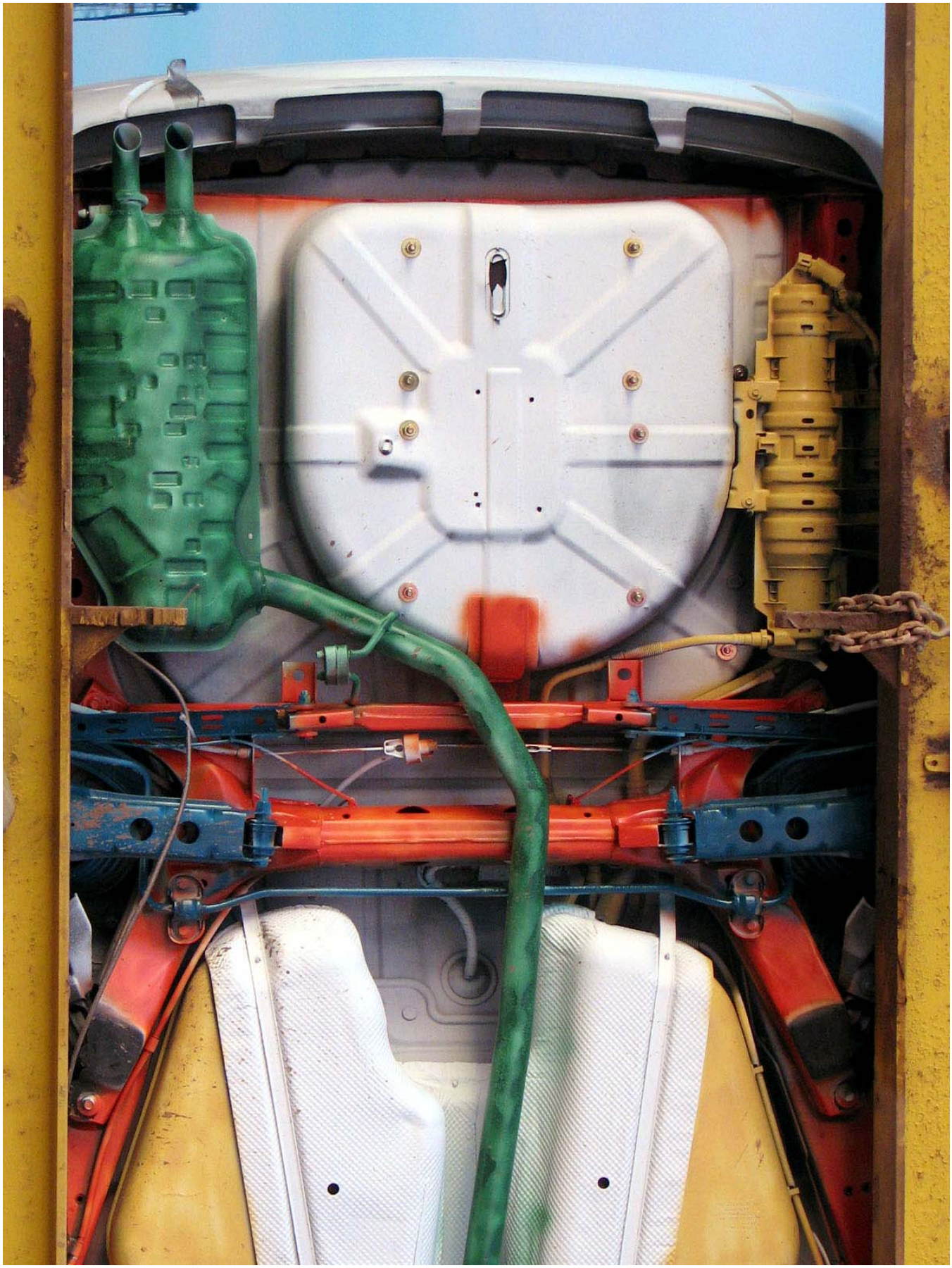

Figure A-527: Bullet Vehicle Post-Test Rear Underbody

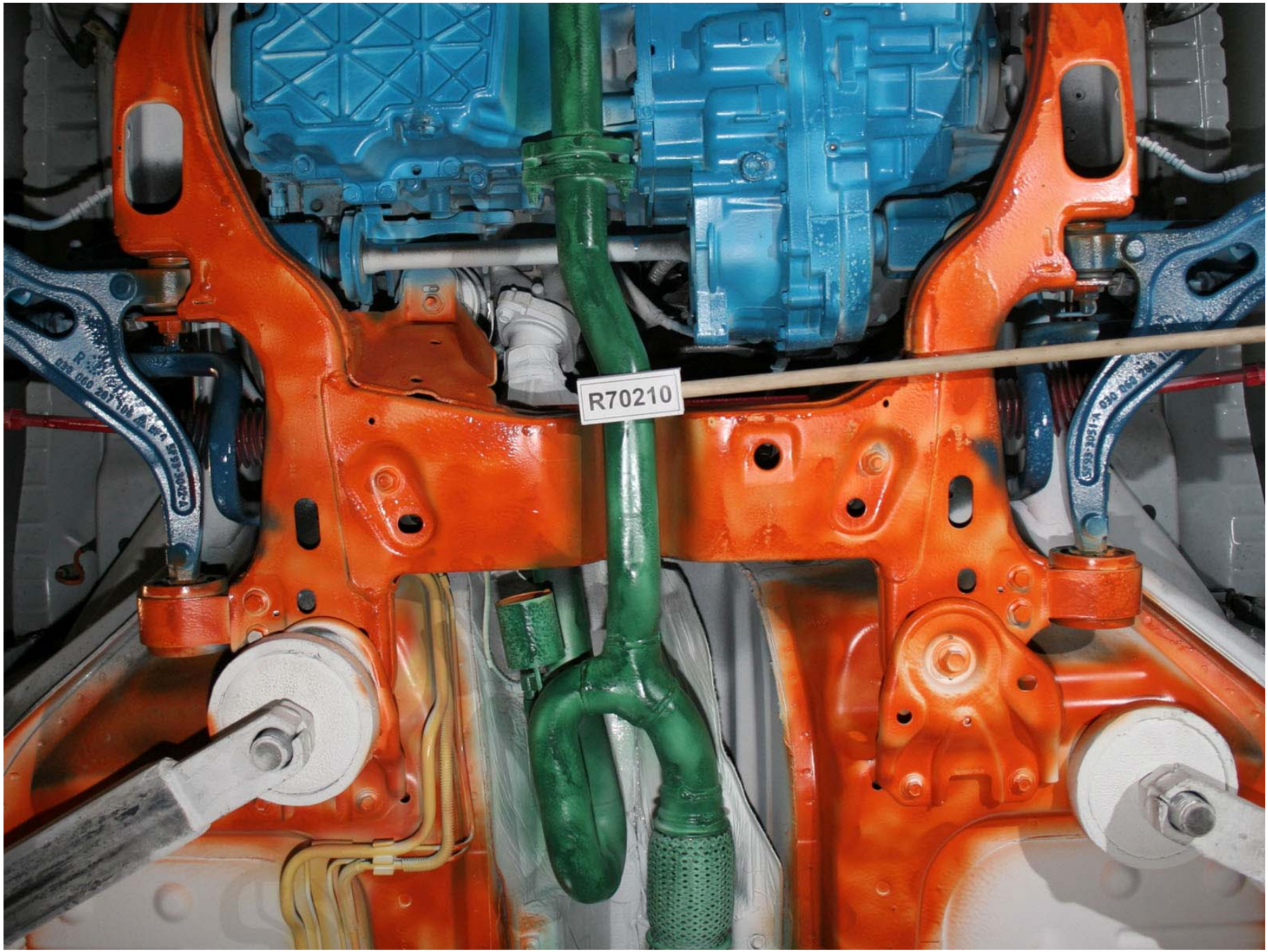

Figure A-528: Bullet Vehicle Pre-Test Steering Rack and Sway Bar View

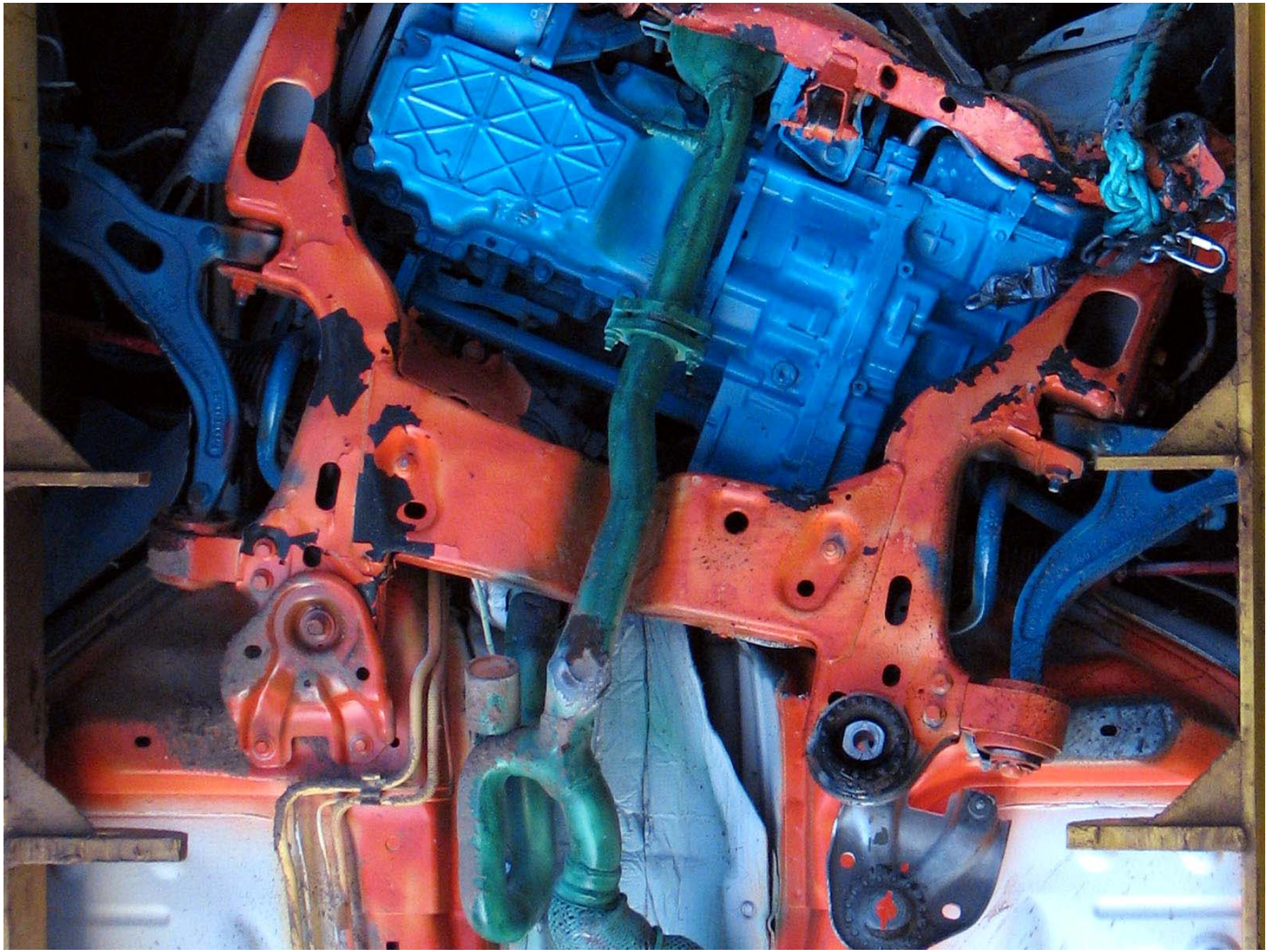

Figure A-529: Bullet Vehicle Post-Test Steering Rack and Sway Bar View

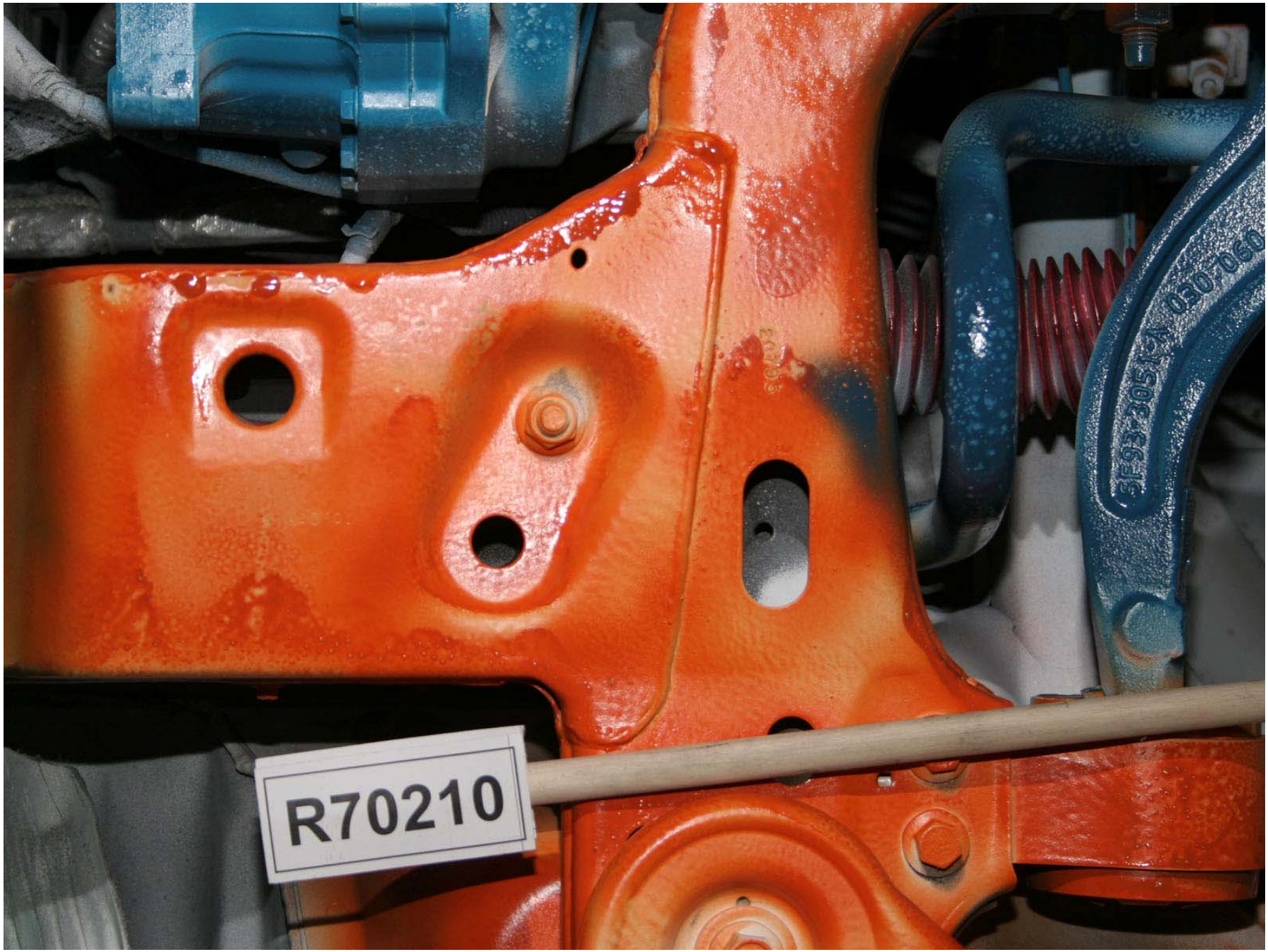

Figure A-530: Bullet Vehicle Pre-Test Steering Rack Left Side Mounting Bolt

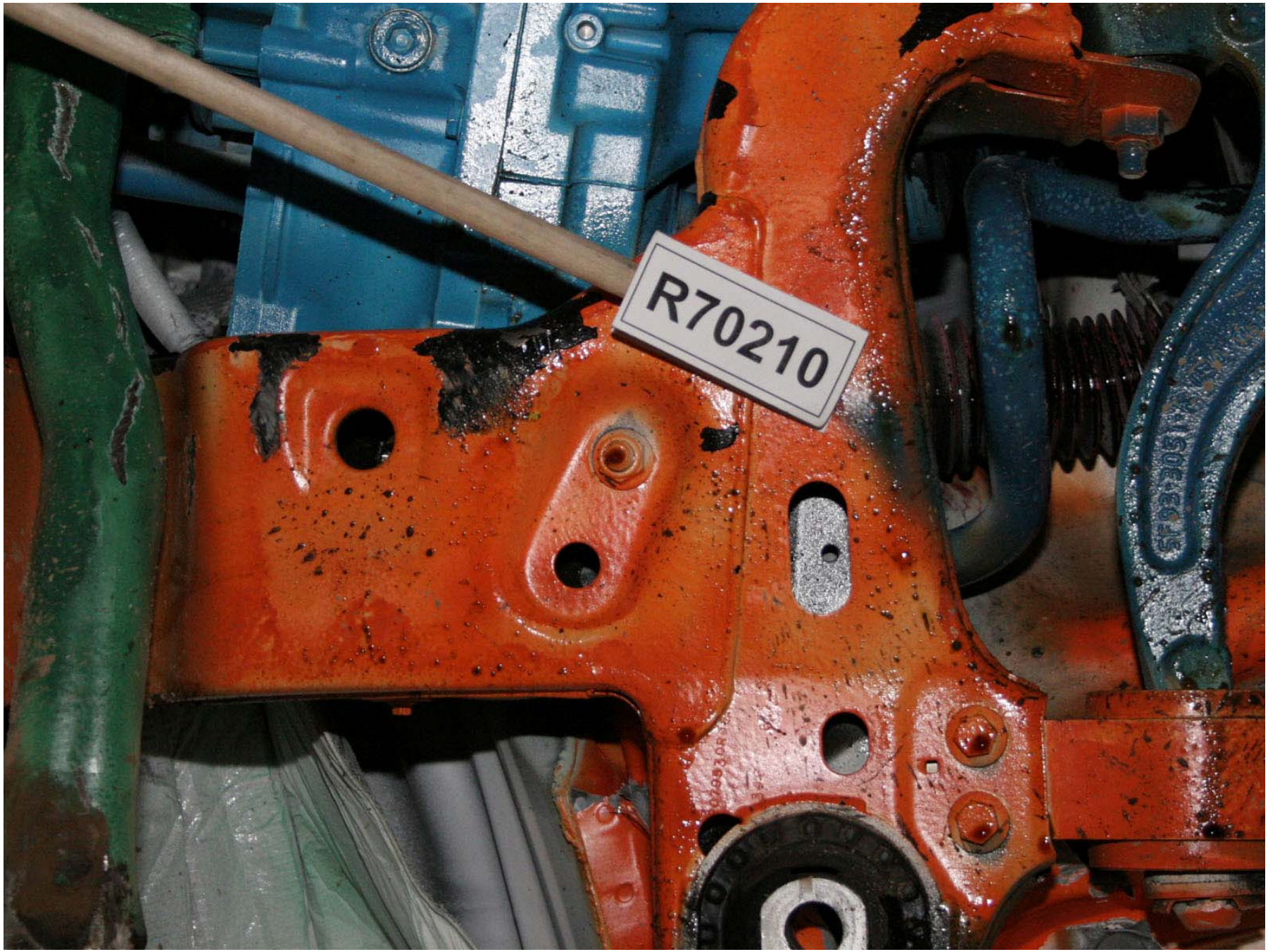

Figure A-531: Bullet Vehicle Post-Test Steering Rack Left Side Mounting Bolt

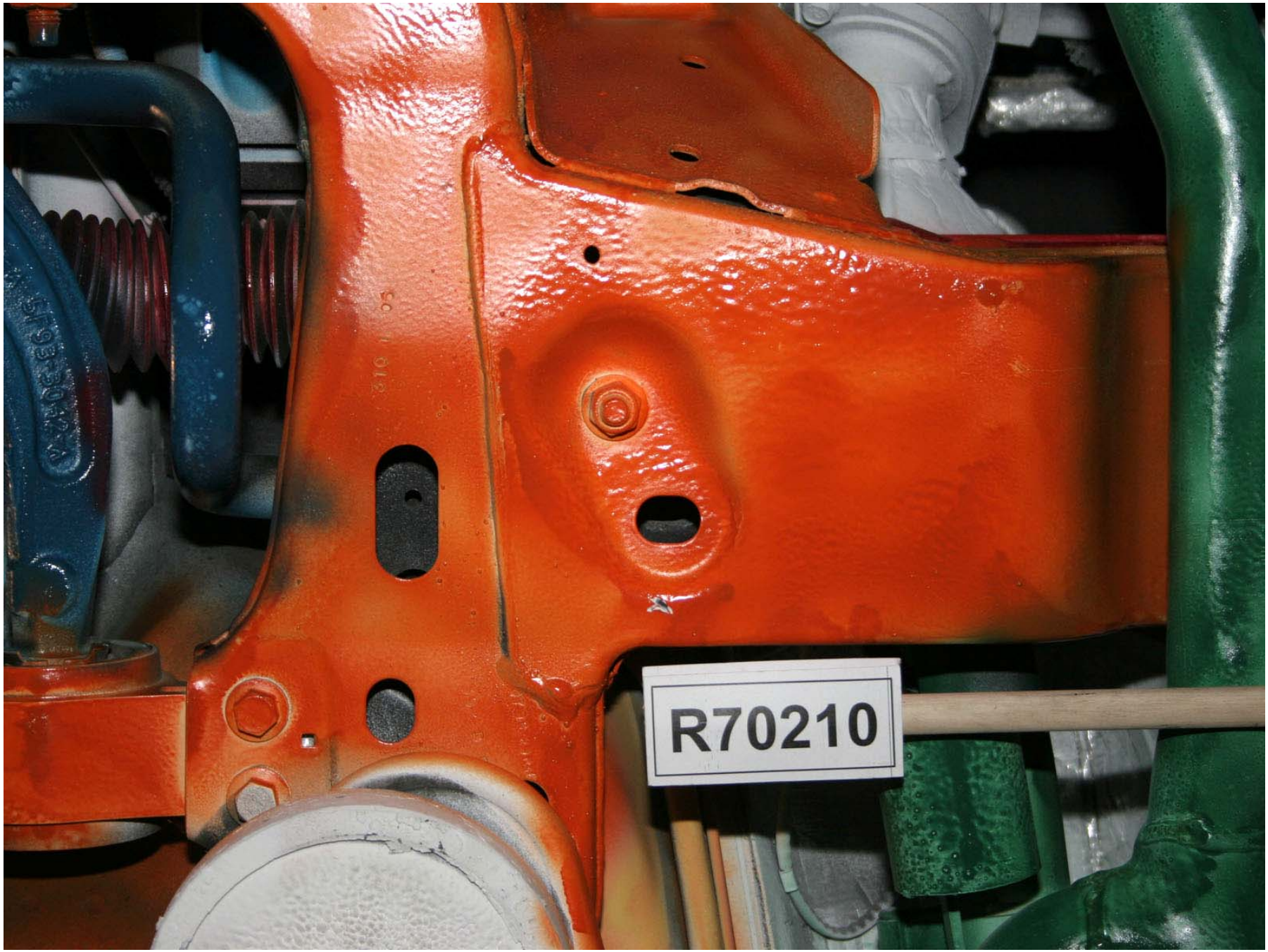

Figure A-532: Bullet Vehicle Pre-Test Steering Rack Right Side Mounting Bolt

Figure A-533: Bullet Vehicle Post-Test Steering Rack Right Side Mounting Bolt

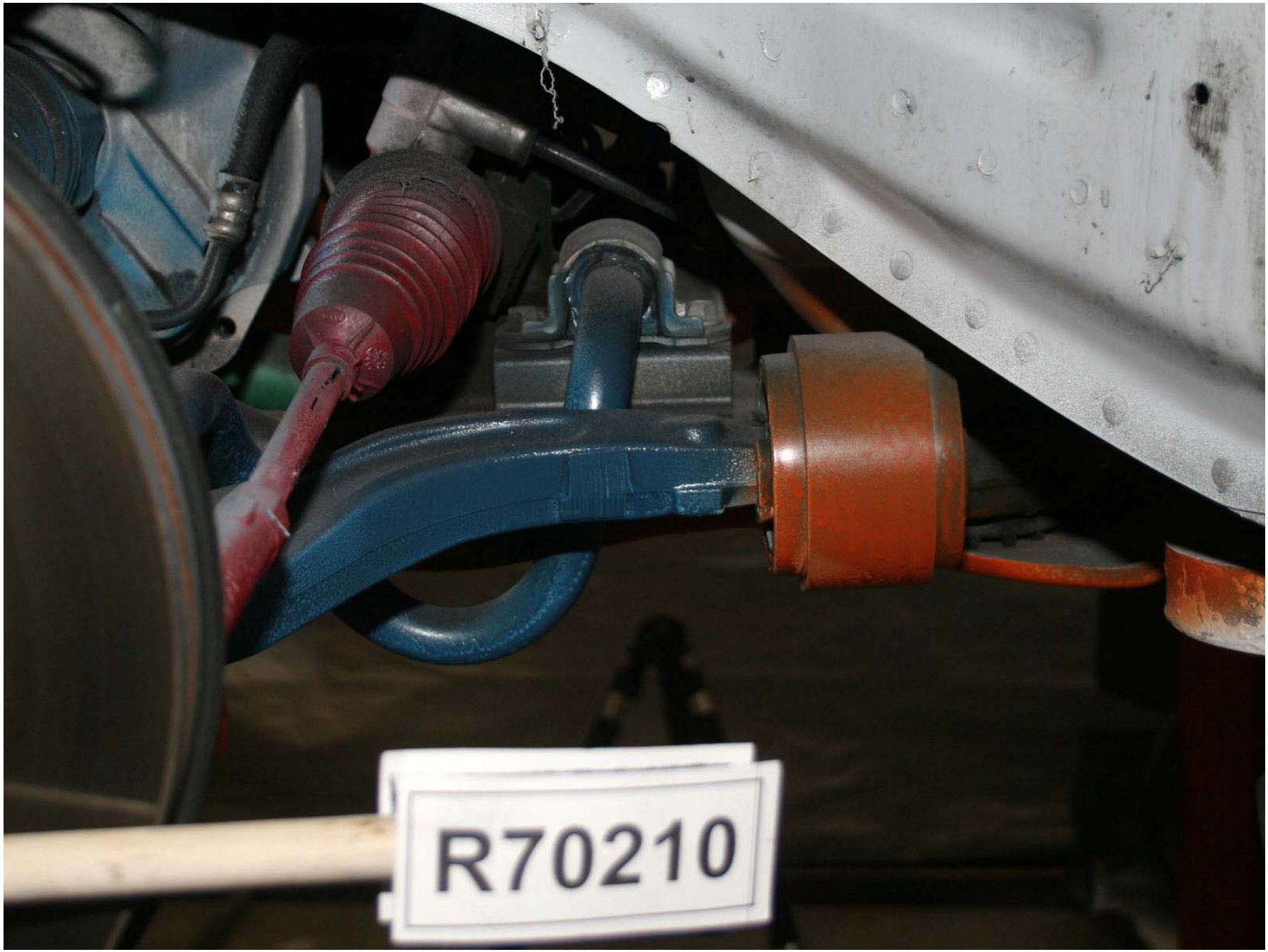

Figure A-534: Bullet Vehicle Pre-Test Sway Bar Left Side Mounting Bolts

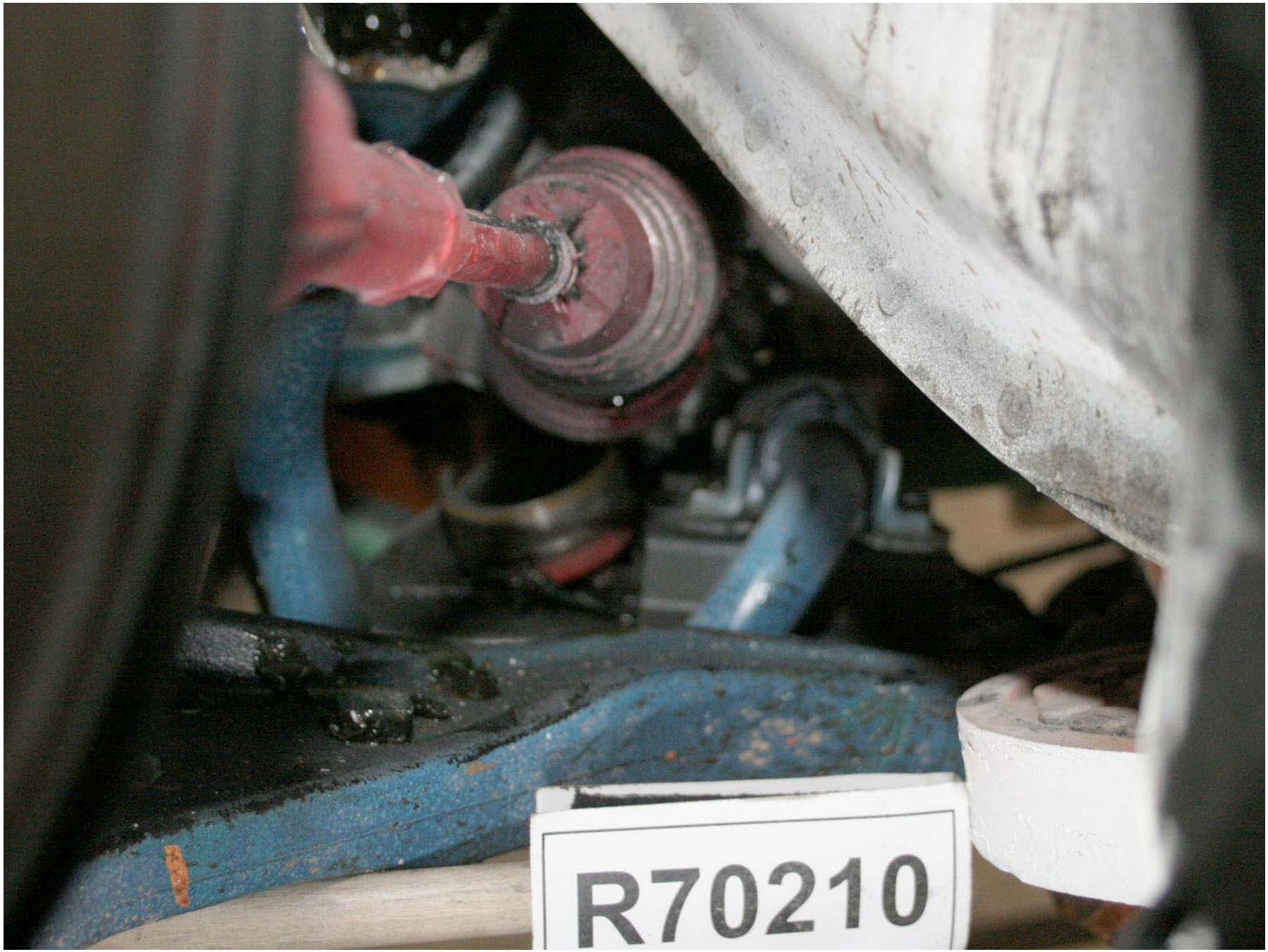

Figure A-535: Bullet Vehicle Post-Test Sway Bar Left Side Mounting Bolts

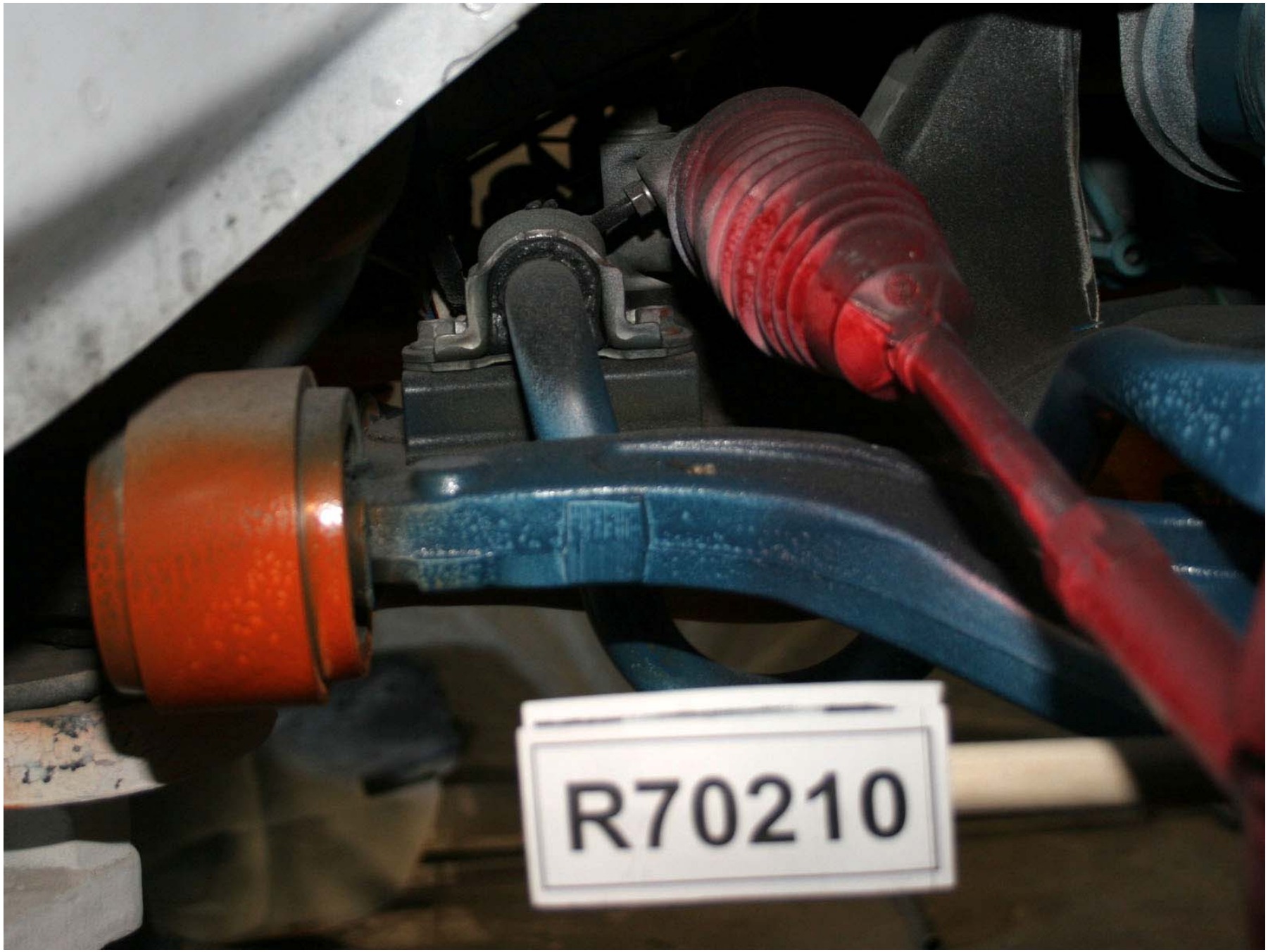

Figure A-536: Bullet Vehicle Pre-Test Sway Bar Right Side Mounting Bolts

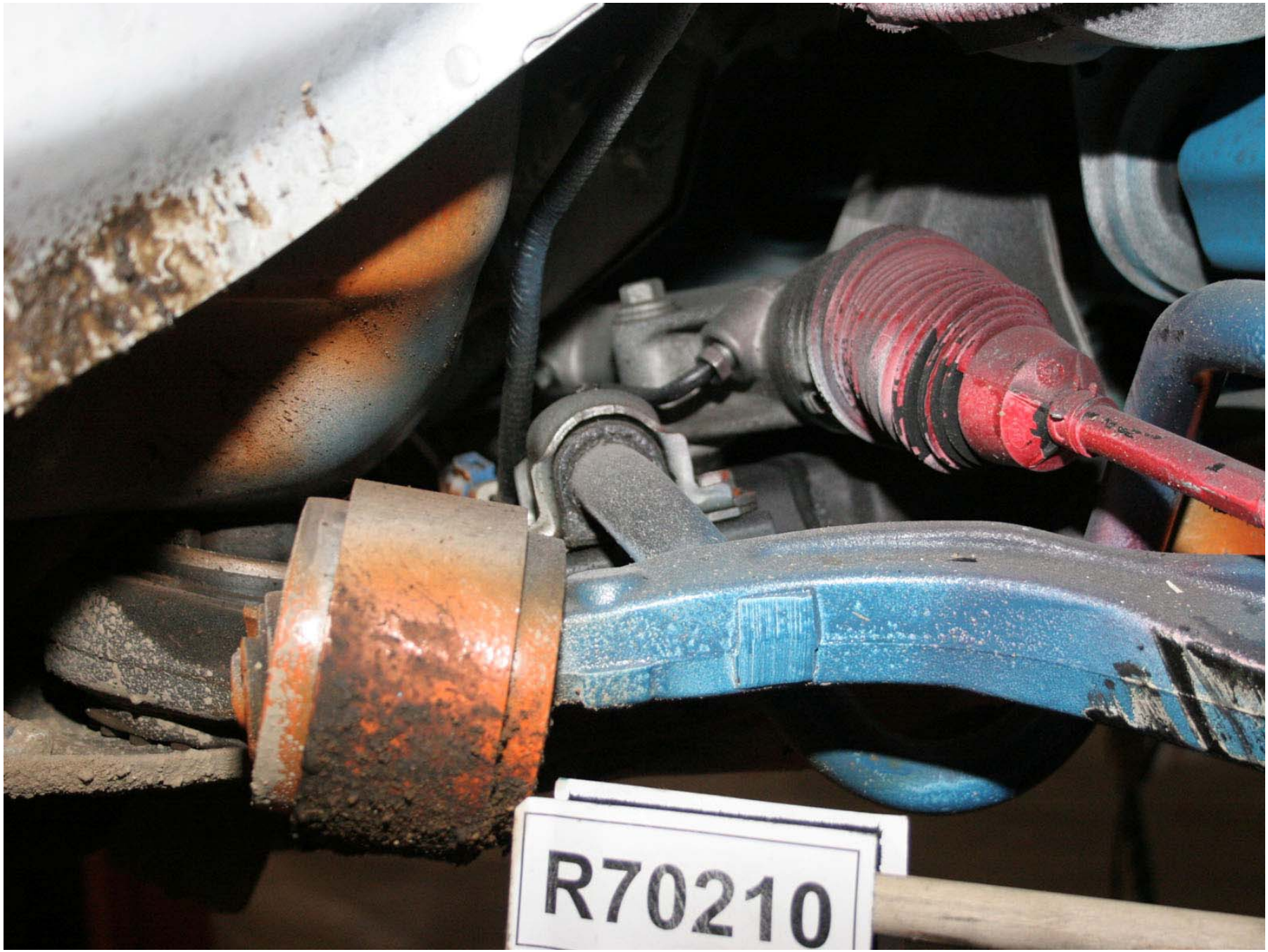

Figure A-537: Bullet Vehicle Post-Test Sway Bar Right Side Mounting Bolts

Figure A-538: Bullet Vehicle Pre-Test Front Door Panel

Figure A-539: Test Vehicle Post-Test Front Door Panel

Figure A-540: Bullet Vehicle Pre-Test Driver Dummy Right Side View

Figure A-541: Test Vehicle Post-Test Driver Dummy Right Side View

Figure A-542: Bullet Vehicle Pre-Test Driver Dummy Front View

Figure A-543: Bullet Vehicle Post-Test Driver Dummy Front View

Figure A-544: Bullet Vehicle Pre-Test Driver Dummy Left Side View (Door Open)

Figure A-545: Bullet Vehicle Post-Test Driver Dummy Left Side View (Door Open)

Figure A-546: Bullet Vehicle Pre-Test Driver Dummy Abdomen Front View

Figure A-547: Bullet Vehicle Post-Test Driver Dummy Abdomen Front View

Figure A-548: Bullet Vehicle Pre-Test Driver Dummy Abdomen Side View

Figure A-549: Bullet Vehicle Post-Test Driver Dummy Abdomen Side View

Figure A-550: Bullet Vehicle Pre-Test Driver Dummy Feet Positioning

Figure A-551: Bullet Vehicle Pre-Test Driver Dummy Feet Positioning

Figure A-552: Bullet Vehicle Pre-Test Driver Dummy Feet Positioning

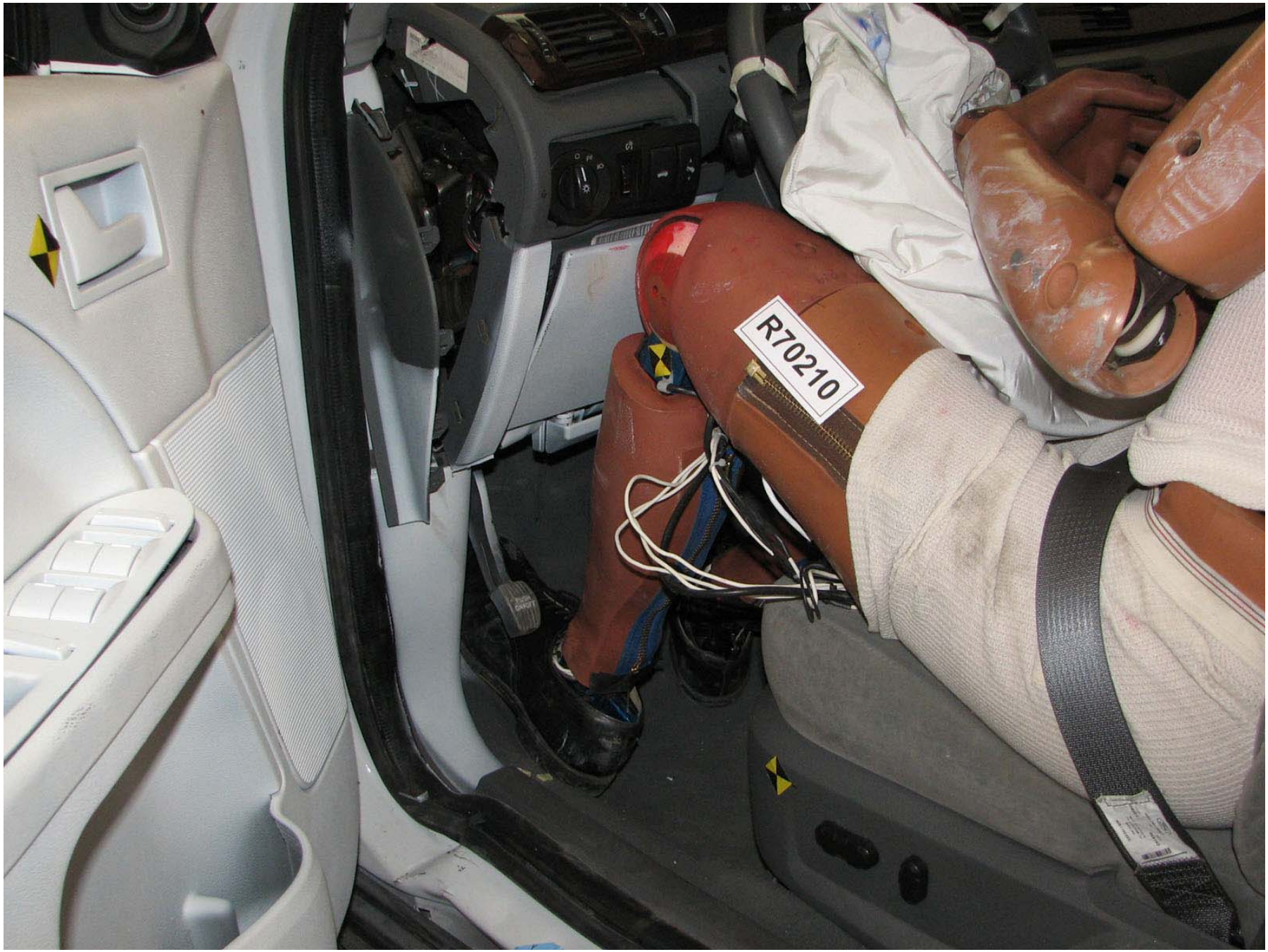

Figure A-553: Bullet Vehicle Post-Test Driver Dummy Feet Positioning

Figure A-554: Bullet Vehicle Post-Test Driver Dummy Feet Positioning

Figure A-555: Bullet Vehicle Post-Test Driver Dummy Feet Positioning

Figure A-556: Bullet Vehicle Pre-Test Driver Dummy Left Side View (Through Window)

Figure A-557: Bullet Vehicle Post-Test Driver Dummy Left Side View (Through Window)

Figure A-558: Bullet Vehicle Pre-Test Driver Dummy Clearance from Door

Figure A-559: Bullet Vehicle Post-Test Driver Dummy Clearance from Door

Figure A-560: Bullet Vehicle Pre-Test Driver's Side Knee Bolster

Figure A-561: Bullet Vehicle Post-Test Driver's Side Knee Bolster

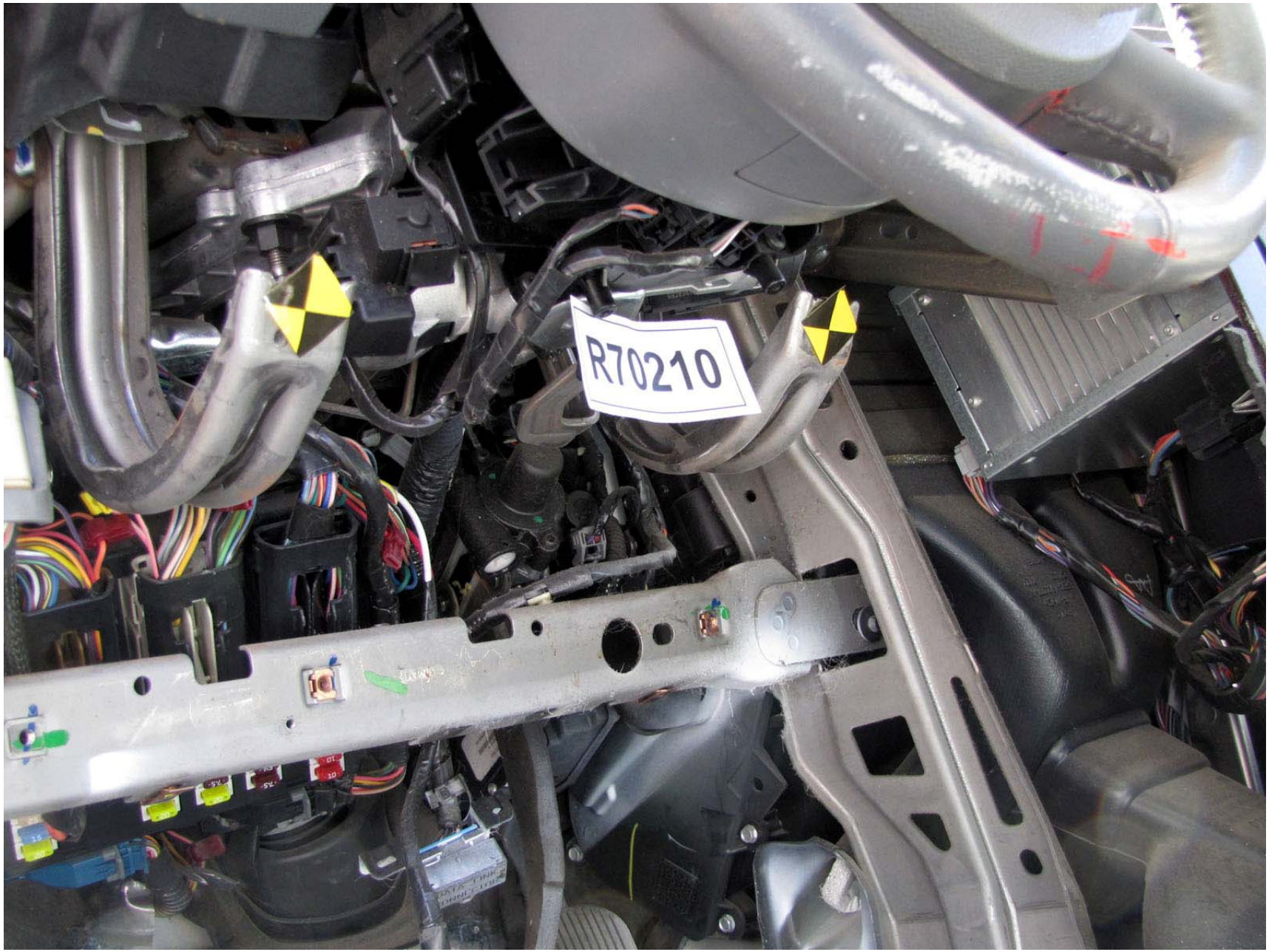

Figure A-562: Bullet Vehicle Post-Test Driver's Side Knee Bolster, ¾ View

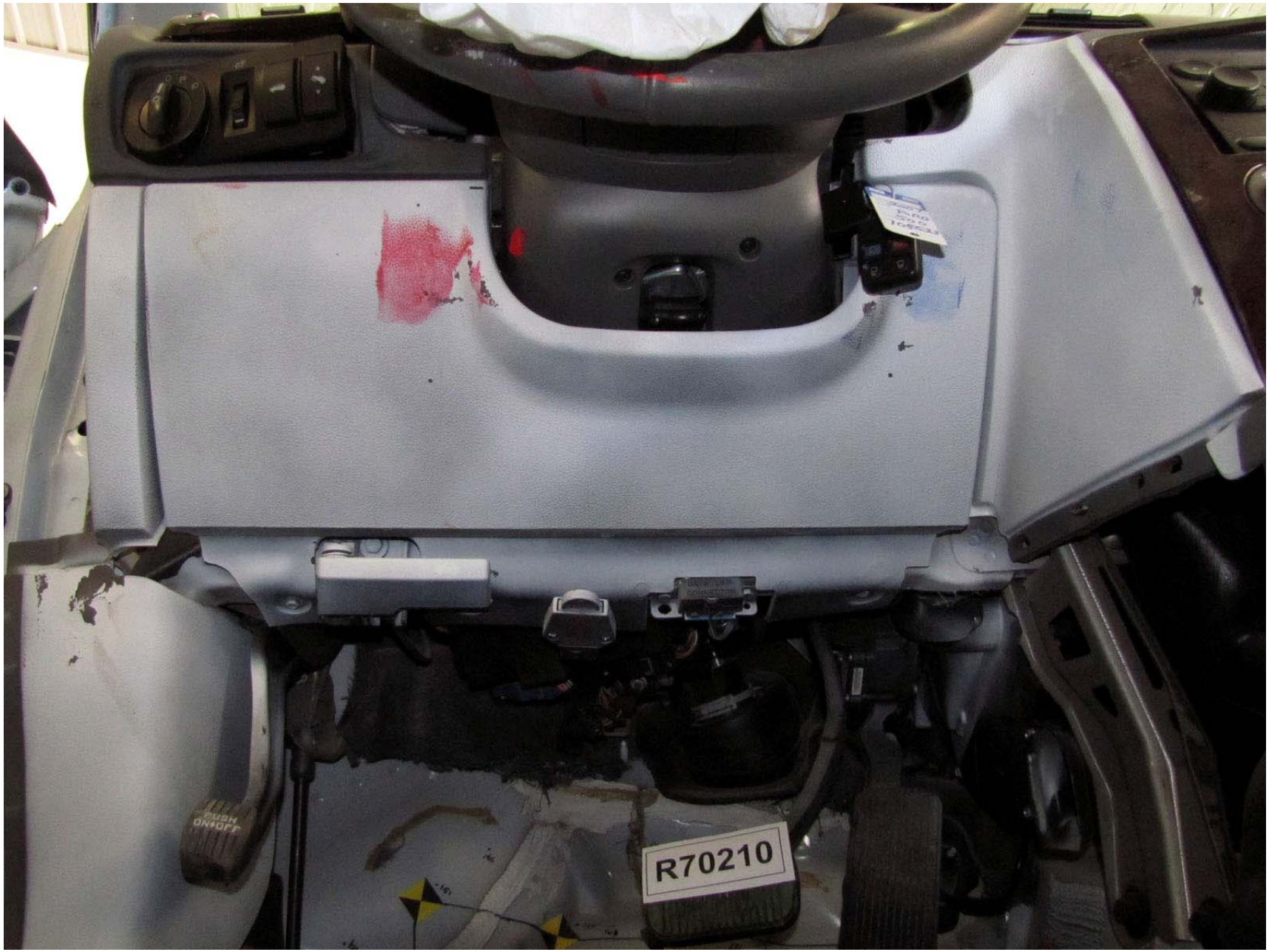

Figure A-563: Bullet Vehicle Post-Test Driver's Side Knee Bolster

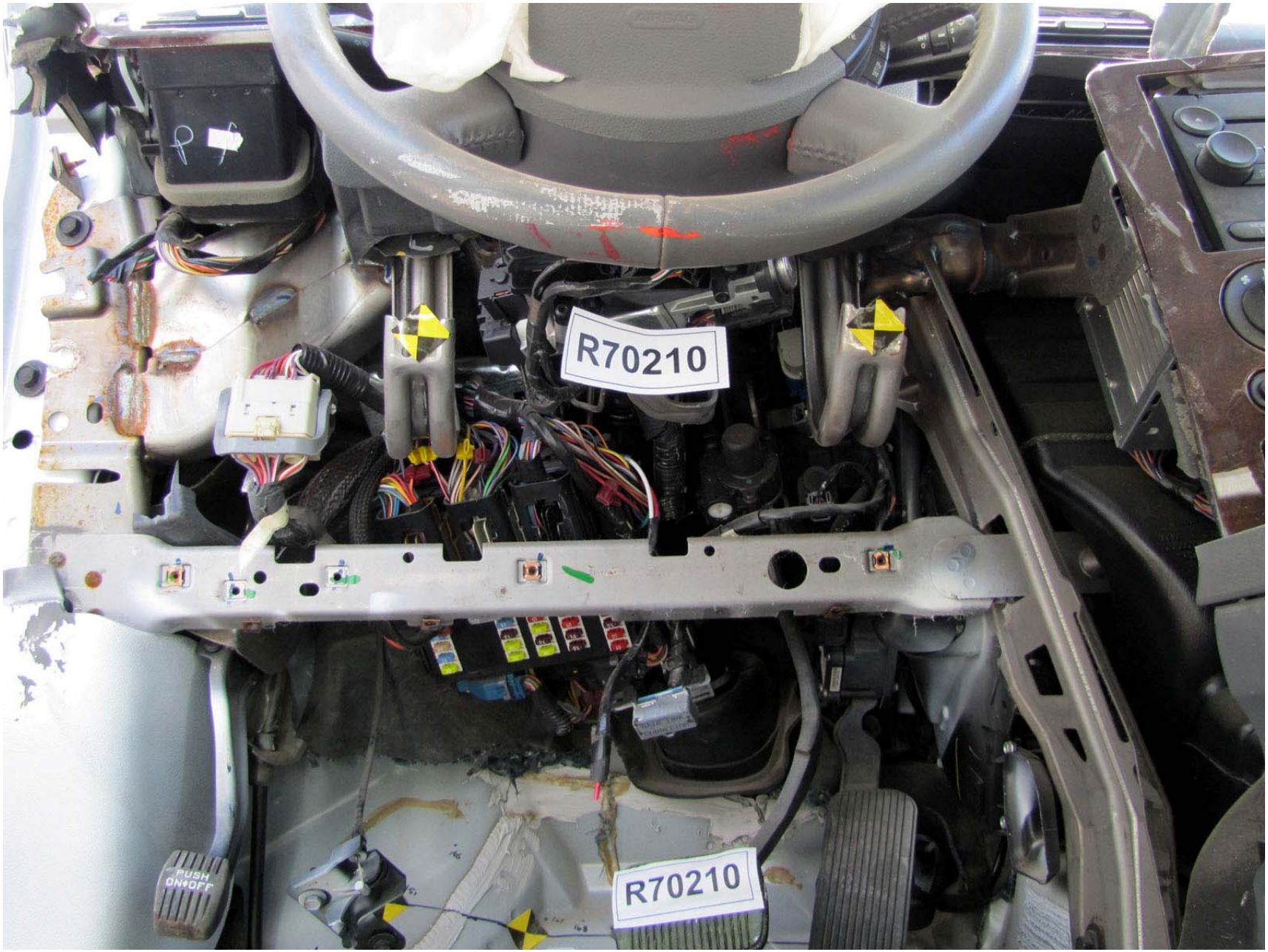

Figure A-564: Bullet Vehicle Post-Test Driver's Side Knee Bolster

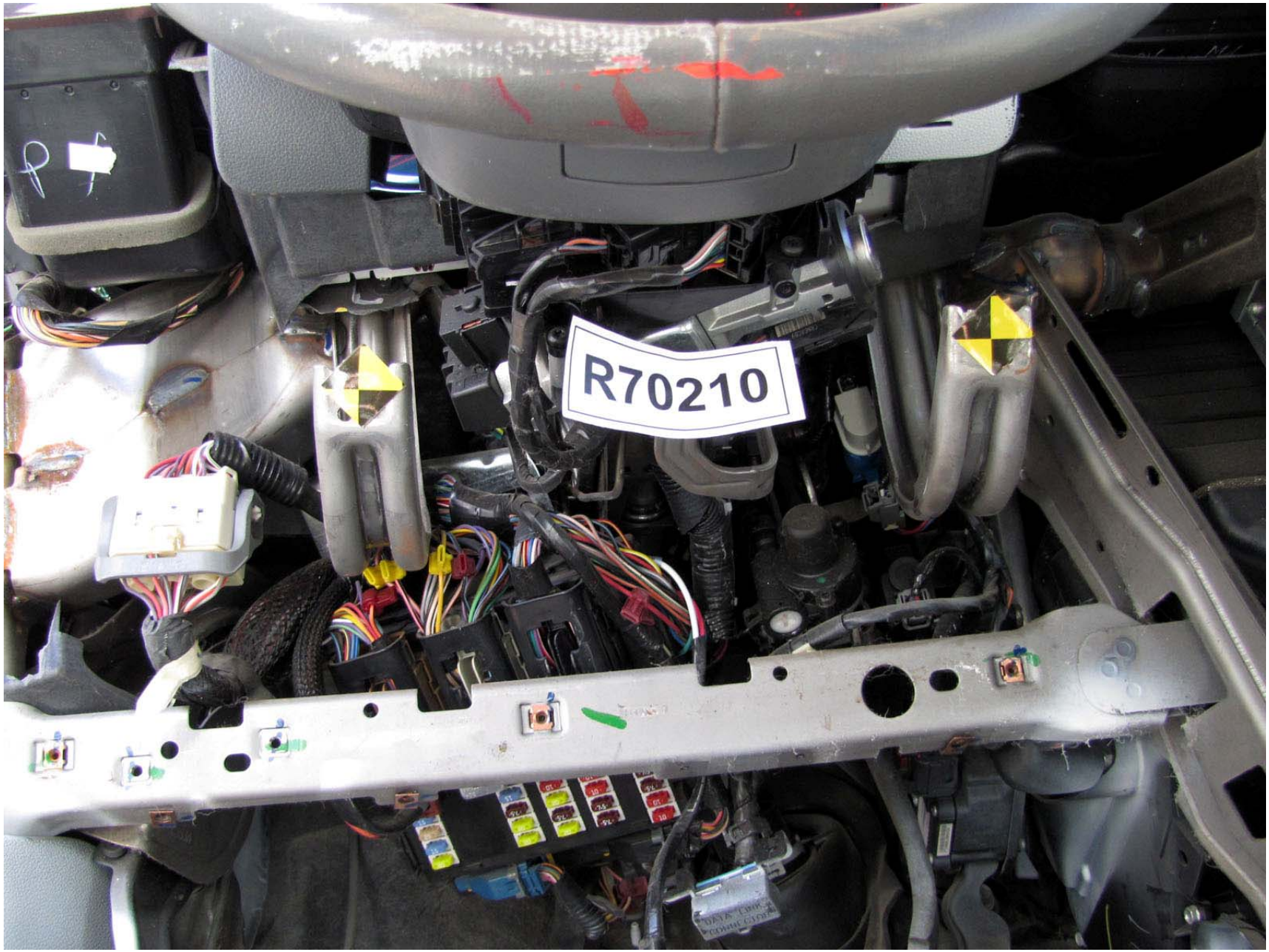

Figure A-565: Bullet Vehicle Post-Test Driver's Side Knee Bolster

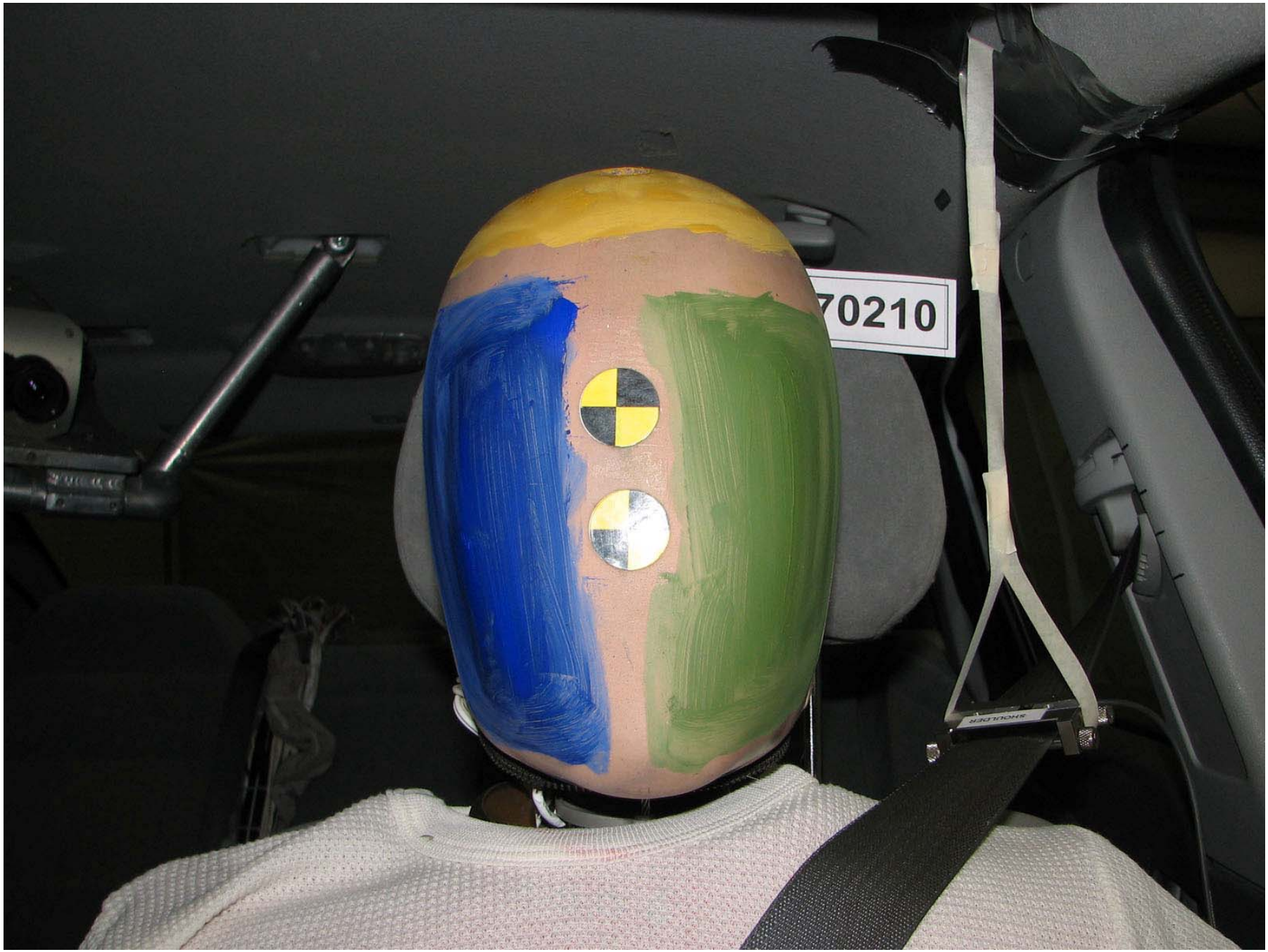

Figure A-566: Bullet Vehicle Pre-Test Driver Dummy Head

Figure A-567: Bullet Vehicle Post-Test Driver Dummy Head

Figure A-568: Bullet Vehicle Post-Test Driver Dummy Contact, Airbag

Figure A-569: Bullet Vehicle Post-Test Driver Dummy Contact, Headrest

Figure A-570: Bullet Vehicle Post-Test Driver Dummy Contact, Roof

Figure A-571: Bullet Vehicle Post-Test Passenger Dummy Contact, Knee Bolster

Figure A-572: Bullet Vehicle Pre-Test Driver Floorpan

Figure A-573: Bullet Vehicle Post-Test Driver Floorpan

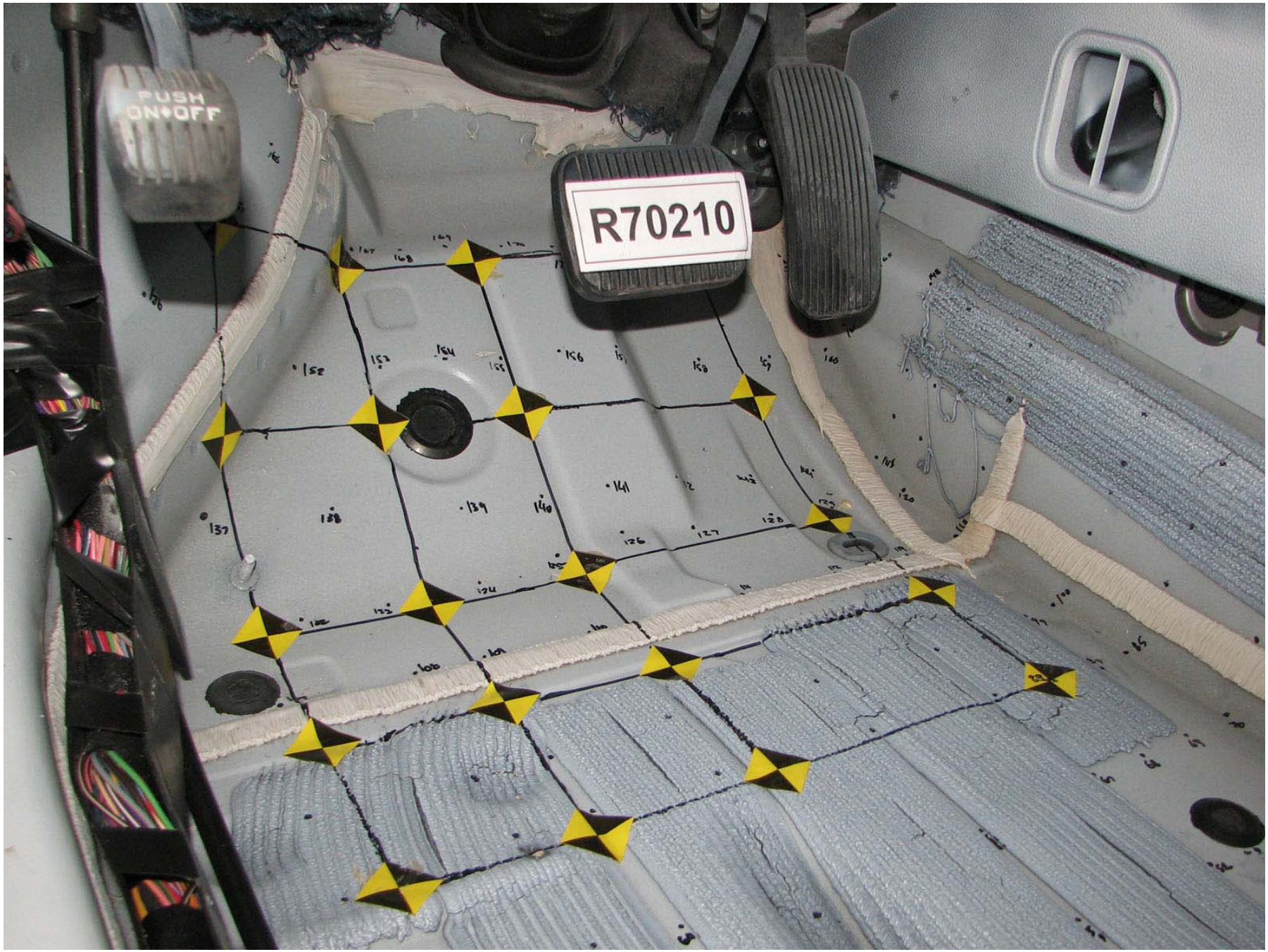

Figure A-574: Bullet Vehicle Pre-Test Driver Floorpan Left ¾ View, Seat Cushion Height

Figure A-575: Bullet Vehicle Post-Test Driver Floorpan Left ¾ View, Seat Cushion Height

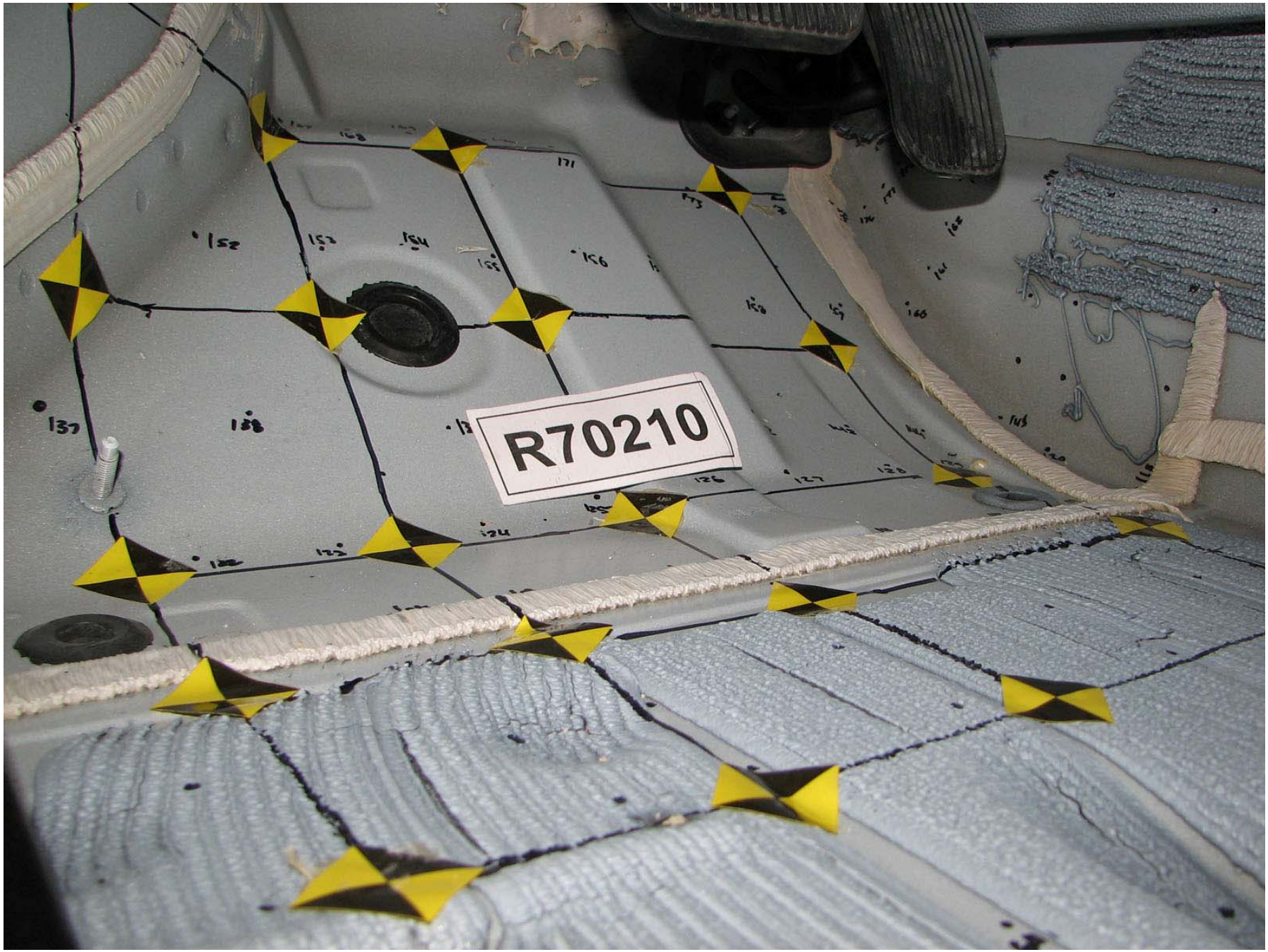

Figure A-576: Bullet Vehicle Pre-Test Driver Floorpan Left ¾ View, Sill Height

Figure A-577: Bullet Vehicle Post-Test Driver Floorpan Left ¾ View, Sill Height

Figure A-578: Bullet Vehicle Pre-Test Driver Floorpan, Seat Cushion Height

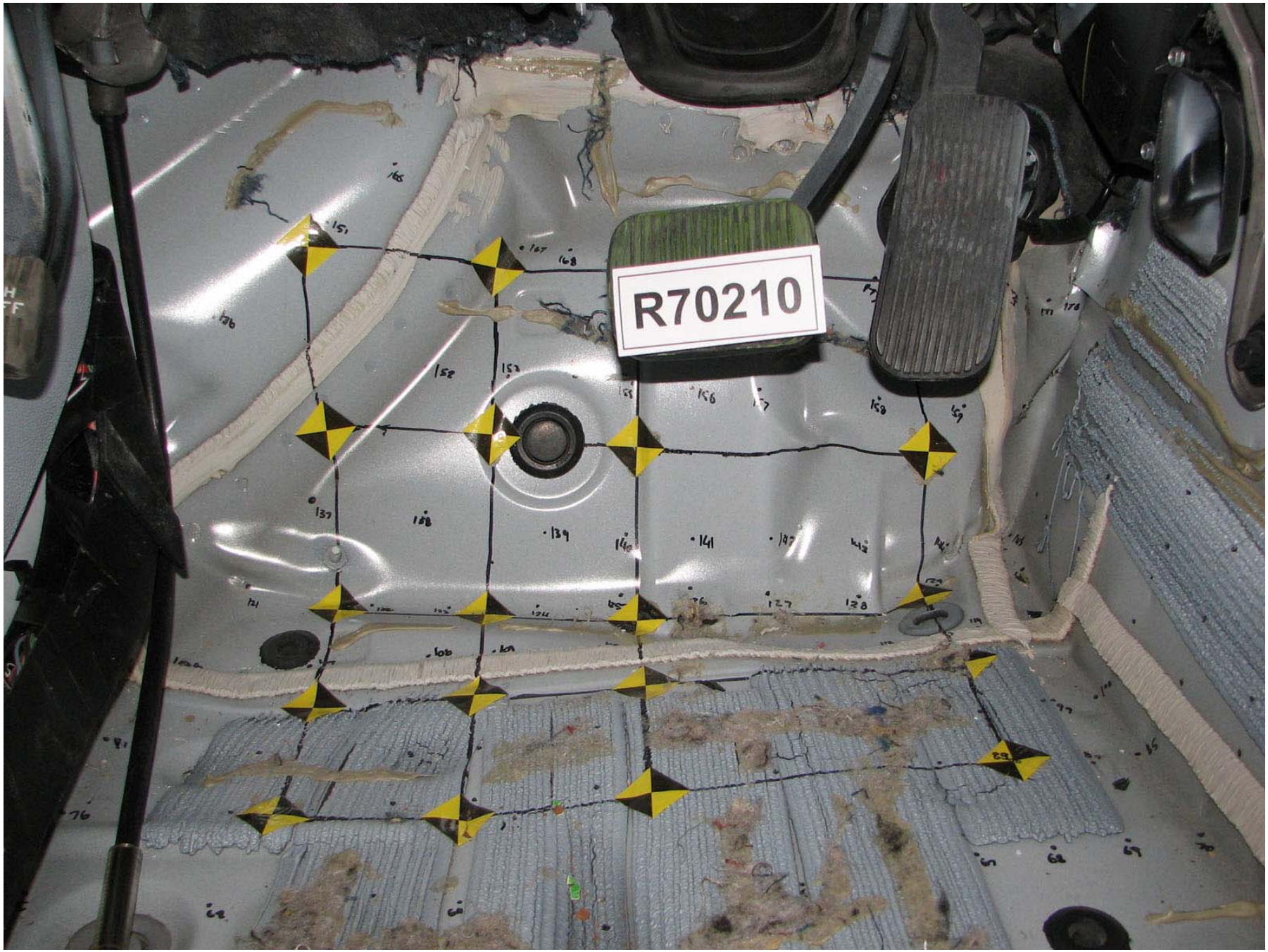

Figure A-579: Bullet Vehicle Post-Test Driver Floorpan, Seat Cushion Height

Figure A-580: Bullet Vehicle Pre-Test Driver Floorpan, Sill Height

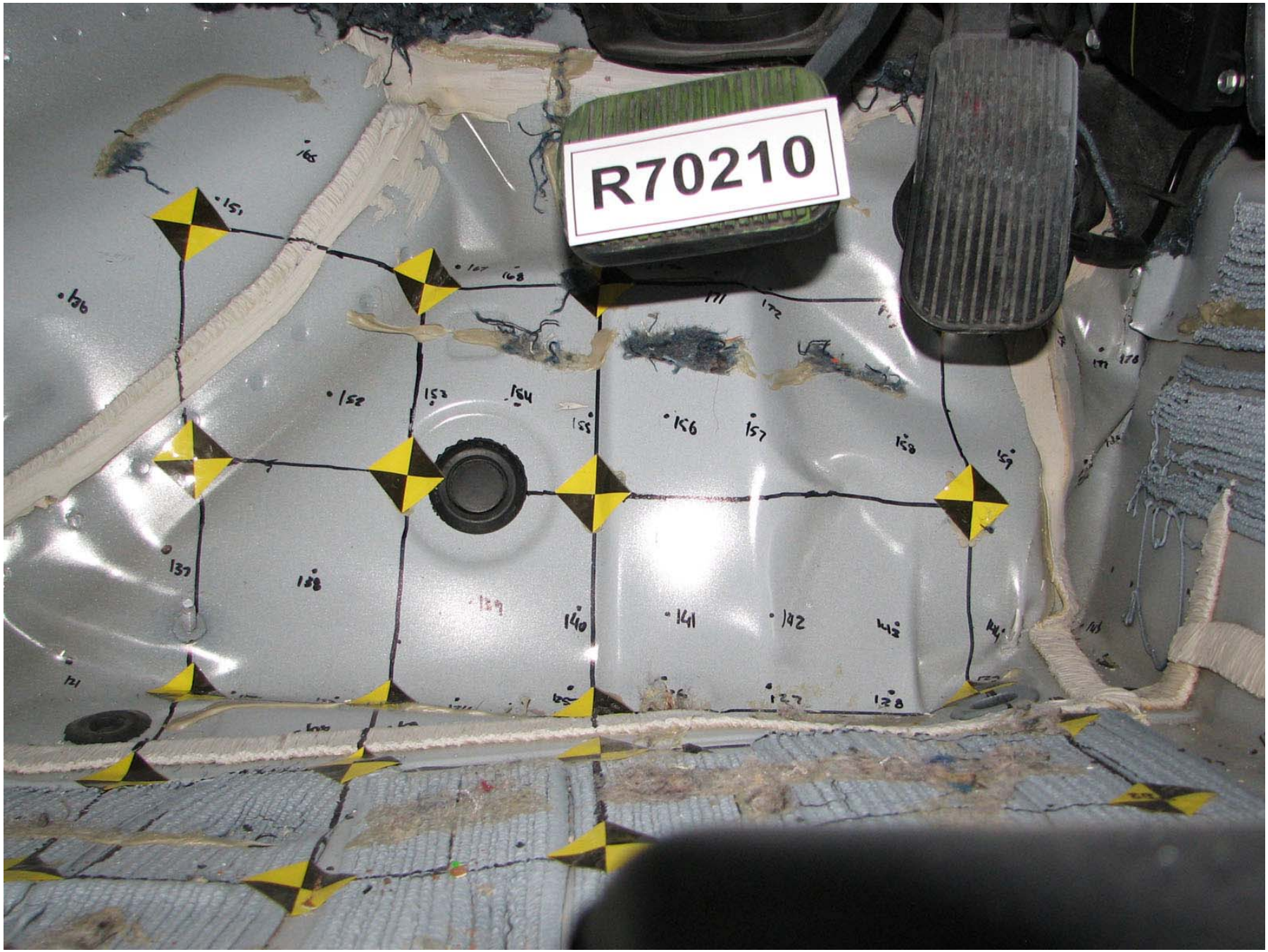

Figure A-581: Bullet Vehicle Post-Test Driver Floorpan, Sill Height

Figure A-582: Bullet Vehicle Pre-Test Driver Floorpan Right ¾ View, Seat Cushion Height

Figure A-583: Bullet Vehicle Post-Test Driver Floorpan Right ¾ View, Seat Cushion Height

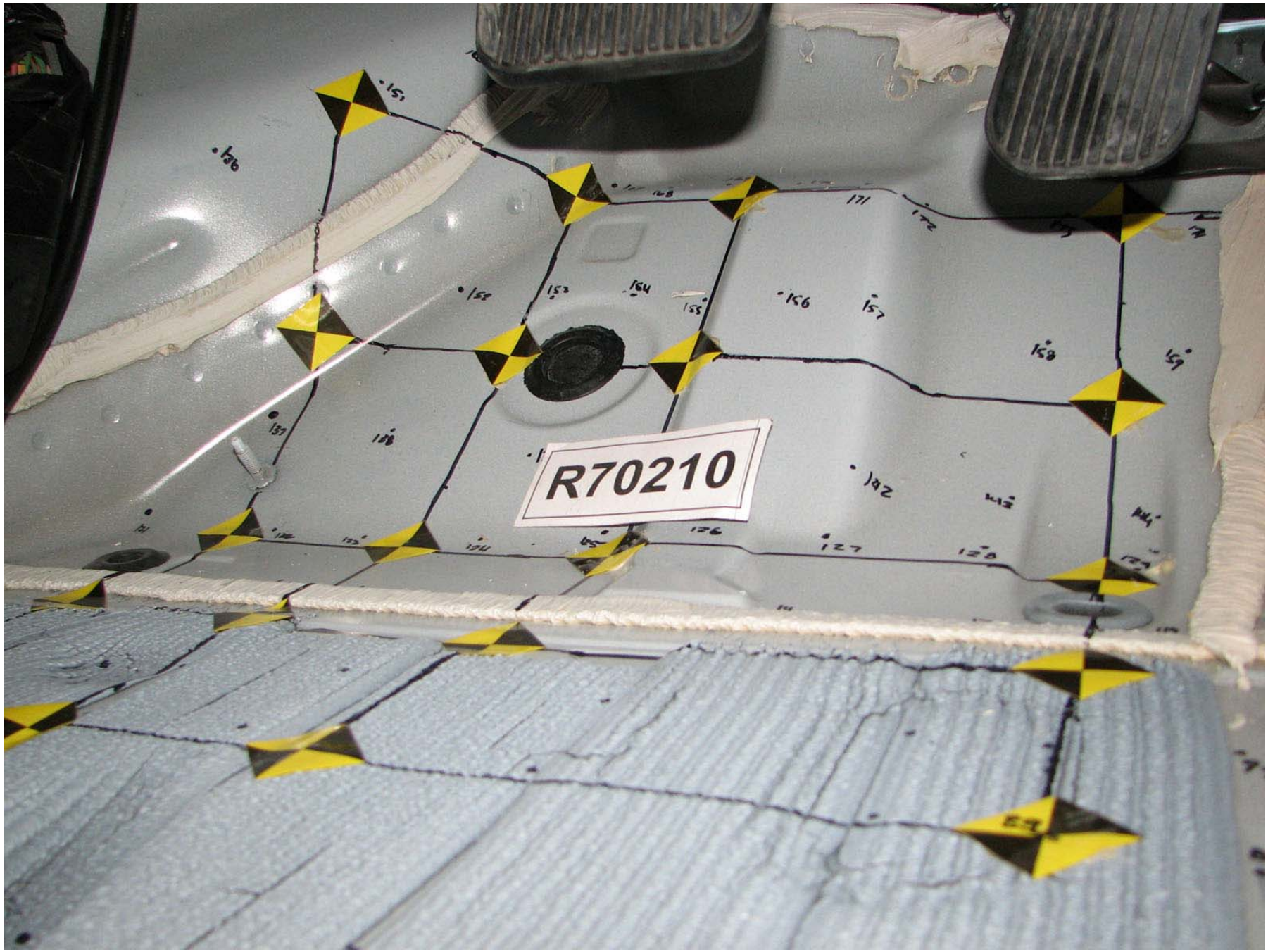

Figure A-584: Bullet Vehicle Pre-Test Driver Floorpan Right ¾ View, Sill Height

Figure A-585: Bullet Vehicle Post-Test Driver Floorpan Right ¾ View, Sill Height

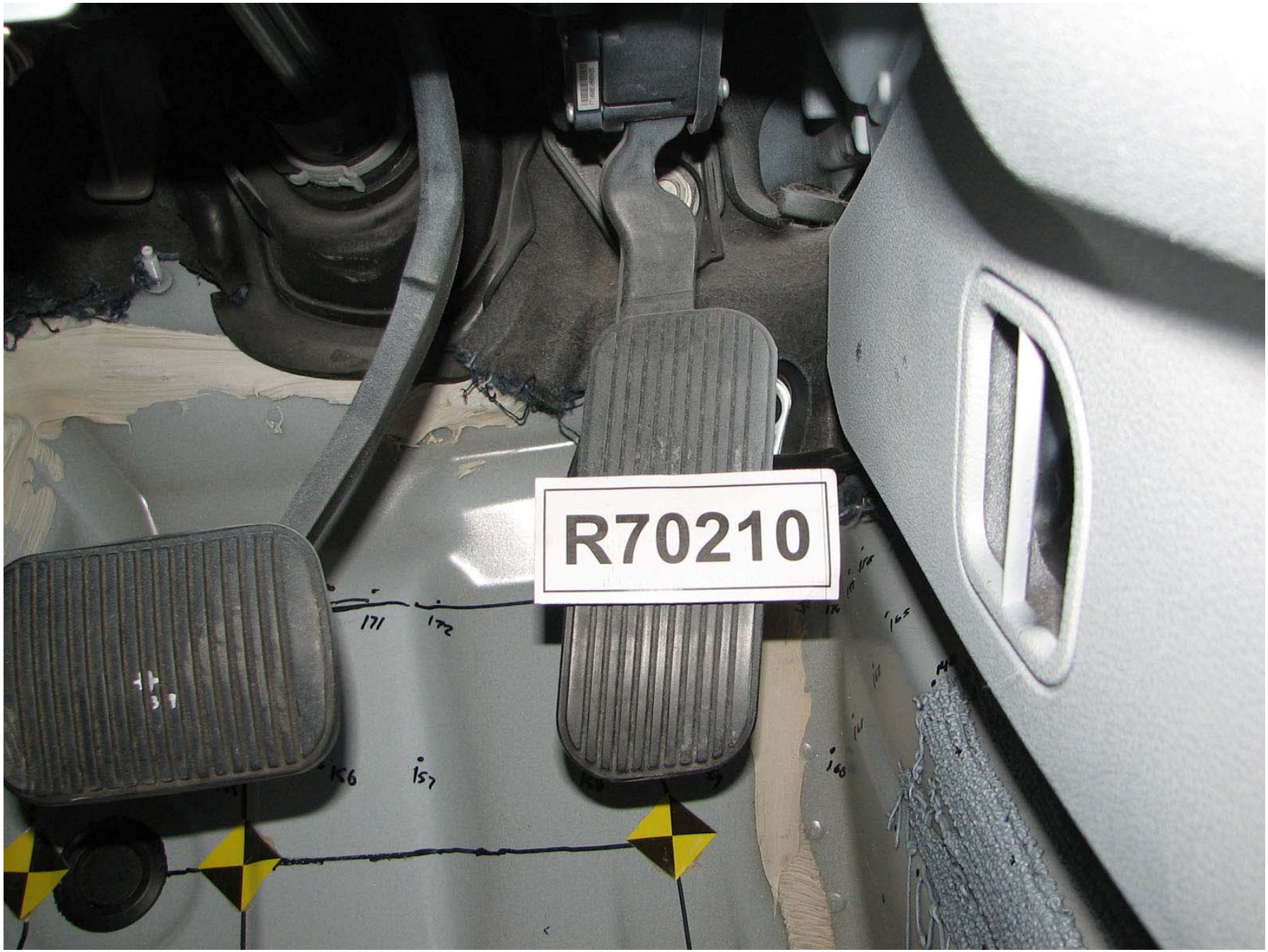

Figure A-586: Bullet Vehicle Pre-Test Accelerator Pedal, Seat Cushion Height

Figure A-587: Bullet Vehicle Post-Test Accelerator Pedal, Seat Cushion Height

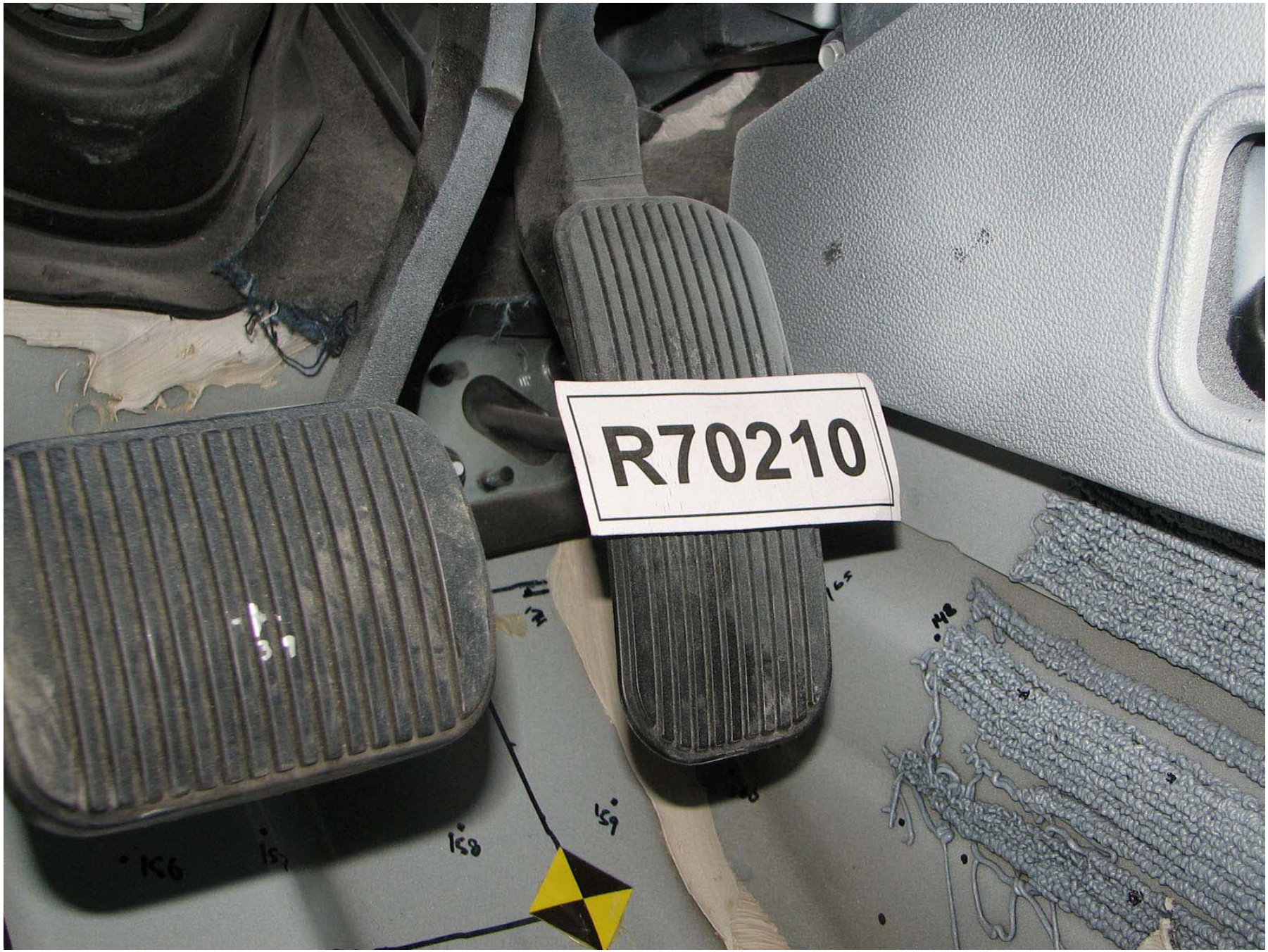

Figure A-588: Bullet Vehicle Pre-Test Accelerator Pedal Side View, In Front of Brake Pedal

Figure A-589: Bullet Vehicle Pre-Test Accelerator Pedal Side View, In Front of Brake Pedal

Figure A-590: Bullet Vehicle Pre-Test Accelerator Pedal Side View, Behind Brake Pedal

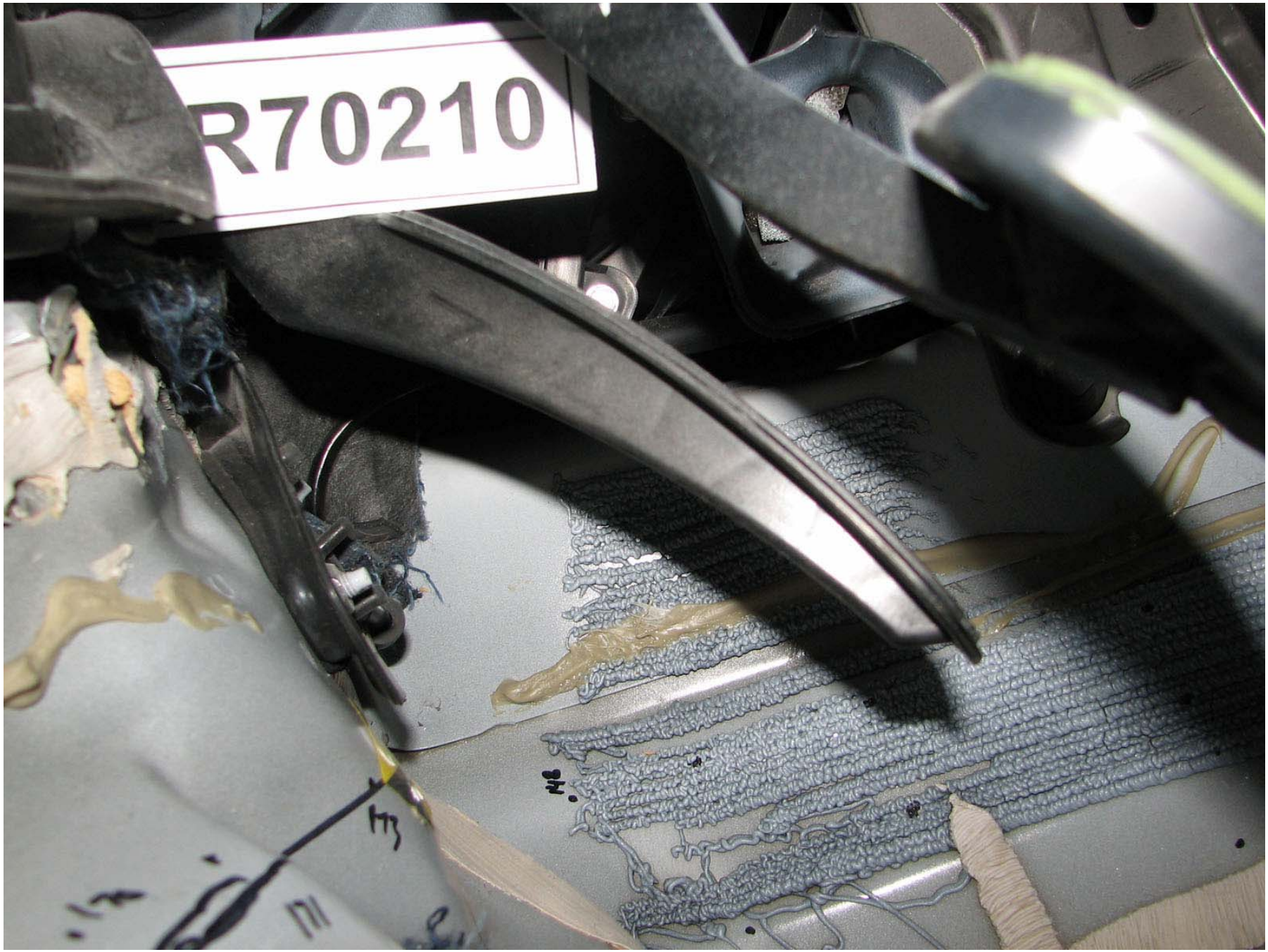

Figure A-591: Bullet Vehicle Post-Test Accelerator Pedal Side View, Behind Brake Pedal

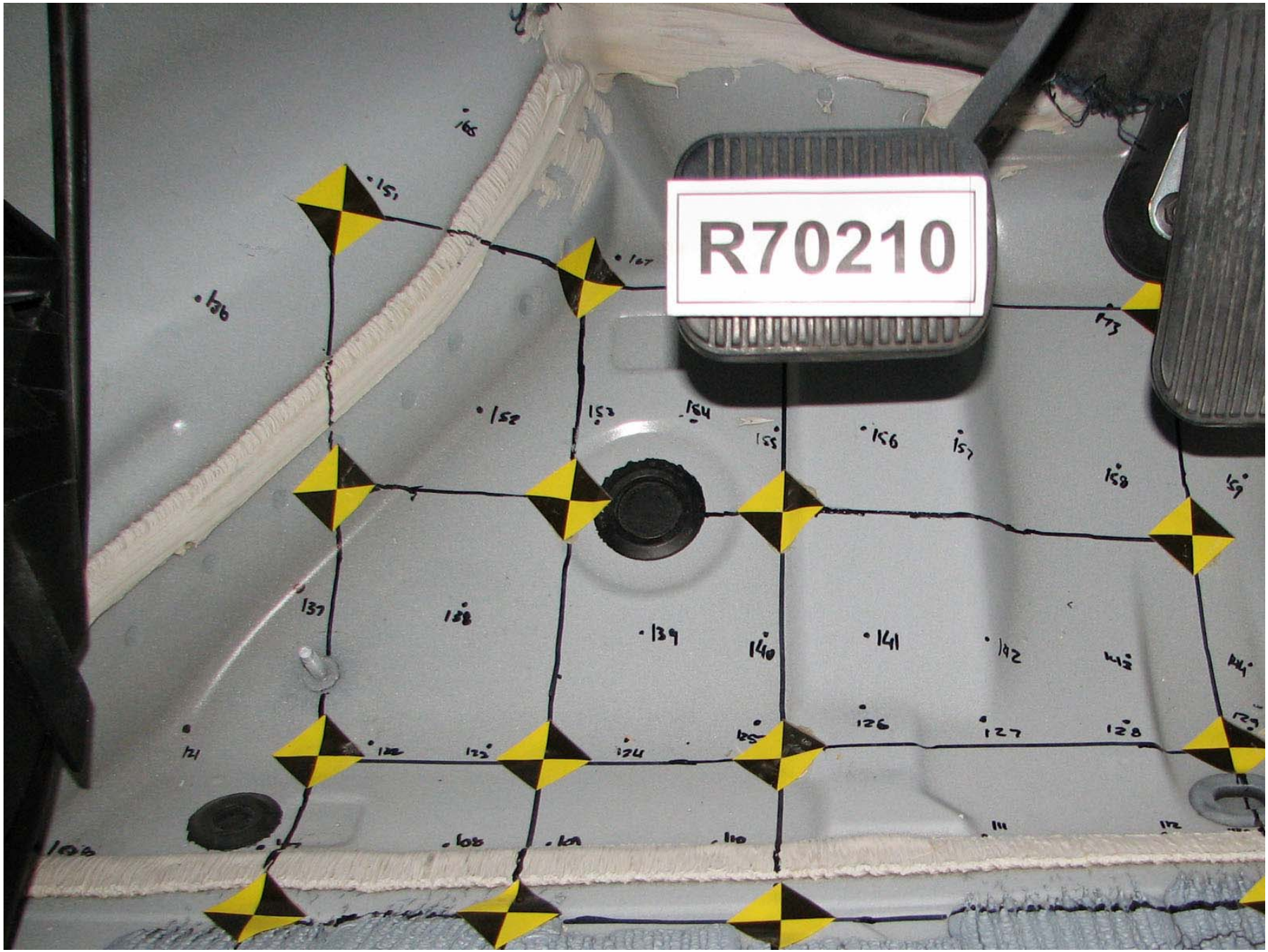

Figure A-592: Bullet Vehicle Pre-Test Foot Rest, Seat Cushion Height

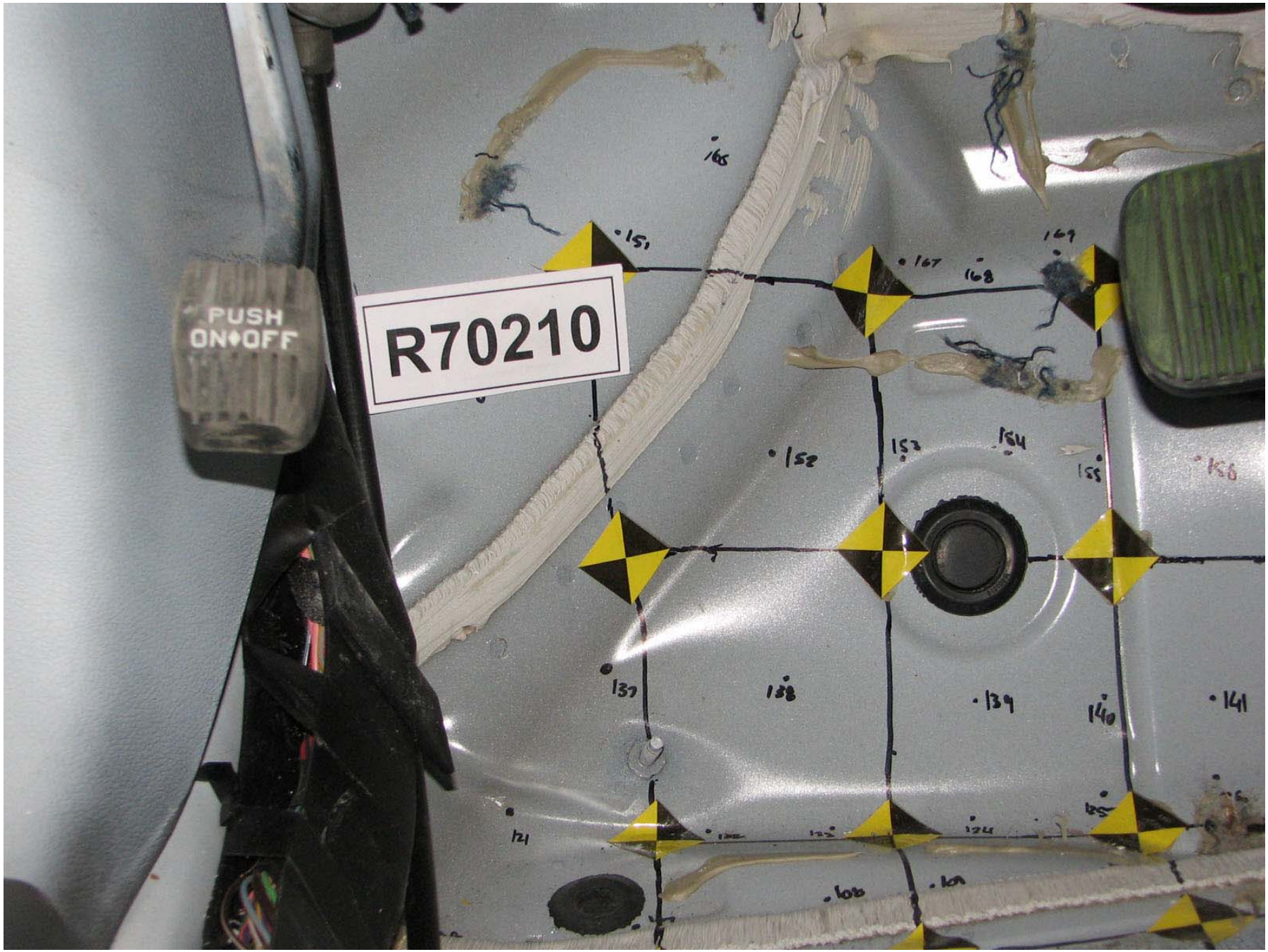

Figure A-593: Bullet Vehicle Post-Test Foot Rest, Seat Cushion Height

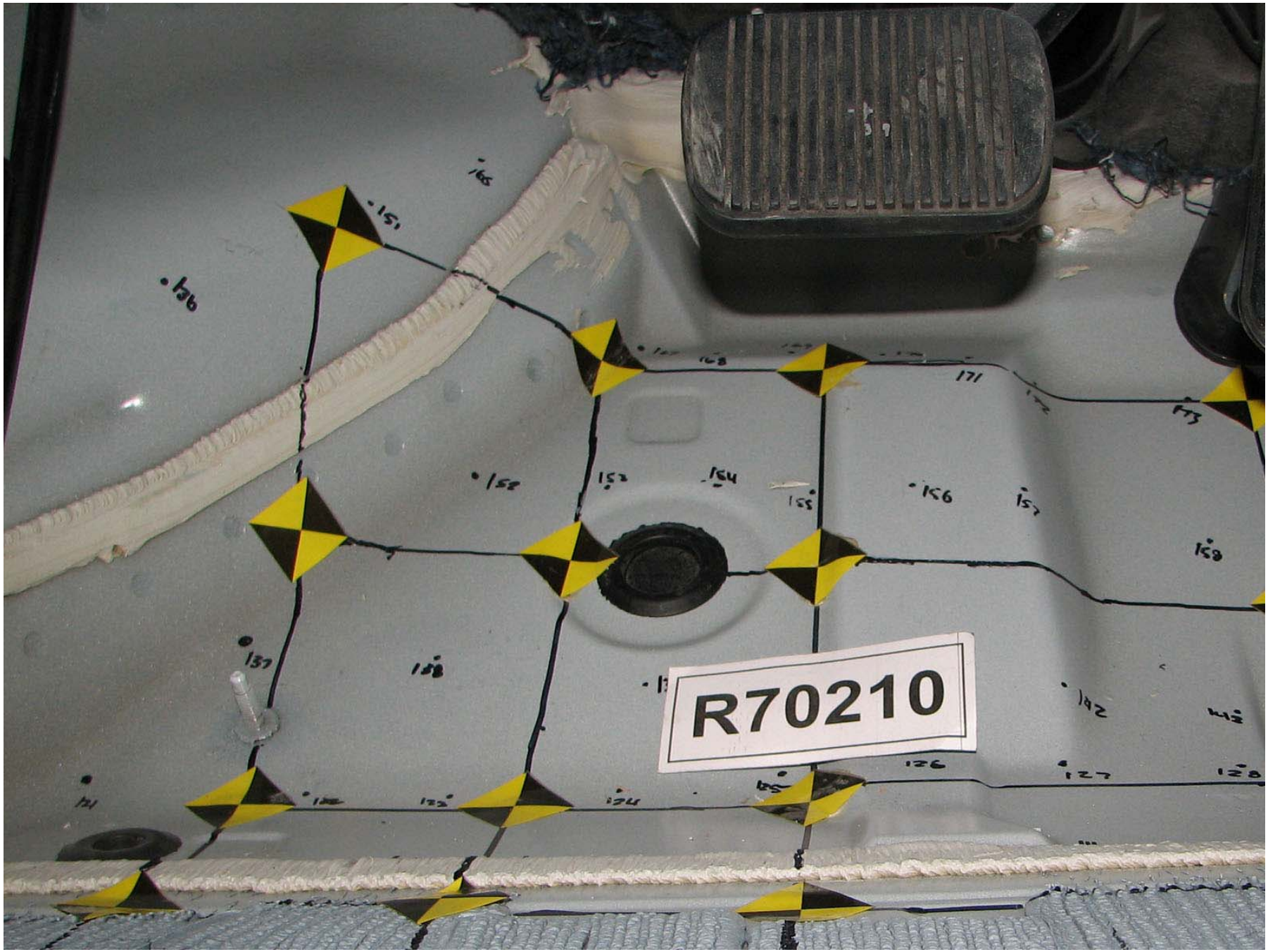

Figure A-594: Bullet Vehicle Pre-Test Foot Rest, Sill Height

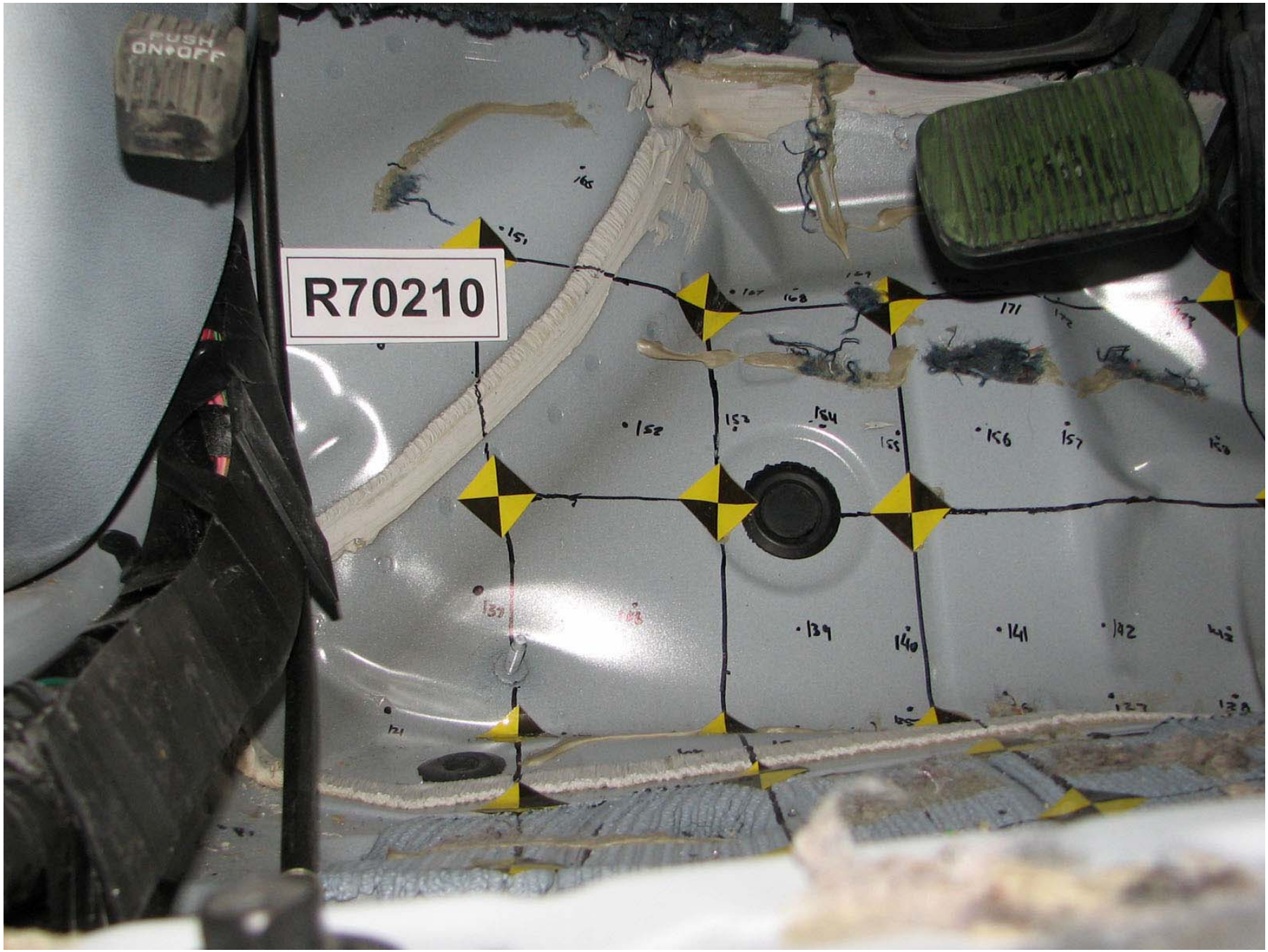

Figure A-595: Bullet Vehicle Post-Test Foot Rest, Sill Height

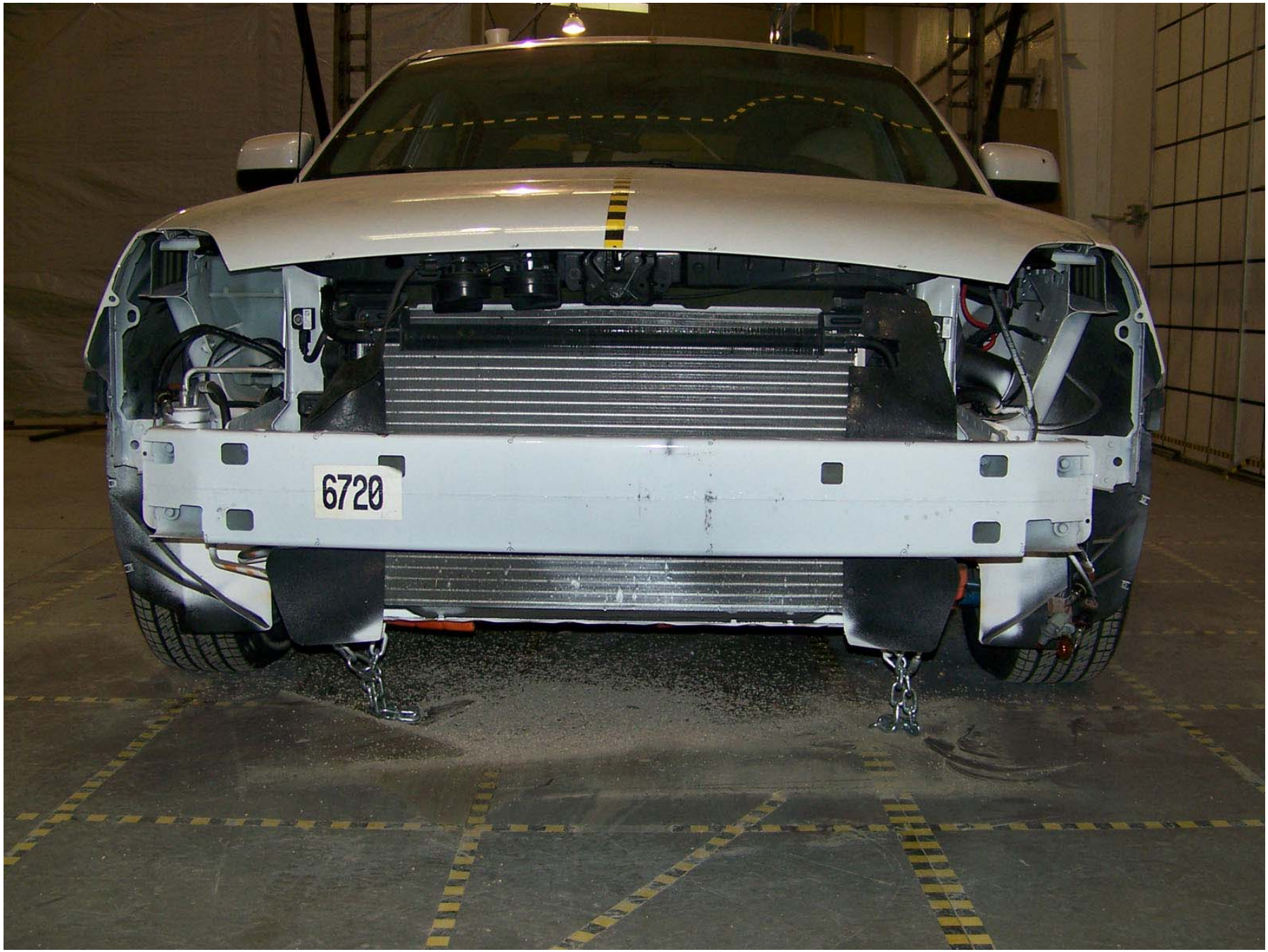

Figure A-596: Bullet Vehicle Pre-Test Structural Member Crush Measurement

Figure A-597: Bullet Vehicle Post-Test Structural Member Crush Measurement

Figure A-598: Bullet Vehicle Pre-Test Structural Member Crush Measurement

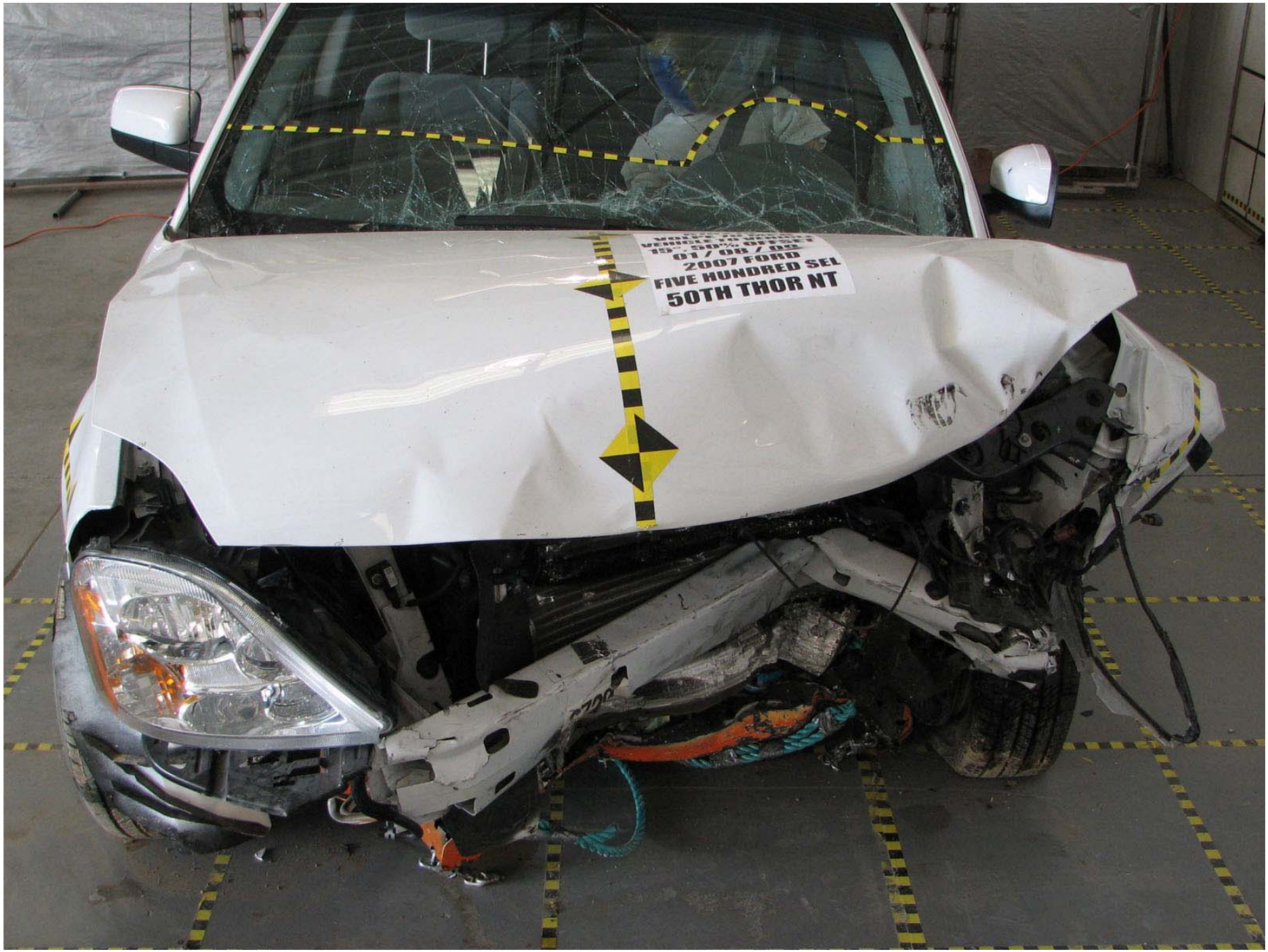

Figure A-599: Bullet Vehicle Post-Test Structural Member Crush Measurement

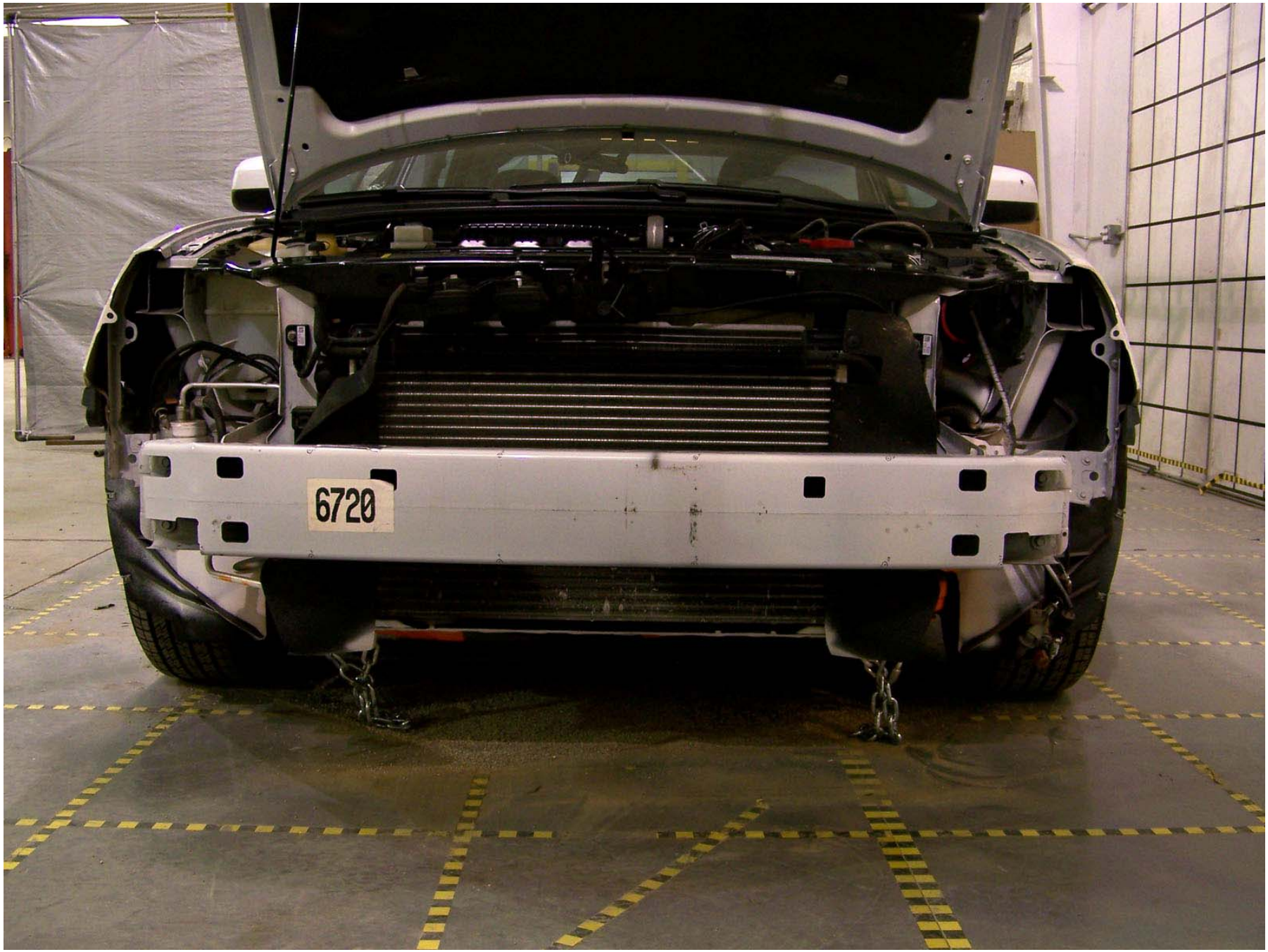

Figure A-600: Bullet Vehicle Pre-Test Structural Member Crush Measurement

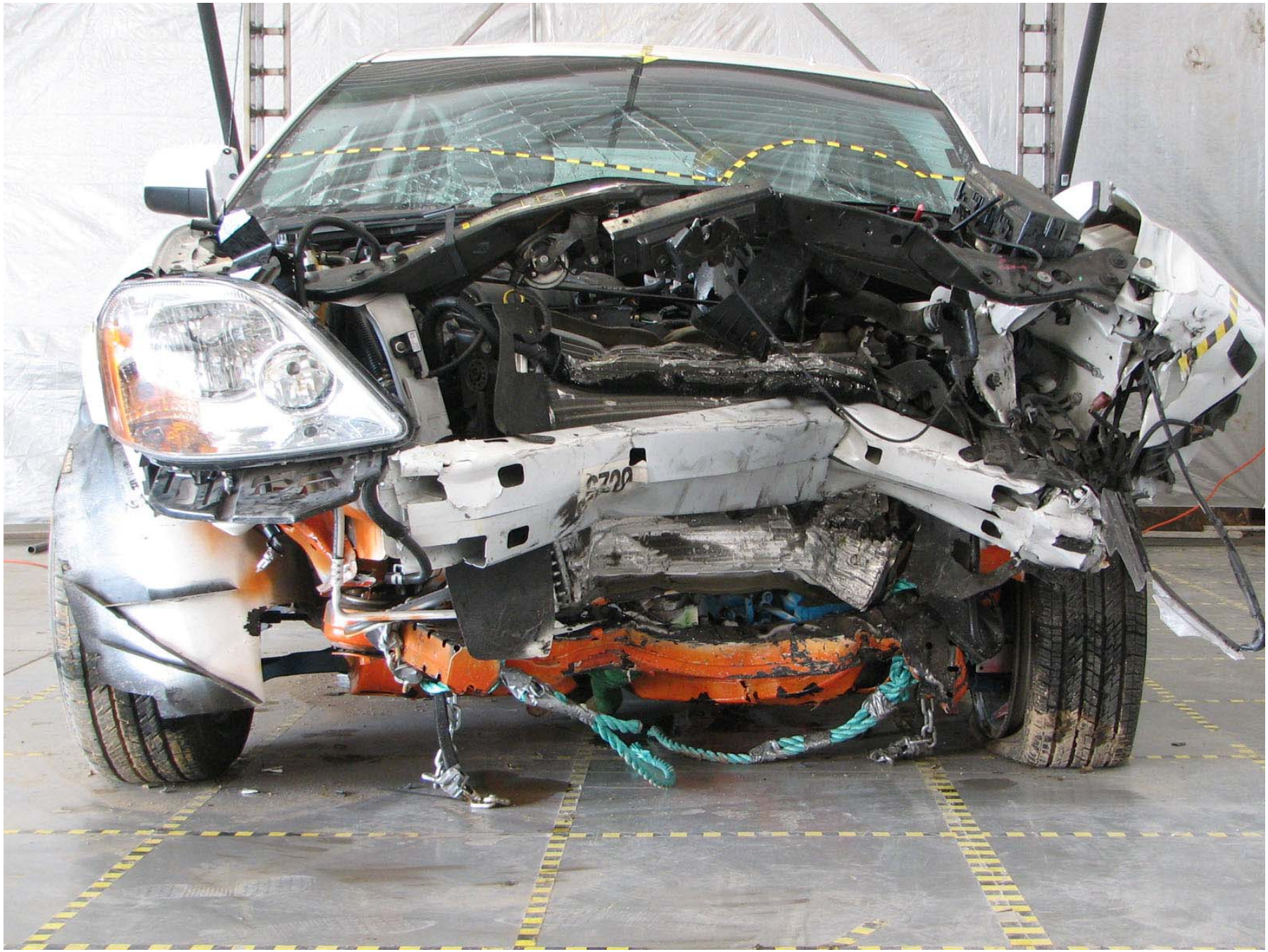

Figure A-601: Bullet Vehicle Post-Test Structural Member Crush Measurement

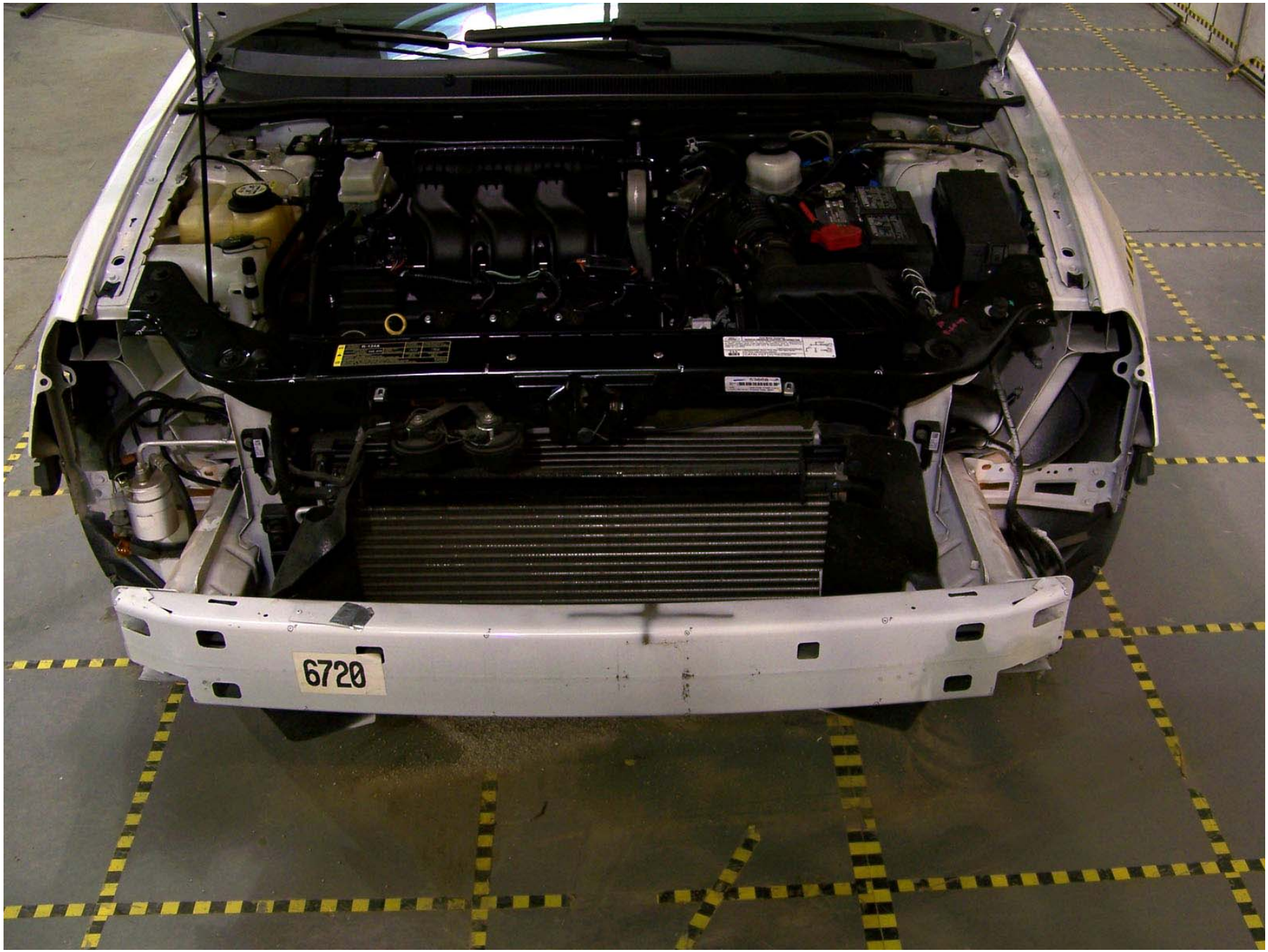

Figure A-602: Bullet Vehicle Pre-Test Structural Member Crush Measurement

Figure A-603: Bullet Vehicle Post-Test Structural Member Crush Measurement

Figure A-604: Target Vehicle on Rollover Device (0°)

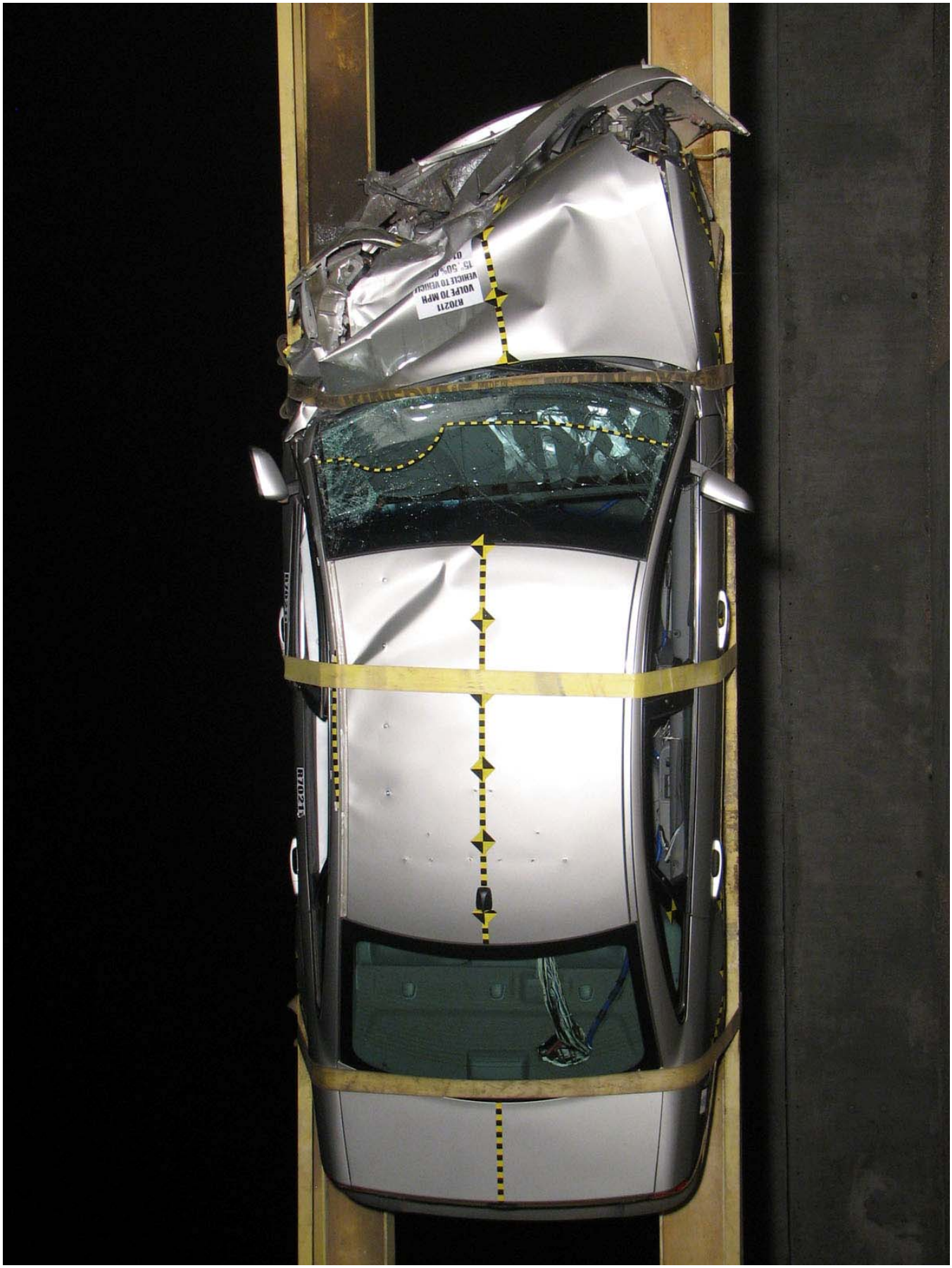

Figure A-605: Target Vehicle on Rollover Device (90°)

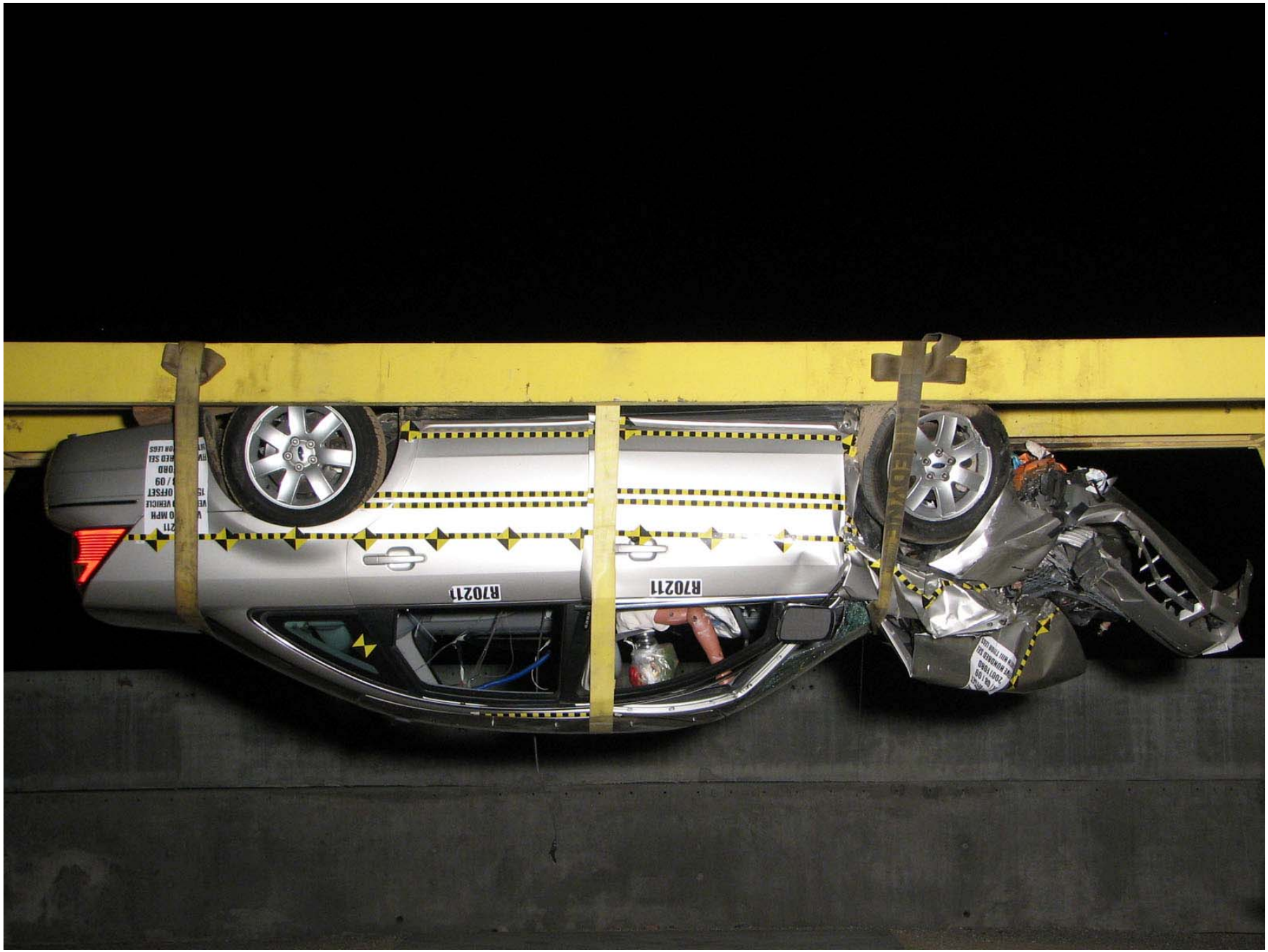

Figure A-606: Target Vehicle on Rollover Device (180°)

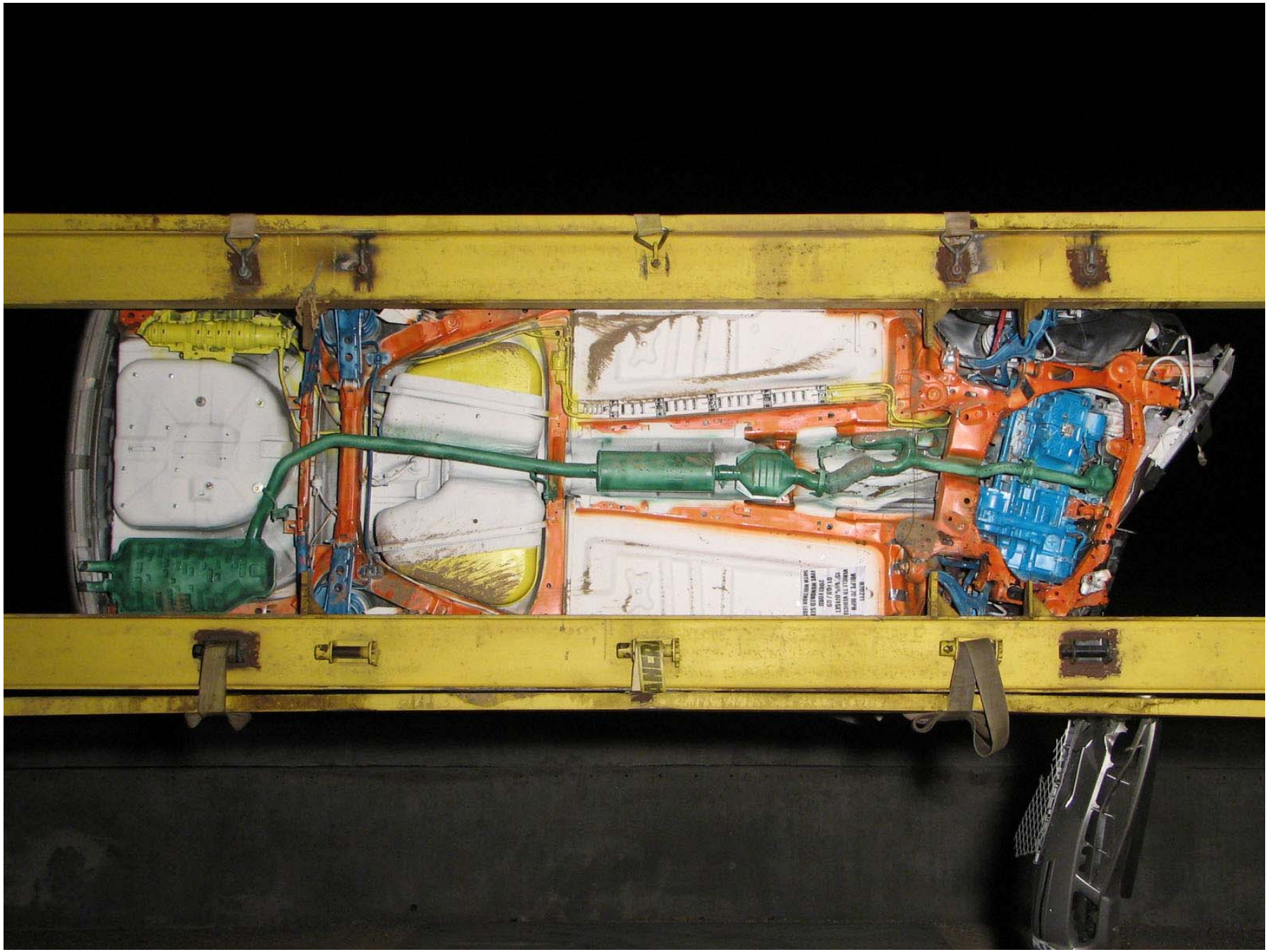

Figure A-607: Target Vehicle on Rollover Device (270°)

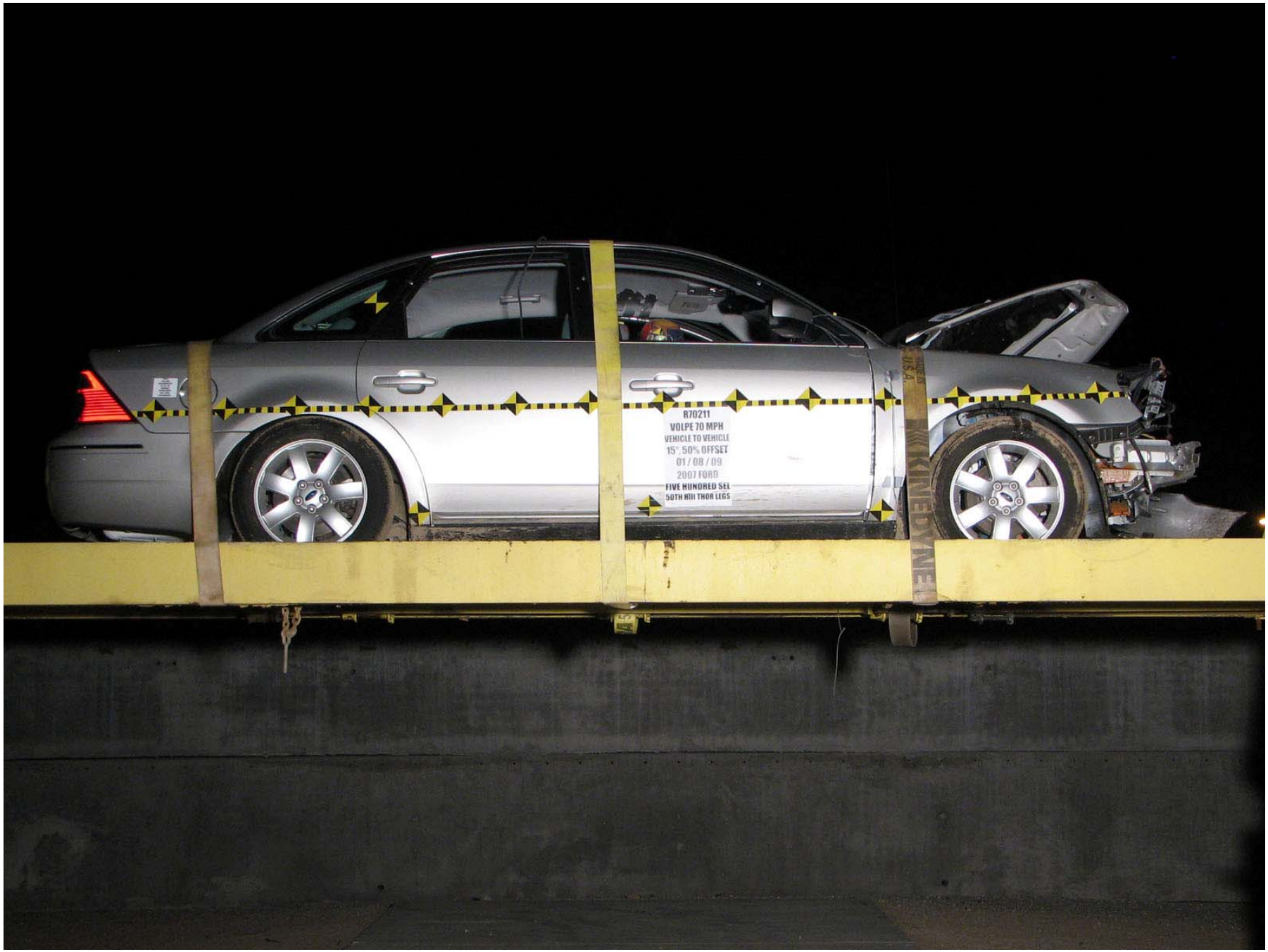

Figure A-608: Target Vehicle on Rollover Device (360°)

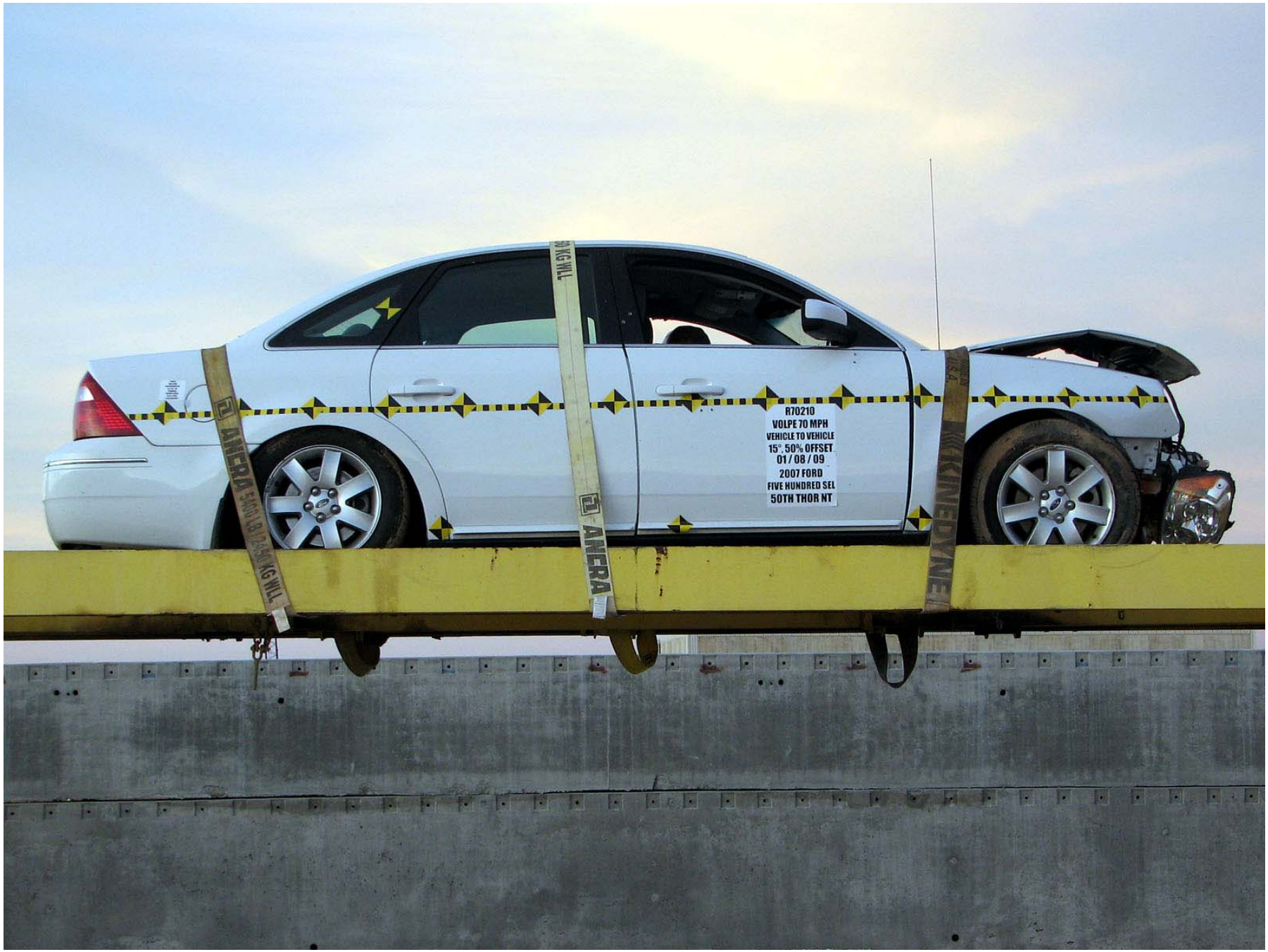

Figure A-609: Bullet Vehicle on Rollover Device (0°)

Figure A-610: Bullet Vehicle on Rollover Device (90°)

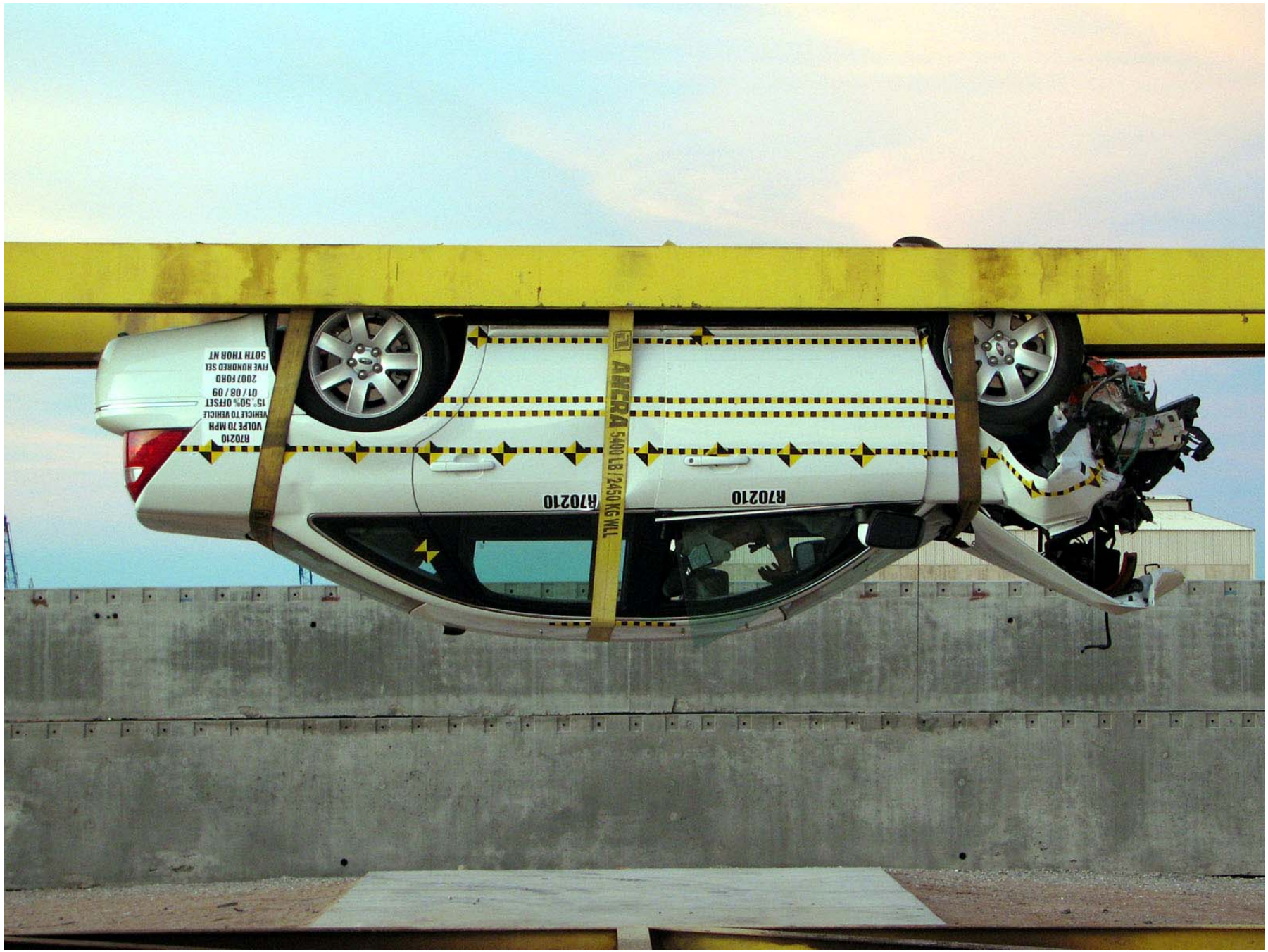

Figure A-611: Bullet Vehicle on Rollover Device (180°)

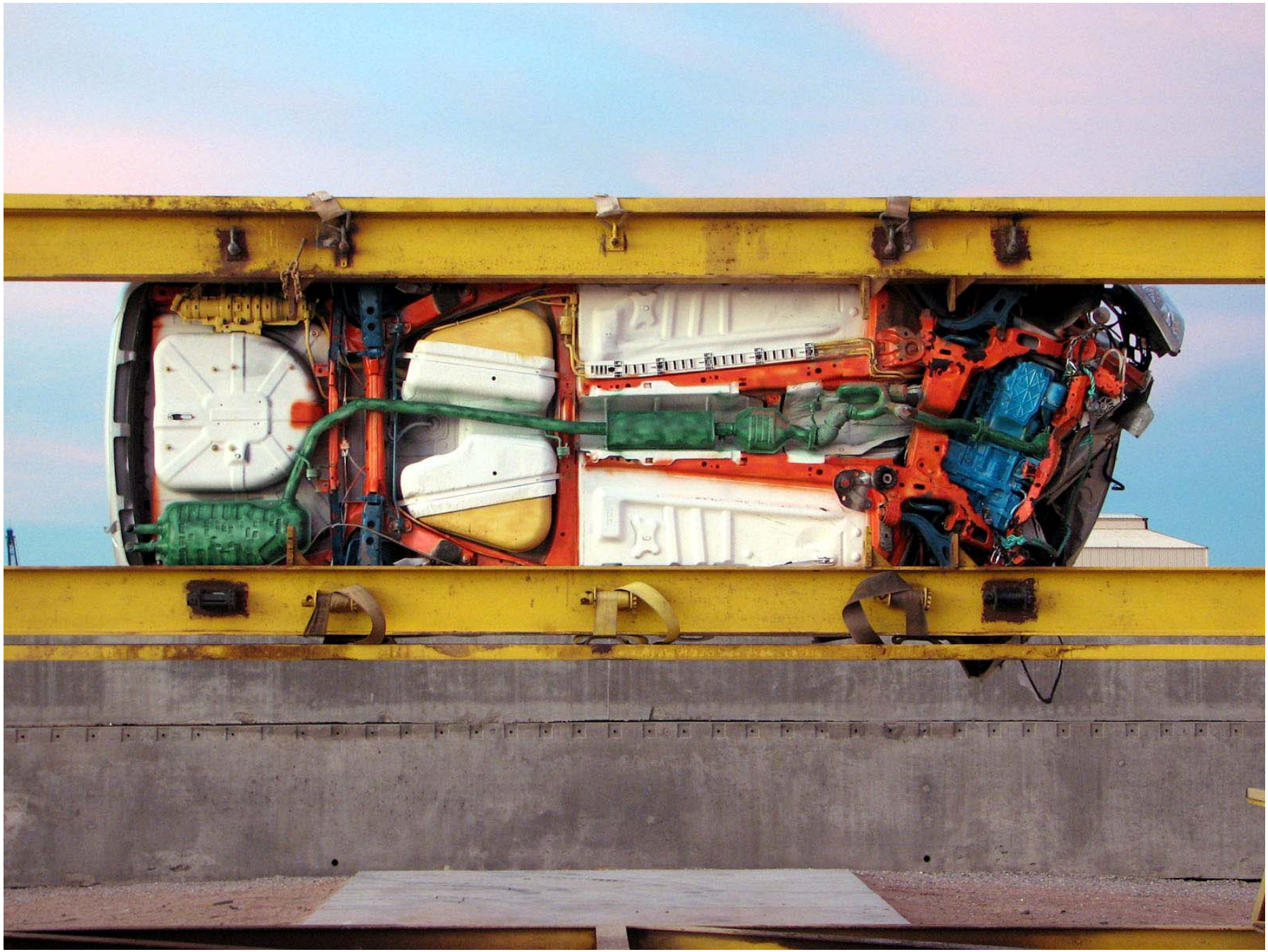

Figure A-612: Bullet Vehicle on Rollover Device (270°)

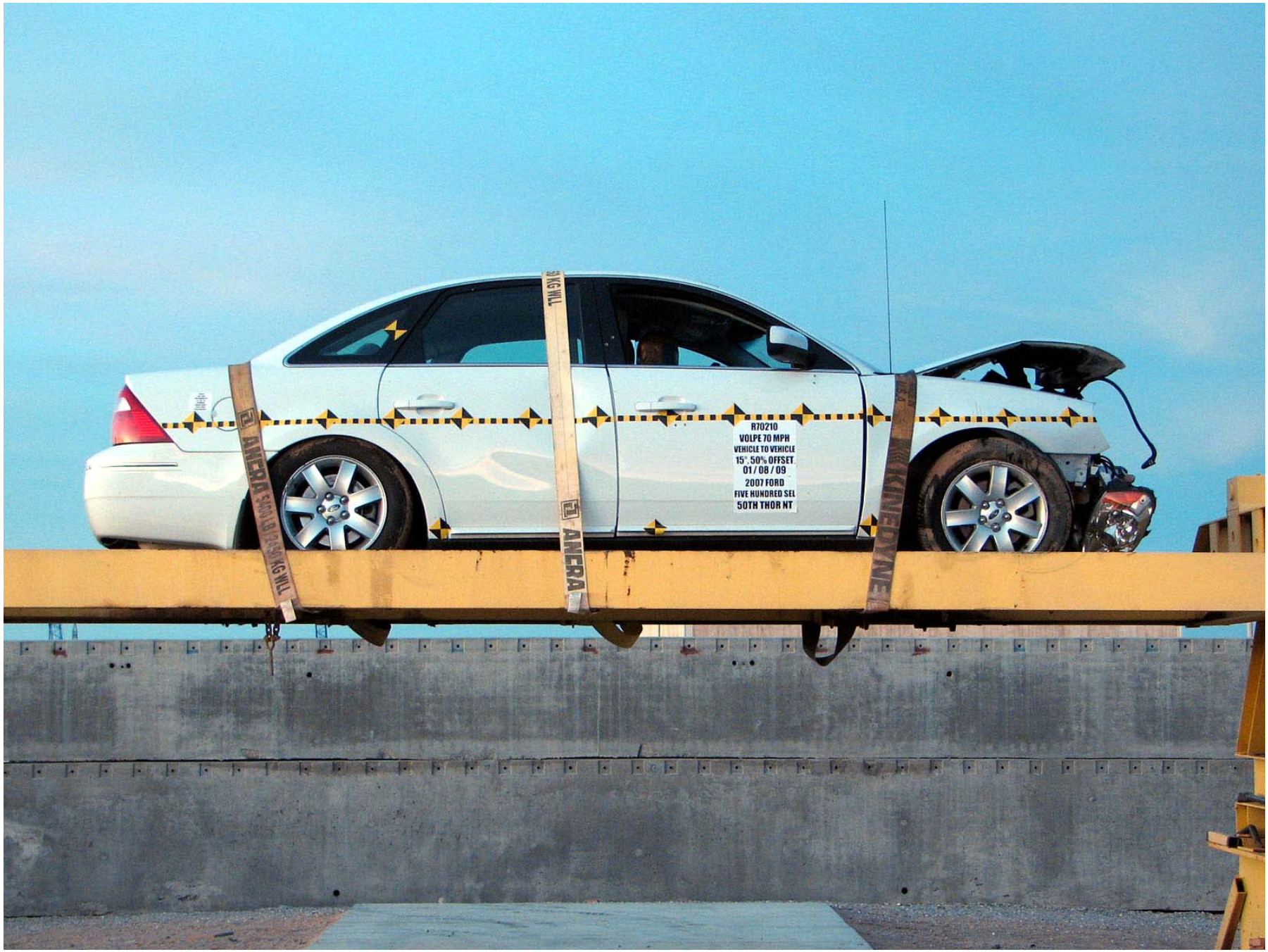

Figure A-613: Bullet Vehicle on Rollover Device (360°)

Figure A-614: Vehicle Impact

APPENDIX B

DATA PLOTS

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316	Target Vehicle Left Rear Pass. 50th Head Angular Acceleration Y	B-
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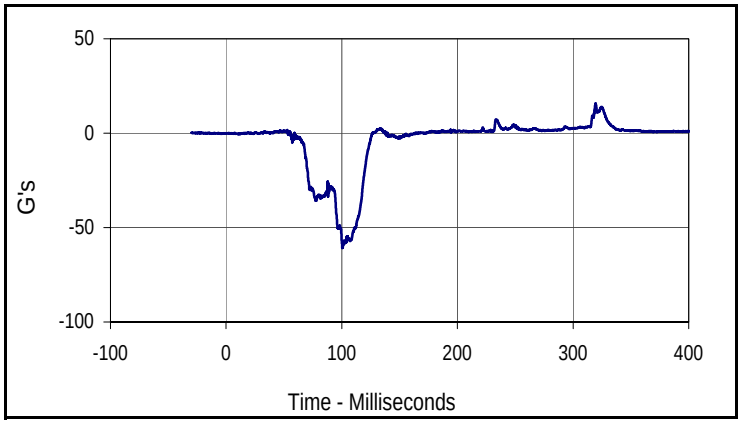

Curve Description			
(Bullet Vehicle) Driver Head CG X			
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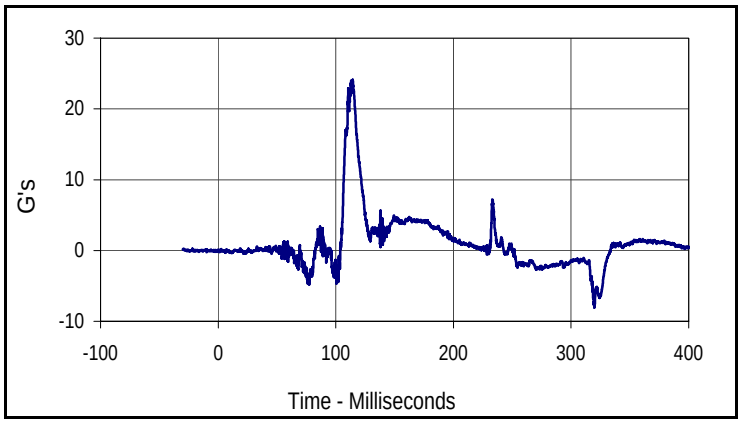
001	FIL	1000	G's
Max	Time	Min	Time
15.7	319.5	-60.9	100.5



Curve Description			
(Bullet Vehicle) Driver Head CG Y			
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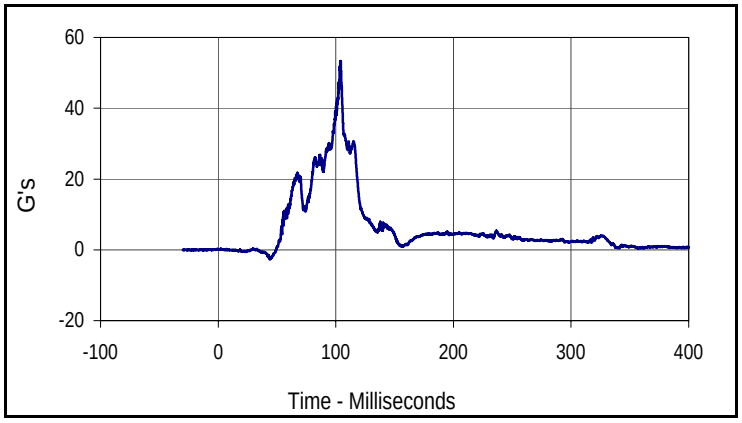
002	FIL	1000	G's
Max	Time	Min	Time
24.1	114.4	-8.0	319.8



Curve Description			
(Bullet Vehicle) Driver Head CG Z			
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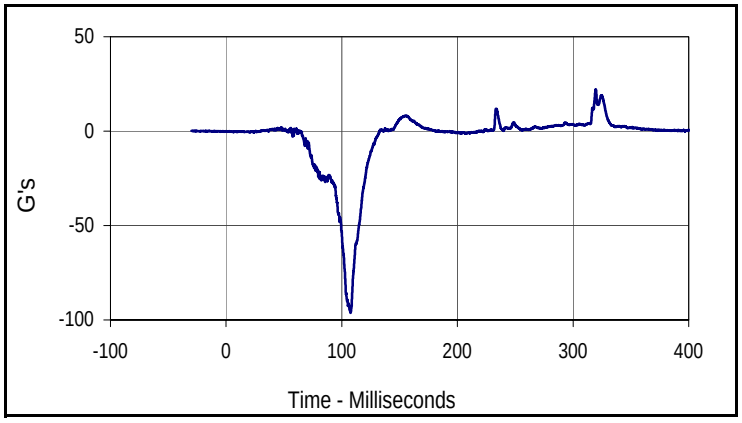
003	FIL	1000	G's
Max	Time	Min	Time
53.3	103.8	-2.7	43.8



Curve Description			
(Bullet Vehicle) Driver Top Head Array X			
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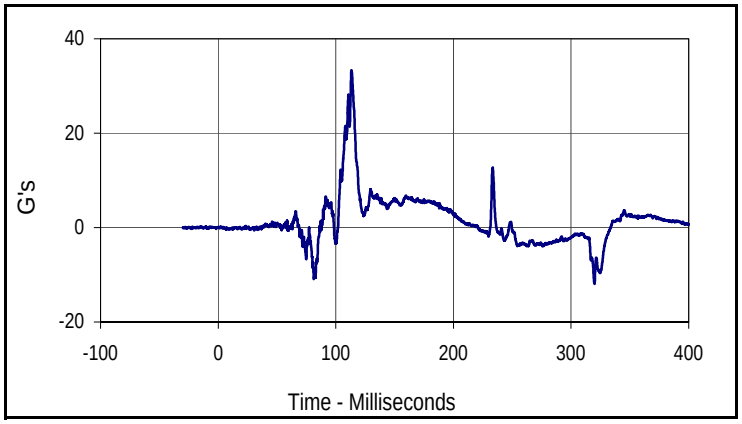
004	FIL	1000	G's
Max	Time	Min	Time
22.0	319.5	-96.3	107.6



Curve Description			
(Bullet Vehicle) Driver Top Head Array Y			
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005	FIL	1000	G's
Max	Time	Min	Time
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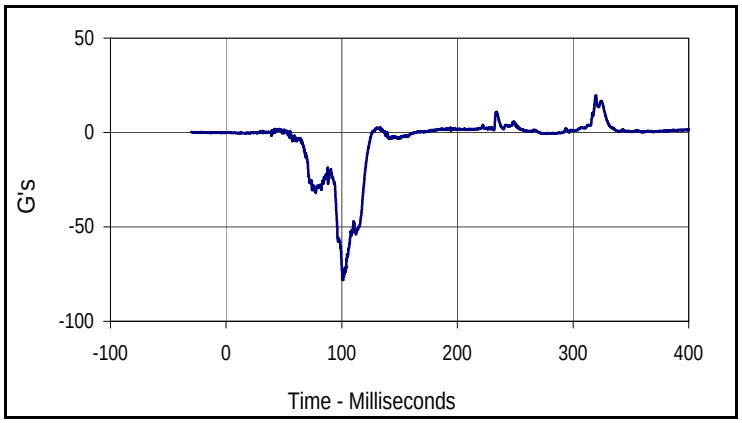
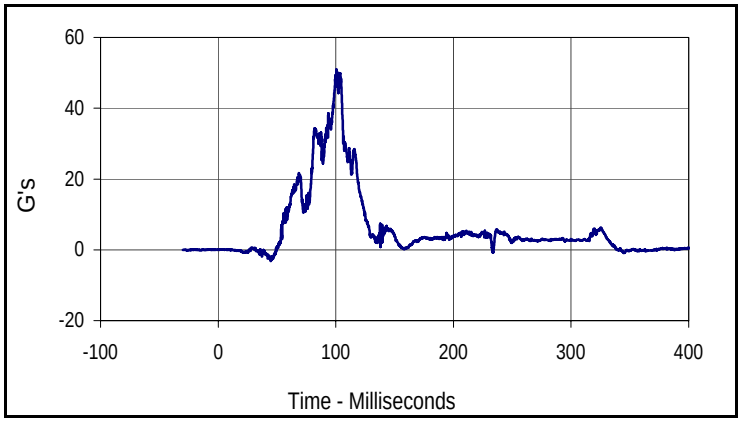
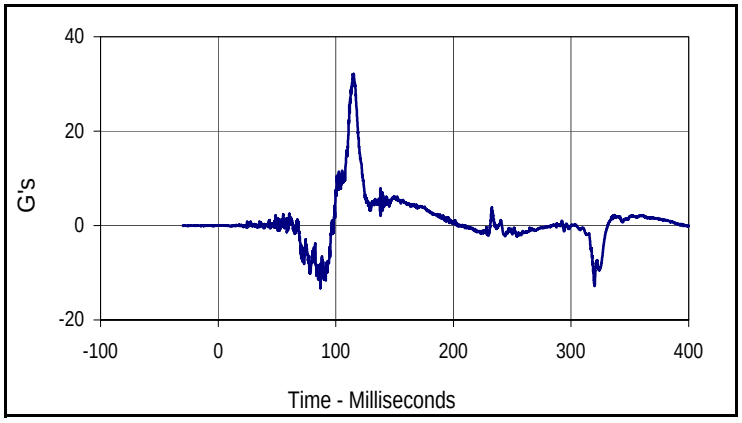


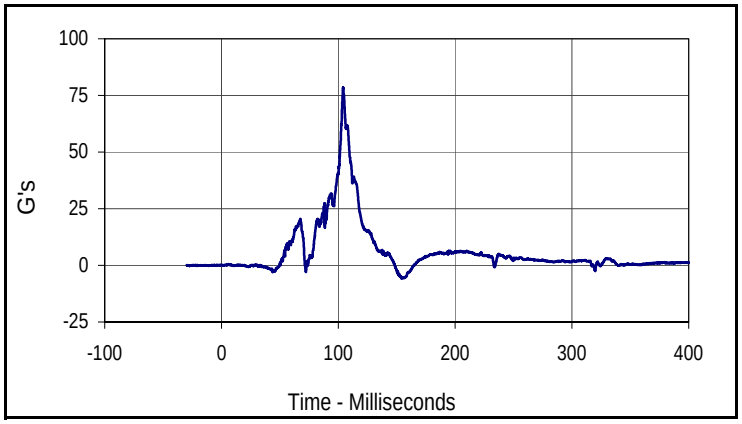
Curve Description			
(Bullet Vehicle) Driver Left Side Head Array X			
CURNO	Type	SAE Class	Units
006	FIL	1000	G's
Max	Time	Min	Time
19.7	319.5	-78.2	101.1



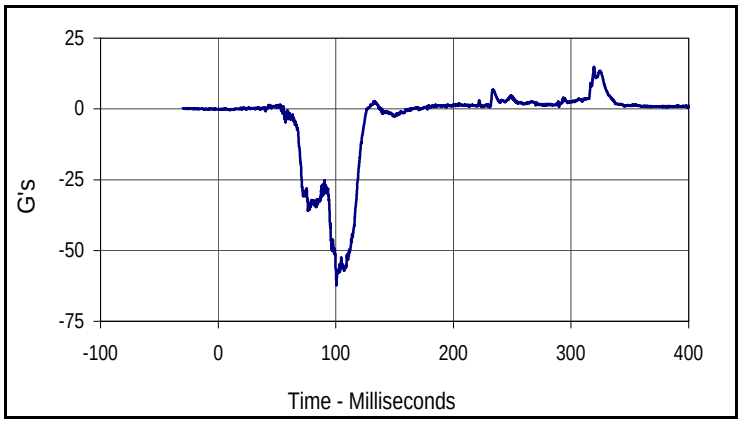
Curve Description			
(Bullet Vehicle) Driver Left Side Head Array Z			
CURNO	Type	SAE Class	Units
007	FIL	1000	G's
Max	Time	Min	Time
51.0	100.6	-3.2	44.6



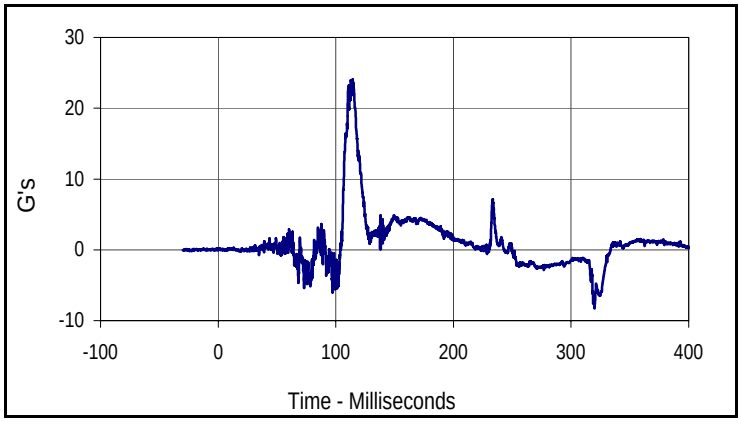
Curve Description			
(Bullet Vehicle) Driver Rear Head Array Y			
CURNO	Type	SAE Class	Units
008	FIL	1000	G's
Max	Time	Min	Time
32.1	115.3	-13.3	86.9



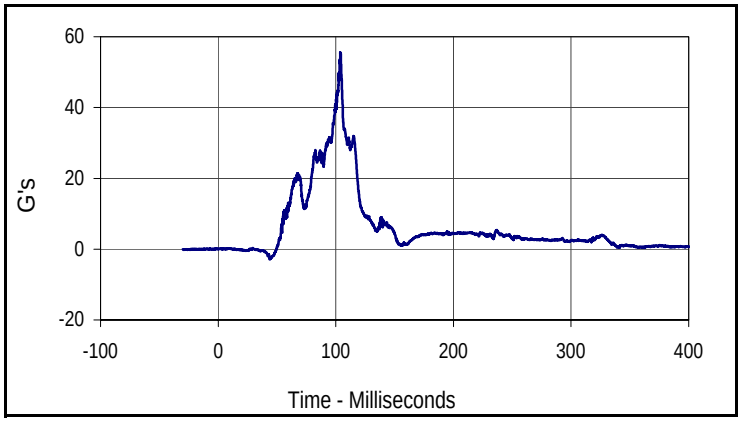
Curve Description			
(Bullet Vehicle) Driver Rear Head Array Z			
CURNO	Type	SAE Class	Units
009	FIL	1000	G's
Max	Time	Min	Time
78.5	104.2	-5.9	154.3



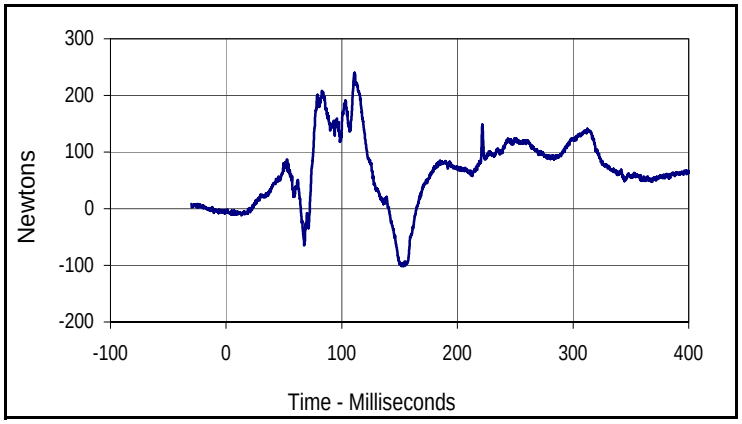
Curve Description			
(Bullet Vehicle) Driver Head CG X Redundant			
CURNO	Type	SAE Class	Units
010	FIL	1000	G's
Max	Time	Min	Time
14.9	319.6	-62.2	100.5



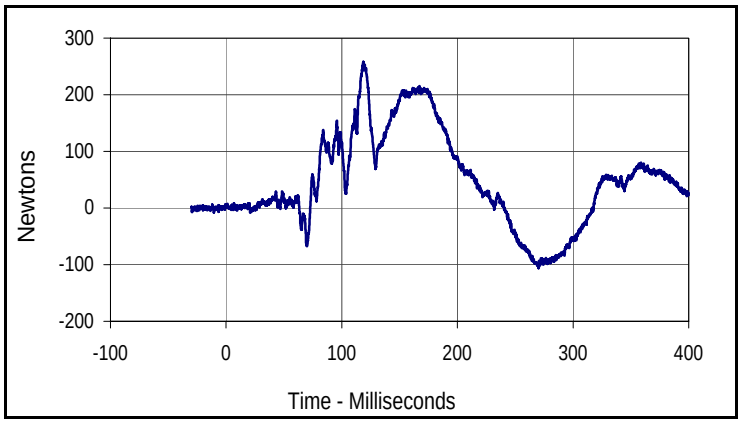
Curve Description			
(Bullet Vehicle) Driver Head CG Y Redundant			
CURNO	Type	SAE Class	Units
011	FIL	1000	G's
Max	Time	Min	Time
24.1	114.4	-8.3	319.9



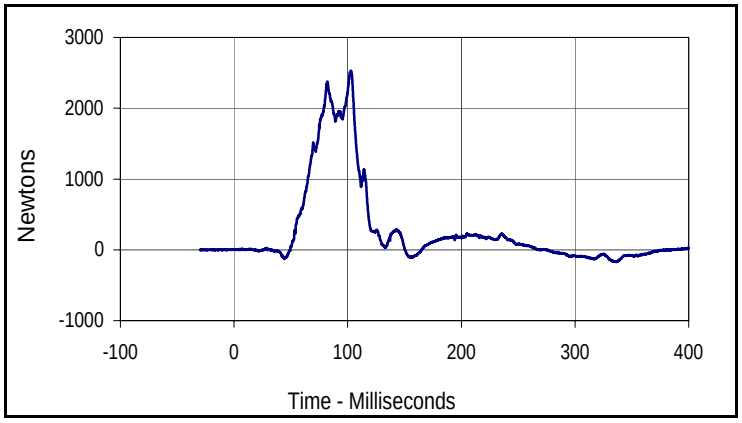
Curve Description			
(Bullet Vehicle) Driver Head CG Z Redundant			
CURNO	Type	SAE Class	Units
012	FIL	1000	G's
Max	Time	Min	Time
55.6	103.8	-2.9	43.8



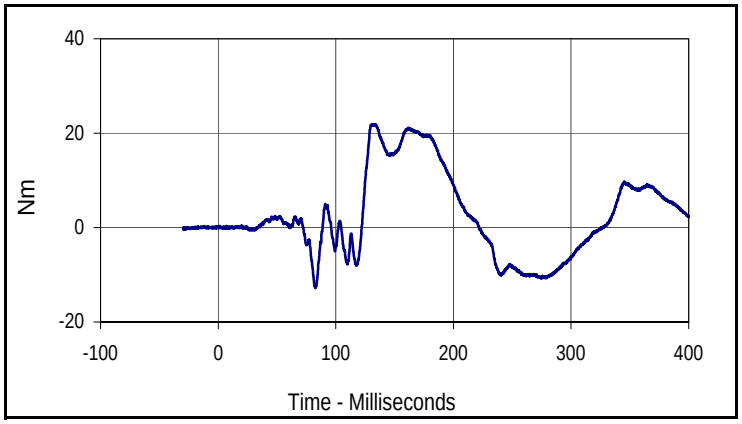
Curve Description			
(Bullet Vehicle) Driver Upper Neck Force X			
CURNO	Type	SAE Class	Units
013	FIL	1000	Newtons
Max	Time	Min	Time
240.1	111.2	-101.8	153.4



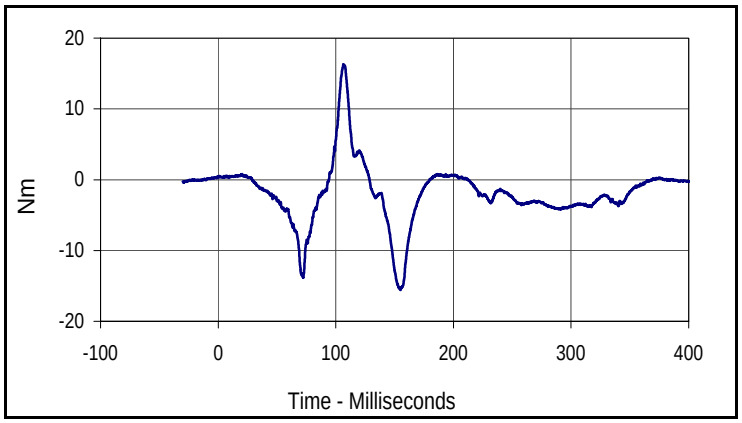
Curve Description			
(Bullet Vehicle) Driver Upper Neck Force Y			
CURNO	Type	SAE Class	Units
014	FIL	1000	Newtons
Max	Time	Min	Time
258.0	118.6	-106.4	270.3



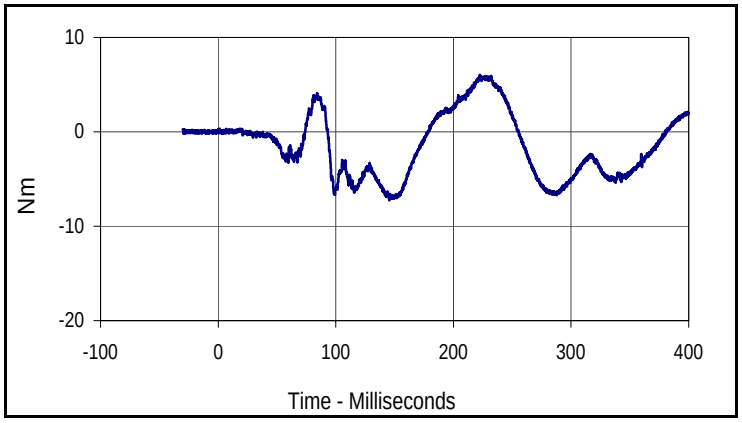
Curve Description			
(Bullet Vehicle) Driver Upper Neck Force Z			
CURNO	Type	SAE Class	Units
015	FIL	1000	Newtons
Max	Time	Min	Time
2531.5	102.8	-173.0	336.2



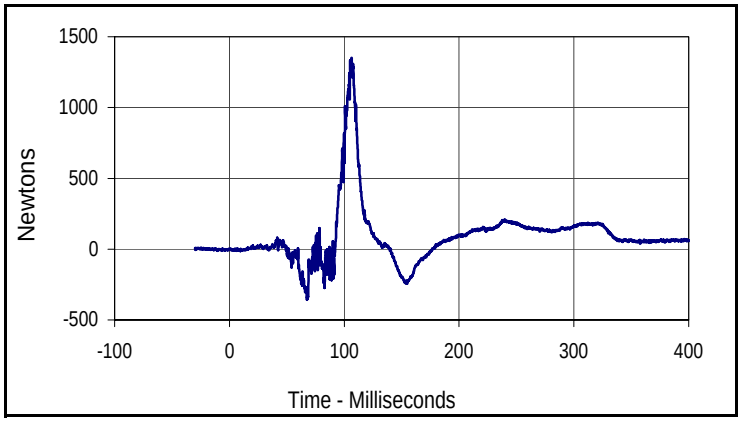
Curve Description			
(Bullet Vehicle) Driver Upper Neck Moment X			
CURNO	Type	SAE Class	Units
016	FIL	600	Nm
Max	Time	Min	Time
21.9	133.5	-12.8	82.7



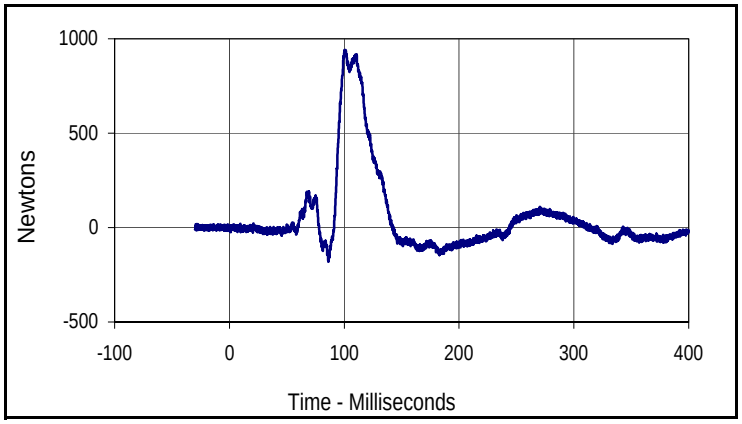
Curve Description			
(Bullet Vehicle) Driver Upper Neck Moment Y			
CURNO	Type	SAE Class	Units
017	FIL	600	Nm
Max	Time	Min	Time
16.3	106.5	-15.6	155.0



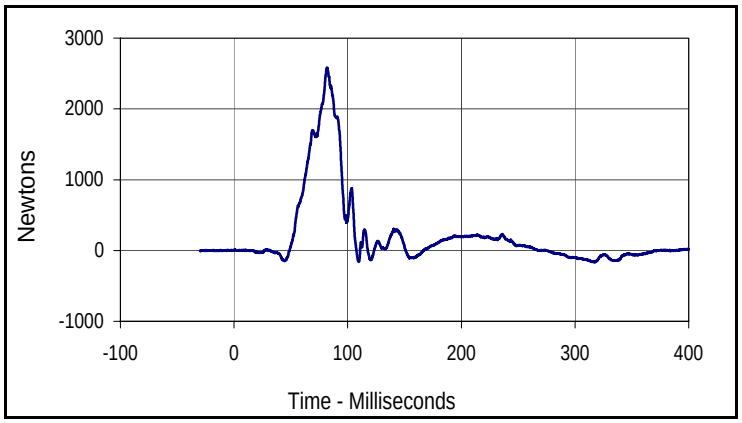
Curve Description			
(Bullet Vehicle) Driver Upper Neck Moment Z			
CURNO	Type	SAE Class	Units
018	FIL	600	Nm
Max	Time	Min	Time
6.0	222.5	-7.2	145.5



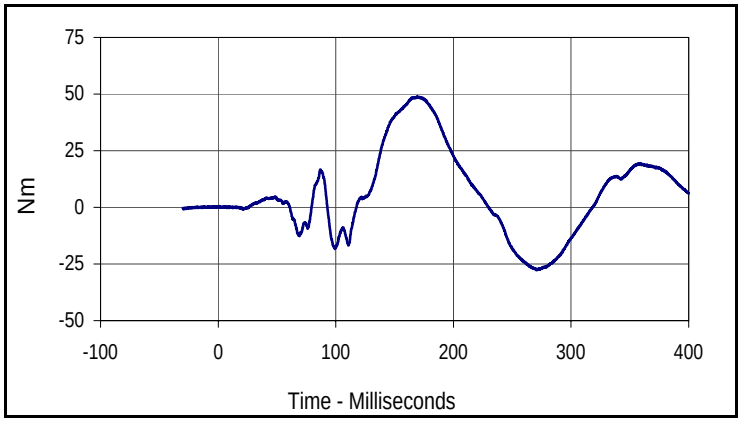
Curve Description			
(Bullet Vehicle) Driver Lower Neck Force X			
CURNO	Type	SAE Class	Units
019	FIL	1000	Newtons
Max	Time	Min	Time
1350.7	106.3	-357.1	67.5



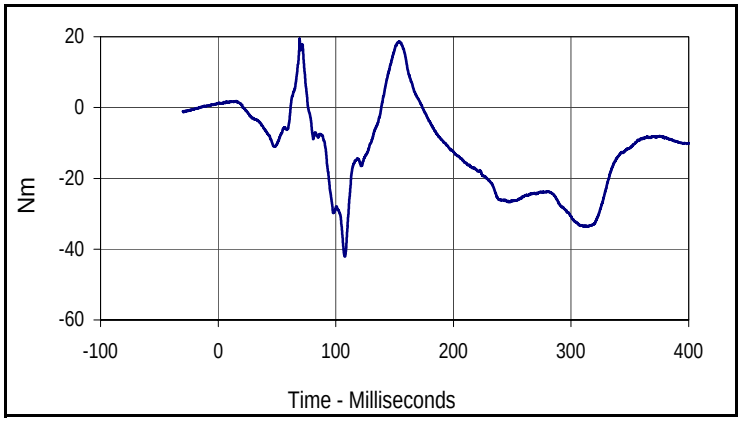
Curve Description			
(Bullet Vehicle) Driver Lower Neck Force Y			
CURNO	Type	SAE Class	Units
020	FIL	1000	Newtons
Max	Time	Min	Time
941.0	101.2	-180.1	86.2



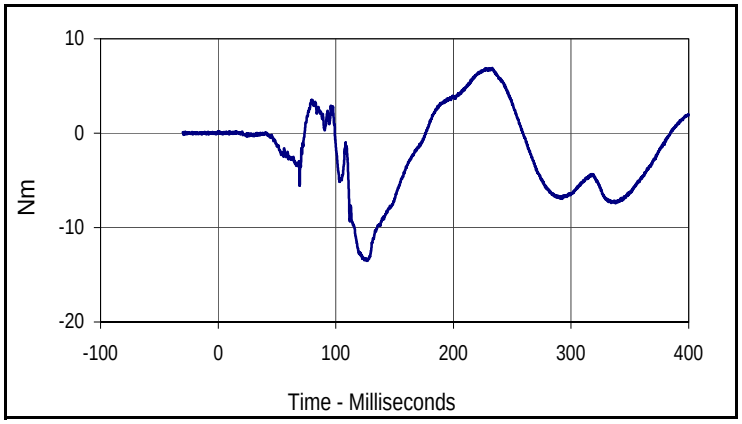
Curve Description			
(Bullet Vehicle) Driver Lower Neck Force Z			
CURNO	Type	SAE Class	Units
021	FIL	1000	Newtons
Max	Time	Min	Time
2582.0	82.0	-167.0	317.4



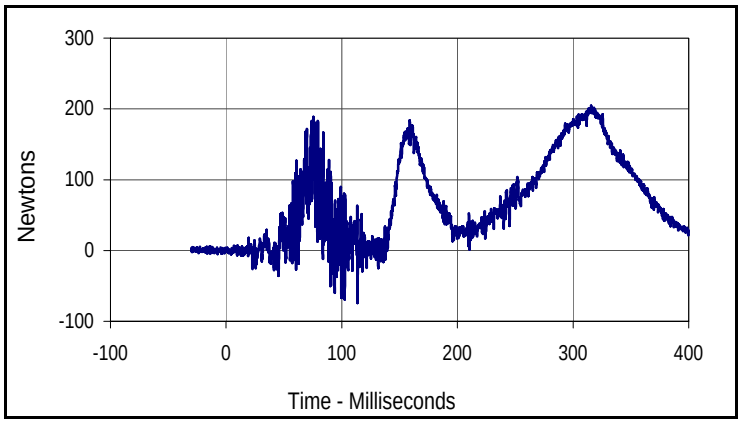
Curve Description			
(Bullet Vehicle) Driver Lower Neck Moment X			
CURNO	Type	SAE Class	Units
022	FIL	600	Nm
Max	Time	Min	Time
48.8	169.3	-27.7	270.3



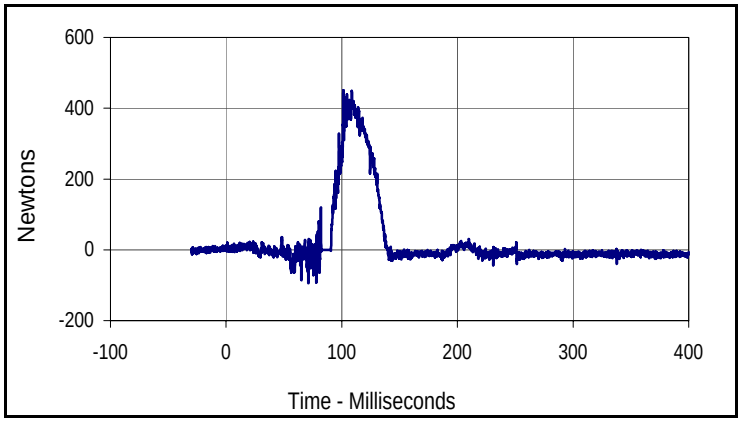
Curve Description			
(Bullet Vehicle) Driver Lower Neck Moment Y			
CURNO	Type	SAE Class	Units
023	FIL	600	Nm
Max	Time	Min	Time
19.5	69.2	-42.1	107.6



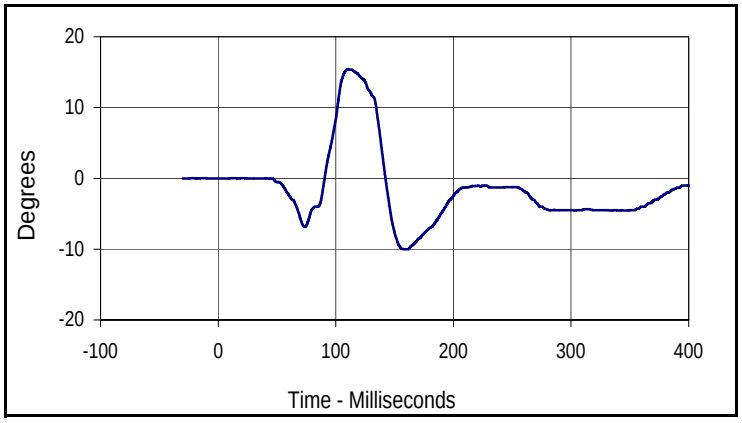
Curve Description			
(Bullet Vehicle) Driver Lower Neck Moment Z			
CURNO	Type	SAE Class	Units
024	FIL	600	Nm
Max	Time	Min	Time
6.9	233.1	-13.5	126.4



Curve Description			
(Bullet Vehicle) Driver Front Skull Spring Force Z			
CURNO	Type	SAE Class	Units
025	FIL	1000	Newtons
Max	Time	Min	Time
204.5	315.7	-73.4	113.6

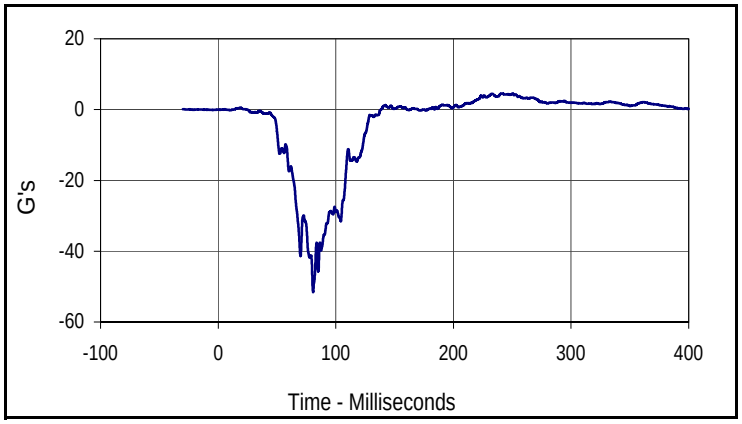


Curve Description			
(Bullet Vehicle) Driver Rear Skull Spring Force Z			
CURNO	Type	SAE Class	Units
026	FIL	1000	Newtons
Max	Time	Min	Time
450.8	101.4	-94.1	71.2

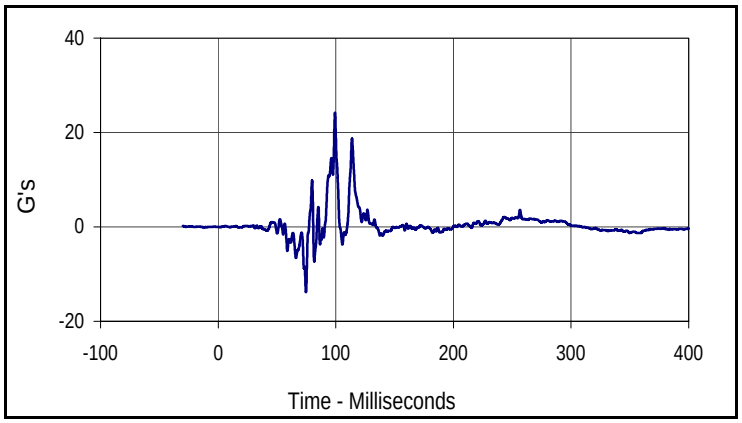


Curve Description			
(Bullet Vehicle) Driver Occipital Condyle Rotation			
CURNO	Type	SAE Class	Units
027	FIL	180	Degrees
Max	Time	Min	Time
15.4	110.4	-10.0	158.3

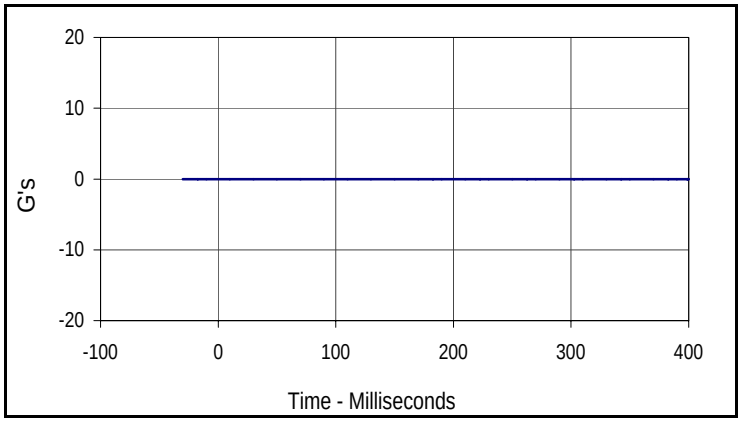
Test Vehicle:	2007 Ford 500 SEL 4-Door Sedan (Bullet)	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	1/8/10



Curve Description			
(Bullet Vehicle) Driver Upper Spine T1 X			
CURNO	Type	SAE Class	Units
028	FIL	180	G's
Max	Time	Min	Time
4.6	241.1	-51.6	80.7

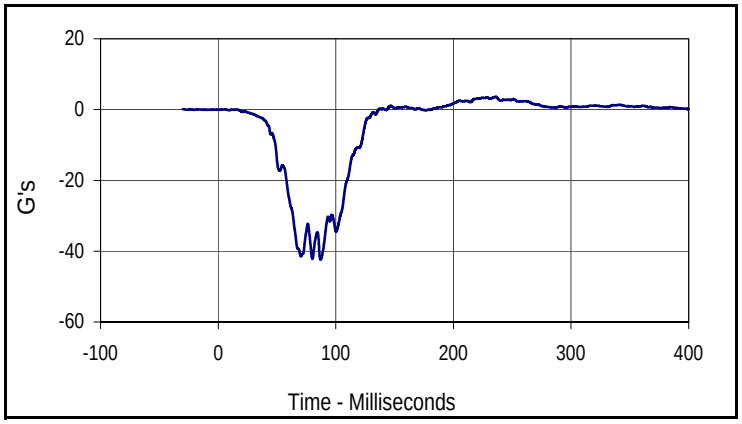


Curve Description			
(Bullet Vehicle) Driver Upper Spine T1 Y			
CURNO	Type	SAE Class	Units
029	FIL	180	G's
Max	Time	Min	Time
24.2	99.3	-13.9	74.6

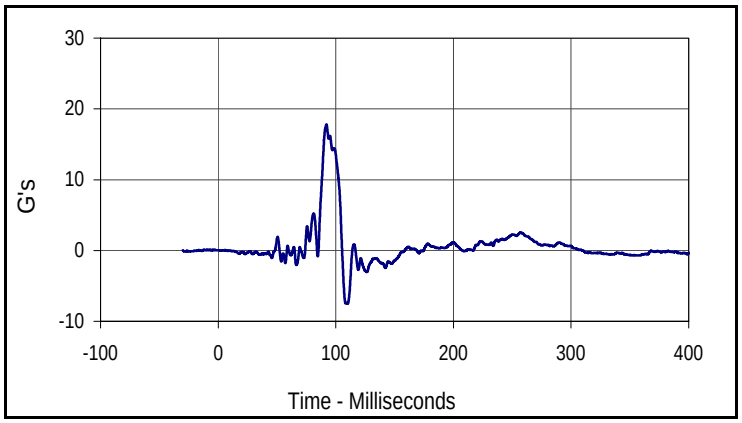


Curve Description			
(Bullet Vehicle) Driver Upper Spine T1 Z			
CURNO	Type	SAE Class	Units
030	FIL	180	G's
Max	Time	Min	Time
0.0	0.0	0.0	0.0

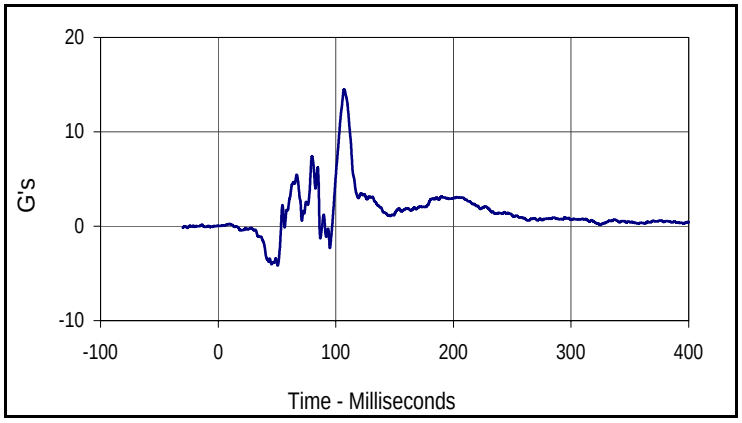
* Channel failed, no data



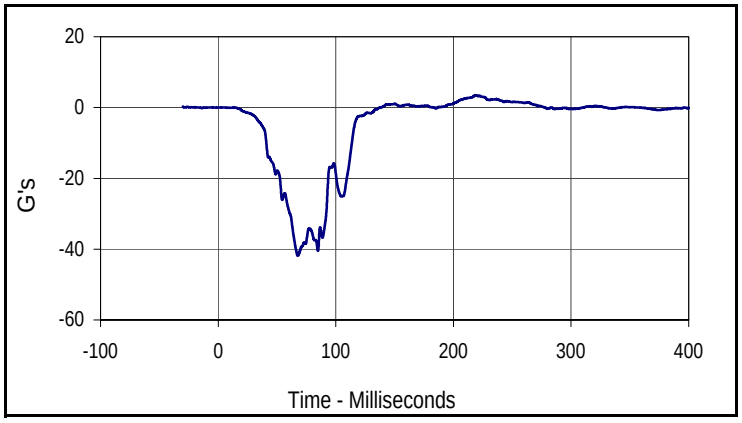
Curve Description			
(Bullet Vehicle) Driver Thorax X			
CURNO	Type	SAE Class	Units
031	FIL	180	G's
Max	Time	Min	Time
3.6	236.1	-42.4	87.1



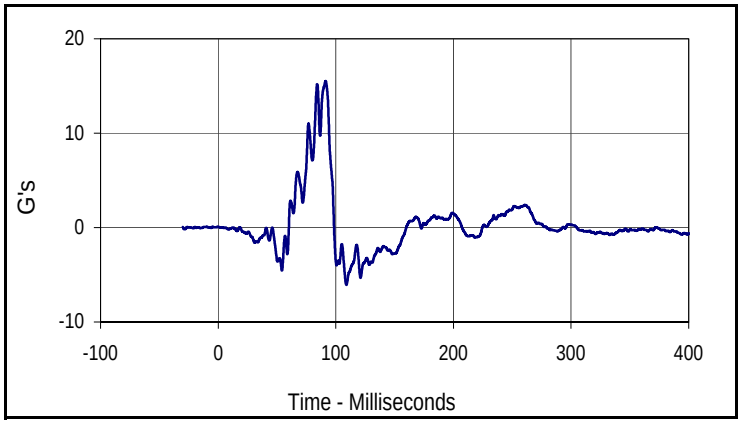
Curve Description			
(Bullet Vehicle) Driver Thorax Y			
CURNO	Type	SAE Class	Units
032	FIL	180	G's
Max	Time	Min	Time
17.8	92.0	-7.5	110.0



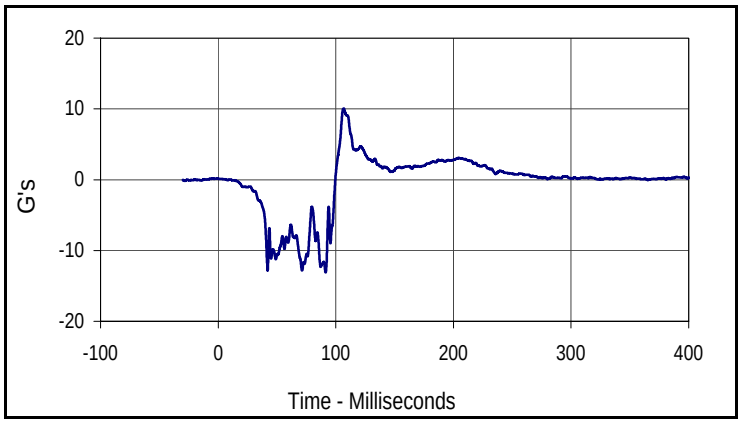
Curve Description			
(Bullet Vehicle) Driver Thorax Z			
CURNO	Type	SAE Class	Units
033	FIL	180	G's
Max	Time	Min	Time
14.5	107.1	-4.2	50.6



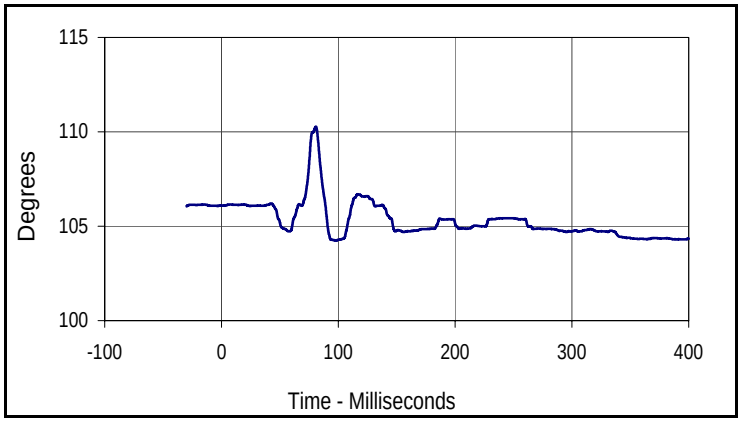
Curve Description			
(Bullet Vehicle) Driver Lower Spine T12 X			
CURNO	Type	SAE Class	Units
034	FIL	180	G's
Max	Time	Min	Time
3.5	218.8	-41.9	67.7



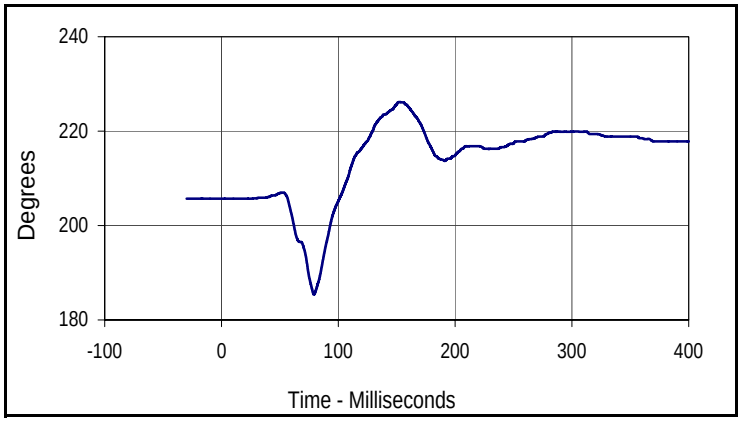
Curve Description			
(Bullet Vehicle) Driver Lower Spine T12 Y			
CURNO	Type	SAE Class	Units
035	FIL	180	G's
Max	Time	Min	Time
15.5	91.4	-6.1	109.0



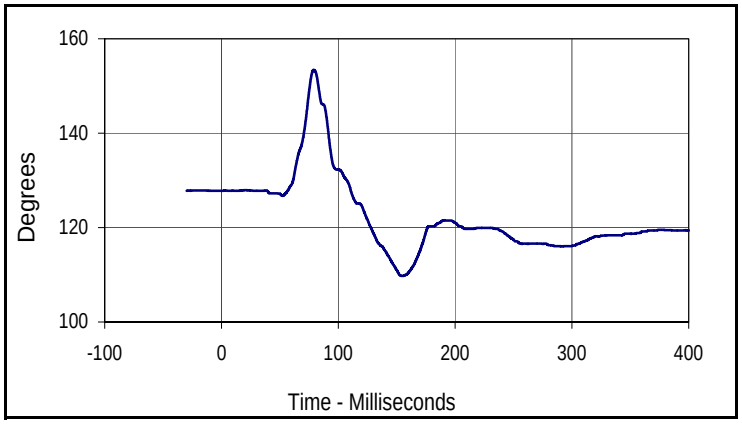
Curve Description			
(Bullet Vehicle) Driver Lower Spine T12 Z			
CURNO	Type	SAE Class	Units
036	FIL	180	G's
Max	Time	Min	Time
10.1	106.7	-13.1	91.4



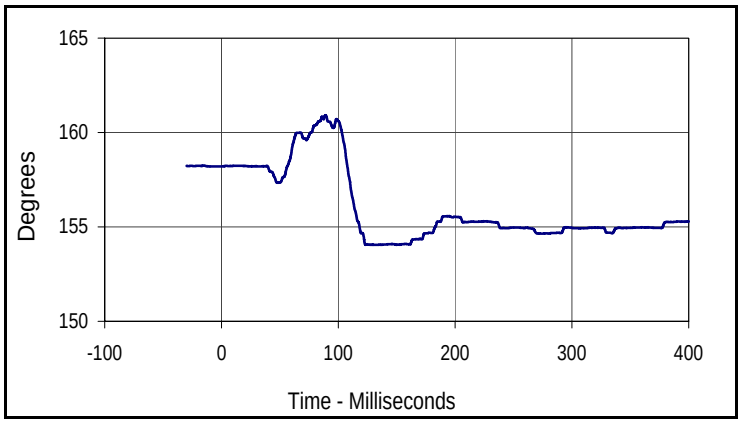
Curve Description			
(Bullet Vehicle) Driver Upper Left CRUX Base Rotation			
CURNO	Type	SAE Class	Units
037	FIL	180	Degrees
Max	Time	Min	Time
110.3	80.8	104.2	98.0



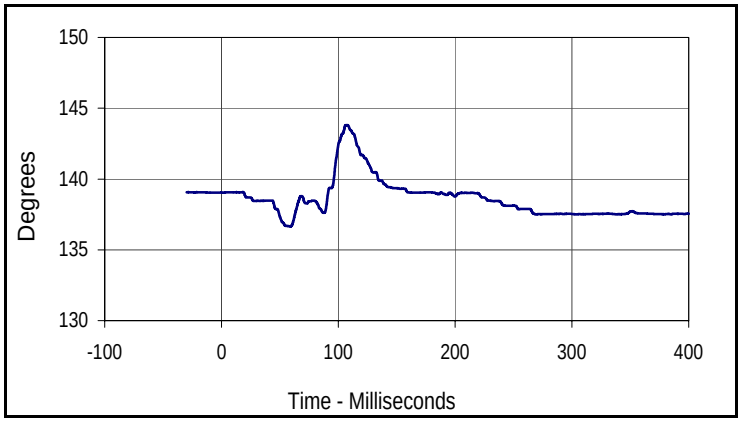
Curve Description			
(Bullet Vehicle) Driver Upper Left CRUX Middle Rotation			
CURNO	Type	SAE Class	Units
038	FIL	180	Degrees
Max	Time	Min	Time
226.1	152.1	185.4	79.2



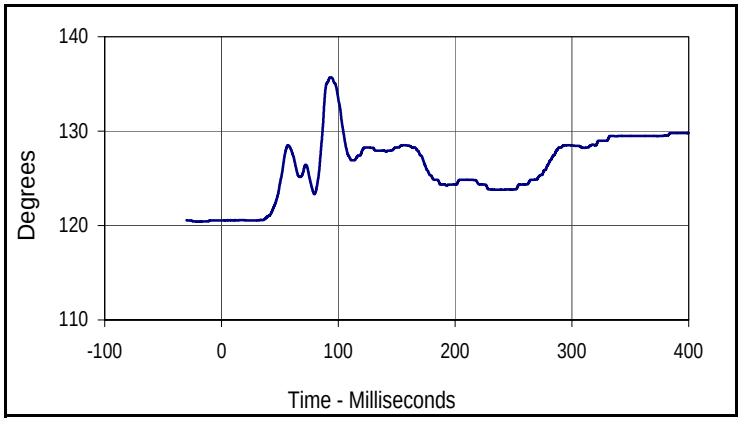
Curve Description			
(Bullet Vehicle) Driver Upper Left CRUX Elbow Rotation			
CURNO	Type	SAE Class	Units
039	FIL	180	Degrees
Max	Time	Min	Time
153.4	79.1	109.8	154.9



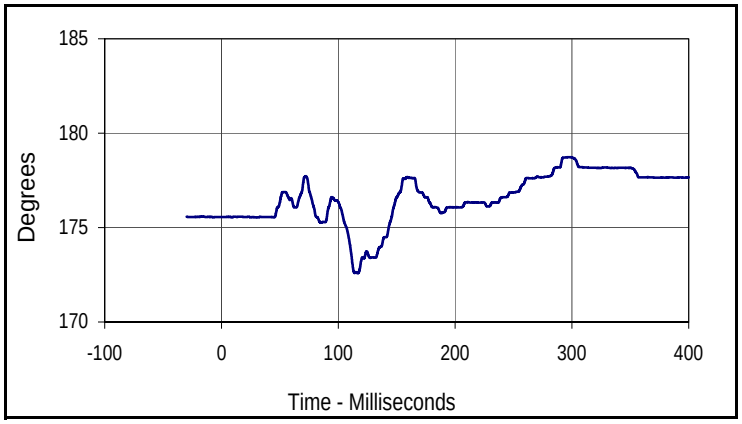
Curve Description			
(Bullet Vehicle) Driver Lower Left CRUX Base Rotation			
CURNO	Type	SAE Class	Units
040	FIL	180	Degrees
Max	Time	Min	Time
160.9	89.1	154.0	132.9



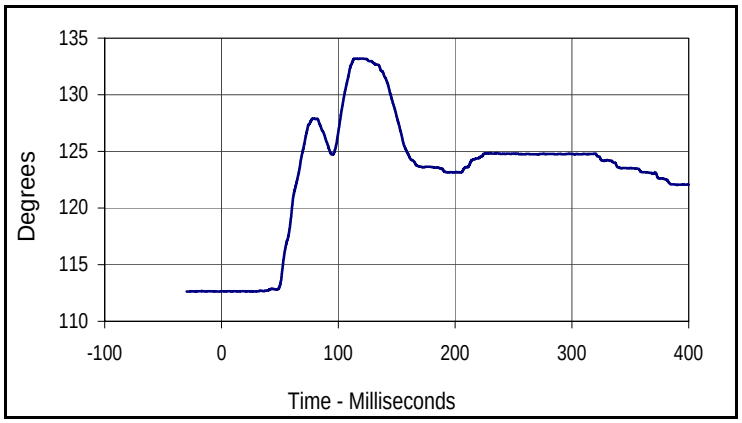
Curve Description			
(Bullet Vehicle) Driver Lower Left CRUX Middle Rotation			
CURNO	Type	SAE Class	Units
041	FIL	180	Degrees
Max	Time	Min	Time
143.8	106.8	136.7	59.2



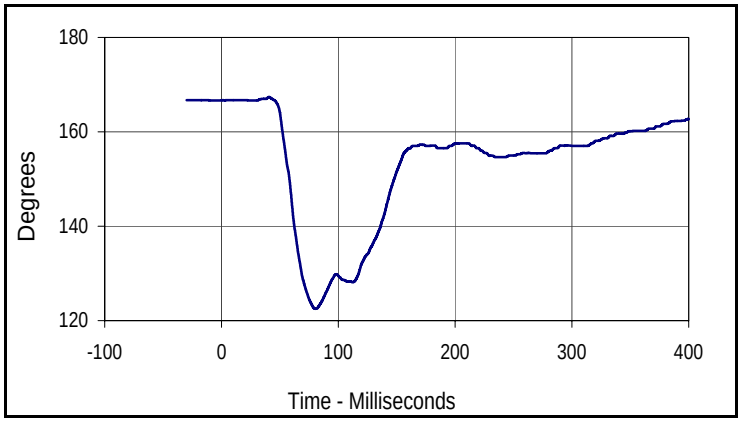
Curve Description			
(Bullet Vehicle) Driver Lower Left CRUX Elbow Rotation			
CURNO	Type	SAE Class	Units
042	FIL	180	Degrees
Max	Time	Min	Time
135.7	93.5	120.5	29.3



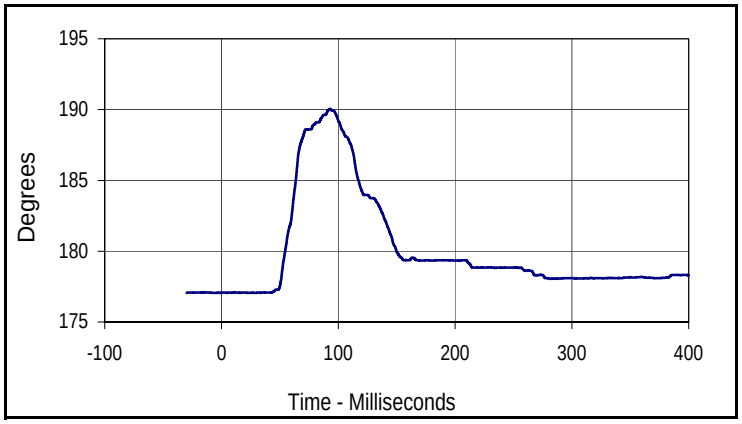
Curve Description			
(Bullet Vehicle) Driver Upper Right CRUX Base Rotation			
CURNO	Type	SAE Class	Units
043	FIL	180	Degrees
Max	Time	Min	Time
178.7	297.2	172.6	116.7



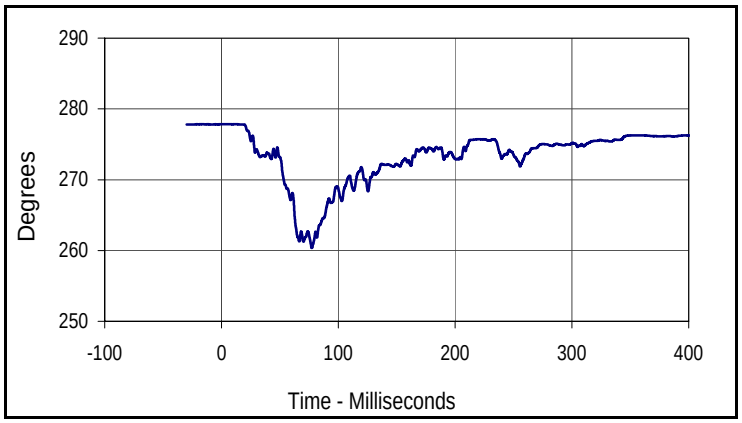
Curve Description			
(Bullet Vehicle) Driver Upper Right CRUX Middle Rotation			
CURNO	Type	SAE Class	Units
044	FIL	180	Degrees
Max	Time	Min	Time
133.2	120.7	112.6	28.2



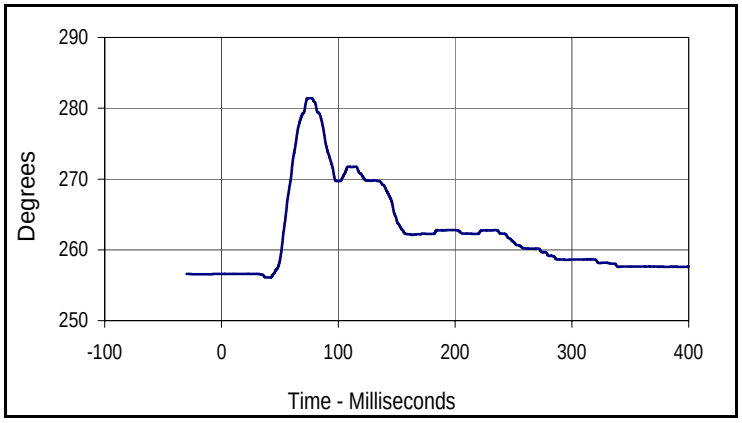
Curve Description			
(Bullet Vehicle) Driver Upper Right CRUX Elbow Rotation			
CURNO	Type	SAE Class	Units
045	FIL	180	Degrees
Max	Time	Min	Time
167.4	40.8	122.5	80.2



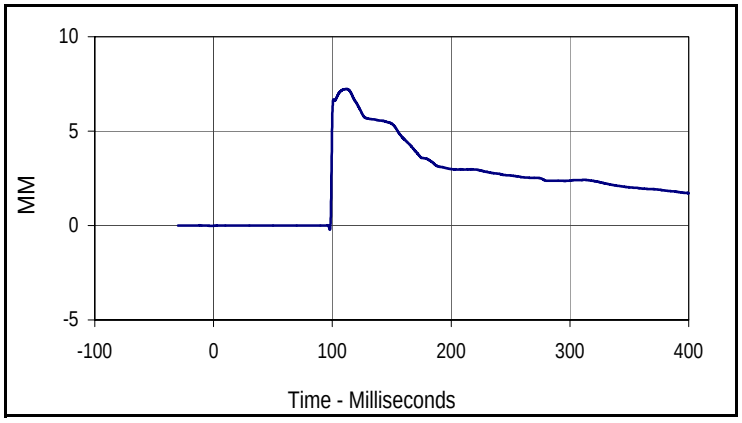
Curve Description			
(Bullet Vehicle) Driver Lower Right CRUX Base Rotation			
CURNO	Type	SAE Class	Units
046	FIL	180	Degrees
Max	Time	Min	Time
190.0	92.9	177.0	24.3



Curve Description			
(Bullet Vehicle) Driver Lower Right CRUX Middle Rotation			
CURNO	Type	SAE Class	Units
047	FIL	180	Degrees
Max	Time	Min	Time
277.8	11.5	260.4	77.3

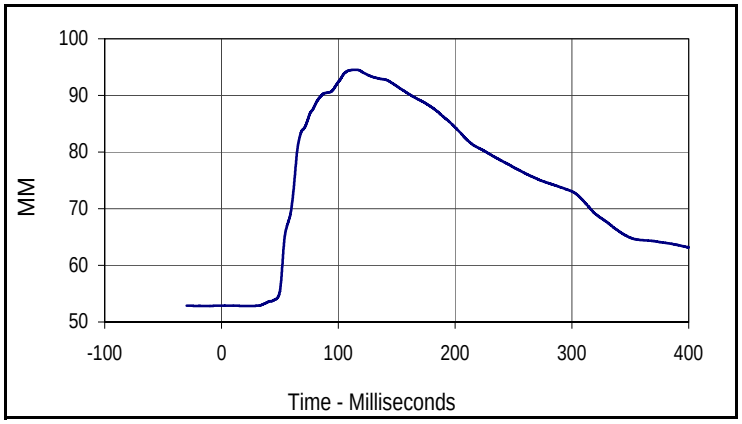


Curve Description			
(Bullet Vehicle) Driver Lower Right CRUX Elbow Rotation			
CURNO	Type	SAE Class	Units
048	FIL	180	Degrees
Max	Time	Min	Time
281.4	77.1	256.1	38.3

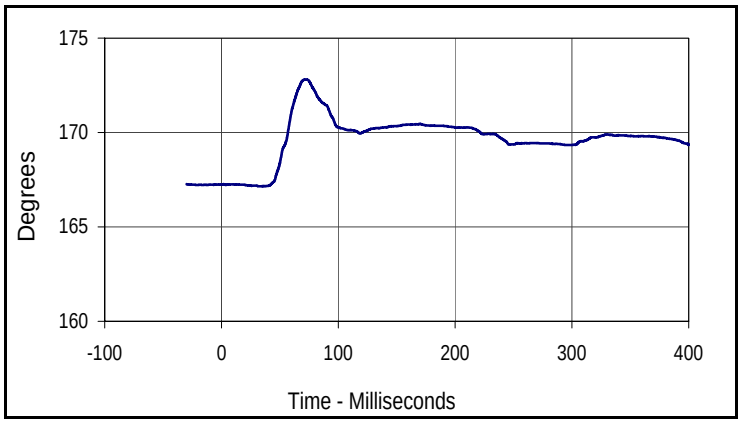


Curve Description			
(Bullet Vehicle) Driver Upper Abdomen Deflection			
CURNO	Type	SAE Class	Units
049	FIL	180	MM
Max	Time	Min	Time
7.2	112.0	-0.2	97.9

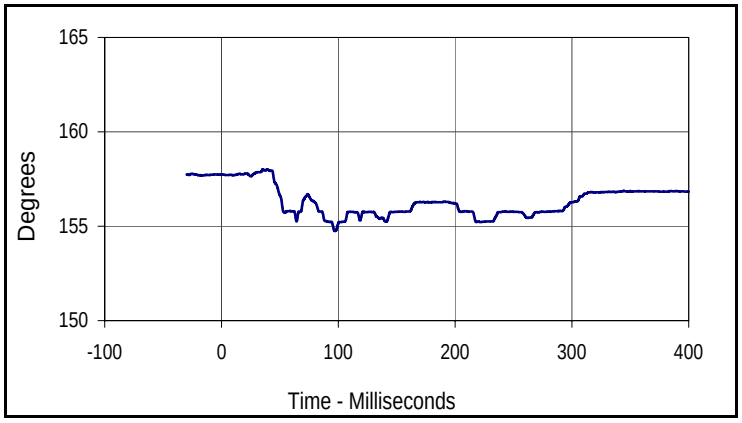
Channel failed between 0 to 99.5



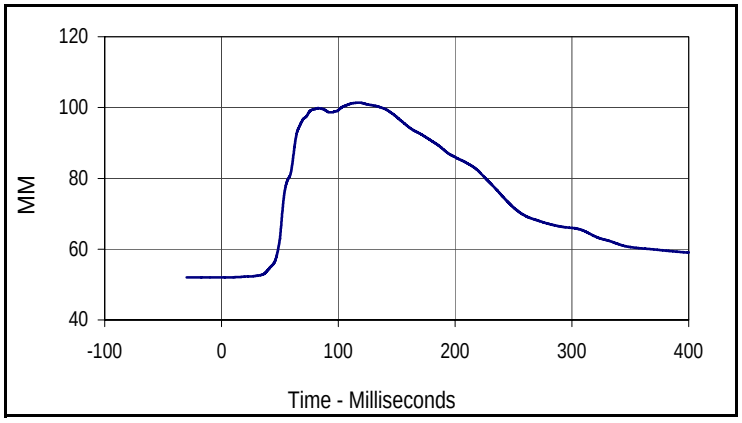
Curve Description			
(Bullet Vehicle) Driver Left DGSP X Deflection			
CURNO	Type	SAE Class	Units
050	FIL	180	MM
Max	Time	Min	Time
94.5	115.7	52.8	25.6



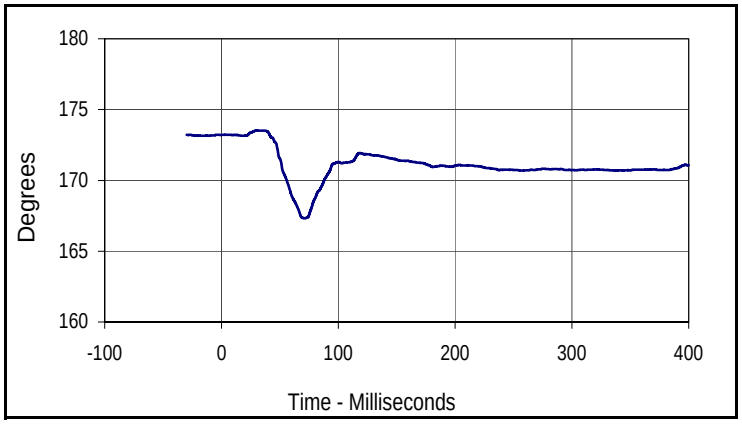
Curve Description			
(Bullet Vehicle) Driver Left DGSP Y Rotation			
CURNO	Type	SAE Class	Units
051	FIL	180	Degrees
Max	Time	Min	Time
172.8	72.3	167.2	33.5



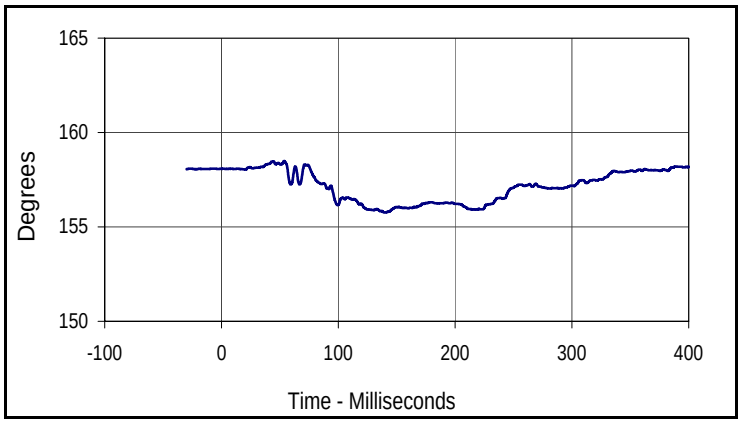
Curve Description			
(Bullet Vehicle) Driver Left DGSP Z Rotation			
CURNO	Type	SAE Class	Units
052	FIL	180	Degrees
Max	Time	Min	Time
158.0	39.4	154.7	97.0



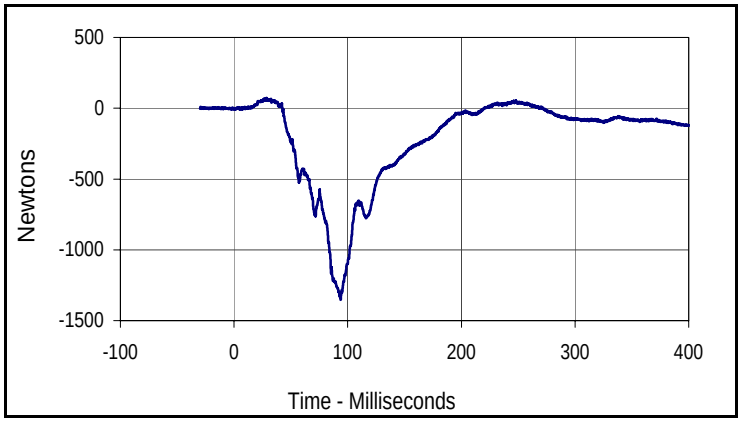
Curve Description			
(Bullet Vehicle) Driver Right DGSP X Deflection			
CURNO	Type	SAE Class	Units
053	FIL	180	MM
Max	Time	Min	Time
101.4	117.3	52.0	0.0



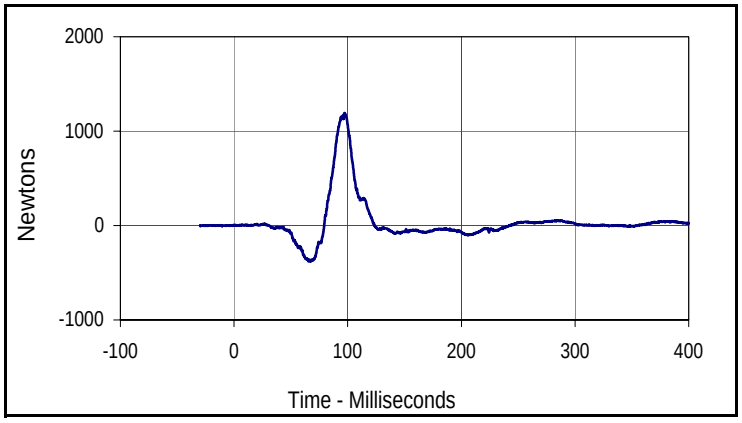
Curve Description			
(Bullet Vehicle) Driver Right DGSP Y Rotation			
CURNO	Type	SAE Class	Units
054	FIL	180	Degrees
Max	Time	Min	Time
173.5	30.2	167.3	70.8



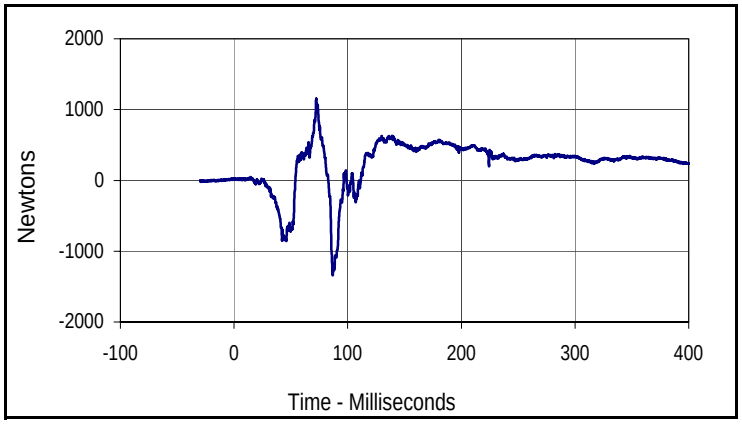
Curve Description			
(Bullet Vehicle) Driver Right DGSP Z Rotation			
CURNO	Type	SAE Class	Units
055	FIL	180	Degrees
Max	Time	Min	Time
158.5	53.7	155.8	139.6



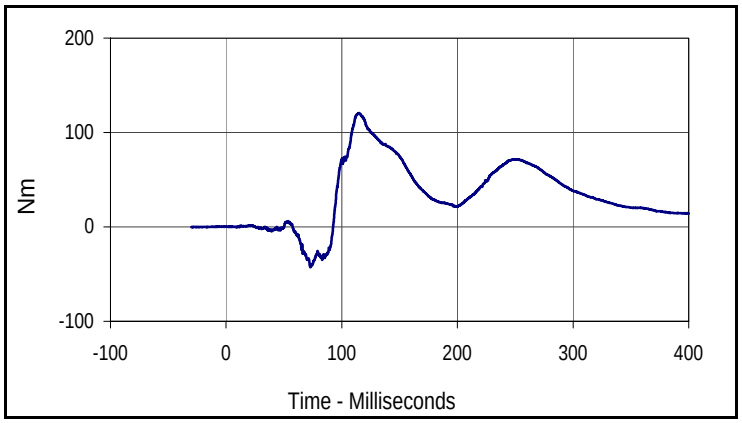
Curve Description			
(Bullet Vehicle) Driver Upper Thoracic Spine Force X			
CURNO	Type	SAE Class	Units
056	FIL	600	Newtons
Max	Time	Min	Time
73.2	28.6	-1352.0	93.8



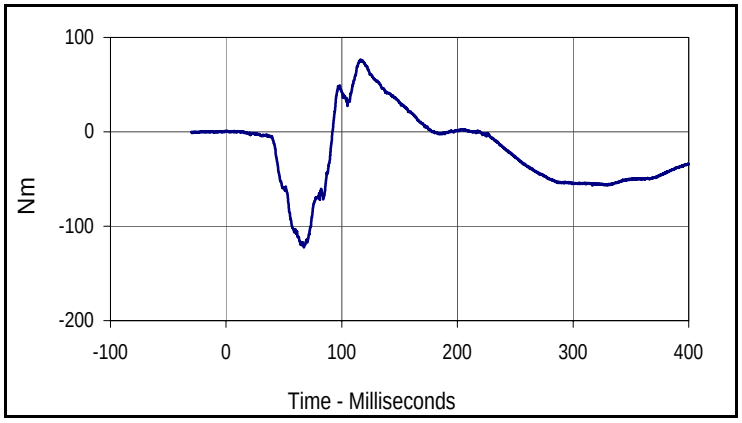
Curve Description			
(Bullet Vehicle) Driver Upper Thoracic Spine Force Y			
CURNO	Type	SAE Class	Units
057	FIL	600	Newtons
Max	Time	Min	Time
1192.1	97.2	-381.0	65.6



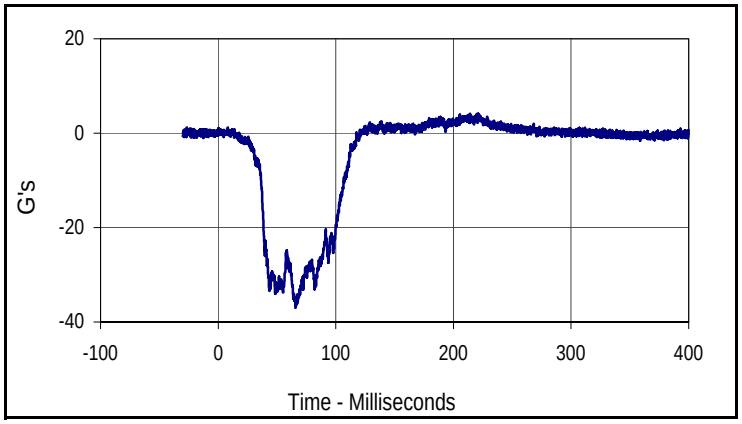
Curve Description			
(Bullet Vehicle) Driver Upper Thoracic Spine Force Z			
CURNO	Type	SAE Class	Units
058	FIL	600	Newtons
Max	Time	Min	Time
1153.0	72.3	-1338.7	86.8



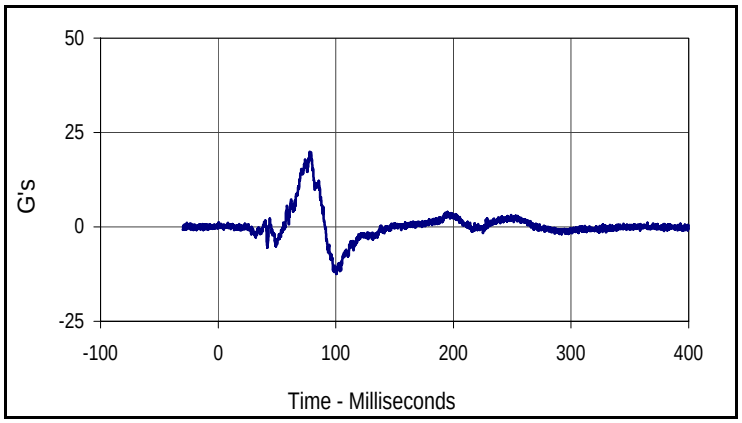
Curve Description			
(Bullet Vehicle) Driver Upper Thoracic Spine Moment X			
CURNO	Type	SAE Class	Units
059	FIL	600	Nm
Max	Time	Min	Time
120.7	114.9	-42.7	73.0



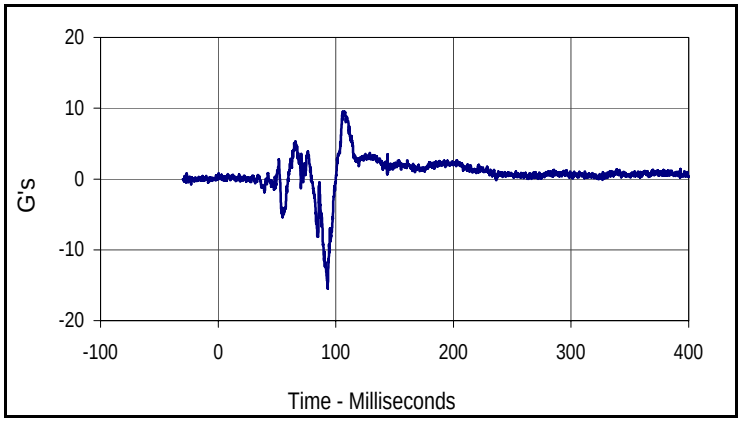
Curve Description			
(Bullet Vehicle) Driver Upper Thoracic Spine Moment Y			
CURNO	Type	SAE Class	Units
060	FIL	600	Nm
Max	Time	Min	Time
76.7	116.3	-122.5	67.3



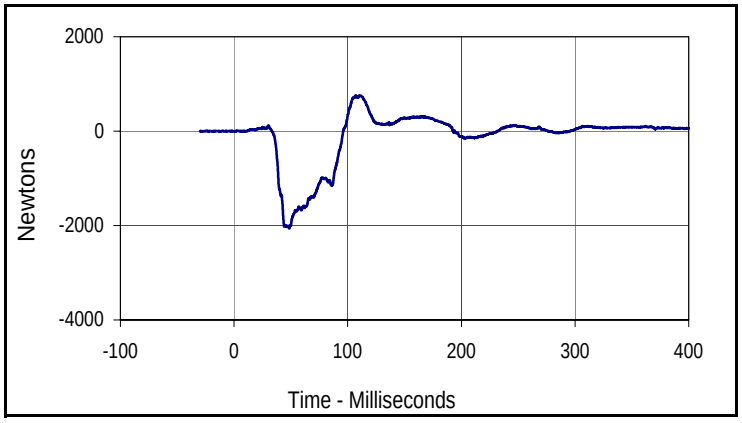
Curve Description			
(Bullet Vehicle) Driver Pelvis X			
CURNO	Type	SAE Class	Units
061	FIL	1000	G's
Max	Time	Min	Time
4.1	214.1	-37.0	65.8



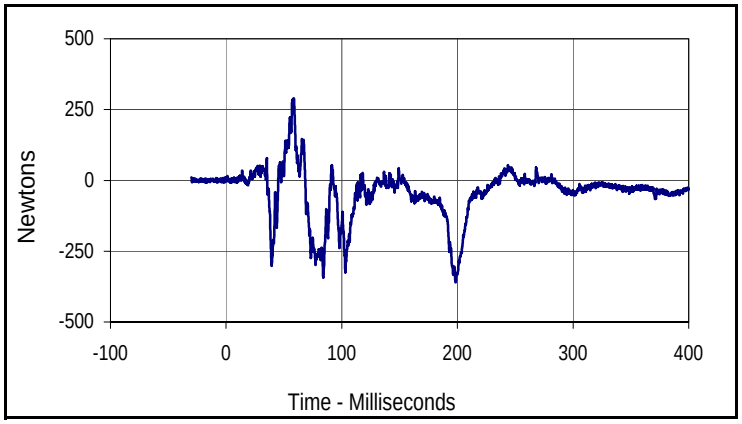
Curve Description			
(Bullet Vehicle) Driver Pelvis Y			
CURNO	Type	SAE Class	Units
062	FIL	1000	G's
Max	Time	Min	Time
19.9	77.8	-12.5	100.4



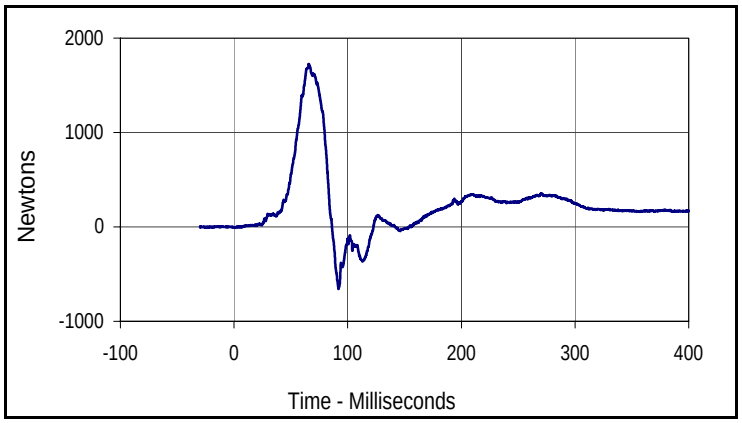
Curve Description			
(Bullet Vehicle) Driver Pelvis Z			
CURNO	Type	SAE Class	Units
063	FIL	1000	G's
Max	Time	Min	Time
9.5	107.4	-15.5	93.1



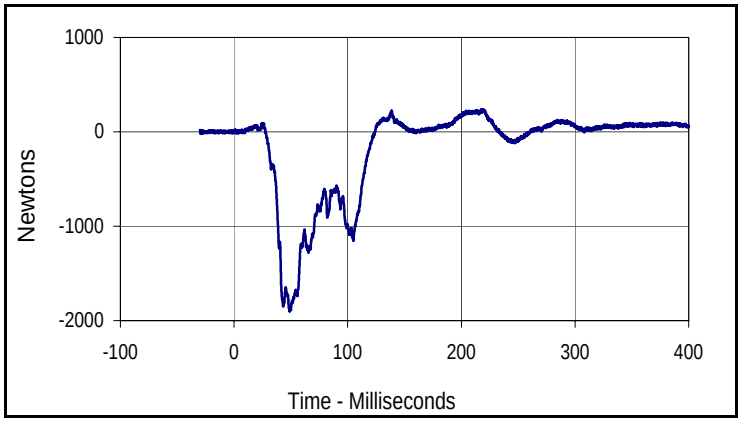
Curve Description			
(Bullet Vehicle) Driver Left Acetabulum Force X			
CURNO	Type	SAE Class	Units
064	FIL	600	Newtons
Max	Time	Min	Time
760.9	107.1	-2059.6	48.5



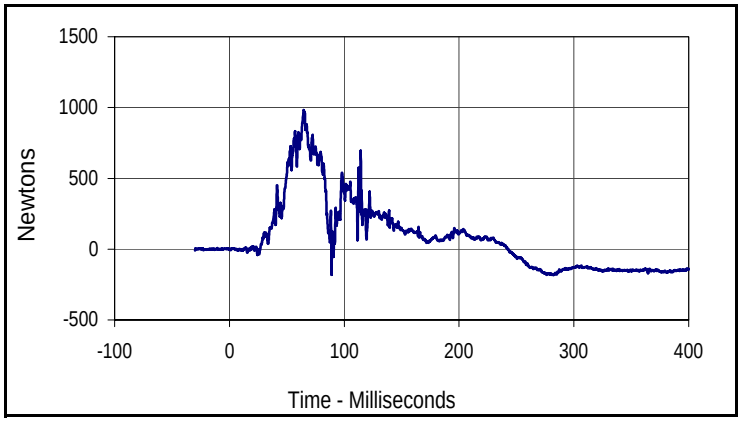
Curve Description			
(Bullet Vehicle) Driver Left Acetabulum Force Y			
CURNO	Type	SAE Class	Units
065	FIL	600	Newtons
Max	Time	Min	Time
290.1	58.5	-360.1	198.5



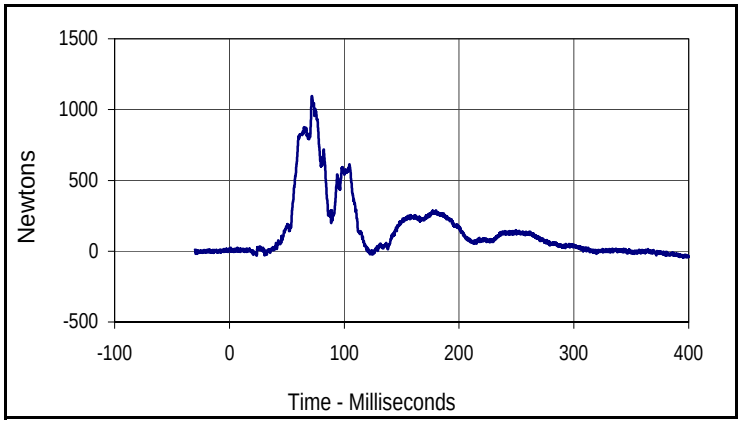
Curve Description			
(Bullet Vehicle) Driver Left Acetabulum Force Z			
CURNO	Type	SAE Class	Units
066	FIL	600	Newtons
Max	Time	Min	Time
1724.9	65.8	-659.1	91.9



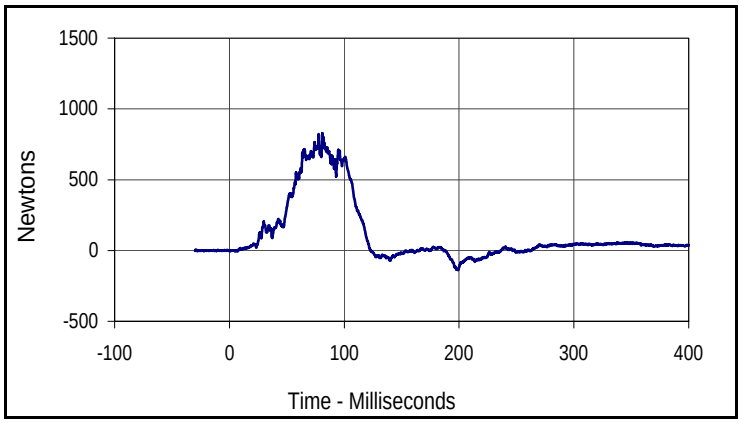
Curve Description			
(Bullet Vehicle) Driver Right Acetabulum Force X			
CURNO	Type	SAE Class	Units
067	FIL	600	Newtons
Max	Time	Min	Time
237.8	217.7	-1900.6	48.9



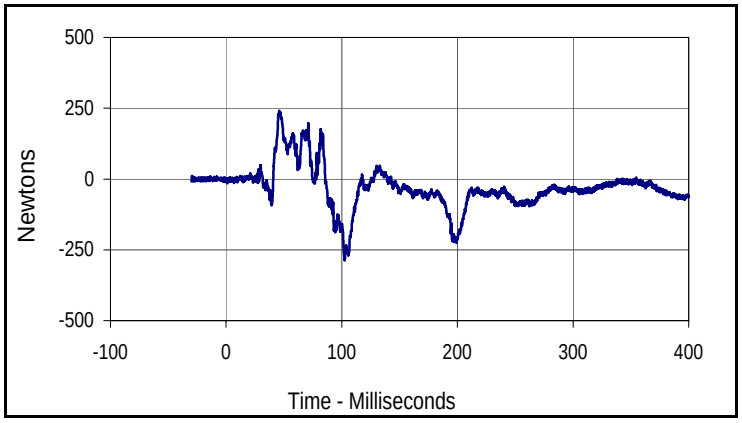
Curve Description			
(Bullet Vehicle) Driver Right Acetabulum Force Y			
CURNO	Type	SAE Class	Units
068	FIL	600	Newtons
Max	Time	Min	Time
982.9	64.8	-182.5	282.2



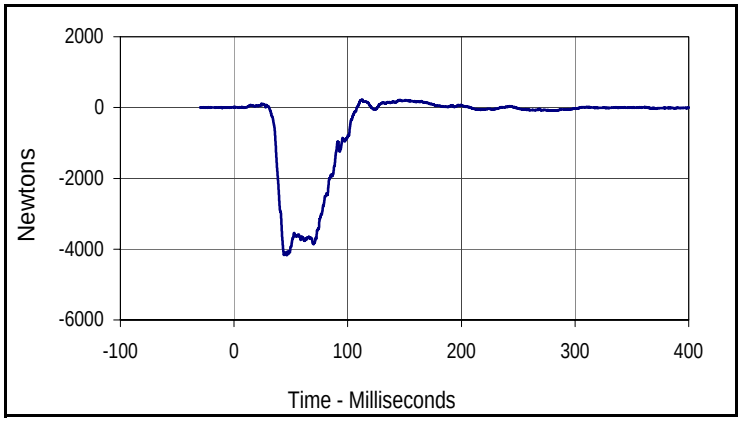
Curve Description			
(Bullet Vehicle) Driver Right Acetabulum Force Z			
CURNO	Type	SAE Class	Units
069	FIL	600	Newtons
Max	Time	Min	Time
1094.4	71.9	-45.7	395.0



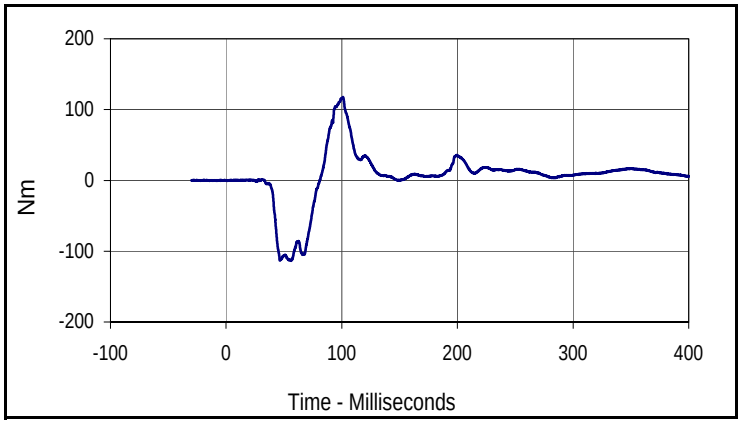
Curve Description			
(Bullet Vehicle) Driver Left Femur Force X			
CURNO	Type	SAE Class	Units
070	FIL	600	Newtons
Max	Time	Min	Time
828.8	80.9	-138.1	199.1



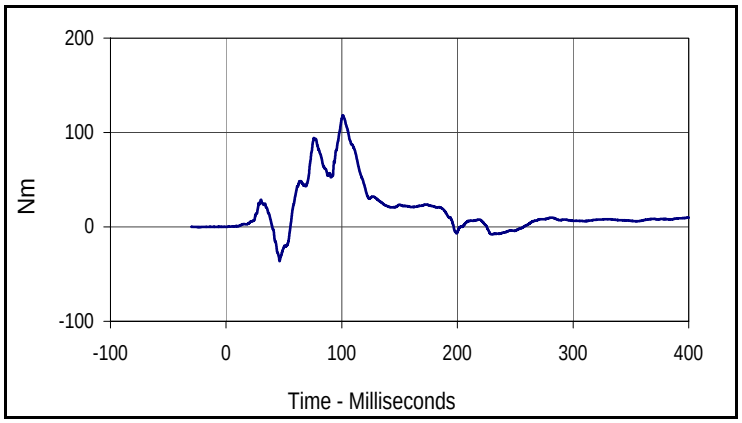
Curve Description			
(Bullet Vehicle) Driver Left Femur Force Y			
CURNO	Type	SAE Class	Units
071	FIL	600	Newtons
Max	Time	Min	Time
240.7	45.9	-287.6	102.5



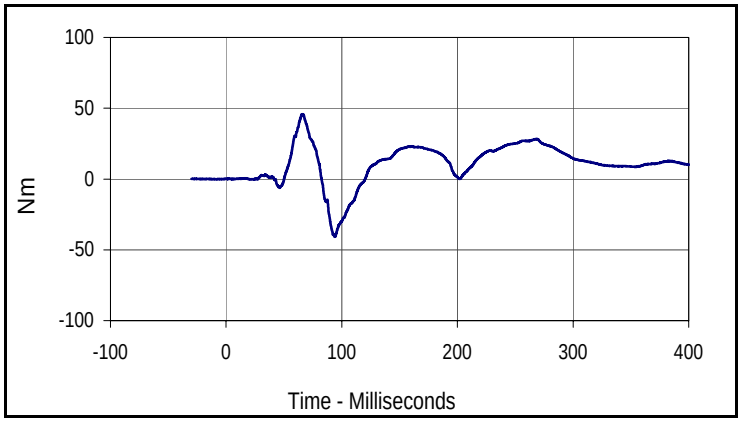
Curve Description			
(Bullet Vehicle) Driver Left Femur Force Z			
CURNO	Type	SAE Class	Units
072	FIL	600	Newtons
Max	Time	Min	Time
225.6	112.9	-4175.7	46.4



Curve Description			
(Bullet Vehicle) Driver Left Femur Moment X			
CURNO	Type	SAE Class	Units
073	FIL	600	Nm
Max	Time	Min	Time
117.8	101.1	-113.5	56.1

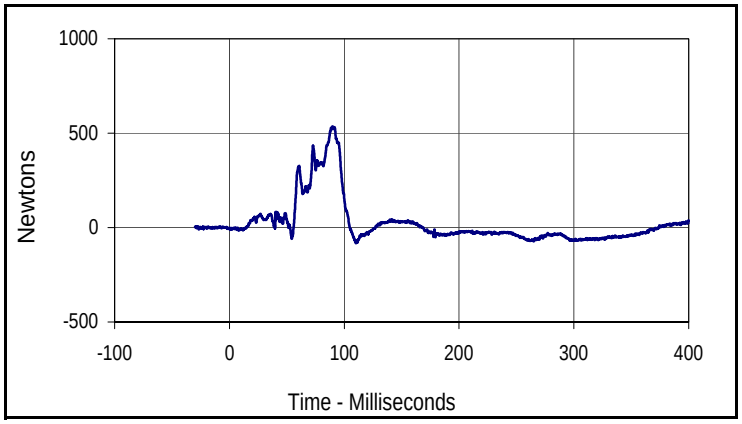


Curve Description			
(Bullet Vehicle) Driver Left Femur Moment Y			
CURNO	Type	SAE Class	Units
074	FIL	600	Nm
Max	Time	Min	Time
118.2	101.0	-36.3	46.3

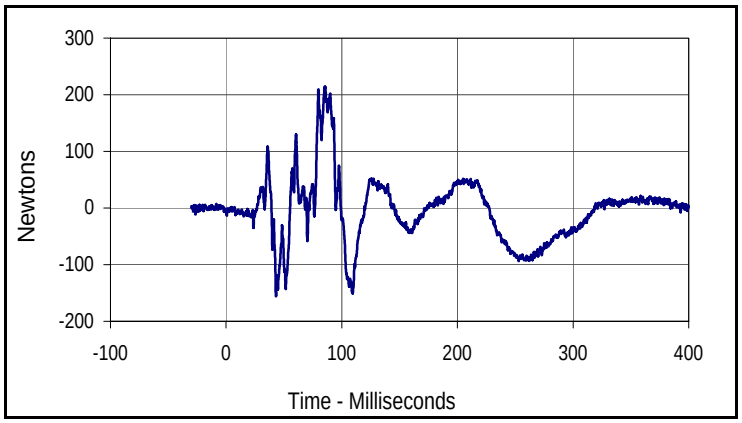


Curve Description			
(Bullet Vehicle) Driver Left Femur Moment Z			
CURNO	Type	SAE Class	Units
075	FIL	600	Nm
Max	Time	Min	Time
45.9	66.1	-40.9	93.9

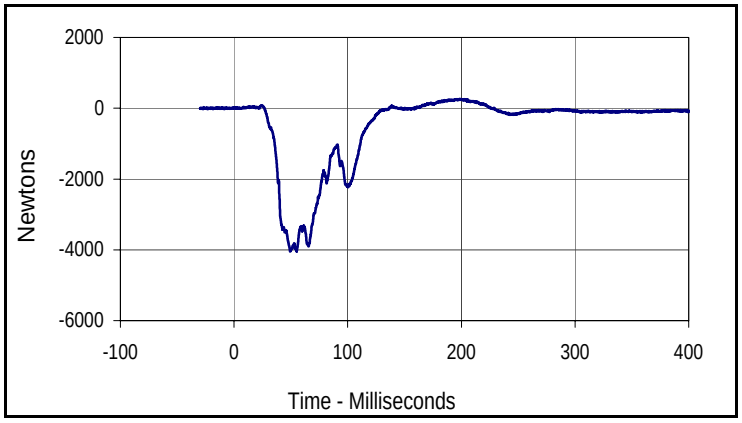
Test Vehicle:	2007 Ford 500 SEL 4-Door Sedan (Bullet)	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	1/8/10



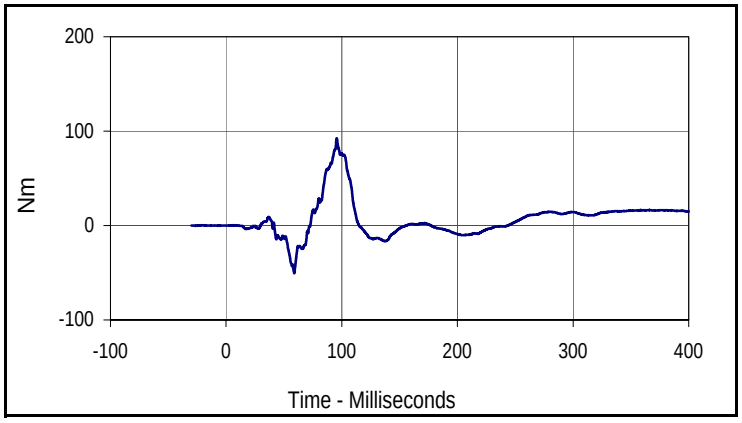
Curve Description			
(Bullet Vehicle) Driver Right Femur Force X			
CURNO	Type	SAE Class	Units
076	FIL	600	Newtons
Max	Time	Min	Time
535.5	89.8	-82.3	110.2



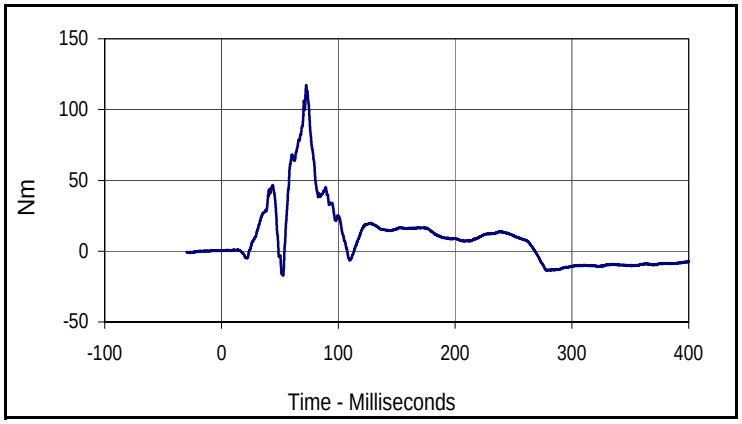
Curve Description			
(Bullet Vehicle) Driver Right Femur Force Y			
CURNO	Type	SAE Class	Units
077	FIL	600	Newtons
Max	Time	Min	Time
214.3	85.2	-156.1	43.1



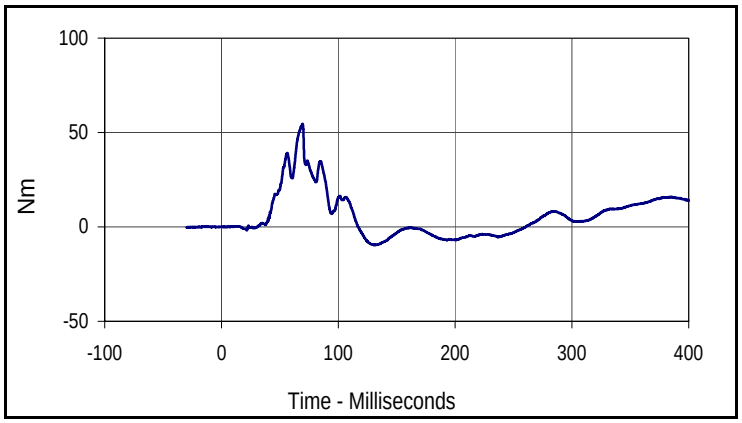
Curve Description			
(Bullet Vehicle) Driver Right Femur Force Z			
CURNO	Type	SAE Class	Units
078	FIL	600	Newtons
Max	Time	Min	Time
262.6	198.7	-4044.0	55.1



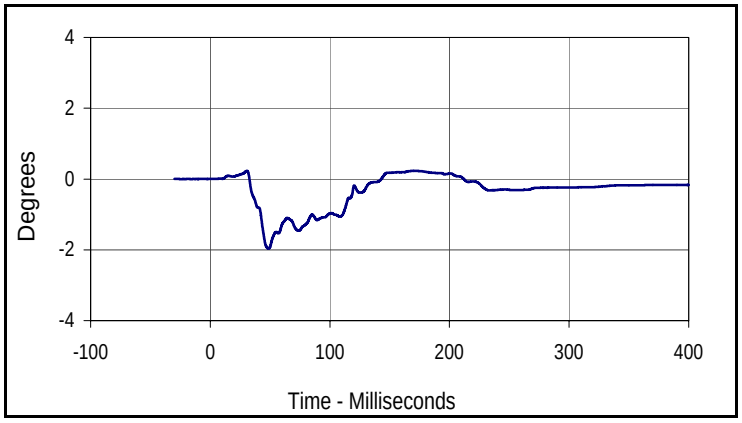
Curve Description			
(Bullet Vehicle) Driver Right Femur Moment X			
CURNO	Type	SAE Class	Units
079	FIL	600	Nm
Max	Time	Min	Time
92.5	95.7	-50.4	59.0



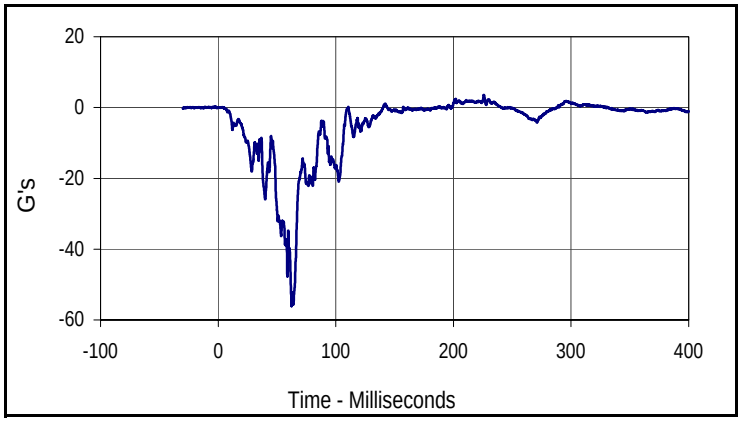
Curve Description			
(Bullet Vehicle) Driver Right Femur Moment Y			
CURNO	Type	SAE Class	Units
080	FIL	600	Nm
Max	Time	Min	Time
117.2	72.4	-17.3	52.7



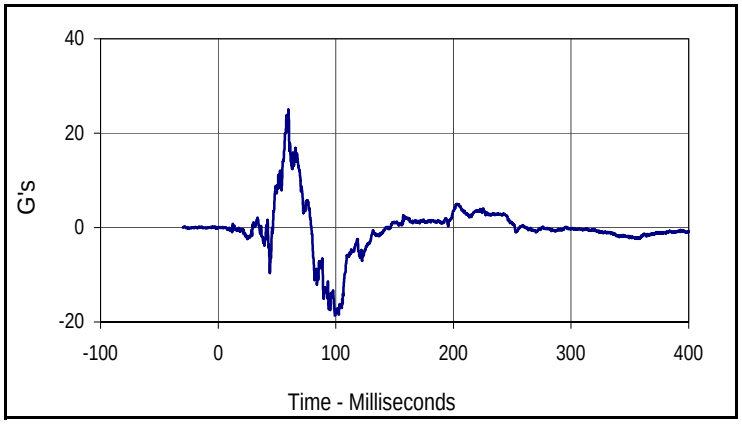
Curve Description			
(Bullet Vehicle) Driver Right Femur Moment Z			
CURNO	Type	SAE Class	Units
081	FIL	600	Nm
Max	Time	Min	Time
54.6	69.5	-9.7	130.4



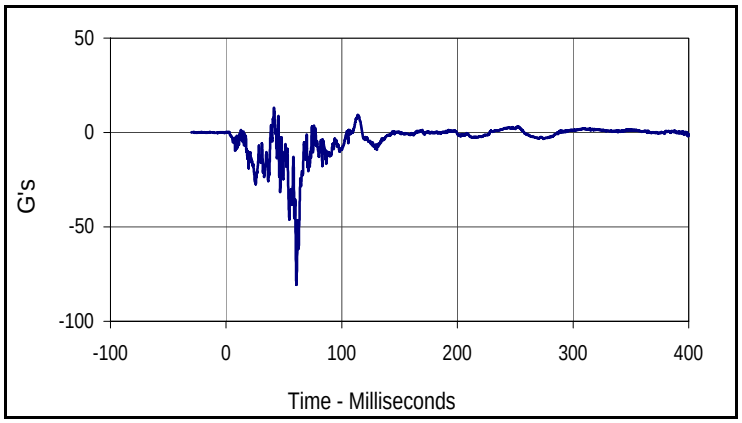
Curve Description			
(Bullet Vehicle) Driver Left Knee Deflection			
CURNO	Type	SAE Class	Units
082	FIL	180	Degrees
Max	Time	Min	Time
0.2	170.3	-2.0	48.8



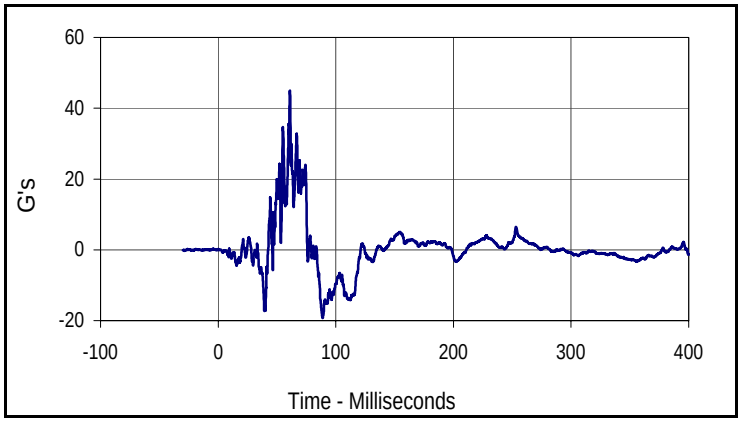
Curve Description			
(Bullet Vehicle) Driver Left Tibia X			
CURNO	Type	SAE Class	Units
083	FIL	1000	G's
Max	Time	Min	Time
3.5	225.9	-56.1	62.5



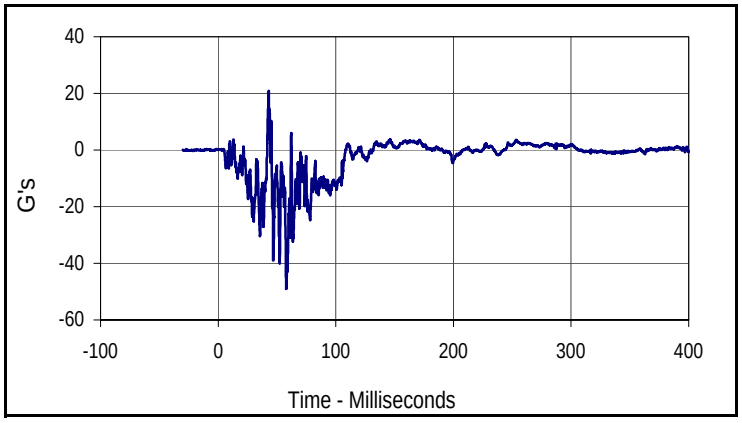
Curve Description			
(Bullet Vehicle) Driver Left Tibia Y			
CURNO	Type	SAE Class	Units
084	FIL	1000	G's
Max	Time	Min	Time
25.0	59.8	-18.6	99.4



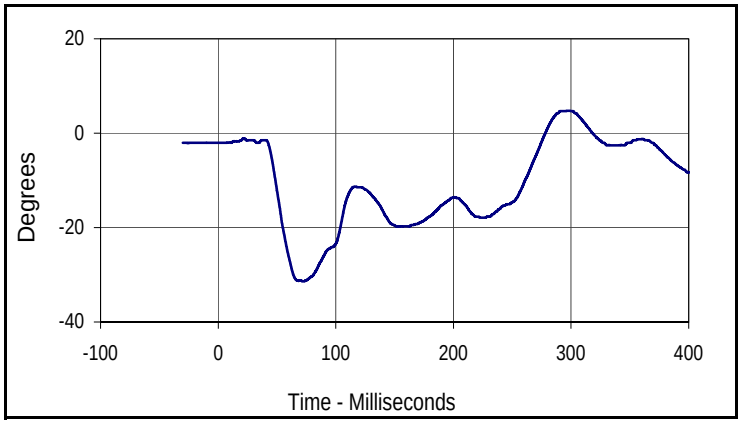
Curve Description			
(Bullet Vehicle) Driver Left Foot X			
CURNO	Type	SAE Class	Units
085	FIL	1000	G's
Max	Time	Min	Time
13.0	41.4	-80.7	60.8



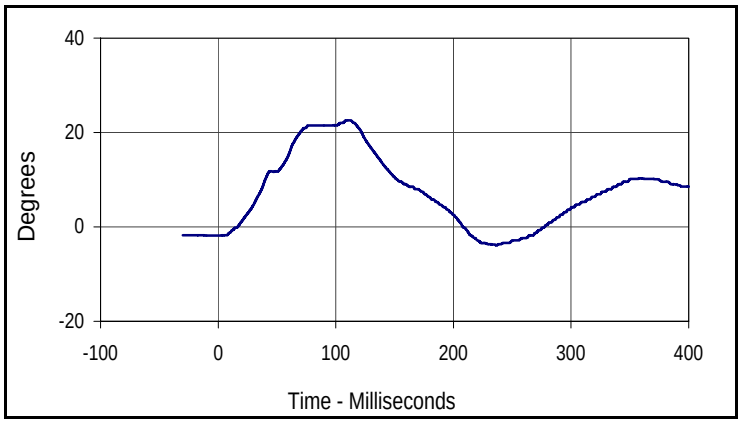
Curve Description			
(Bullet Vehicle) Driver Left Foot Y			
CURNO	Type	SAE Class	Units
086	FIL	1000	G's
Max	Time	Min	Time
45.0	61.0	-19.2	88.9



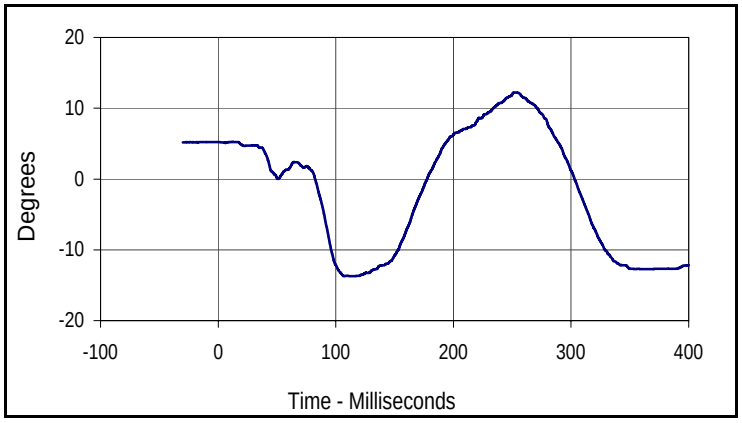
Curve Description			
(Bullet Vehicle) Driver Left Foot Z			
CURNO	Type	SAE Class	Units
087	FIL	1000	G's
Max	Time	Min	Time
20.9	43.0	-49.1	57.9



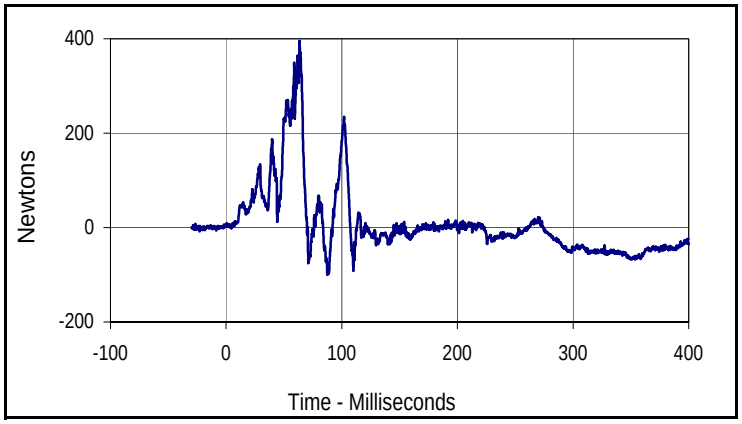
Curve Description			
(Bullet Vehicle) Driver Left Ankle Rotation X			
CURNO	Type	SAE Class	Units
088	FIL	180	Degrees
Max	Time	Min	Time
4.7	297.6	-31.4	72.4



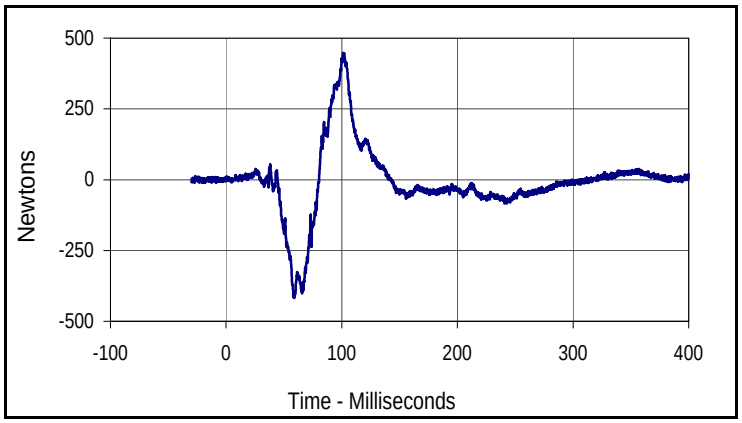
Curve Description			
(Bullet Vehicle) Driver Left Ankle Rotation Y			
CURNO	Type	SAE Class	Units
089	FIL	180	Degrees
Max	Time	Min	Time
22.6	111.7	-3.9	236.6



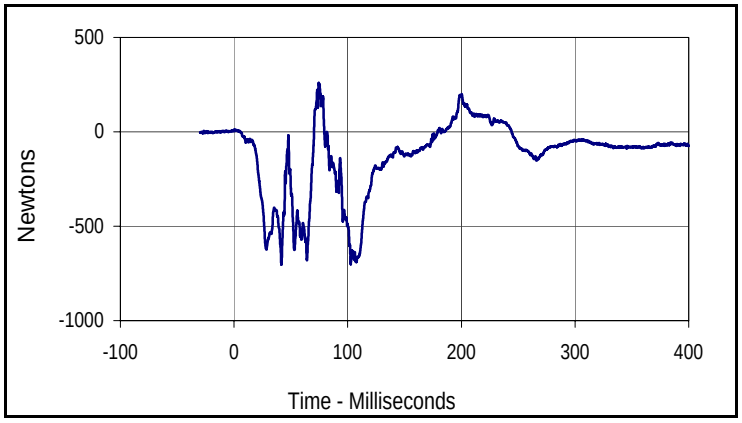
Curve Description			
(Bullet Vehicle) Driver Left Ankle Rotation Z			
CURNO	Type	SAE Class	Units
090	FIL	180	Degrees
Max	Time	Min	Time
12.2	251.7	-13.7	113.0



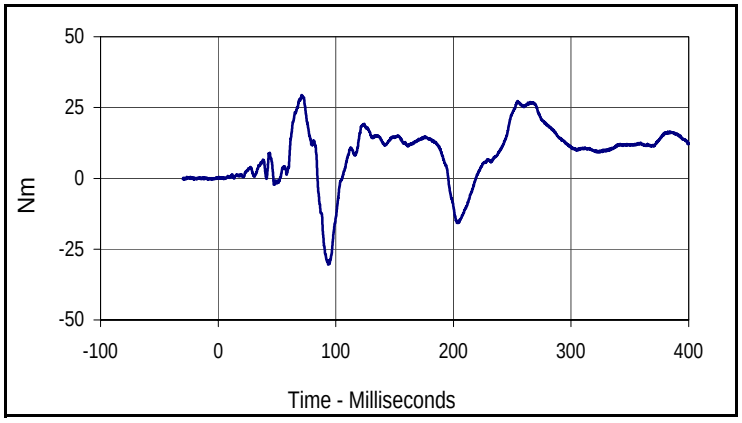
Curve Description			
(Bullet Vehicle) Driver Left Upper Tibia Force X			
CURNO	Type	SAE Class	Units
091	FIL	600	Newtons
Max	Time	Min	Time
395.6	63.5	-99.6	87.6



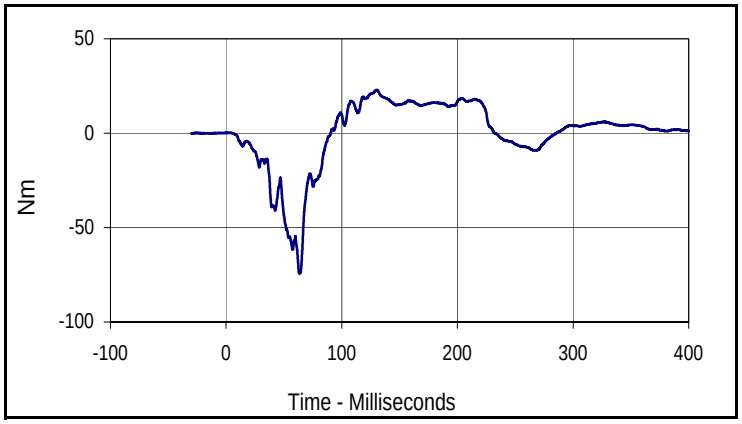
Curve Description			
(Bullet Vehicle) Driver Left Upper Tibia Force Y			
CURNO	Type	SAE Class	Units
092	FIL	600	Newtons
Max	Time	Min	Time
447.6	101.3	-417.9	59.0



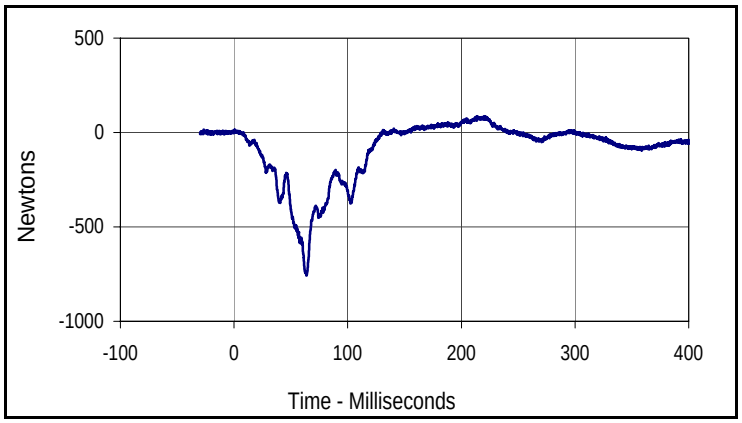
Curve Description			
(Bullet Vehicle) Driver Left Upper Tibia Force Z			
CURNO	Type	SAE Class	Units
093	FIL	600	Newtons
Max	Time	Min	Time
258.9	74.6	-703.0	41.7



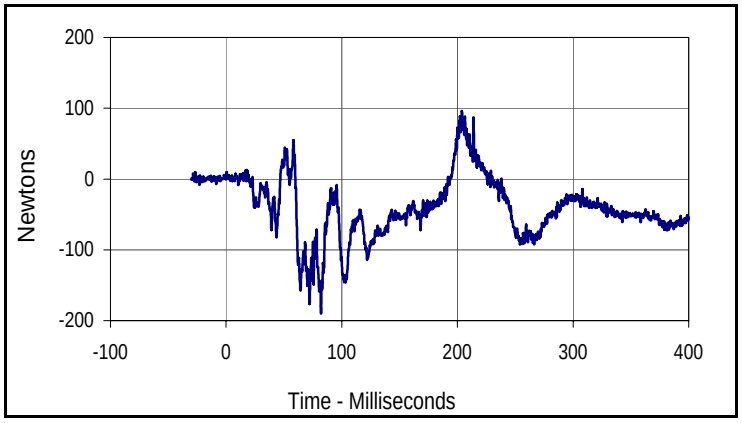
Curve Description			
(Bullet Vehicle) Driver Left Upper Tibia Moment X			
CURNO	Type	SAE Class	Units
094	FIL	600	Nm
Max	Time	Min	Time
29.4	71.1	-30.5	93.6



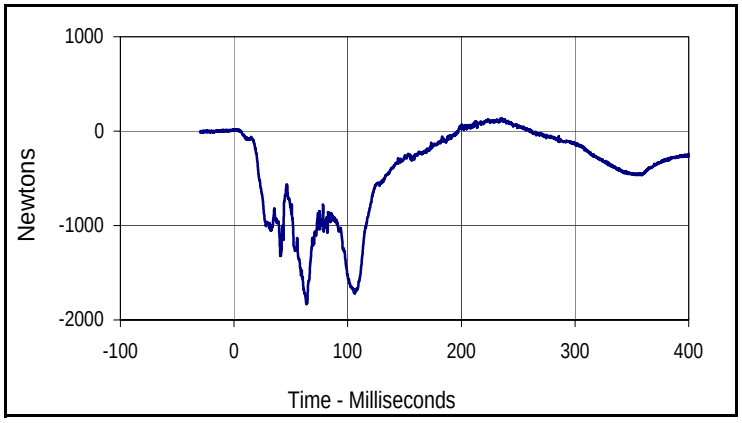
Curve Description			
(Bullet Vehicle) Driver Left Upper Tibia Moment Y			
CURNO	Type	SAE Class	Units
095	FIL	600	Nm
Max	Time	Min	Time
22.9	130.9	-74.5	63.8



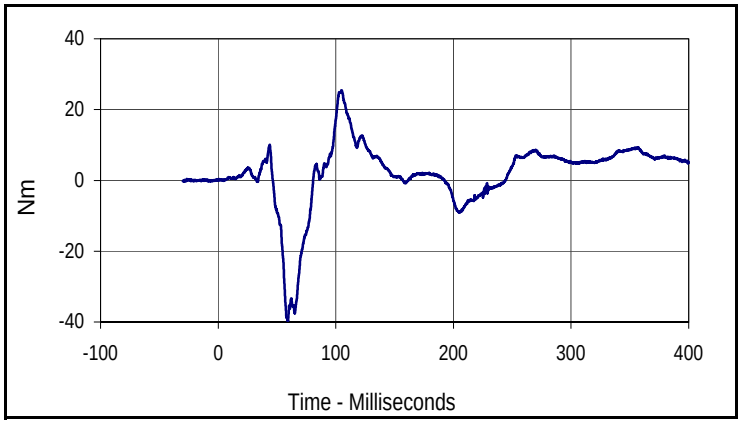
Curve Description			
(Bullet Vehicle) Driver Left Lower Tibia Force X			
CURNO	Type	SAE Class	Units
096	FIL	600	Newtons
Max	Time	Min	Time
86.6	220.0	-757.4	63.8



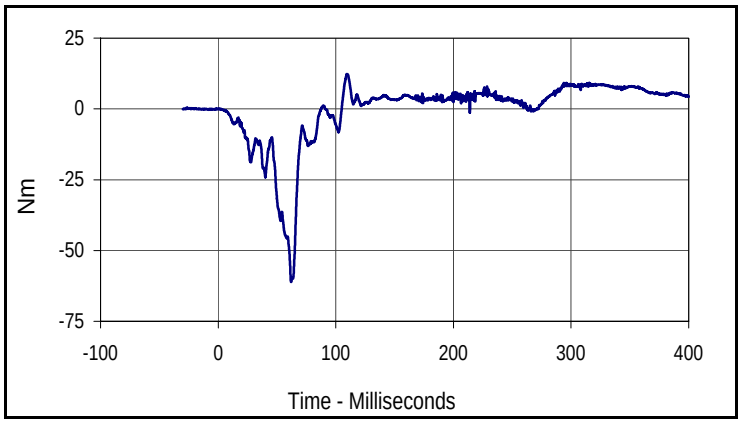
Curve Description			
(Bullet Vehicle) Driver Left Lower Tibia Force Y			
CURNO	Type	SAE Class	Units
097	FIL	600	Newtons
Max	Time	Min	Time
96.0	203.9	-189.7	82.1



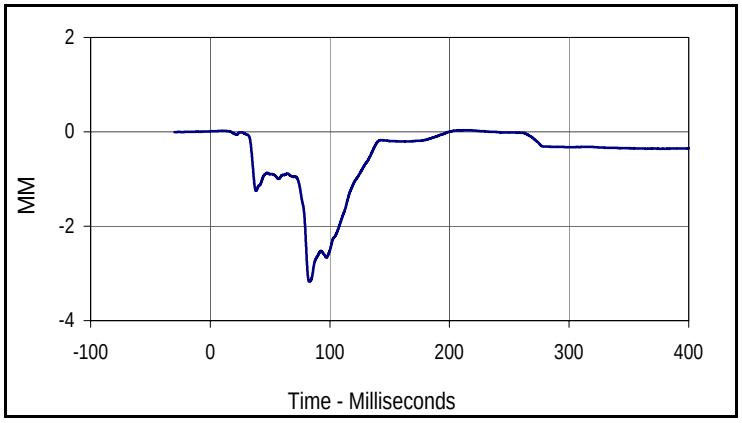
Curve Description			
(Bullet Vehicle) Driver Left Lower Tibia Force Z			
CURNO	Type	SAE Class	Units
098	FIL	600	Newtons
Max	Time	Min	Time
135.6	234.5	-1832.6	63.7



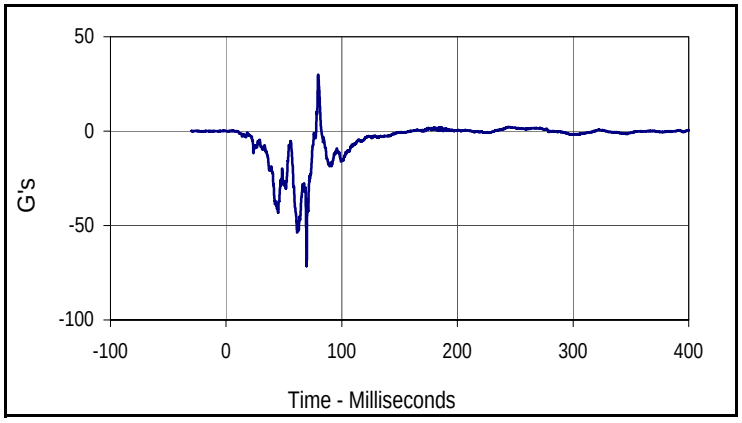
Curve Description			
(Bullet Vehicle) Driver Left Lower Tibia Moment X			
CURNO	Type	SAE Class	Units
099	FIL	600	Nm
Max	Time	Min	Time
25.4	104.9	-39.7	59.2



Curve Description			
(Bullet Vehicle) Driver Left Lower Tibia Moment Y			
CURNO	Type	SAE Class	Units
100	FIL	600	Nm
Max	Time	Min	Time
12.3	109.6	-61.1	62.0

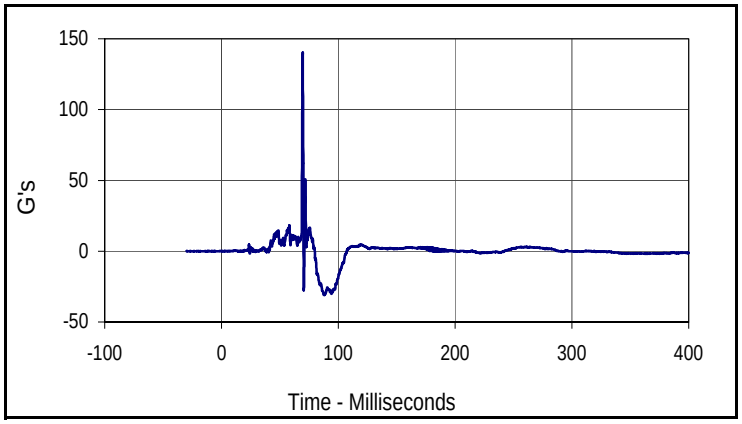


Curve Description			
(Bullet Vehicle) Driver Right Knee Deflection			
CURNO	Type	SAE Class	Units
101	FIL	180	MM
Max	Time	Min	Time
0.0	214.1	-3.2	82.9

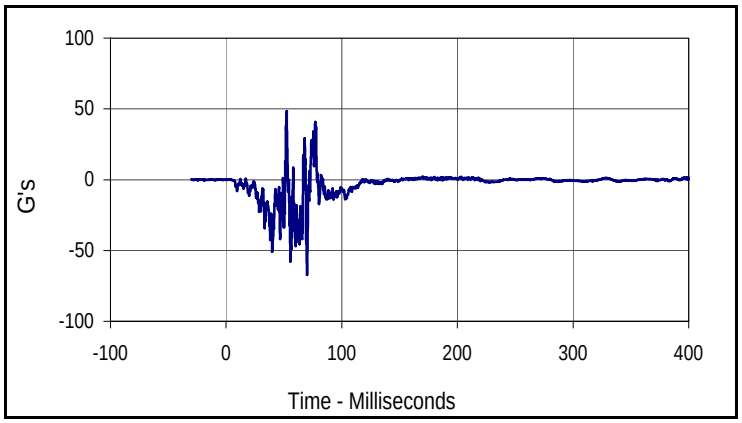


Curve Description			
(Bullet Vehicle) Driver Right Tibia X			
CURNO	Type	SAE Class	Units
102	FIL	1000	G's
Max	Time	Min	Time
29.8	79.6	-71.5	69.7

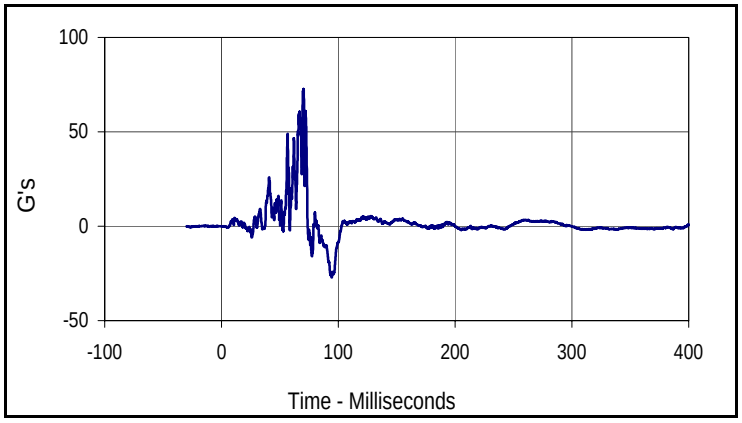
Test Vehicle:	2007 Ford 500 SEL 4-Door Sedan (Bullet)	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	1/8/10



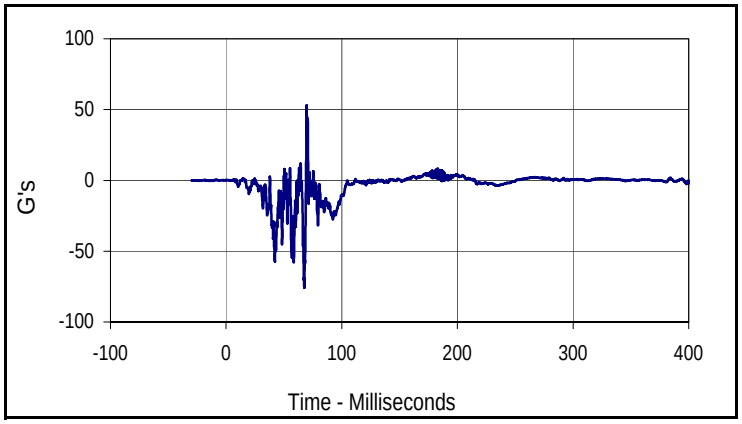
Curve Description			
(Bullet Vehicle) Driver Right Tibia Y			
CURNO	Type	SAE Class	Units
103	FIL	1000	G's
Max	Time	Min	Time
140.2	69.5	-31.0	88.0



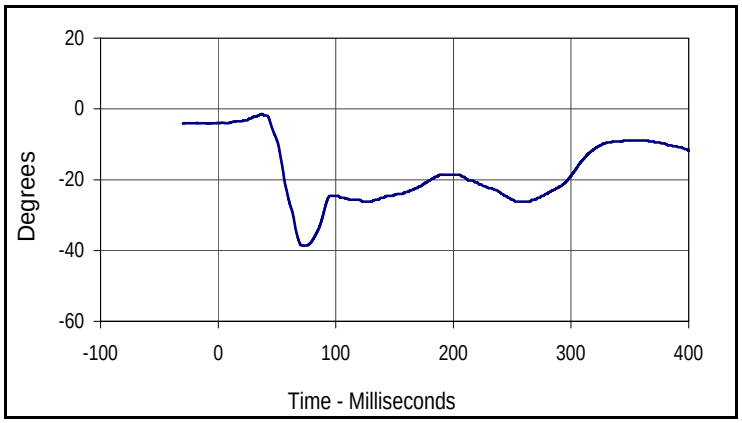
Curve Description			
(Bullet Vehicle) Driver Right Foot X			
CURNO	Type	SAE Class	Units
104	FIL	1000	G's
Max	Time	Min	Time
48.4	52.4	-67.2	70.0



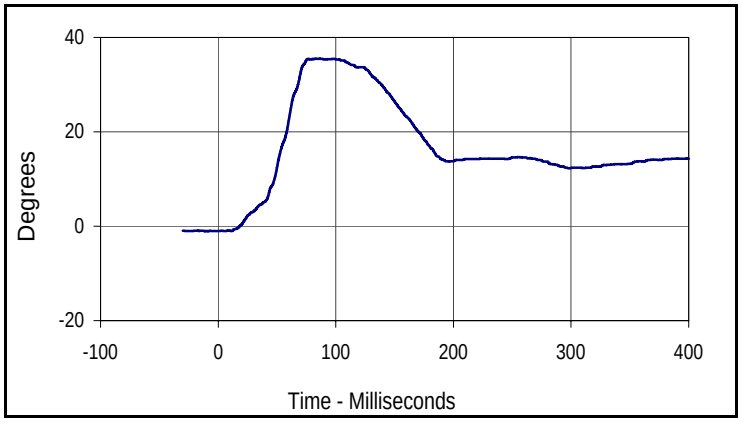
Curve Description			
(Bullet Vehicle) Driver Right Foot Y			
CURNO	Type	SAE Class	Units
105	FIL	1000	G's
Max	Time	Min	Time
72.8	70.2	-27.1	94.4



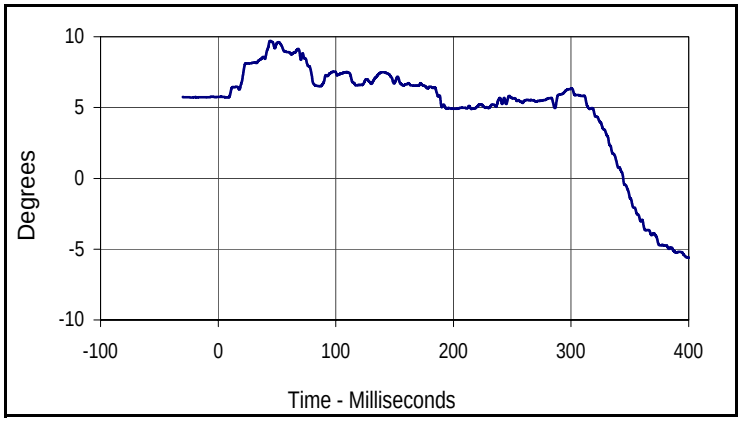
Curve Description			
(Bullet Vehicle) Driver Right Foot Z			
CURNO	Type	SAE Class	Units
106	FIL	1000	G's
Max	Time	Min	Time
52.9	69.6	-75.8	67.6



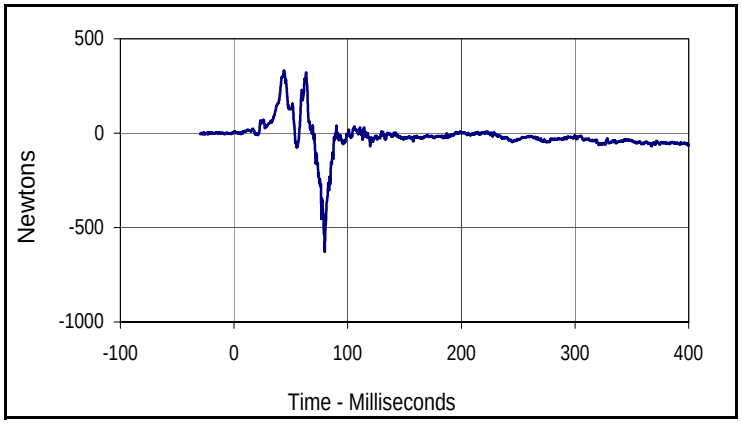
Curve Description			
(Bullet Vehicle) Driver Right Ankle Rotation X			
CURNO	Type	SAE Class	Units
107	FIL	180	Degrees
Max	Time	Min	Time
-1.4	37.1	-38.7	72.6



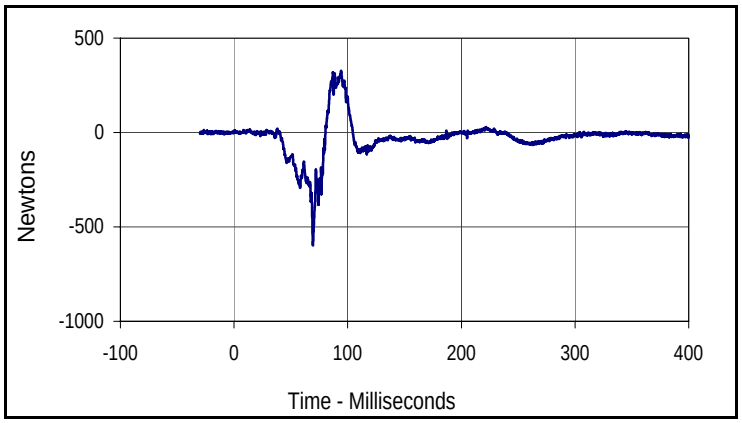
Curve Description			
(Bullet Vehicle) Driver Right Ankle Rotation Y			
CURNO	Type	SAE Class	Units
108	FIL	180	Degrees
Max	Time	Min	Time
35.5	83.4	-1.0	1.0



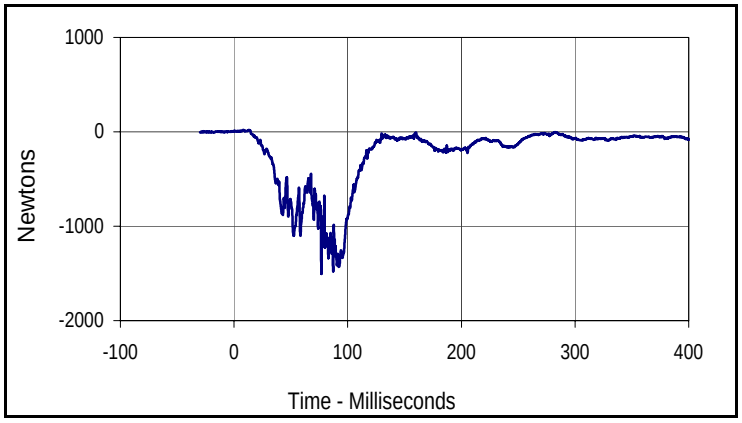
Curve Description			
(Bullet Vehicle) Driver Right Ankle Rotation Z			
CURNO	Type	SAE Class	Units
109	FIL	180	Degrees
Max	Time	Min	Time
9.7	44.3	-5.6	399.9



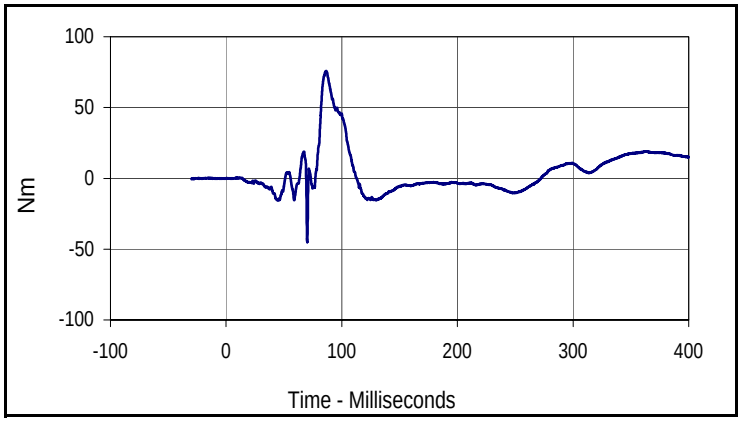
Curve Description			
(Bullet Vehicle) Driver Right Upper Tibia Force X			
CURNO	Type	SAE Class	Units
110	FIL	600	Newtons
Max	Time	Min	Time
332.5	43.9	-629.5	79.8



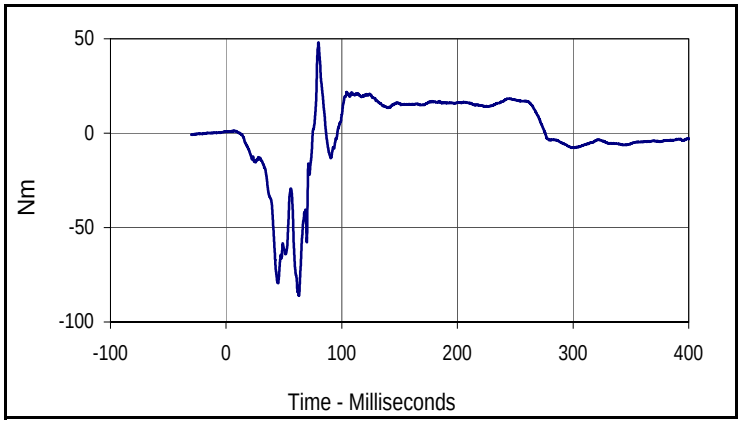
Curve Description			
(Bullet Vehicle) Driver Right Upper Tibia Force Y			
CURNO	Type	SAE Class	Units
111	FIL	600	Newtons
Max	Time	Min	Time
326.5	94.2	-598.3	69.4



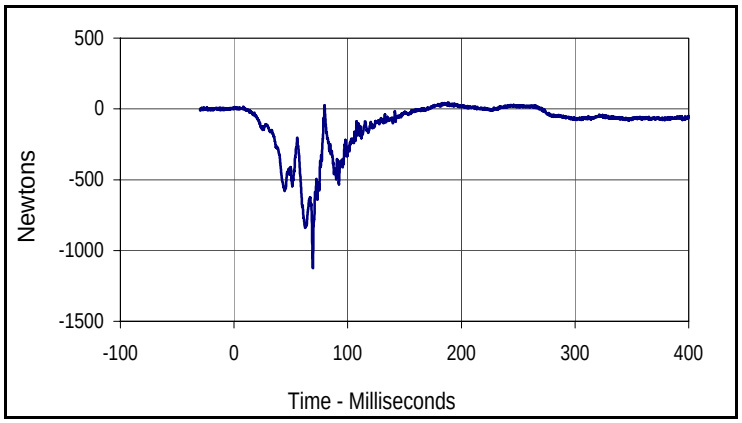
Curve Description			
(Bullet Vehicle) Driver Right Upper Tibia Force Z			
CURNO	Type	SAE Class	Units
112	FIL	600	Newtons
Max	Time	Min	Time
20.9	13.0	-1504.1	76.8



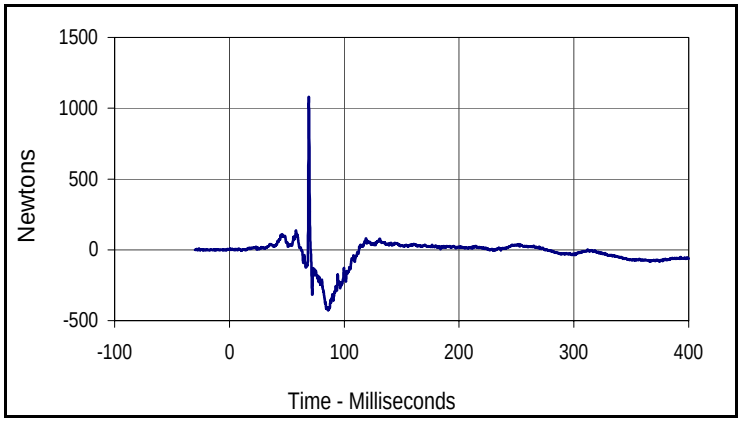
Curve Description			
(Bullet Vehicle) Driver Right Upper Tibia Moment X			
CURNO	Type	SAE Class	Units
113	FIL	600	Nm
Max	Time	Min	Time
75.9	86.5	-45.0	70.2



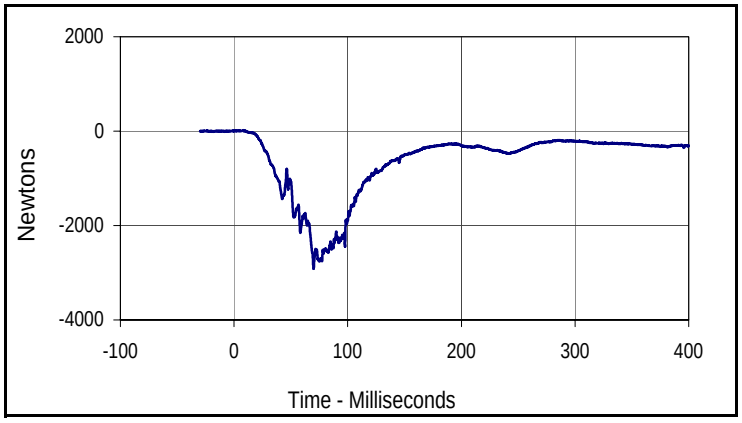
Curve Description			
(Bullet Vehicle) Driver Right Upper Tibia Moment Y			
CURNO	Type	SAE Class	Units
114	FIL	600	Nm
Max	Time	Min	Time
48.1	79.8	-86.0	63.0



Curve Description			
(Bullet Vehicle) Driver Right Lower Tibia Force X			
CURNO	Type	SAE Class	Units
115	FIL	600	Newtons
Max	Time	Min	Time
44.3	189.0	-1123.9	69.4

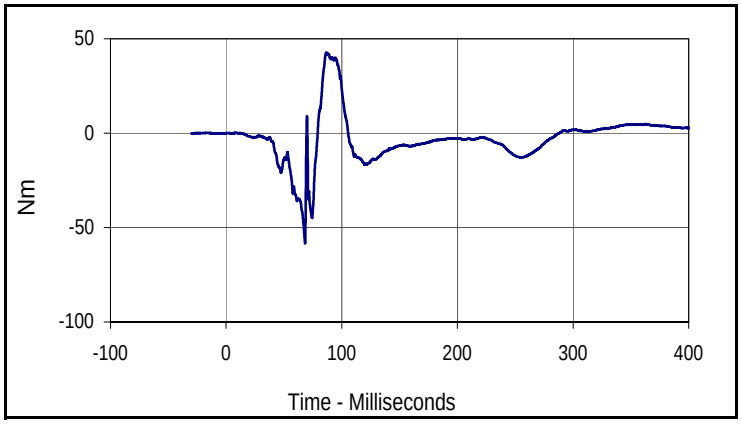


Curve Description			
(Bullet Vehicle) Driver Right Lower Tibia Force Y			
CURNO	Type	SAE Class	Units
116	FIL	600	Newtons
Max	Time	Min	Time
1078.6	69.2	-427.6	85.9

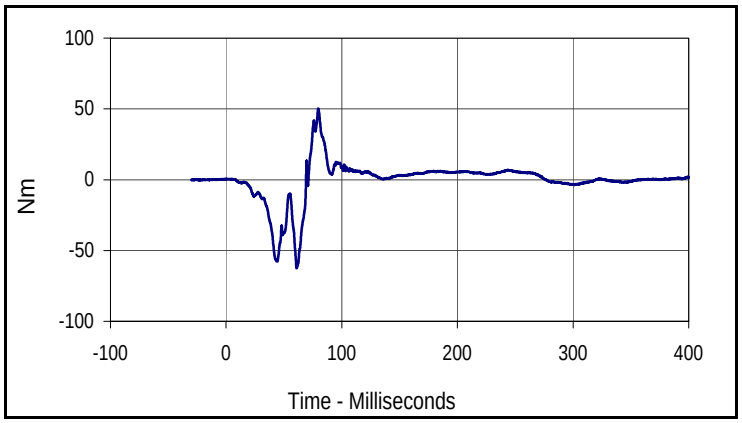


Curve Description			
(Bullet Vehicle) Driver Right Lower Tibia Force Z			
CURNO	Type	SAE Class	Units
117	FIL	600	Newtons
Max	Time	Min	Time
19.9	8.2	-2915.4	70.0

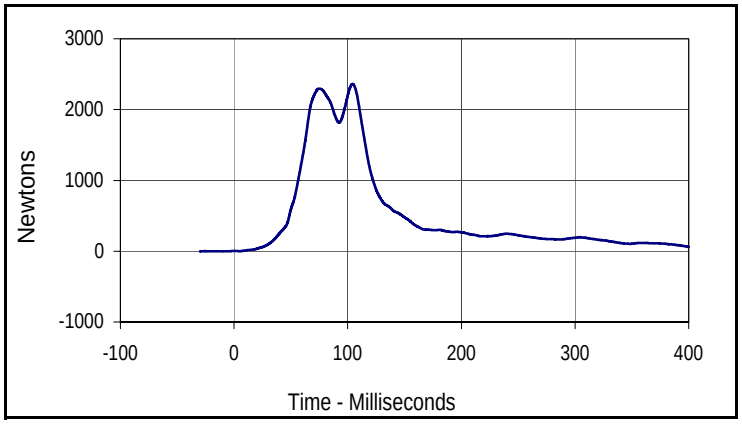
Test Vehicle:	2007 Ford 500 SEL 4-Door Sedan (Bullet)	NHTSA No.:	R70210
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	1/8/10



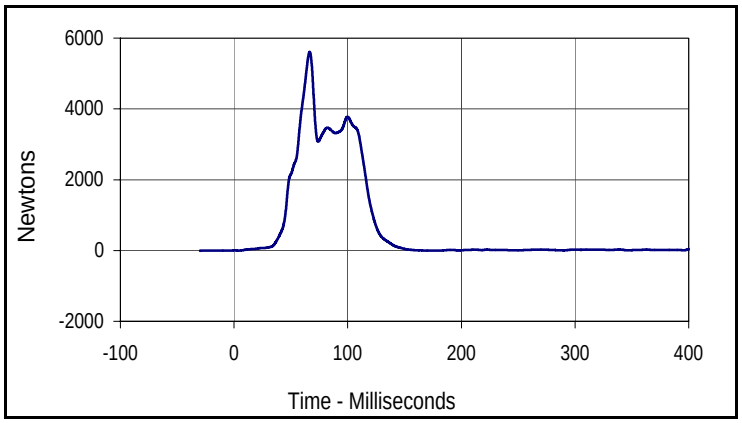
Curve Description			
(Bullet Vehicle) Driver Right Lower Tibia Moment X			
CURNO	Type	SAE Class	Units
118	FIL	600	Nm
Max	Time	Min	Time
42.7	87.0	-58.2	68.3



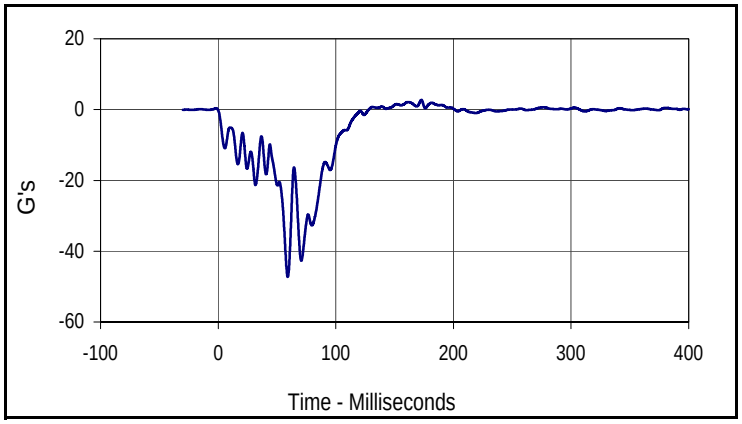
Curve Description			
(Bullet Vehicle) Driver Right Lower Tibia Moment Y			
CURNO	Type	SAE Class	Units
119	FIL	600	Nm
Max	Time	Min	Time
50.2	79.7	-62.5	61.0



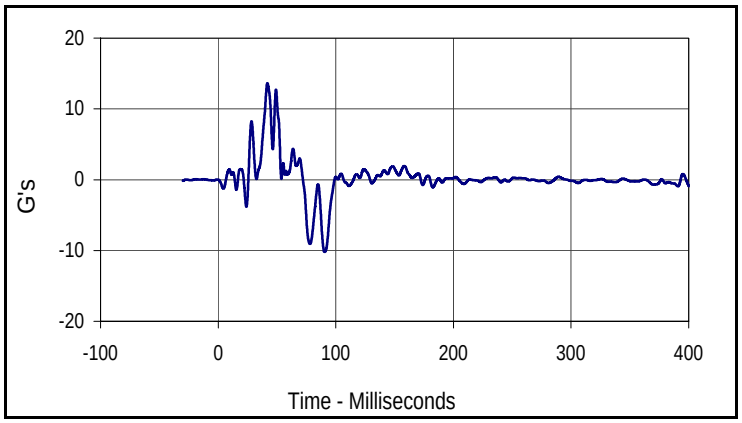
Curve Description			
(Bullet Vehicle) Driver Lap Belt Force			
CURNO	Type	SAE Class	Units
120	FIL	60	Newtons
Max	Time	Min	Time
2361.2	104.3	0.4	4.9



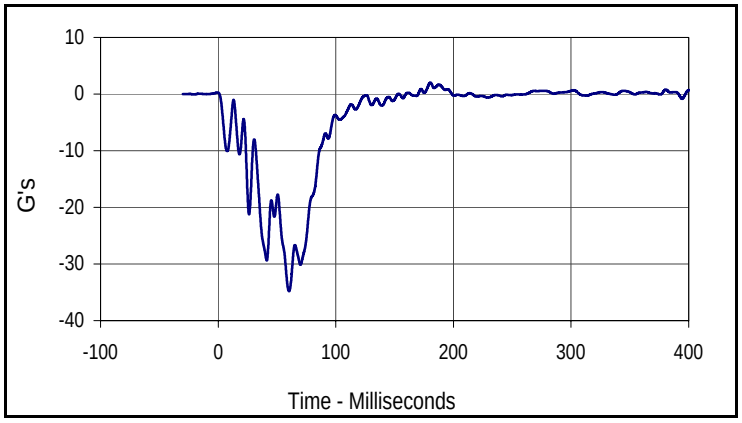
Curve Description			
(Bullet Vehicle) Driver Shoulder Belt Force			
CURNO	Type	SAE Class	Units
121	FIL	60	Newtons
Max	Time	Min	Time
5607.3	66.5	-1.6	173.8



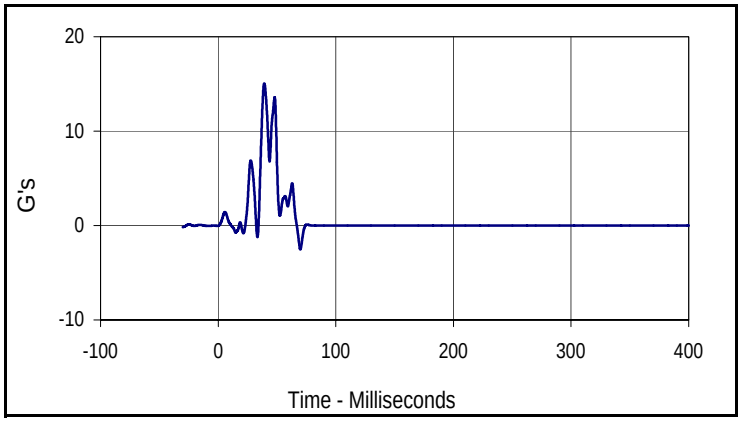
Curve Description			
Bullet Vehicle Left Sill X			
CURNO	Type	SAE Class	Units
122	FIL	60	G's
Max	Time	Min	Time
2.7	172.8	-47.2	59.2



Curve Description			
Bullet Vehicle Left Sill Y			
CURNO	Type	SAE Class	Units
123	FIL	60	G's
Max	Time	Min	Time
13.6	41.9	-10.2	90.6

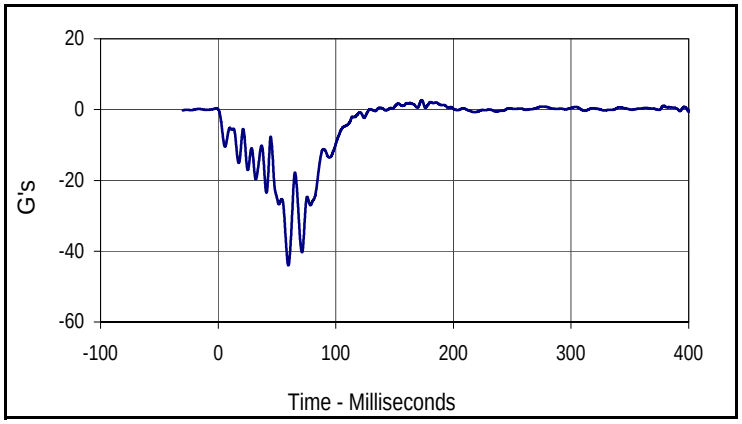


Curve Description			
Bullet Vehicle Right Sill X			
CURNO	Type	SAE Class	Units
124	FIL	60	G's
Max	Time	Min	Time
2.0	180.4	-34.8	60.3

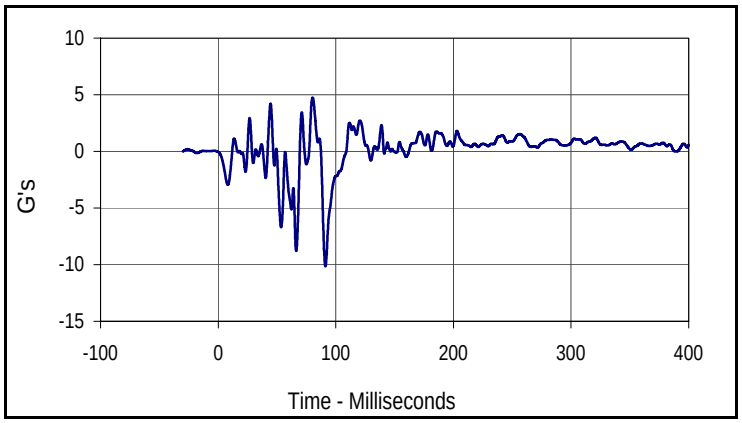


Curve Description			
Bullet Vehicle Right Sill Y			
CURNO	Type	SAE Class	Units
125	FIL	60	G's
Max	Time	Min	Time
15.1	39.2	-2.5	69.8

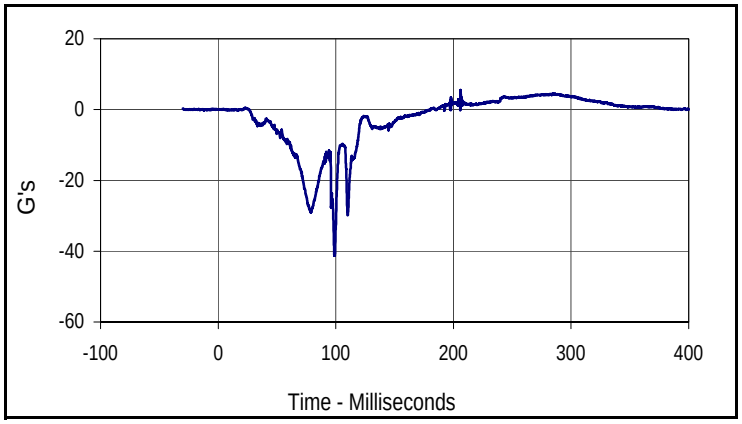
* Channel failed at 70.5 msec.



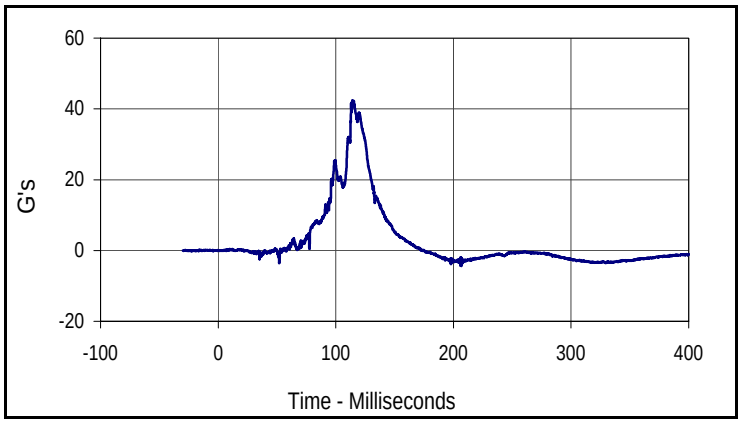
Curve Description			
Bullet Vehicle Driver Mid Seat Track X			
CURNO	Type	SAE Class	Units
126	FIL	60	G's
Max	Time	Min	Time
2.7	173.0	-44.0	59.7



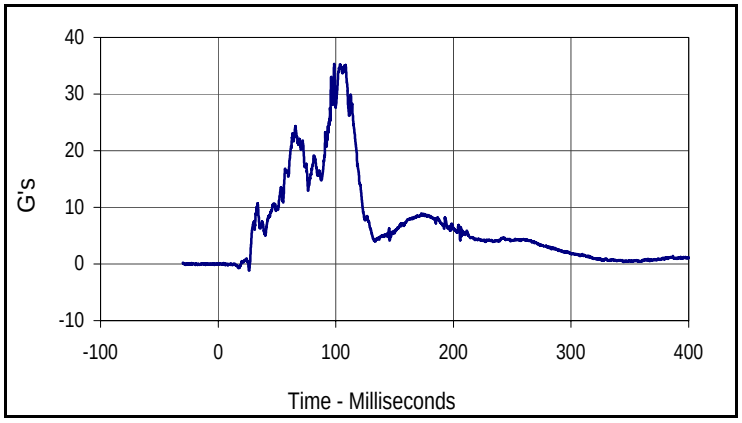
Curve Description			
Bullet Vehicle Trunk Z			
CURNO	Type	SAE Class	Units
127	FIL	60	G's
Max	Time	Min	Time
4.7	80.3	-10.2	91.2



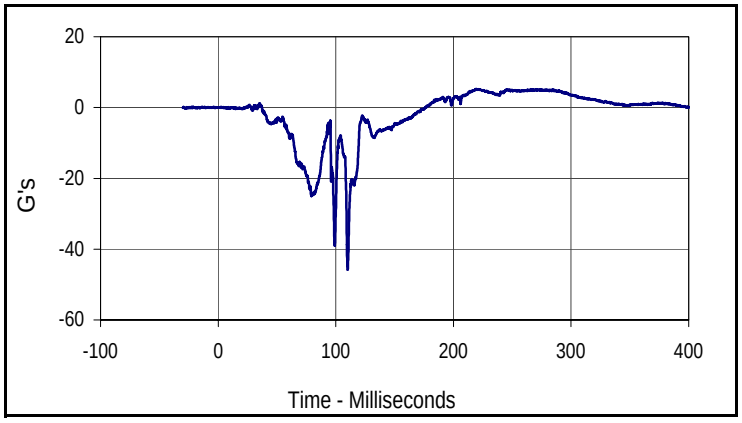
Curve Description			
(Target Vehicle) Driver Head CG X			
CURNO	Type	SAE Class	Units
128	FIL	1000	G's
Max	Time	Min	Time
5.5	206.1	-41.3	98.9



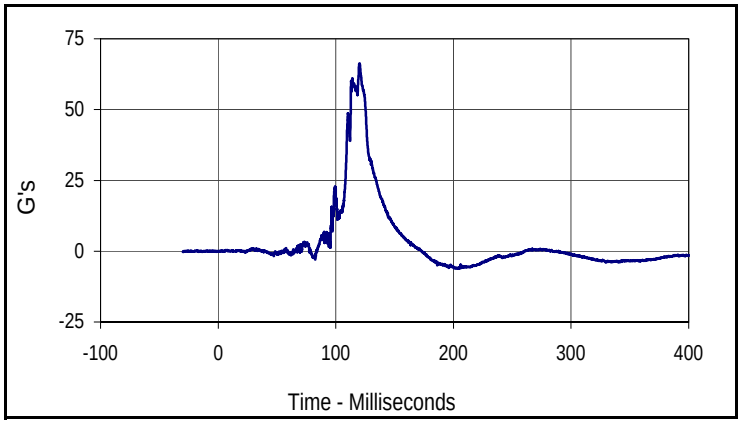
Curve Description			
(Target Vehicle) Driver Head CG Y			
CURNO	Type	SAE Class	Units
129	FIL	1000	G's
Max	Time	Min	Time
42.4	114.2	-4.3	206.5



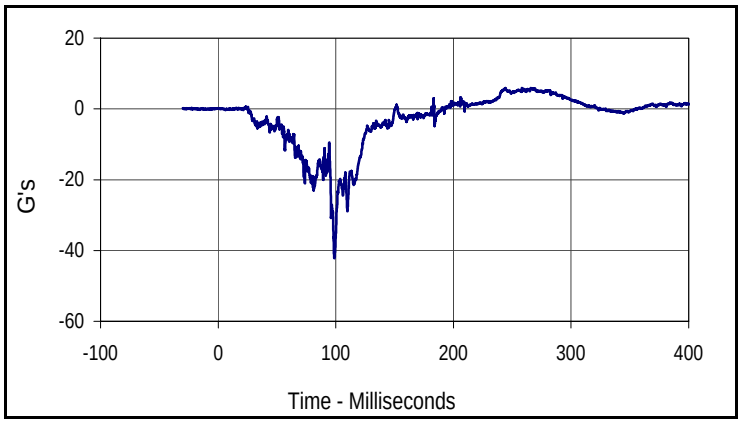
Curve Description			
(Target Vehicle) Driver Head CG Z			
CURNO	Type	SAE Class	Units
130	FIL	1000	G's
Max	Time	Min	Time
35.3	98.7	-1.2	26.3



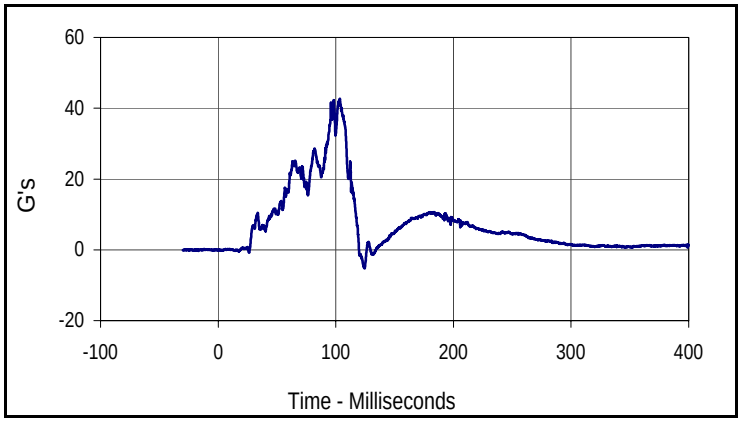
Curve Description			
(Target Vehicle) Driver Top Head Array X			
CURNO	Type	SAE Class	Units
131	FIL	1000	G's
Max	Time	Min	Time
5.3	219.3	-45.8	110.1



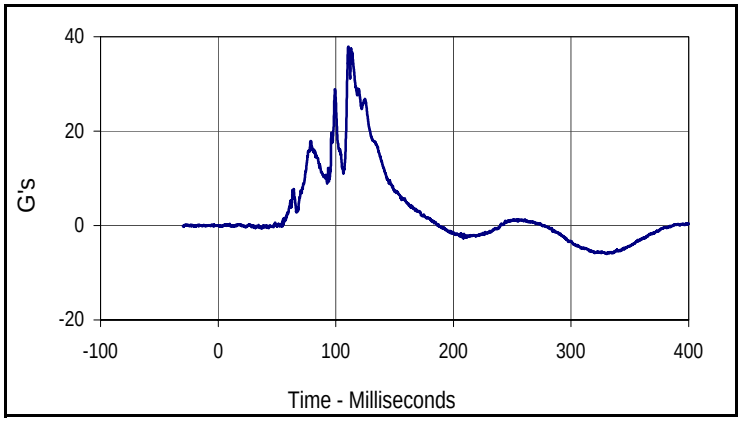
Curve Description			
(Target Vehicle) Driver Top Head Array Y			
CURNO	Type	SAE Class	Units
132	FIL	1000	G's
Max	Time	Min	Time
66.3	120.3	-6.2	203.8



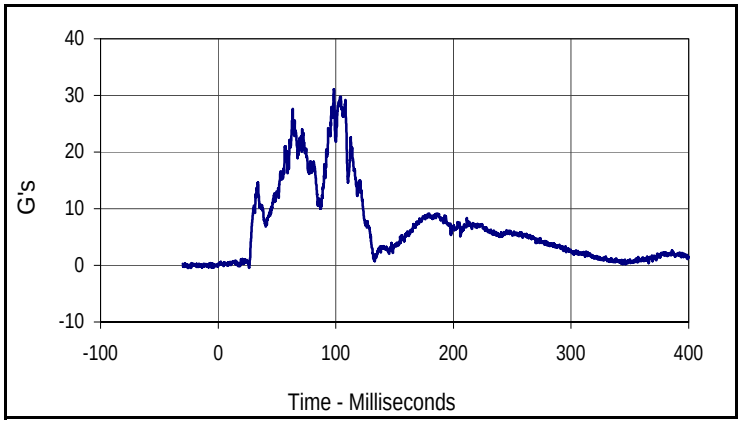
Curve Description			
(Target Vehicle) Driver Left Side Head Array X			
CURNO	Type	SAE Class	Units
133	FIL	1000	G's
Max	Time	Min	Time
5.9	265.9	-42.2	98.9



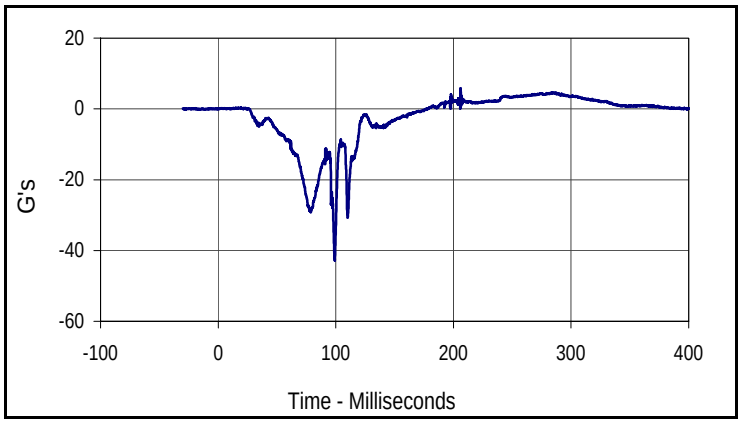
Curve Description			
(Target Vehicle) Driver Left Side Head Array Z			
CURNO	Type	SAE Class	Units
134	FIL	1000	G's
Max	Time	Min	Time
42.6	103.5	-5.3	124.5



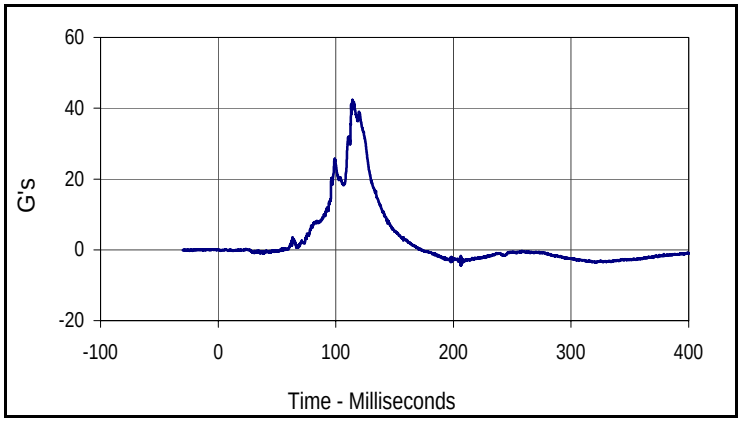
Curve Description			
(Target Vehicle) Driver Front Head Array Y			
CURNO	Type	SAE Class	Units
135	FIL	1000	G's
Max	Time	Min	Time
37.9	110.6	-6.1	330.4



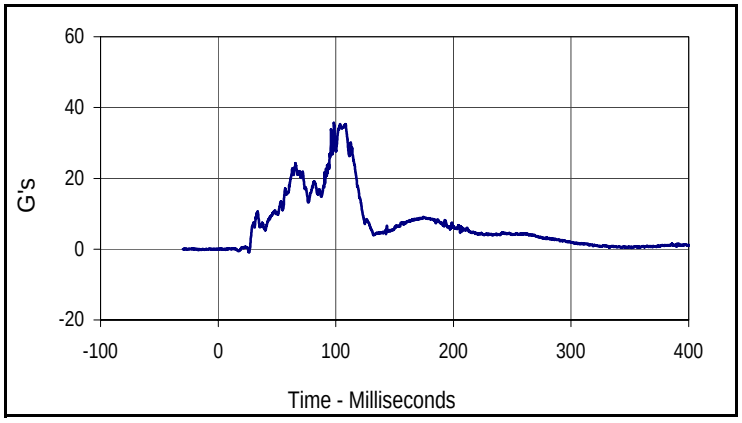
Curve Description			
(Target Vehicle) Driver Front Head Array Z			
CURNO	Type	SAE Class	Units
136	FIL	1000	G's
Max	Time	Min	Time
31.1	98.4	-0.5	26.3



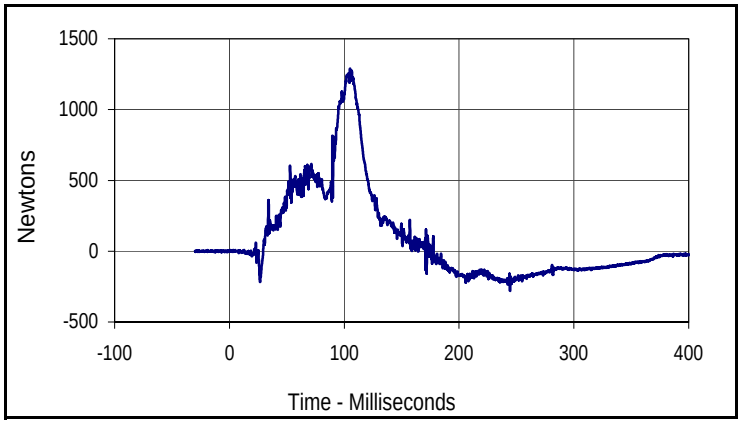
Curve Description			
(Target Vehicle) Driver Head CG X Redundant			
CURNO	Type	SAE Class	Units
137	FIL	1000	G's
Max	Time	Min	Time
5.8	206.1	-42.8	99.1



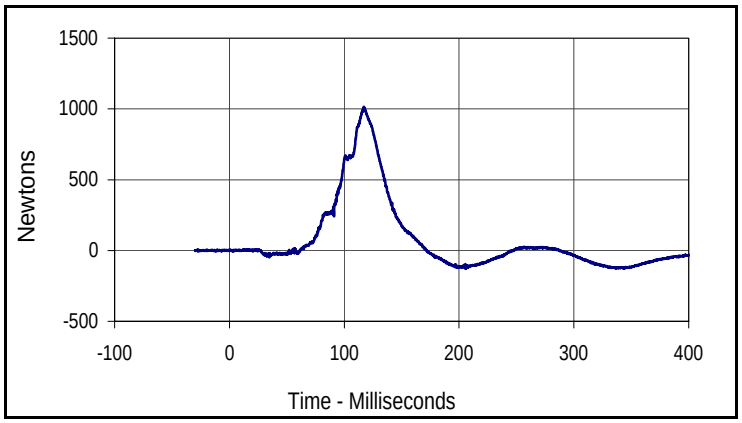
Curve Description			
(Target Vehicle) Driver Head CG Y Redundant			
CURNO	Type	SAE Class	Units
138	FIL	1000	G's
Max	Time	Min	Time
42.4	114.2	-4.4	206.1



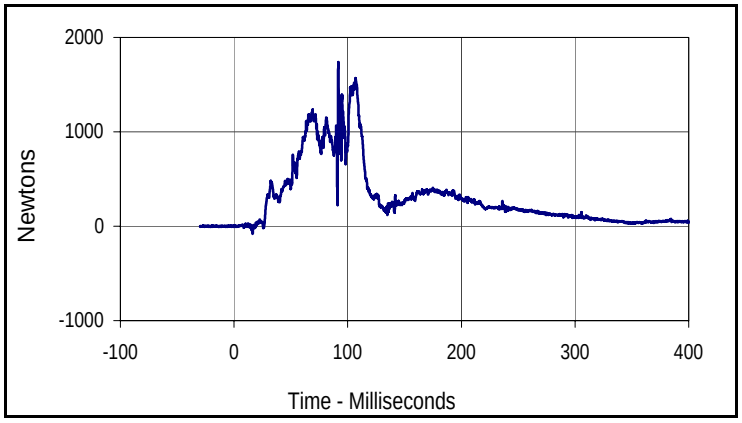
Curve Description			
(Target Vehicle) Driver Head CG Z Redundant			
CURNO	Type	SAE Class	Units
139	FIL	1000	G's
Max	Time	Min	Time
35.7	98.4	-0.9	26.1



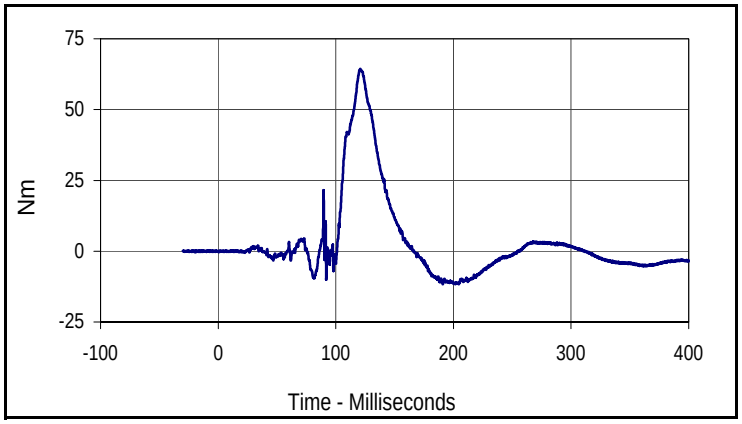
Curve Description			
(Target Vehicle) Driver Upper Neck Force X			
CURNO	Type	SAE Class	Units
140	FIL	1000	Newtons
Max	Time	Min	Time
1290.0	105.0	-281.6	244.4



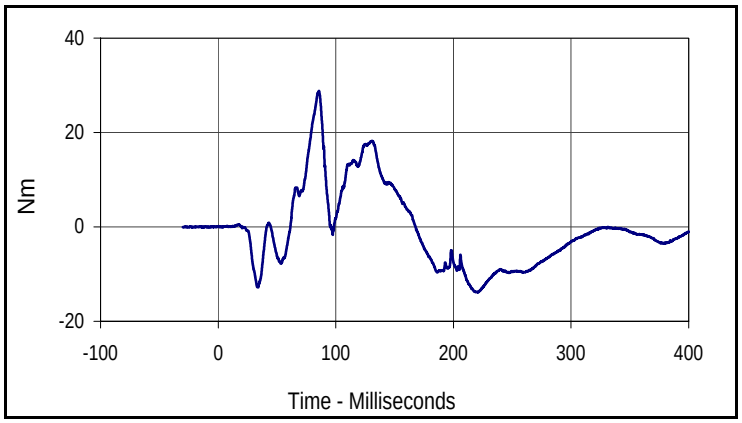
Curve Description			
(Target Vehicle) Driver Upper Neck Force Y			
CURNO	Type	SAE Class	Units
141	FIL	1000	Newtons
Max	Time	Min	Time
1013.6	117.1	-128.5	205.8



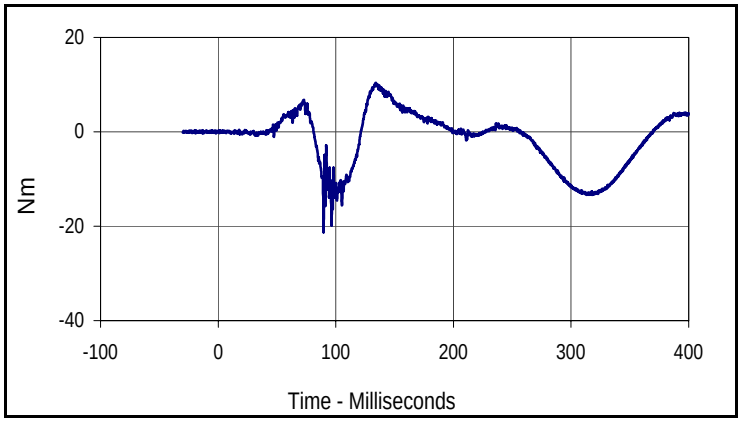
Curve Description			
(Target Vehicle) Driver Upper Neck Force Z			
CURNO	Type	SAE Class	Units
142	FIL	1000	Newtons
Max	Time	Min	Time
1739.7	91.6	-81.0	16.4



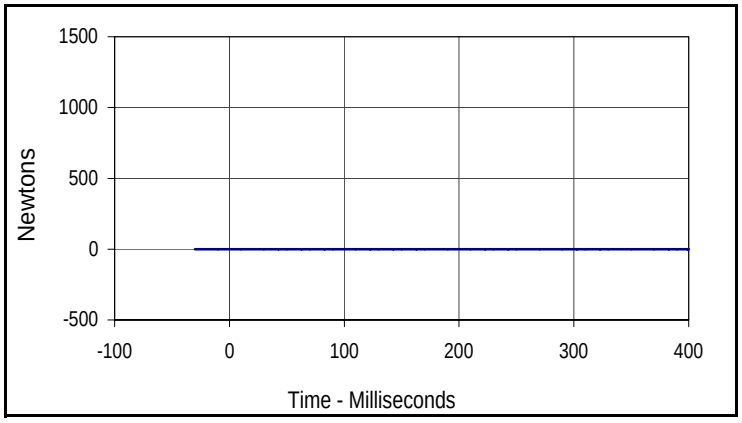
Curve Description			
(Target Vehicle) Driver Upper Neck Moment X			
CURNO	Type	SAE Class	Units
143	FIL	600	Nm
Max	Time	Min	Time
64.4	120.9	-11.7	191.0



Curve Description			
(Target Vehicle) Driver Upper Neck Moment Y			
CURNO	Type	SAE Class	Units
144	FIL	600	Nm
Max	Time	Min	Time
28.8	85.6	-13.9	220.9

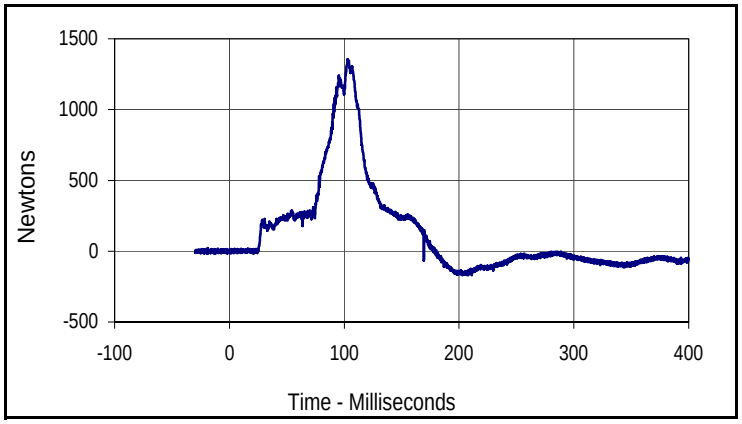


Curve Description			
(Target Vehicle) Driver Upper Neck Moment Z			
CURNO	Type	SAE Class	Units
145	FIL	600	Nm
Max	Time	Min	Time
10.4	134.0	-21.3	89.6

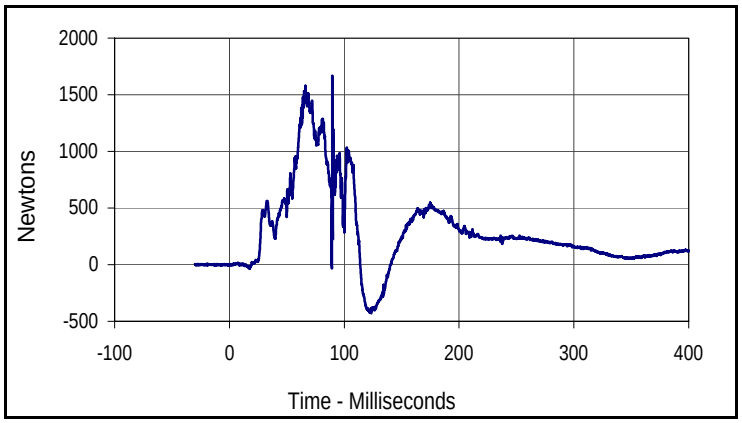


Curve Description			
(Target Vehicle) Driver Lower Neck Force X			
CURNO	Type	SAE Class	Units
146	FIL	1000	Newtons
Max	Time	Min	Time
0.0	0.0	0.0	0.0

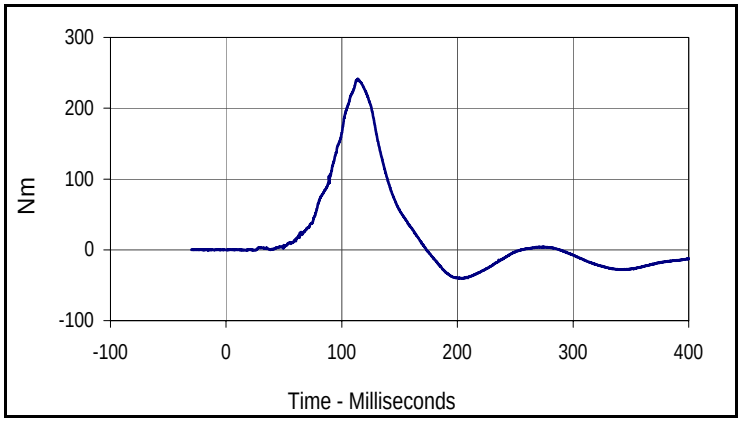
Channel failed, no data



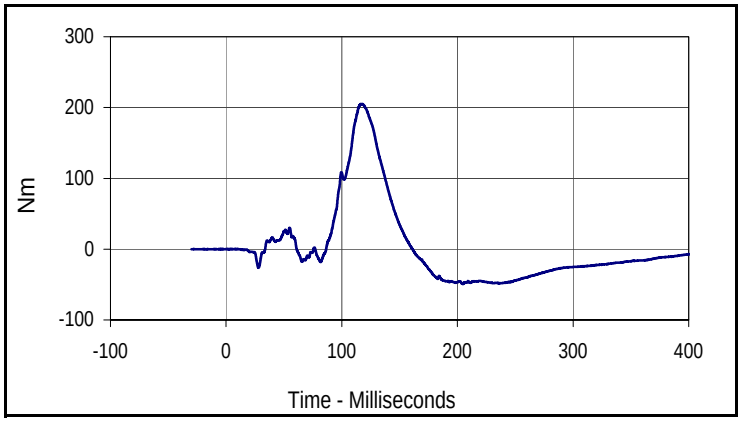
Curve Description			
(Target Vehicle) Driver Lower Neck Force Y			
CURNO	Type	SAE Class	Units
147	FIL	1000	Newtons
Max	Time	Min	Time
1354.5	102.9	-170.9	203.0



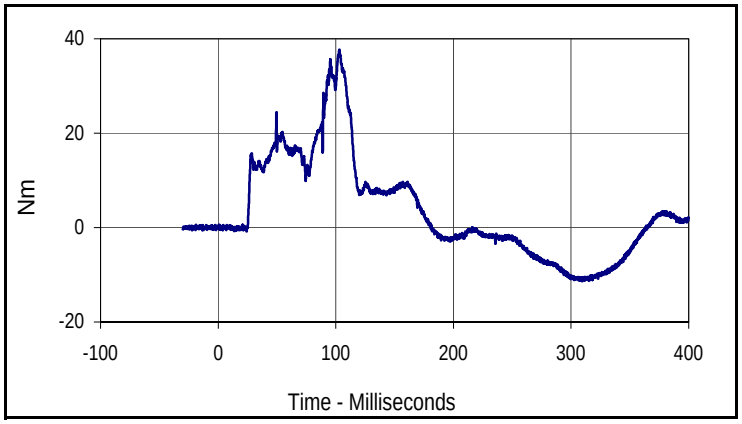
Curve Description			
(Target Vehicle) Driver Lower Neck Force Z			
CURNO	Type	SAE Class	Units
148	FIL	1000	Newtons
Max	Time	Min	Time
1664.4	89.6	-428.1	123.4



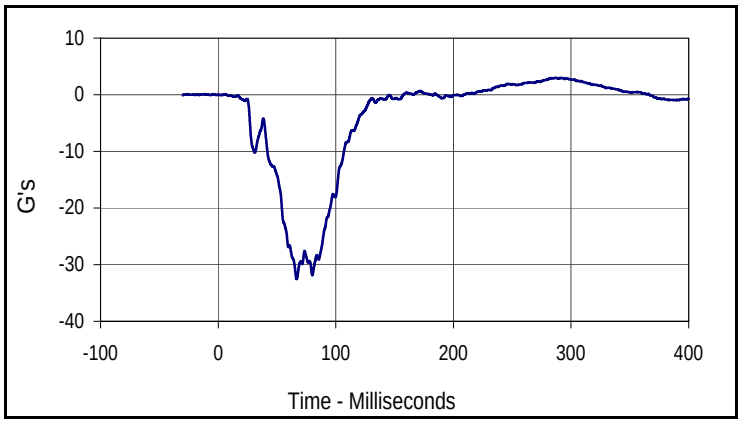
Curve Description			
(Target Vehicle) Driver Lower Neck Moment X			
CURNO	Type	SAE Class	Units
149	FIL	600	Nm
Max	Time	Min	Time
241.5	114.0	-40.6	204.5



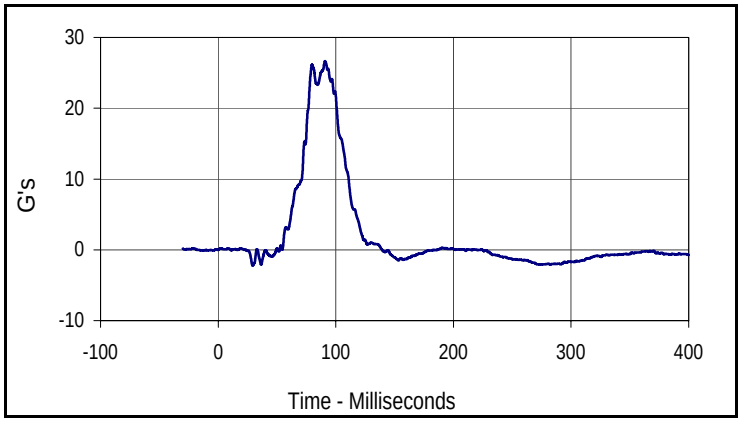
Curve Description			
(Target Vehicle) Driver Lower Neck Moment Y			
CURNO	Type	SAE Class	Units
150	FIL	600	Nm
Max	Time	Min	Time
205.1	117.6	-49.2	204.7



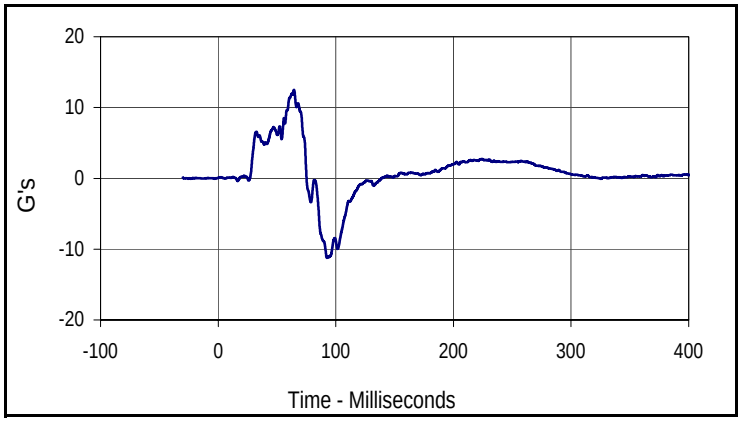
Curve Description			
(Target Vehicle) Driver Lower Neck Moment Z			
CURNO	Type	SAE Class	Units
151	FIL	600	Nm
Max	Time	Min	Time
37.7	103.0	-11.4	309.4



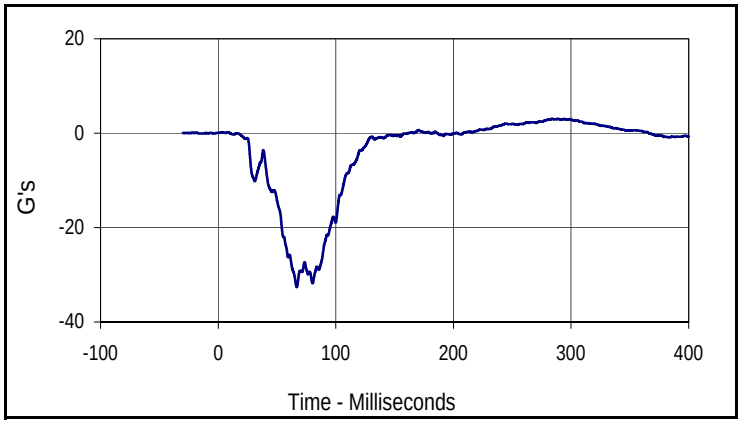
Curve Description			
(Target Vehicle) Driver Chest X Primary			
CURNO	Type	SAE Class	Units
152	FIL	180	G's
Max	Time	Min	Time
3.0	287.2	-32.6	66.7



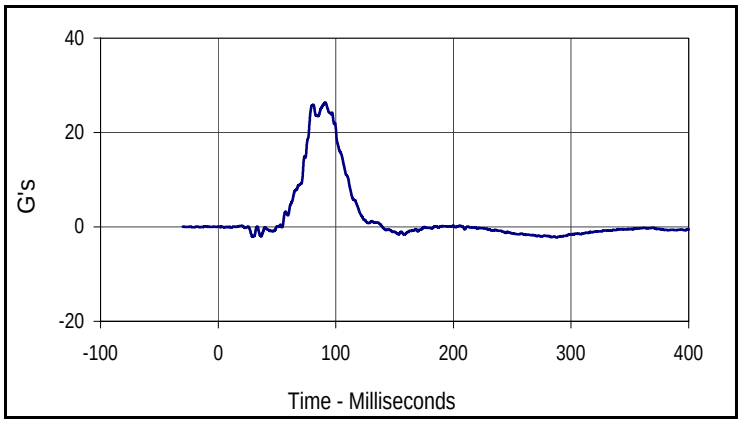
Curve Description			
(Target Vehicle) Driver Chest Y Primary			
CURNO	Type	SAE Class	Units
153	FIL	180	G's
Max	Time	Min	Time
26.6	90.9	-2.2	29.4



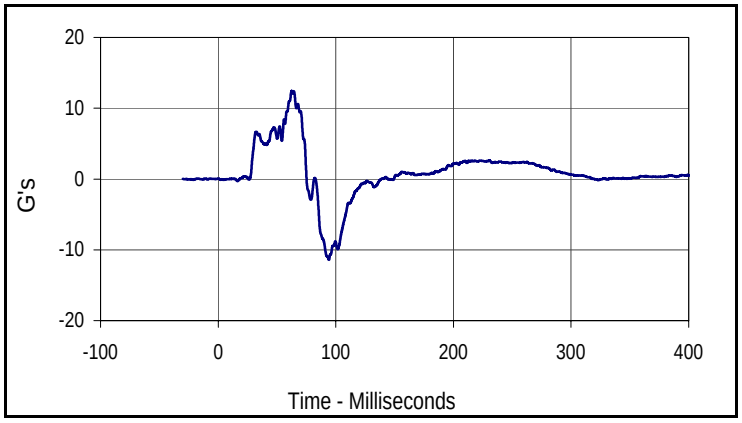
Curve Description			
(Target Vehicle) Driver Chest Z Primary			
CURNO	Type	SAE Class	Units
154	FIL	180	G's
Max	Time	Min	Time
12.5	64.4	-11.2	92.5



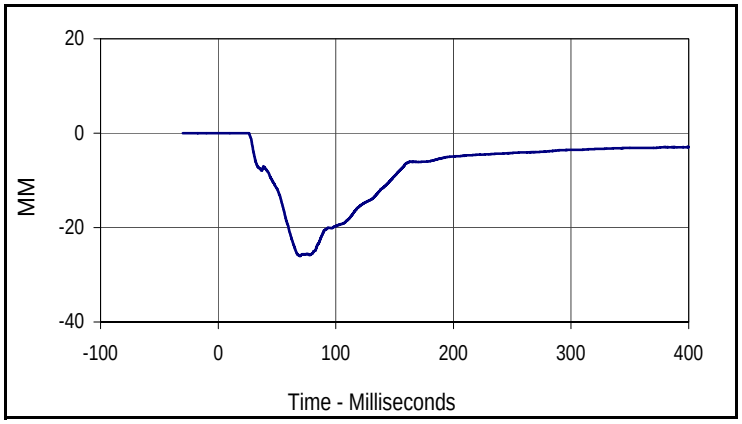
Curve Description			
(Target Vehicle) Driver Chest X Redundant			
CURNO	Type	SAE Class	Units
155	FIL	180	G's
Max	Time	Min	Time
3.1	284.0	-32.6	66.8



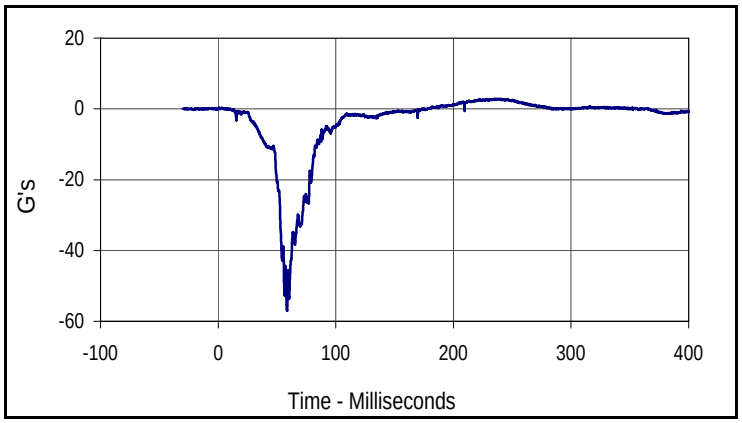
Curve Description			
(Target Vehicle) Driver Chest Y Redundant			
CURNO	Type	SAE Class	Units
156	FIL	180	G's
Max	Time	Min	Time
26.4	91.1	-2.2	287.6



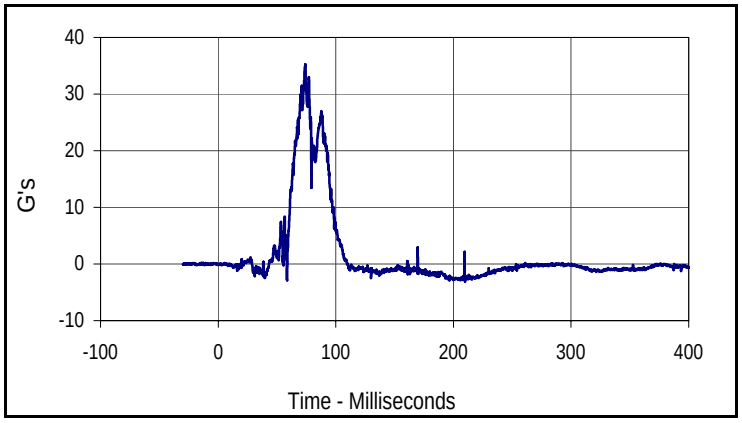
Curve Description			
(Target Vehicle) Driver Chest Z Redundant			
CURNO	Type	SAE Class	Units
157	FIL	180	G's
Max	Time	Min	Time
12.4	62.4	-11.4	94.1



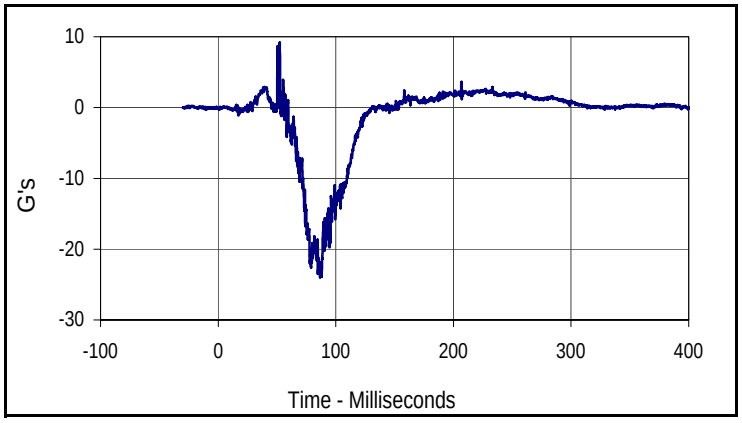
Curve Description			
(Target Vehicle) Driver Chest Deflection			
CURNO	Type	SAE Class	Units
158	FIL	600	MM
Max	Time	Min	Time
0.0	24.3	-26.1	69.5



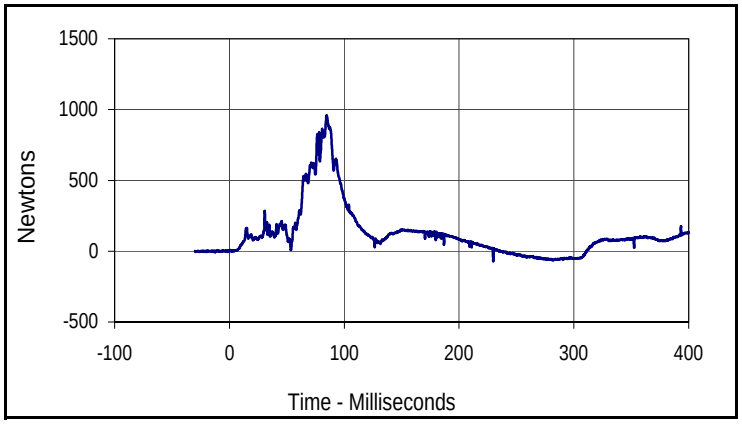
Curve Description			
(Target Vehicle) Driver Pelvis X			
CURNO	Type	SAE Class	Units
159	FIL	1000	G's
Max	Time	Min	Time
2.9	238.4	-57.0	58.6



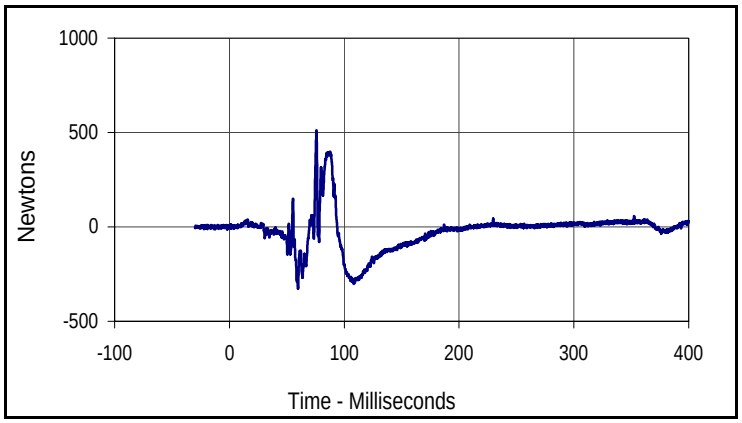
Curve Description			
(Target Vehicle) Driver Pelvis Y			
CURNO	Type	SAE Class	Units
160	FIL	1000	G's
Max	Time	Min	Time
35.2	74.1	-3.1	209.8



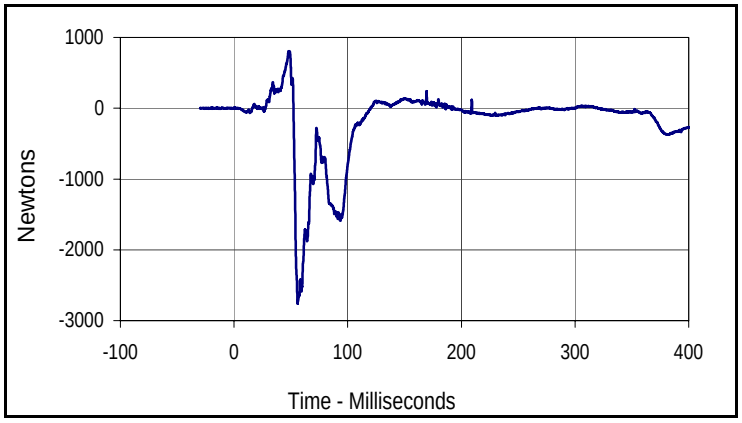
Curve Description			
(Target Vehicle) Driver Pelvis Z			
CURNO	Type	SAE Class	Units
161	FIL	1000	G's
Max	Time	Min	Time
9.2	52.4	-24.0	86.7



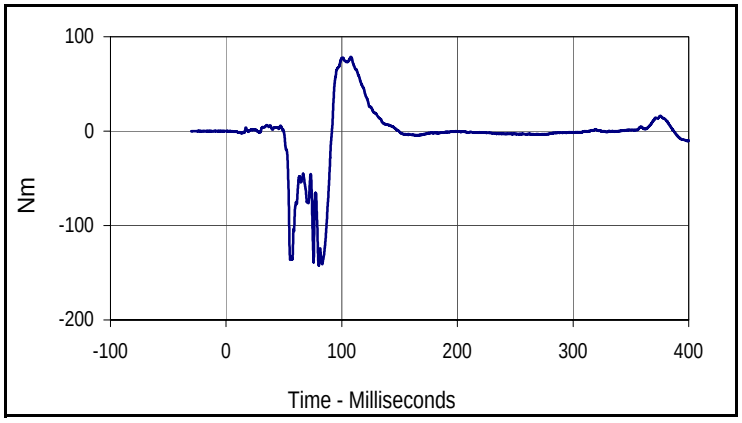
Curve Description			
(Target Vehicle) Driver Left Femur Force X			
CURNO	Type	SAE Class	Units
162	FIL	600	Newtons
Max	Time	Min	Time
960.3	84.7	-70.5	229.7



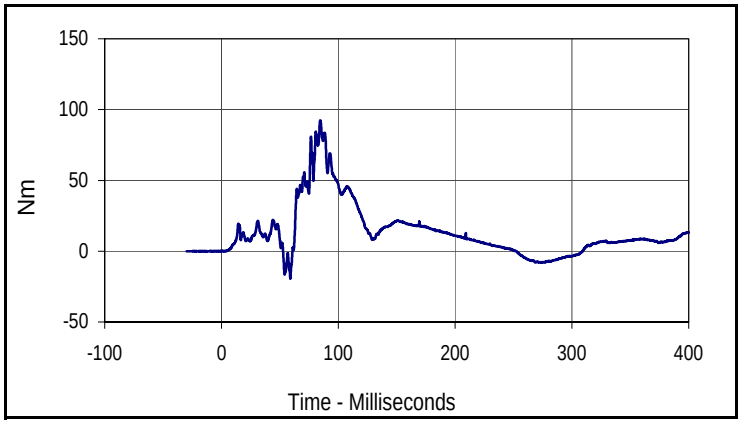
Curve Description			
(Target Vehicle) Driver Left Femur Force Y			
CURNO	Type	SAE Class	Units
163	FIL	600	Newtons
Max	Time	Min	Time
512.1	75.8	-327.7	59.7



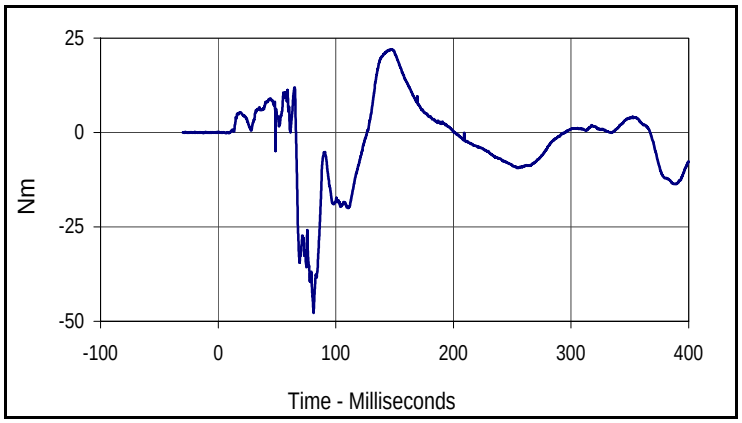
Curve Description			
(Target Vehicle) Driver Left Femur Force Z			
CURNO	Type	SAE Class	Units
164	FIL	600	Newtons
Max	Time	Min	Time
807.8	48.4	-2760.0	56.0



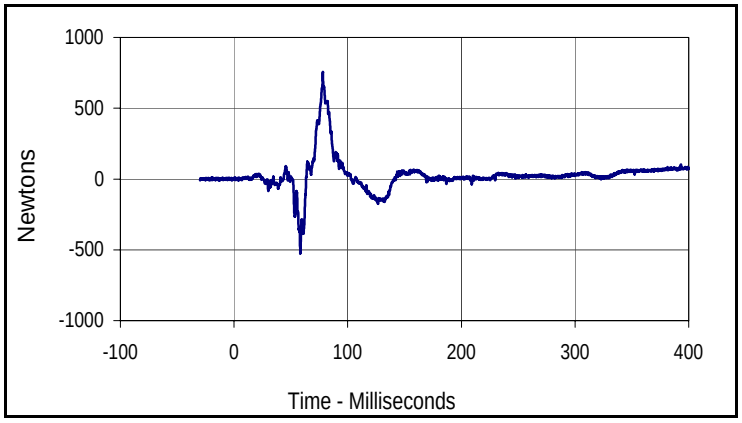
Curve Description			
(Target Vehicle) Driver Left Femur Moment X			
CURNO	Type	SAE Class	Units
165	FIL	600	Nm
Max	Time	Min	Time
78.7	107.9	-142.4	80.1



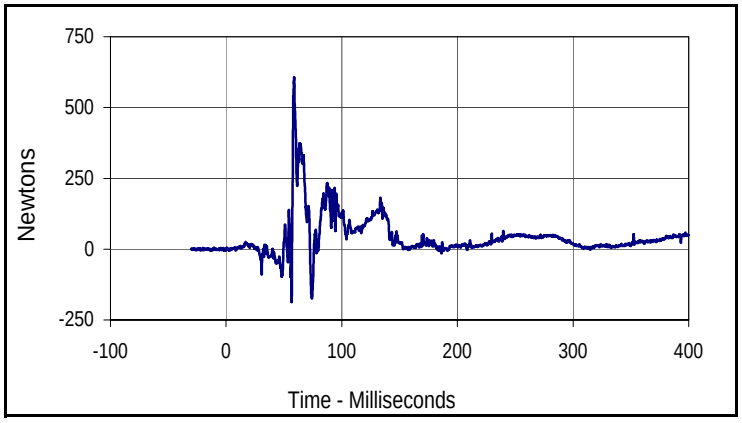
Curve Description			
(Target Vehicle) Driver Left Femur Moment Y			
CURNO	Type	SAE Class	Units
166	FIL	600	Nm
Max	Time	Min	Time
92.4	84.7	-19.2	59.0



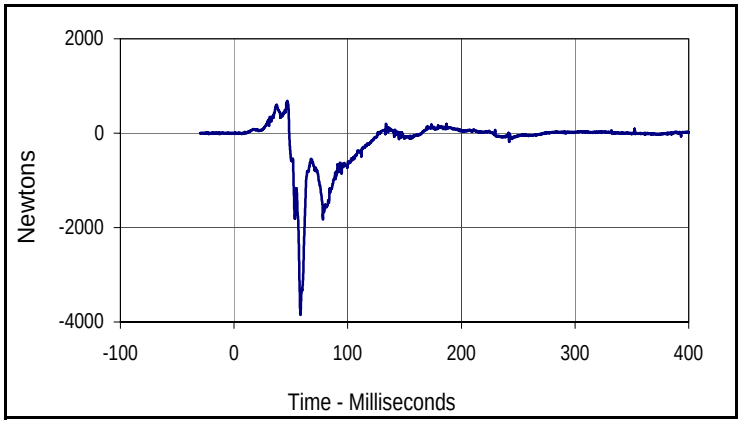
Curve Description			
(Target Vehicle) Driver Left Femur Moment Z			
CURNO	Type	SAE Class	Units
167	FIL	600	Nm
Max	Time	Min	Time
22.0	146.5	-47.8	81.1



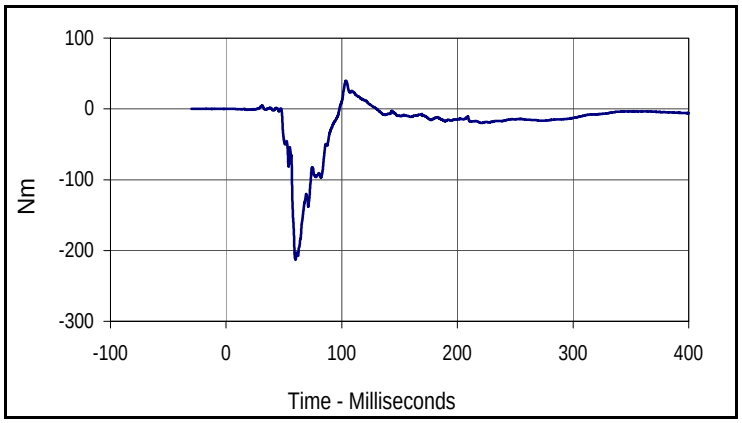
Curve Description			
(Target Vehicle) Driver Right Femur Force X			
CURNO	Type	SAE Class	Units
168	FIL	600	Newtons
Max	Time	Min	Time
755.2	78.1	-525.2	58.3



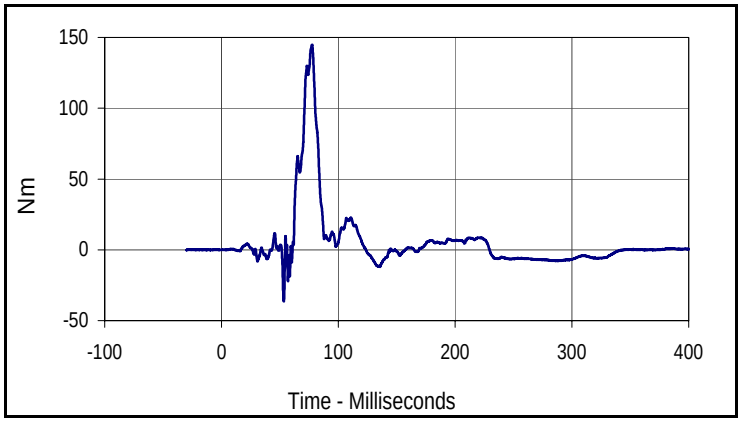
Curve Description			
(Target Vehicle) Driver Right Femur Force Y			
CURNO	Type	SAE Class	Units
169	FIL	600	Newtons
Max	Time	Min	Time
606.4	58.8	-186.5	56.7



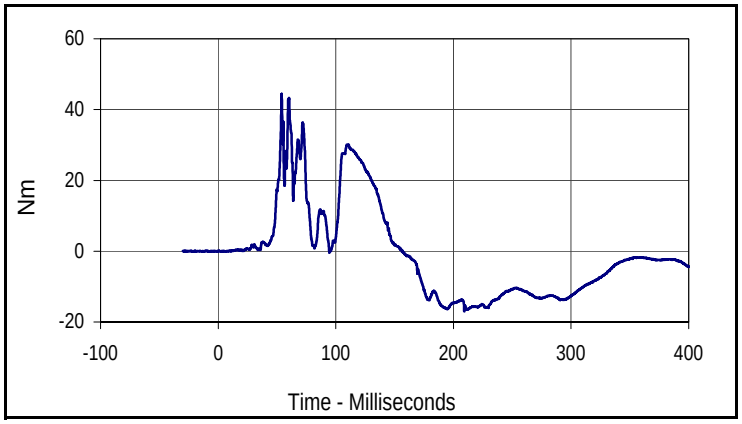
Curve Description			
(Target Vehicle) Driver Right Femur Force Z			
CURNO	Type	SAE Class	Units
170	FIL	600	Newtons
Max	Time	Min	Time
687.3	46.9	-3851.6	58.4



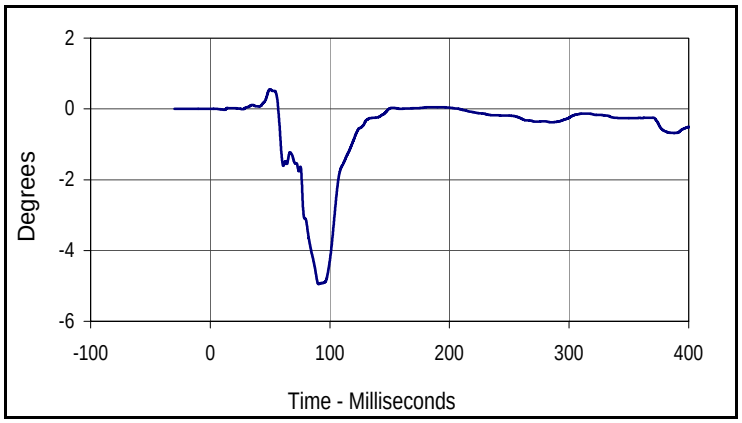
Curve Description			
(Target Vehicle) Driver Right Femur Moment X			
CURNO	Type	SAE Class	Units
171	FIL	600	Nm
Max	Time	Min	Time
39.8	103.6	-213.1	60.0



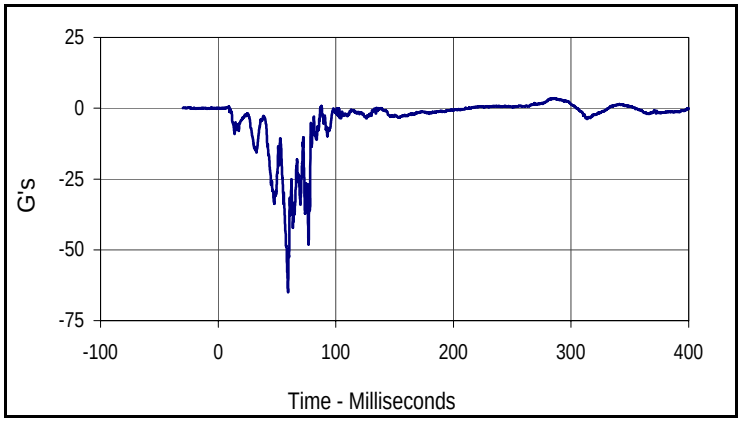
Curve Description			
(Target Vehicle) Driver Right Femur Moment Y			
CURNO	Type	SAE Class	Units
172	FIL	600	Nm
Max	Time	Min	Time
144.9	77.6	-36.5	53.3



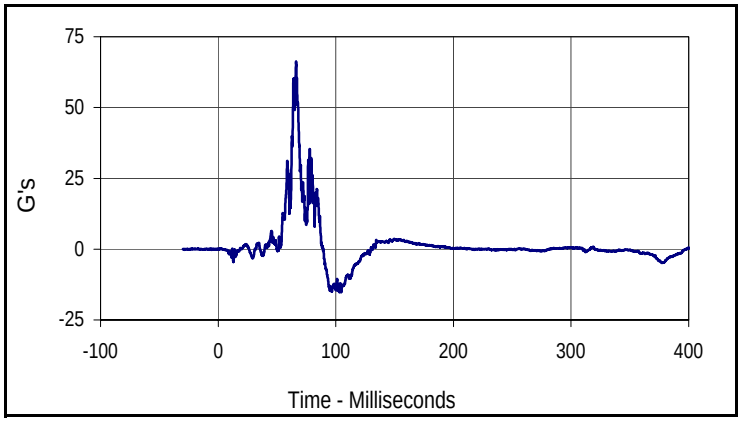
Curve Description			
(Target Vehicle) Driver Right Femur Moment Z			
CURNO	Type	SAE Class	Units
173	FIL	600	Nm
Max	Time	Min	Time
44.5	54.0	-17.0	209.2



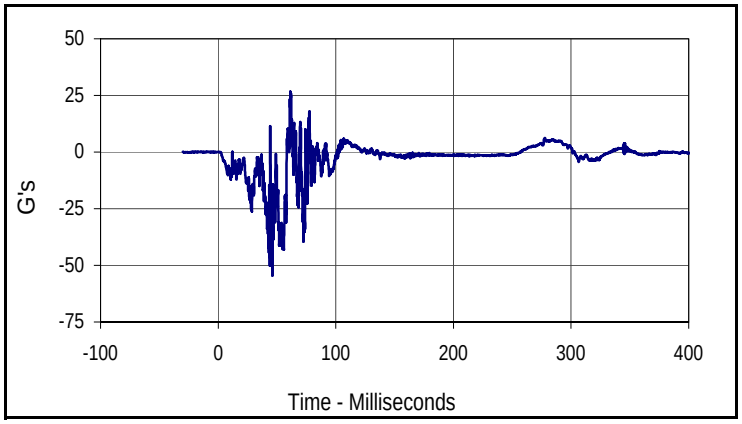
Curve Description			
(Target Vehicle) Driver Left Knee Deflection			
CURNO	Type	SAE Class	Units
174	FIL	180	Degrees
Max	Time	Min	Time
0.6	50.1	-5.0	90.6



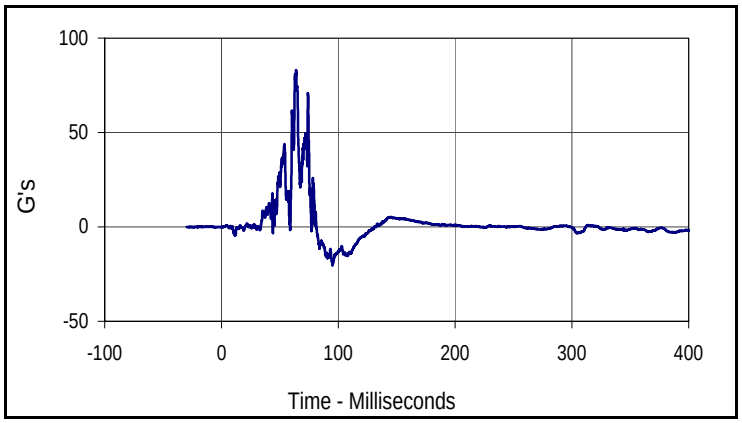
Curve Description			
(Target Vehicle) Driver Left Tibia X			
CURNO	Type	SAE Class	Units
175	FIL	1000	G's
Max	Time	Min	Time
3.6	285.9	-64.9	59.4



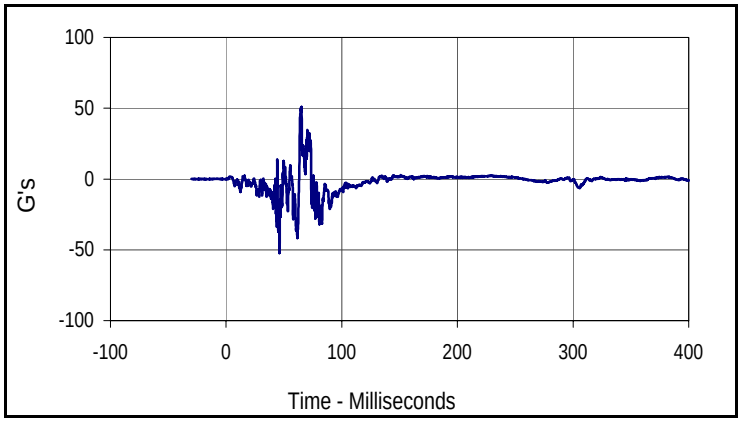
Curve Description			
(Target Vehicle) Driver Left Tibia Y			
CURNO	Type	SAE Class	Units
176	FIL	1000	G's
Max	Time	Min	Time
66.2	66.3	-15.2	103.3



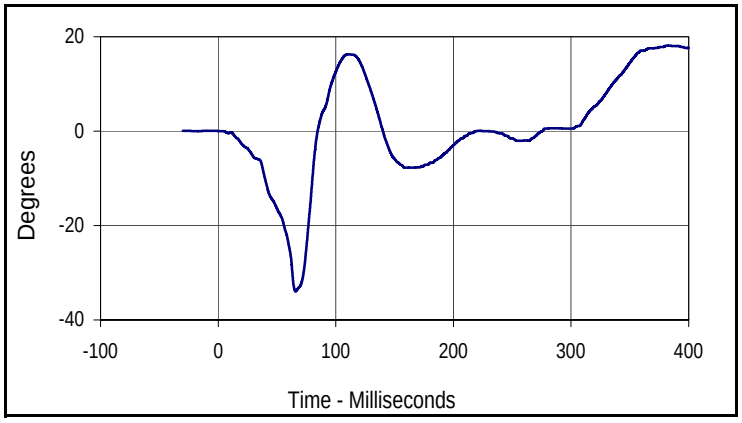
Curve Description			
(Target Vehicle) Driver Left Foot X			
CURNO	Type	SAE Class	Units
177	FIL	1000	G's
Max	Time	Min	Time
26.8	61.4	-54.5	46.1



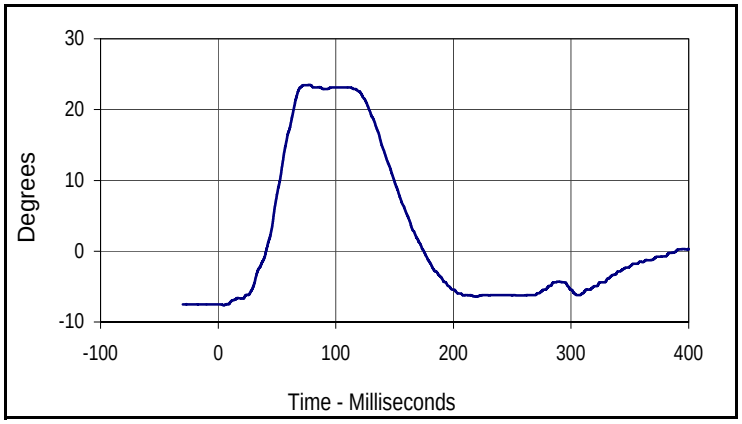
Curve Description			
(Target Vehicle) Driver Left Foot Y			
CURNO	Type	SAE Class	Units
178	FIL	1000	G's
Max	Time	Min	Time
83.1	63.9	-20.5	95.0



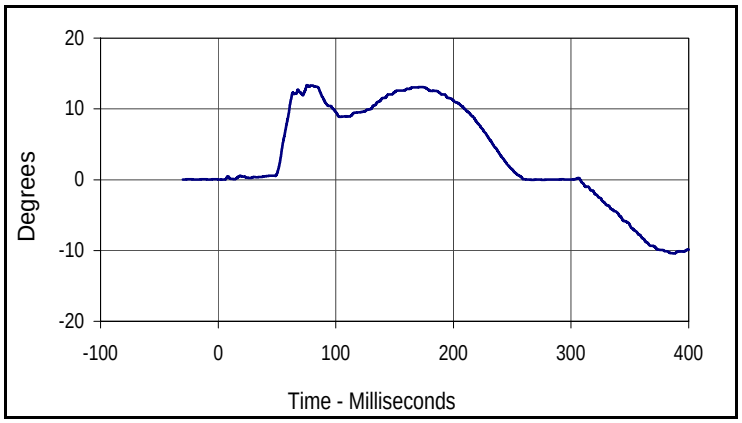
Curve Description			
(Target Vehicle) Driver Left Foot Z			
CURNO	Type	SAE Class	Units
179	FIL	1000	G's
Max	Time	Min	Time
51.0	65.2	-52.4	46.2



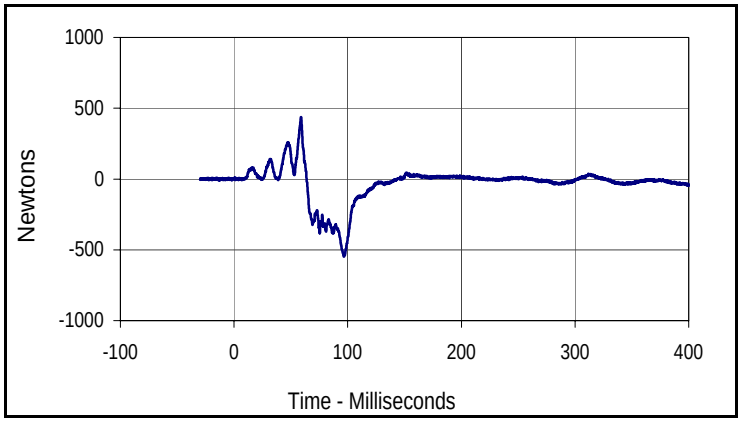
Curve Description			
(Target Vehicle) Driver Left Ankle Rotation X			
CURNO	Type	SAE Class	Units
180	FIL	180	Degrees
Max	Time	Min	Time
18.1	381.5	-33.9	65.8



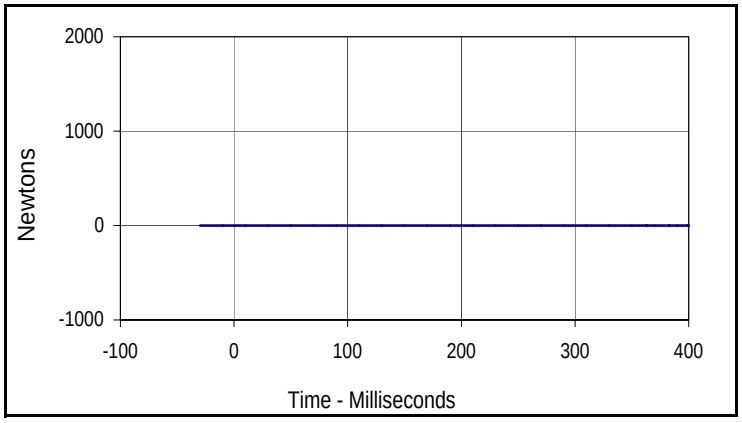
Curve Description			
(Target Vehicle) Driver Left Ankle Rotation Y			
CURNO	Type	SAE Class	Units
181	FIL	180	Degrees
Max	Time	Min	Time
23.5	77.6	-7.6	4.8



Curve Description			
(Target Vehicle) Driver Left Ankle Rotation Z			
CURNO	Type	SAE Class	Units
182	FIL	180	Degrees
Max	Time	Min	Time
13.4	75.5	-10.4	387.5

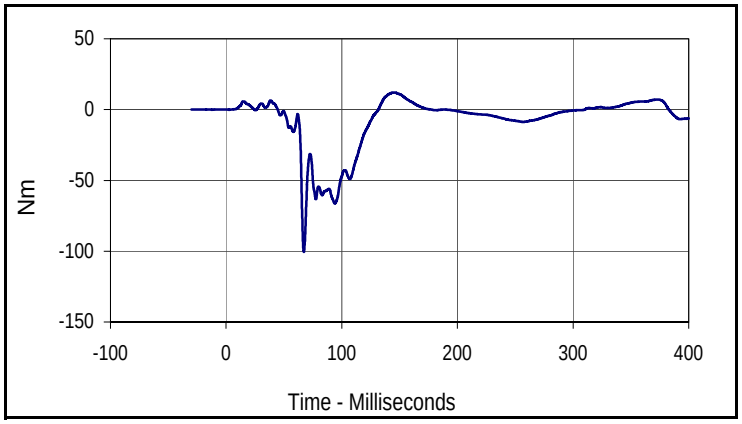


Curve Description			
(Target Vehicle) Driver Left Upper Tibia Force X			
CURNO	Type	SAE Class	Units
183	FIL	600	Newtons
Max	Time	Min	Time
438.0	59.0	-547.0	96.7

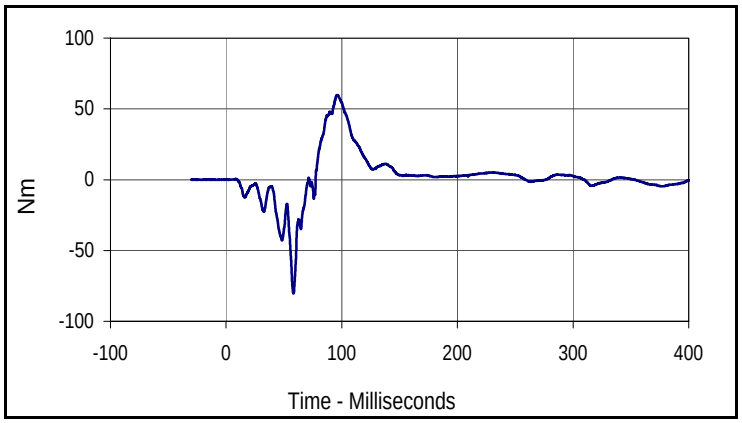


Curve Description			
(Target Vehicle) Driver Left Upper Tibia Force Z			
CURNO	Type	SAE Class	Units
184	FIL	600	Newtons
Max	Time	Min	Time
0.0	0.0	0.0	0.0

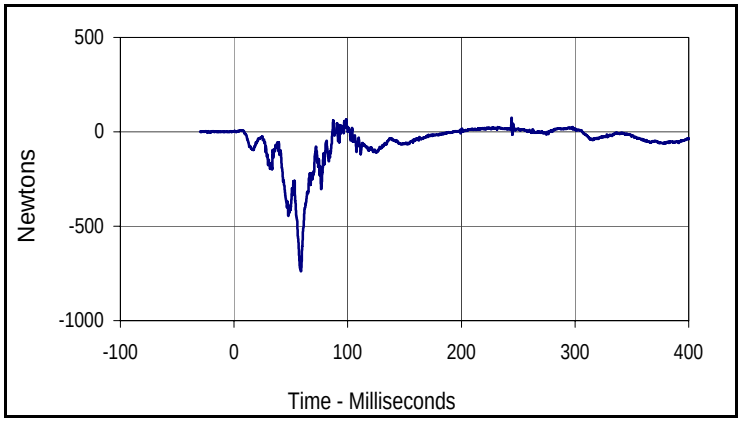
Channel failed, no data



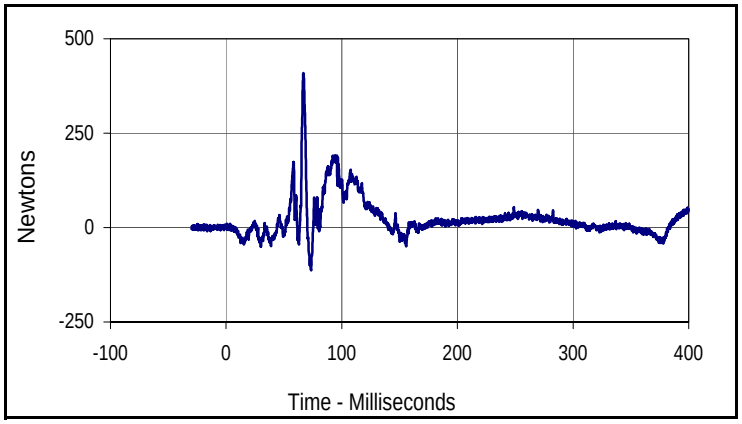
Curve Description			
(Target Vehicle) Driver Left Upper Tibia Moment X			
CURNO	Type	SAE Class	Units
185	FIL	180	Nm
Max	Time	Min	Time
12.1	145.9	-100.6	67.2



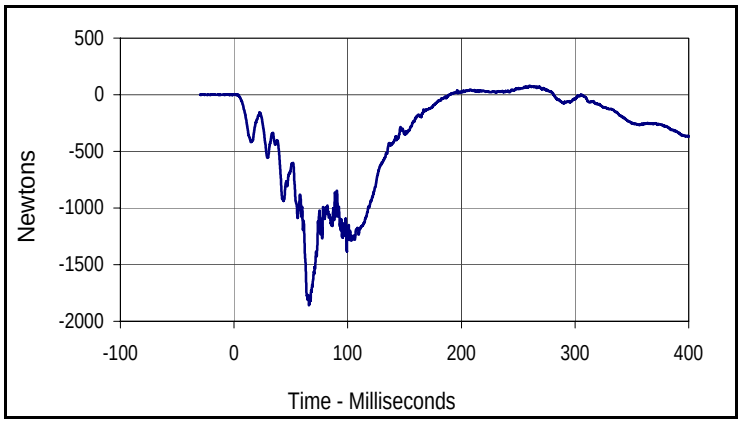
Curve Description			
(Target Vehicle) Driver Left Upper Tibia Moment Y			
CURNO	Type	SAE Class	Units
186	FIL	600	Nm
Max	Time	Min	Time
59.8	96.0	-80.5	58.3



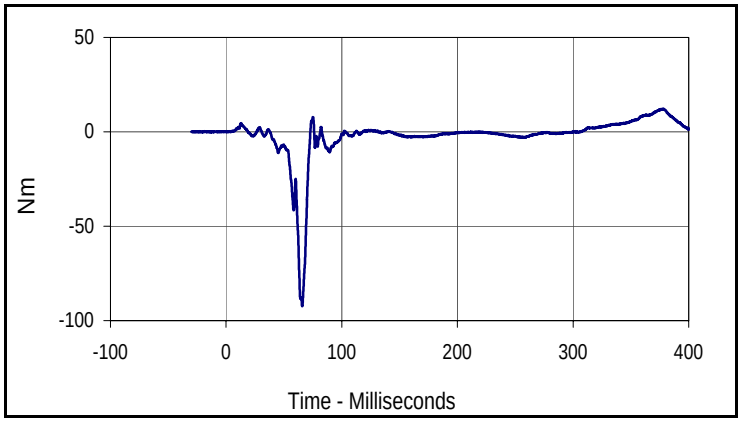
Curve Description			
(Target Vehicle) Driver Left Lower Tibia Force X			
CURNO	Type	SAE Class	Units
187	FIL	600	Newtons
Max	Time	Min	Time
75.2	244.2	-738.5	58.9



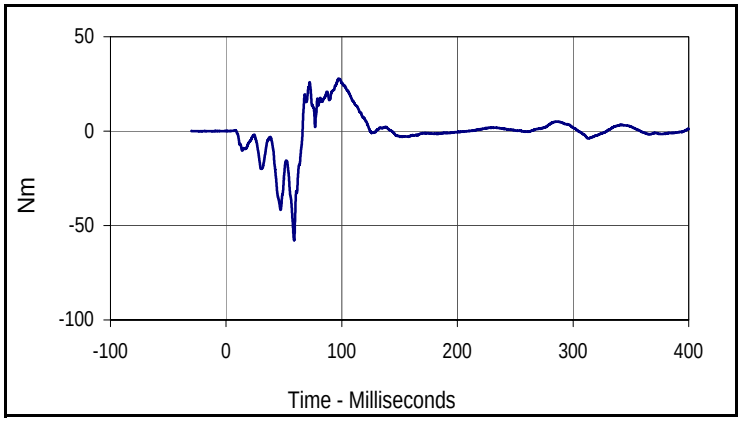
Curve Description			
(Target Vehicle) Driver Left Lower Tibia Force Y			
CURNO	Type	SAE Class	Units
188	FIL	600	Newtons
Max	Time	Min	Time
409.0	66.8	-112.5	73.5



Curve Description			
(Target Vehicle) Driver Left Lower Tibia Force Z			
CURNO	Type	SAE Class	Units
189	FIL	600	Newtons
Max	Time	Min	Time
79.0	260.1	-1858.1	65.9

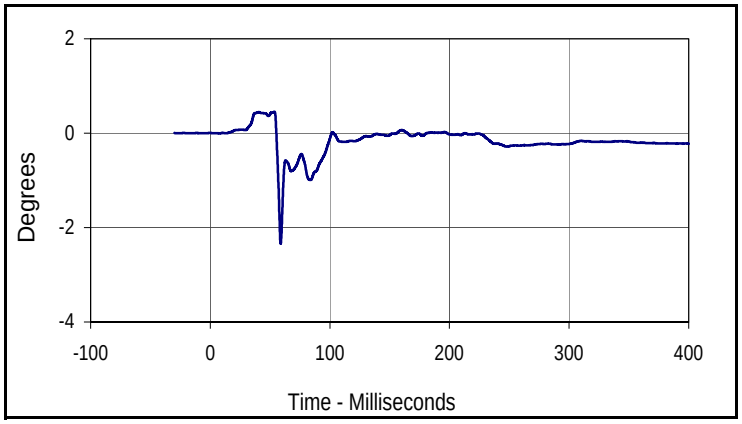


Curve Description			
(Target Vehicle) Driver Left Lower Tibia Moment X			
CURNO	Type	SAE Class	Units
190	FIL	600	Nm
Max	Time	Min	Time
12.2	377.5	-92.3	65.8

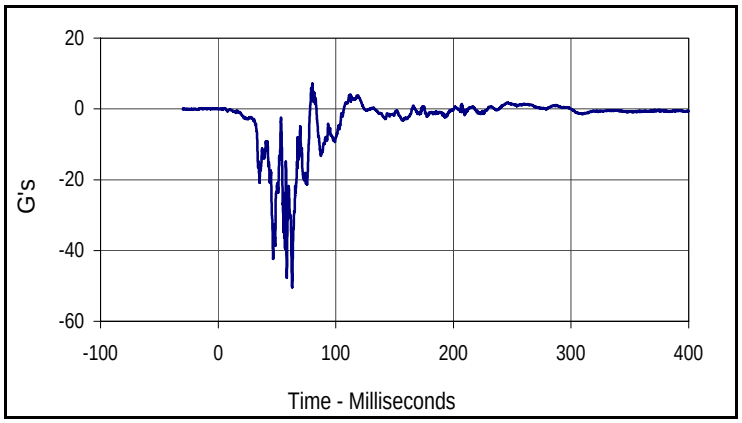


Curve Description			
(Target Vehicle) Driver Left Lower Tibia Moment Y			
CURNO	Type	SAE Class	Units
191	FIL	600	Nm
Max	Time	Min	Time
27.7	97.2	-57.7	58.8

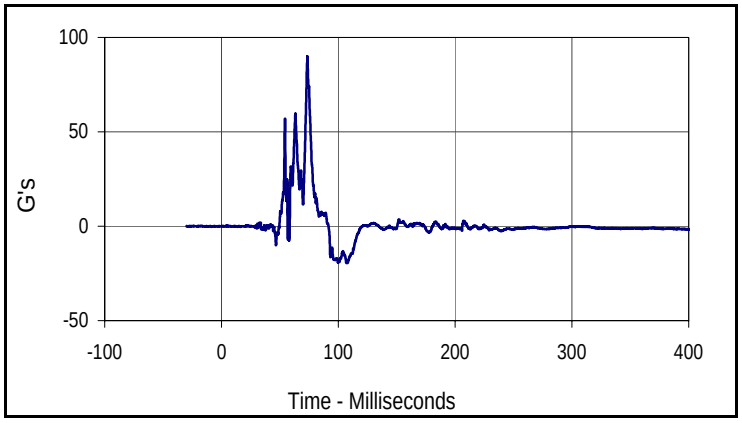
Test Vehicle:	2007 Ford 500 SEL 4-Door Sedan (Target)	NHTSA No.:	R70211
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	1/8/10



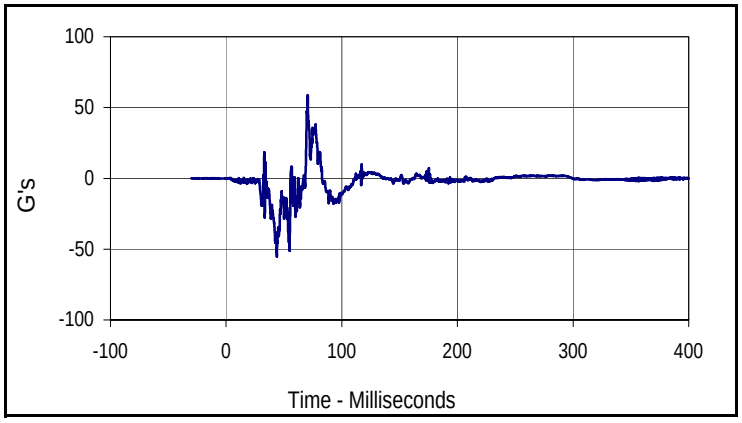
Curve Description			
(Target Vehicle) Driver Right Knee Deflection			
CURNO	Type	SAE Class	Units
192	FIL	180	Degrees
Max	Time	Min	Time
0.5	53.7	-2.3	58.9



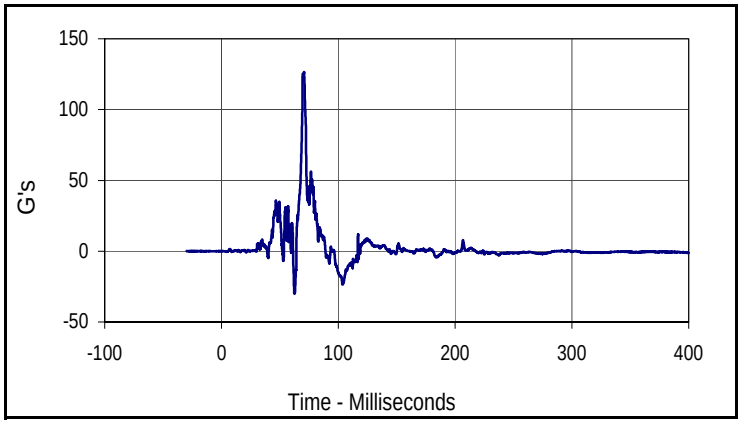
Curve Description			
(Target Vehicle) Driver Right Tibia X			
CURNO	Type	SAE Class	Units
193	FIL	1000	G's
Max	Time	Min	Time
7.1	80.1	-50.4	62.9



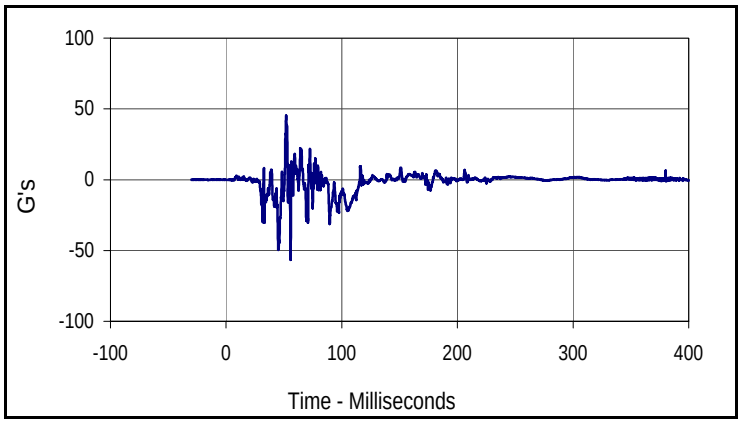
Curve Description			
(Target Vehicle) Driver Right Tibia Y			
CURNO	Type	SAE Class	Units
194	FIL	1000	G's
Max	Time	Min	Time
90.0	73.5	-19.6	107.0



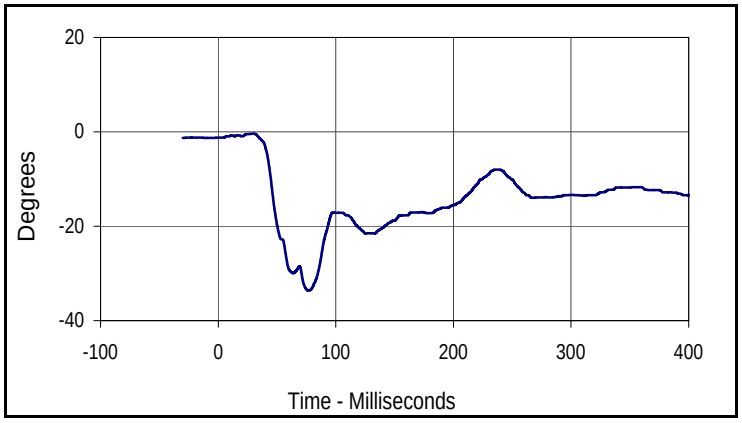
Curve Description			
(Target Vehicle) Driver Right Foot X			
CURNO	Type	SAE Class	Units
195	FIL	1000	G's
Max	Time	Min	Time
58.9	70.5	-55.2	43.9



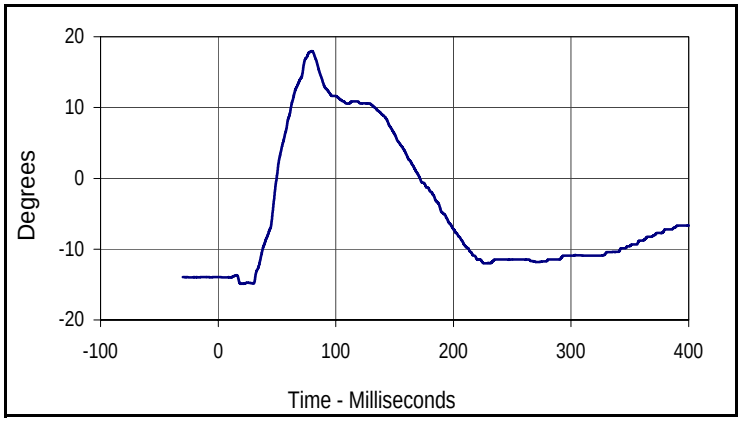
Curve Description			
(Target Vehicle) Driver Right Foot Y			
CURNO	Type	SAE Class	Units
196	FIL	1000	G's
Max	Time	Min	Time
126.6	70.7	-29.9	62.7



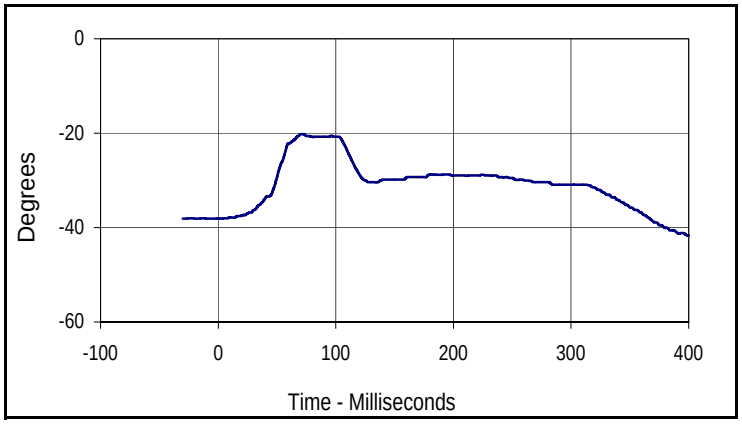
Curve Description			
(Target Vehicle) Driver Right Foot Z			
CURNO	Type	SAE Class	Units
197	FIL	1000	G's
Max	Time	Min	Time
45.4	51.9	-56.6	55.8



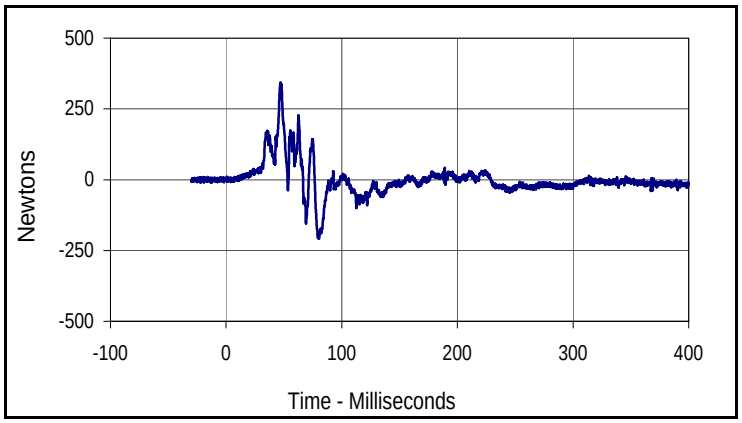
Curve Description			
(Target Vehicle) Driver Right Ankle Rotation X			
CURNO	Type	SAE Class	Units
198	FIL	180	Degrees
Max	Time	Min	Time
-0.4	29.8	-33.6	76.4



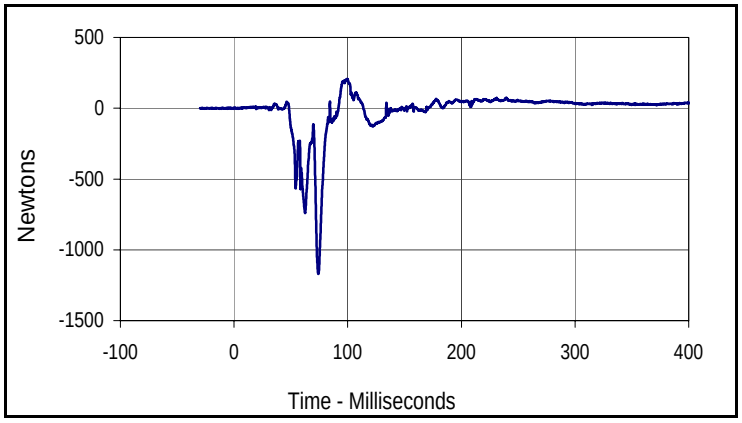
Curve Description			
(Target Vehicle) Driver Right Ankle Rotation Y			
CURNO	Type	SAE Class	Units
199	FIL	180	Degrees
Max	Time	Min	Time
18.0	79.5	-14.9	19.1



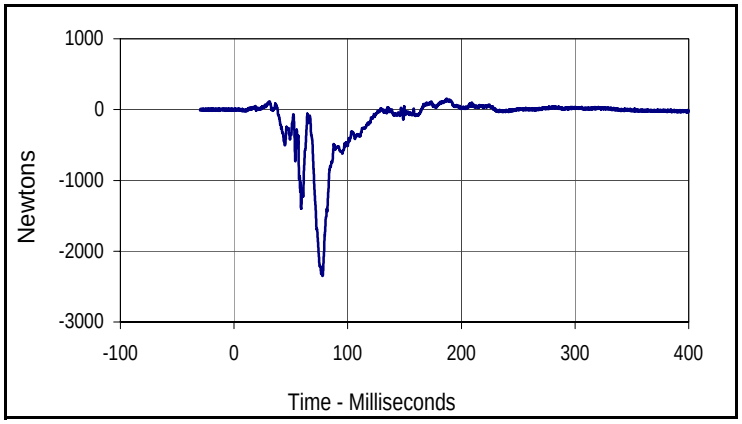
Curve Description			
(Target Vehicle) Driver Right Ankle Rotation Z			
CURNO	Type	SAE Class	Units
200	FIL	180	Degrees
Max	Time	Min	Time
-20.2	70.3	-41.6	398.7



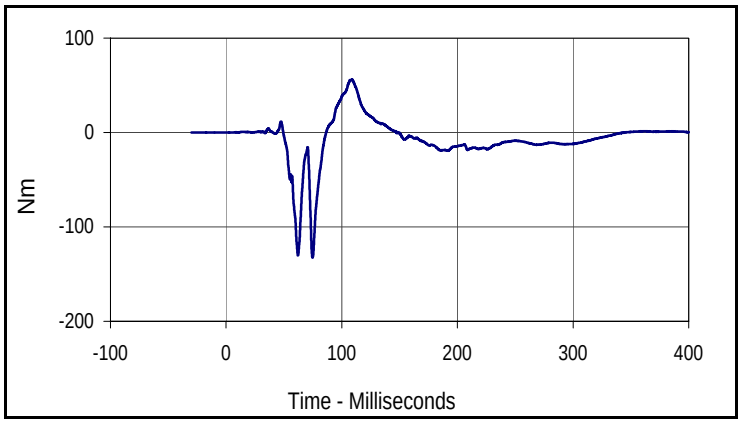
Curve Description			
(Target Vehicle) Driver Right Upper Tibia Force X			
CURNO	Type	SAE Class	Units
201	FIL	600	Newtons
Max	Time	Min	Time
343.9	47.0	-208.2	80.3



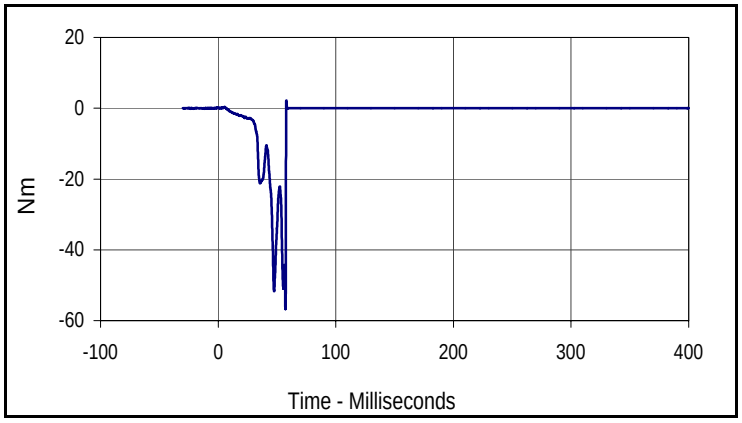
Curve Description			
(Target Vehicle) Driver Right Upper Tibia Force Y			
CURNO	Type	SAE Class	Units
202	FIL	600	Newtons
Max	Time	Min	Time
205.3	99.3	-1169.3	74.2



Curve Description			
(Target Vehicle) Driver Right Upper Tibia Force Z			
CURNO	Type	SAE Class	Units
203	FIL	600	Newtons
Max	Time	Min	Time
155.8	187.1	-2347.9	77.9

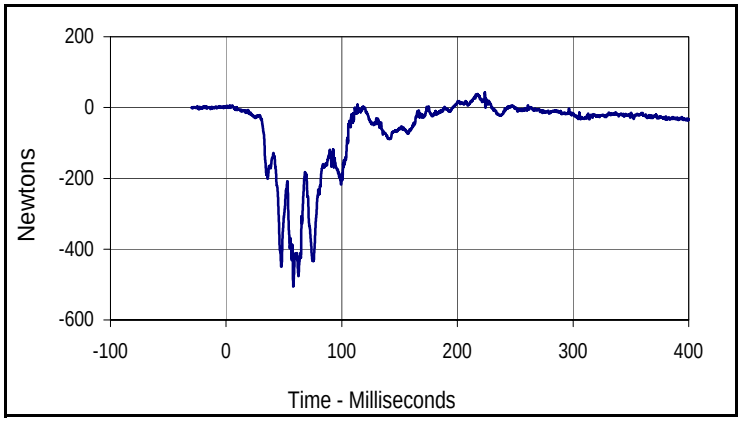


Curve Description			
(Target Vehicle) Driver Right Upper Tibia Moment X			
CURNO	Type	SAE Class	Units
204	FIL	600	Nm
Max	Time	Min	Time
56.0	109.4	-132.4	74.8

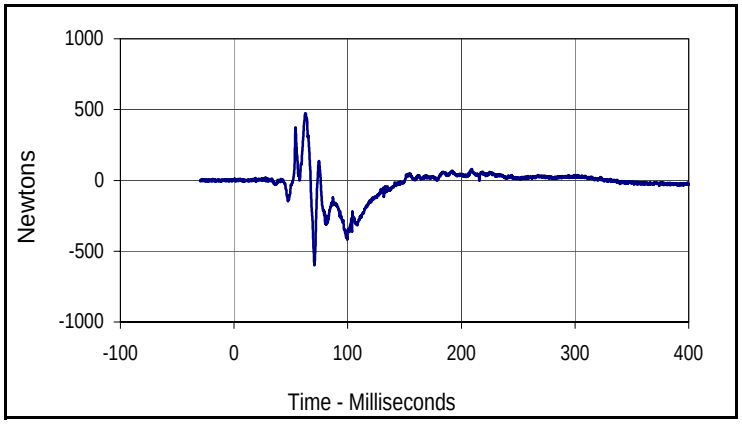


Curve Description			
(Target Vehicle) Driver Right Upper Tibia Moment Y			
CURNO	Type	SAE Class	Units
205	FIL	600	Nm
Max	Time	Min	Time
2.2	58.0	-56.7	57.2

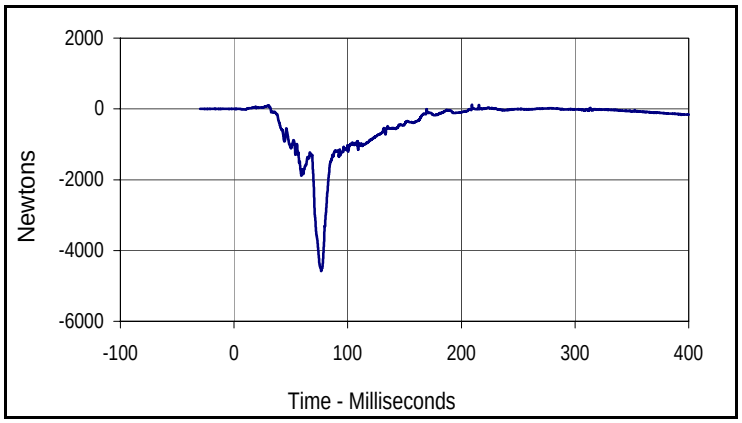
Channel failed at 57.6 msec.



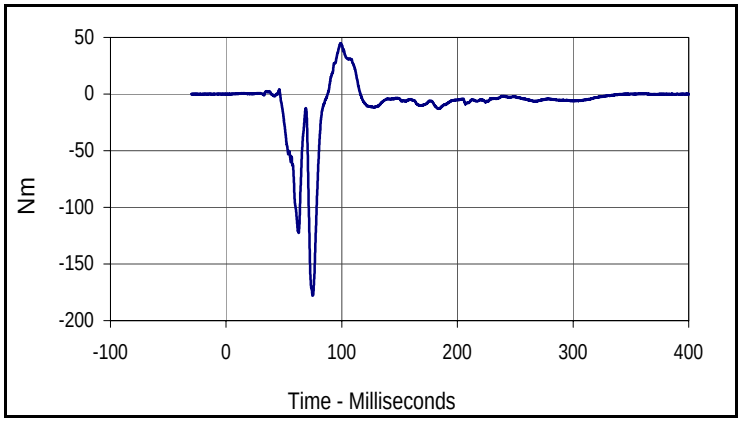
Curve Description			
(Target Vehicle) Driver Right Lower Tibia Force X			
CURNO	Type	SAE Class	Units
206	FIL	600	Newtons
Max	Time	Min	Time
42.7	223.8	-505.8	58.1



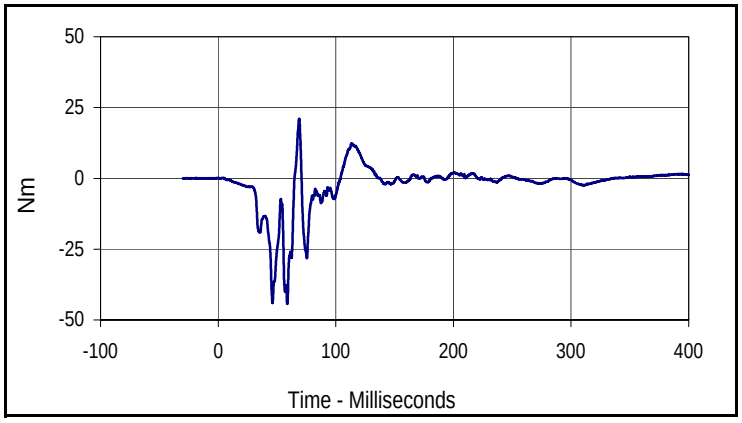
Curve Description			
(Target Vehicle) Driver Right Lower Tibia Force Y			
CURNO	Type	SAE Class	Units
207	FIL	600	Newtons
Max	Time	Min	Time
474.5	63.0	-599.9	70.7



Curve Description			
(Target Vehicle) Driver Right Lower Tibia Force Z			
CURNO	Type	SAE Class	Units
208	FIL	600	Newtons
Max	Time	Min	Time
115.4	209.3	-4583.2	76.7

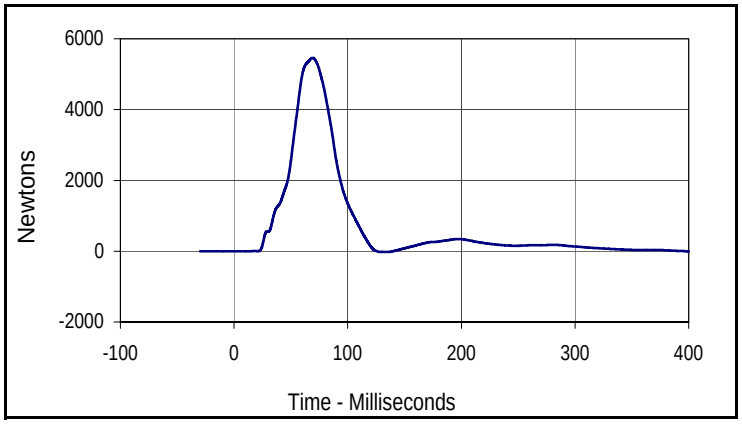


Curve Description			
(Target Vehicle) Driver Right Lower Tibia Moment X			
CURNO	Type	SAE Class	Units
209	FIL	600	Nm
Max	Time	Min	Time
44.8	99.1	-178.1	74.9

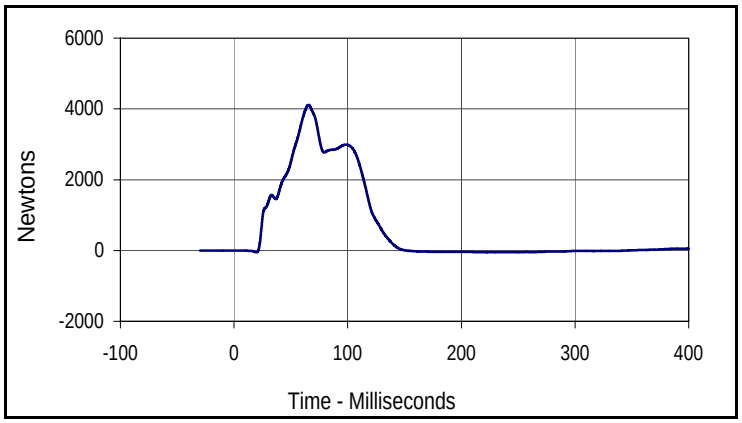


Curve Description			
(Target Vehicle) Driver Right Lower Tibia Moment Y			
CURNO	Type	SAE Class	Units
210	FIL	600	Nm
Max	Time	Min	Time
21.1	68.9	-44.4	58.7

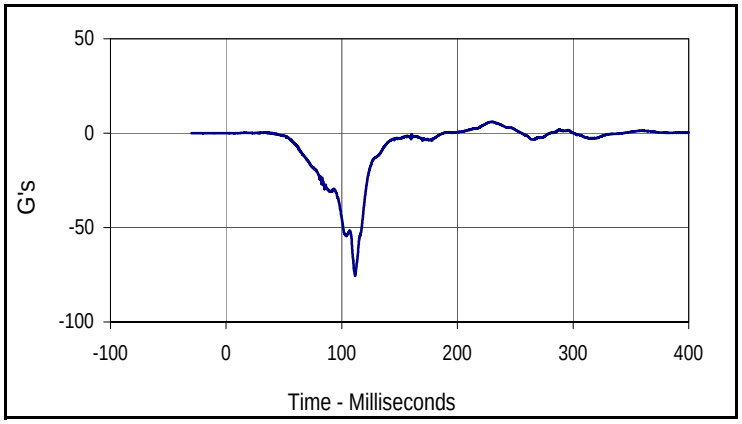
Test Vehicle:	2007 Ford 500 SEL 4-Door Sedan (Target)	NHTSA No.:	R70211
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	1/8/10



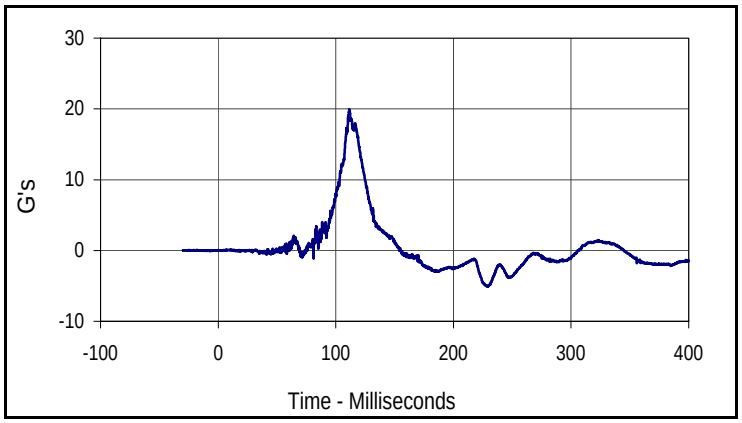
Curve Description			
(Target Vehicle) Driver Lap Belt Force			
CURNO	Type	SAE Class	Units
211	FIL	60	Newtons
Max	Time	Min	Time
5461.2	69.2	-23.8	135.6



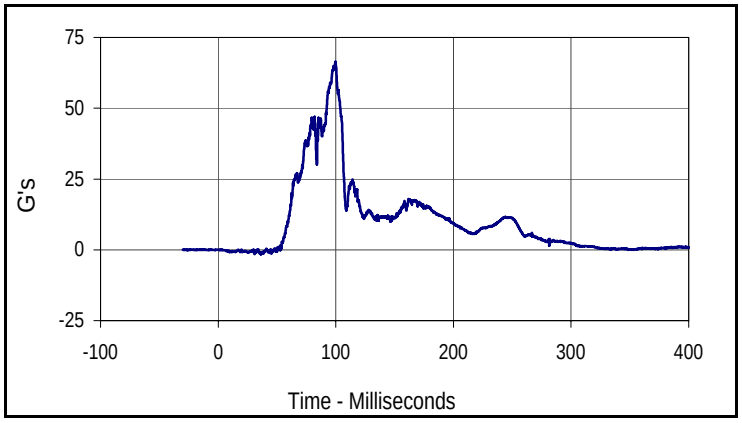
Curve Description			
(Target Vehicle) Driver Shoulder Belt Force			
CURNO	Type	SAE Class	Units
212	FIL	60	Newtons
Max	Time	Min	Time
4112.9	65.5	-51.9	19.7



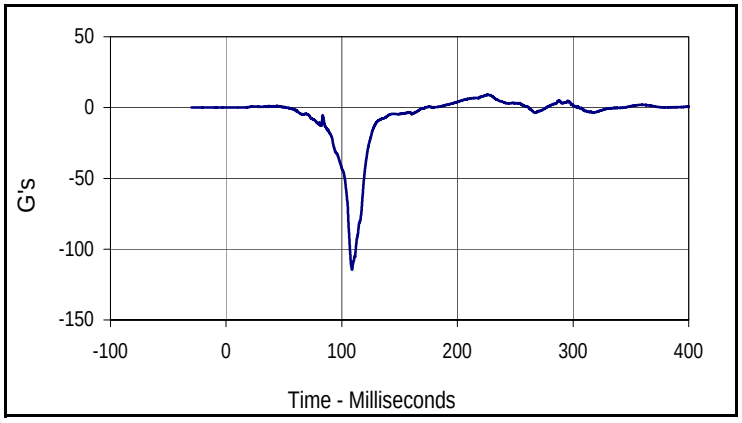
Curve Description			
(Target Vehicle) Left Rear Pass. Head CG X			
CURNO	Type	SAE Class	Units
213	FIL	1000	G's
Max	Time	Min	Time
6.0	230.7	-75.7	111.6



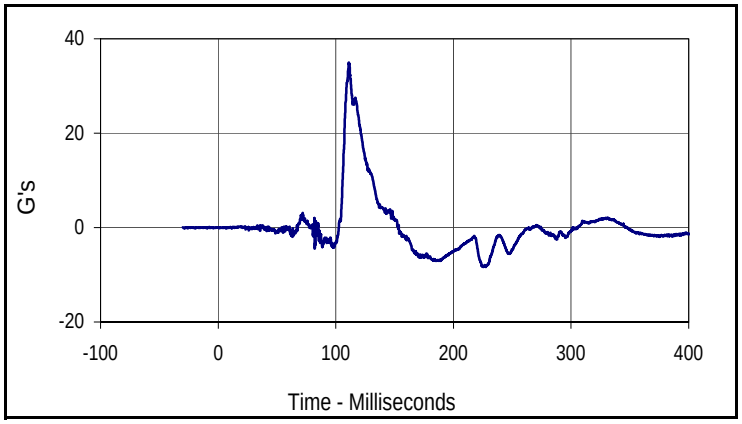
Curve Description			
(Target Vehicle) Left Rear Pass. Head CG Y			
CURNO	Type	SAE Class	Units
214	FIL	1000	G's
Max	Time	Min	Time
19.9	111.5	-5.1	229.5



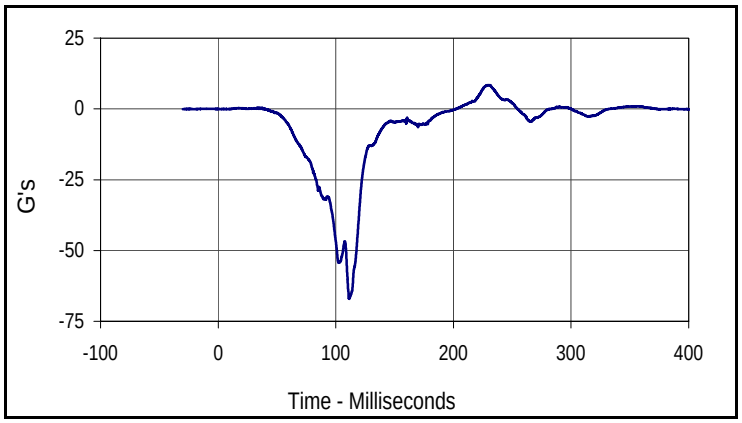
Curve Description			
(Target Vehicle) Left Rear Pass. Head CG Z			
CURNO	Type	SAE Class	Units
215	FIL	1000	G's
Max	Time	Min	Time
66.4	99.7	-1.7	36.3



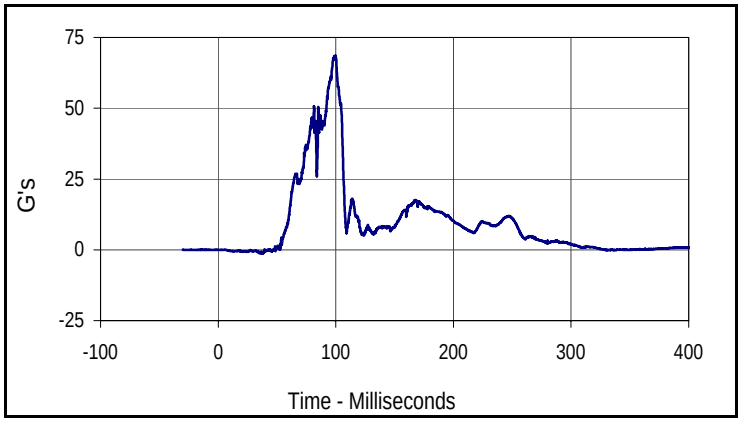
Curve Description			
(Target Vehicle) Left Rear Pass. Top Head Array X			
CURNO	Type	SAE Class	Units
216	FIL	1000	G's
Max	Time	Min	Time
9.0	226.4	-114.5	108.8



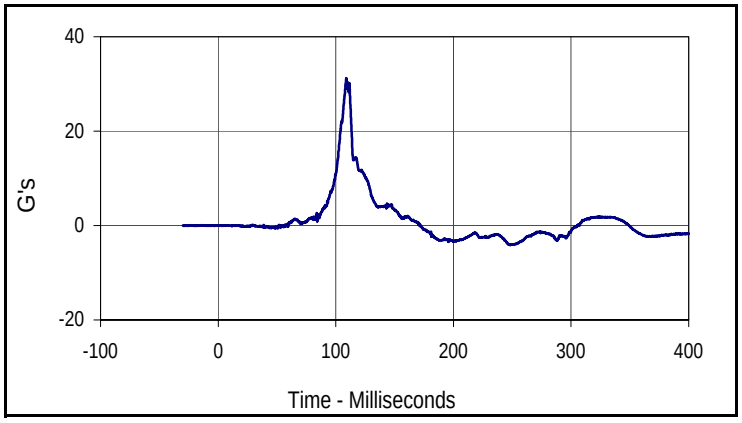
Curve Description			
(Target Vehicle) Left Rear Pass. Top Head Array Y			
CURNO	Type	SAE Class	Units
217	FIL	1000	G's
Max	Time	Min	Time
35.0	111.0	-8.3	225.5



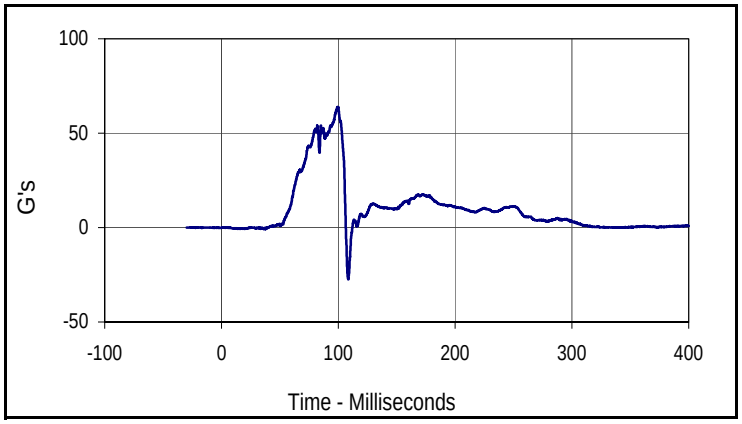
Curve Description			
(Target Vehicle) Left Rear Pass. Left Side Head Array X			
CURNO	Type	SAE Class	Units
218	FIL	1000	G's
Max	Time	Min	Time
8.4	229.6	-67.1	111.5



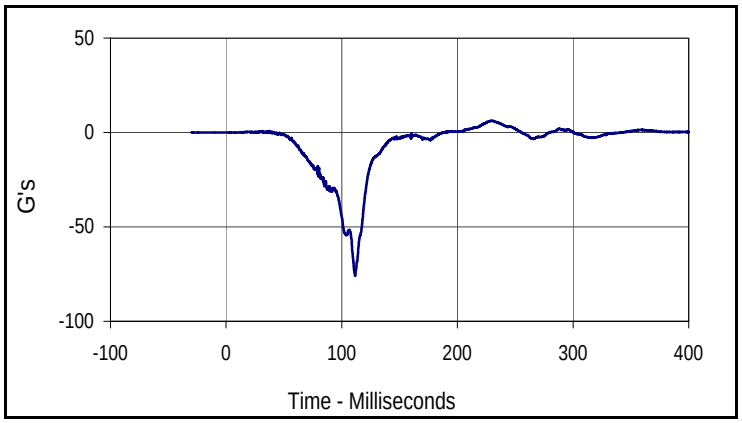
Curve Description			
(Target Vehicle) Left Rear Pass. Left Side Head Array Z			
CURNO	Type	SAE Class	Units
219	FIL	1000	G's
Max	Time	Min	Time
68.5	99.7	-1.4	37.3



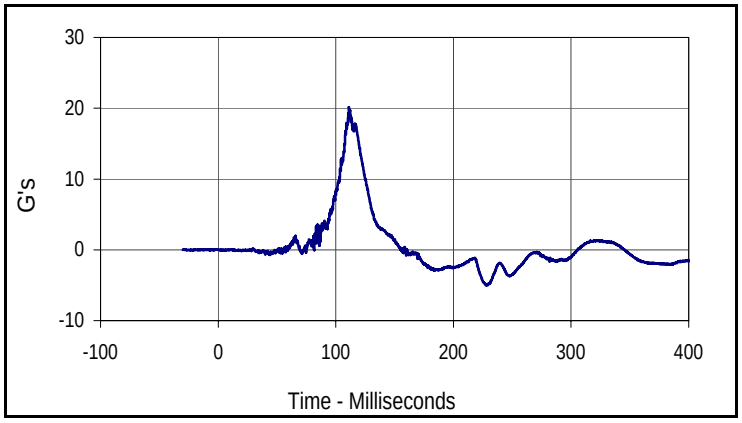
Curve Description			
(Target Vehicle) Left Rear Pass. Front Head Array Y			
CURNO	Type	SAE Class	Units
220	FIL	1000	G's
Max	Time	Min	Time
31.2	108.9	-4.1	248.3



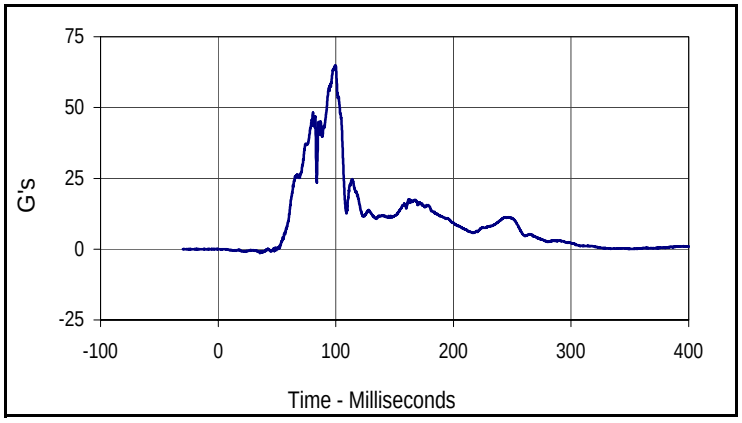
Curve Description			
(Target Vehicle) Left Rear Pass. Front Head Array Z			
CURNO	Type	SAE Class	Units
221	FIL	1000	G's
Max	Time	Min	Time
63.9	99.5	-27.4	108.6



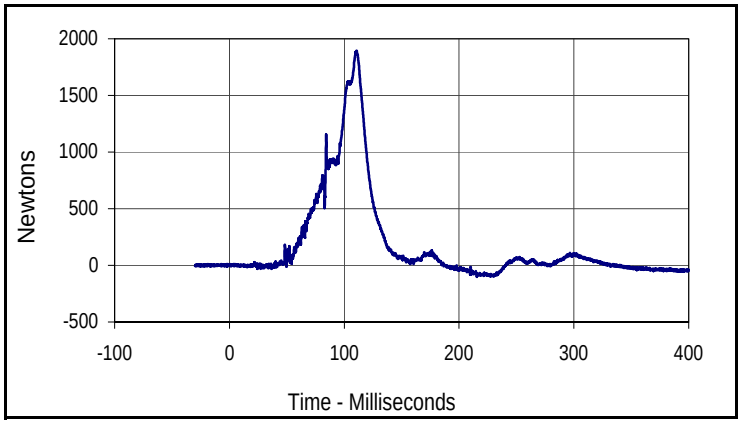
Curve Description			
(Target Vehicle) Left Rear Pass. Head CG X Redundant			
CURNO	Type	SAE Class	Units
222	FIL	1000	G's
Max	Time	Min	Time
6.2	229.3	-76.0	111.6



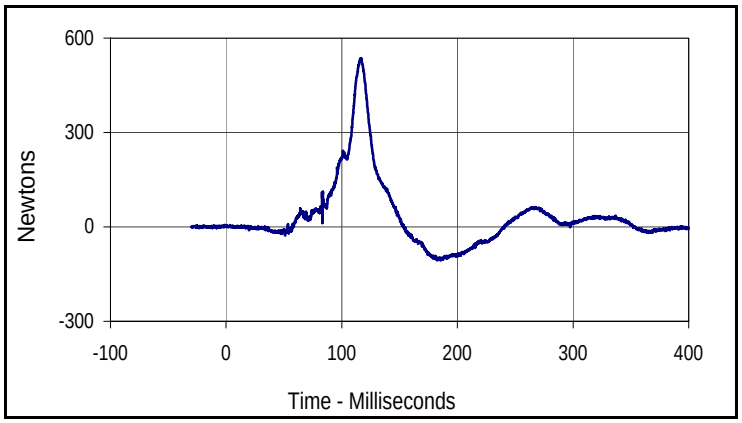
Curve Description			
(Target Vehicle) Left Rear Pass. Head CG Y Redundant			
CURNO	Type	SAE Class	Units
223	FIL	1000	G's
Max	Time	Min	Time
20.2	111.2	-5.0	228.8



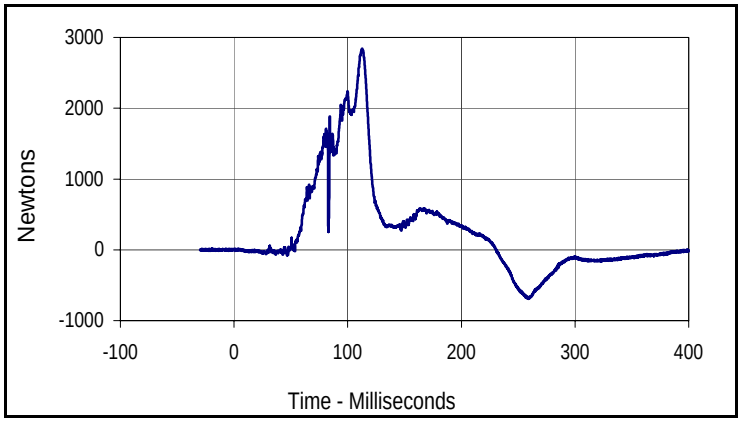
Curve Description			
(Target Vehicle) Left Rear Pass. Head CG Z Redundant			
CURNO	Type	SAE Class	Units
224	FIL	1000	G's
Max	Time	Min	Time
64.9	99.5	-1.4	35.5



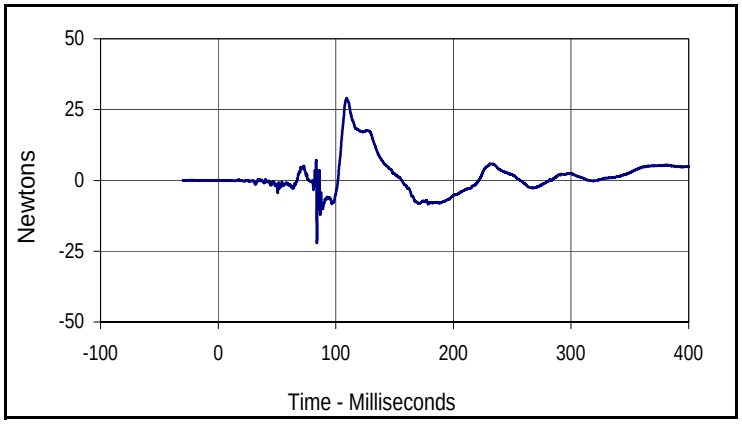
Curve Description			
(Target Vehicle) Left Rear Pass. Upper Neck Force X			
CURNO	Type	SAE Class	Units
225	FIL	1000	Newtons
Max	Time	Min	Time
1894.8	110.8	-101.0	215.5



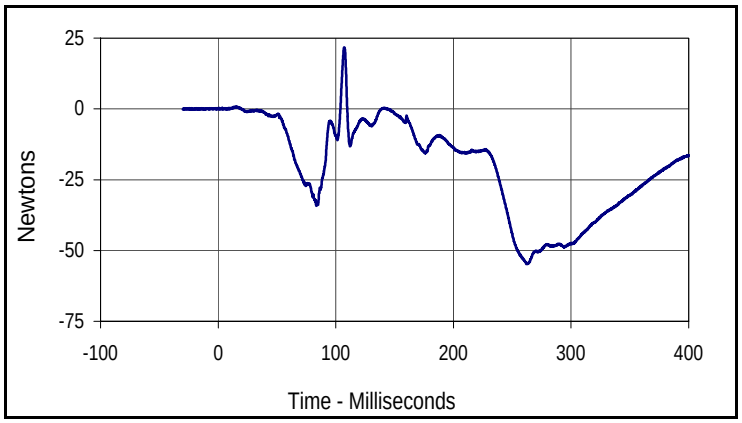
Curve Description			
(Target Vehicle) Left Rear Pass. Upper Neck Force Y			
CURNO	Type	SAE Class	Units
226	FIL	1000	Newtons
Max	Time	Min	Time
535.7	116.0	-106.4	185.5



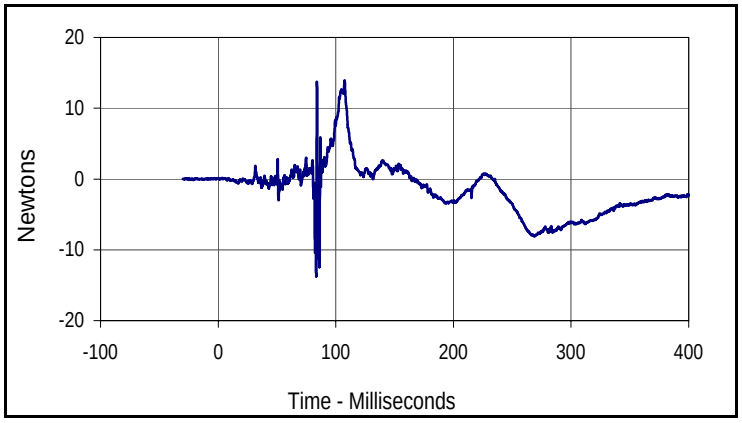
Curve Description			
(Target Vehicle) Left Rear Pass. Upper Neck Force Z			
CURNO	Type	SAE Class	Units
227	FIL	1000	Newtons
Max	Time	Min	Time
2842.6	112.6	-692.8	259.2



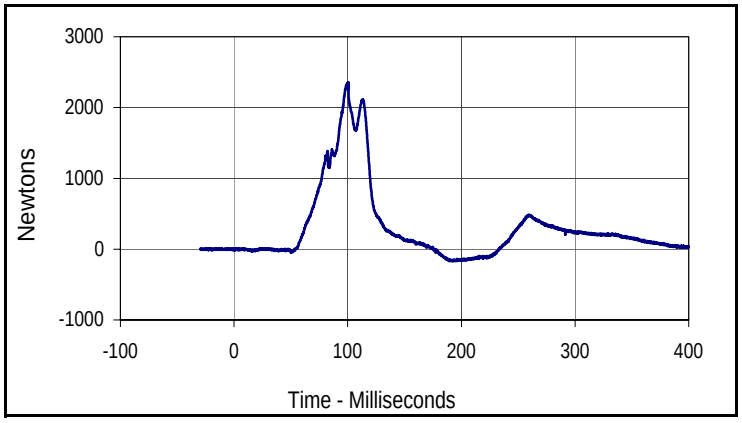
Curve Description			
(Target Vehicle) Left Rear Pass. Upper Neck Moment X			
CURNO	Type	SAE Class	Units
228	FIL	600	Newtons
Max	Time	Min	Time
29.1	109.2	-22.1	84.0



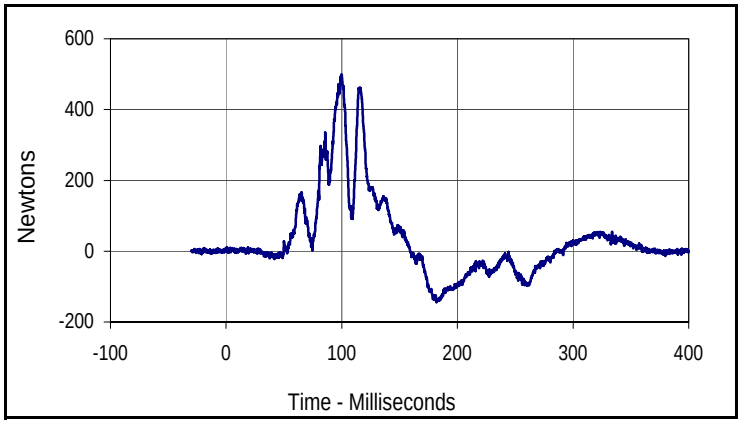
Curve Description			
(Target Vehicle) Left Rear Pass. Upper Neck Moment Y			
CURNO	Type	SAE Class	Units
229	FIL	600	Newtons
Max	Time	Min	Time
21.7	107.1	-54.8	263.0



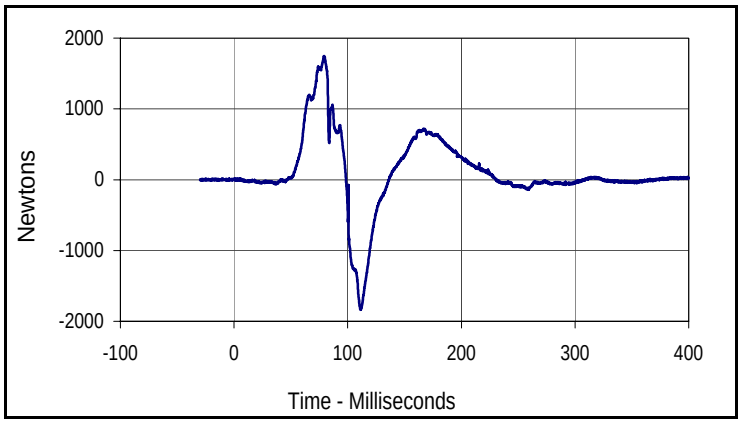
Curve Description			
(Target Vehicle) Left Rear Pass. Upper Neck Moment Z			
CURNO	Type	SAE Class	Units
230	FIL	600	Newtons
Max	Time	Min	Time
13.9	107.5	-13.7	83.3



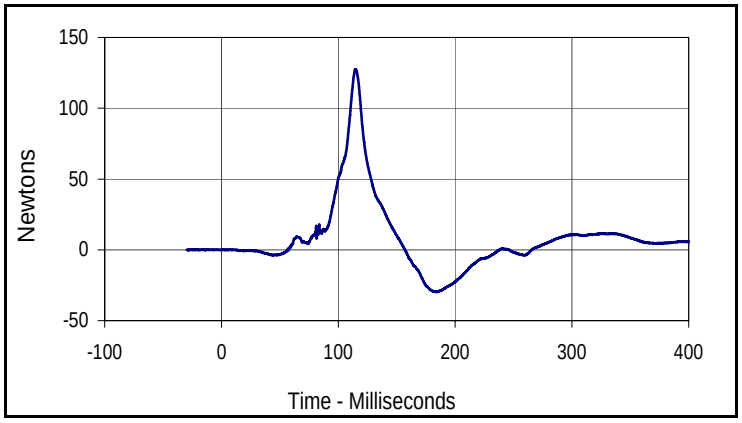
Curve Description			
(Target Vehicle) Left Rear Pass. Lower Neck Force X			
CURNO	Type	SAE Class	Units
231	FIL	1000	Newtons
Max	Time	Min	Time
2356.7	100.6	-172.1	192.0



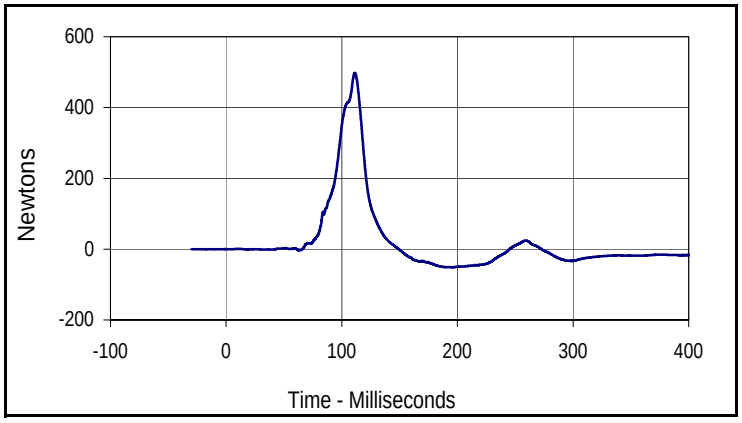
Curve Description			
(Target Vehicle) Left Rear Pass. Lower Neck Force Y			
CURNO	Type	SAE Class	Units
232	FIL	1000	Newtons
Max	Time	Min	Time
498.5	100.0	-143.7	182.0



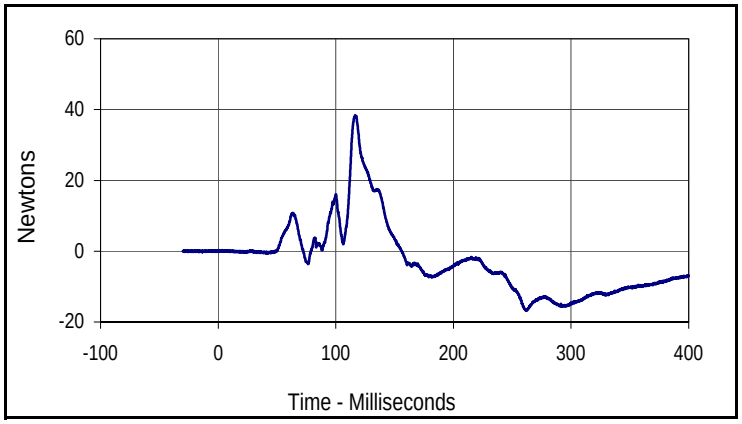
Curve Description			
(Target Vehicle) Left Rear Pass. Lower Neck Force Z			
CURNO	Type	SAE Class	Units
233	FIL	1000	Newtons
Max	Time	Min	Time
1745.0	79.2	-1839.5	111.3



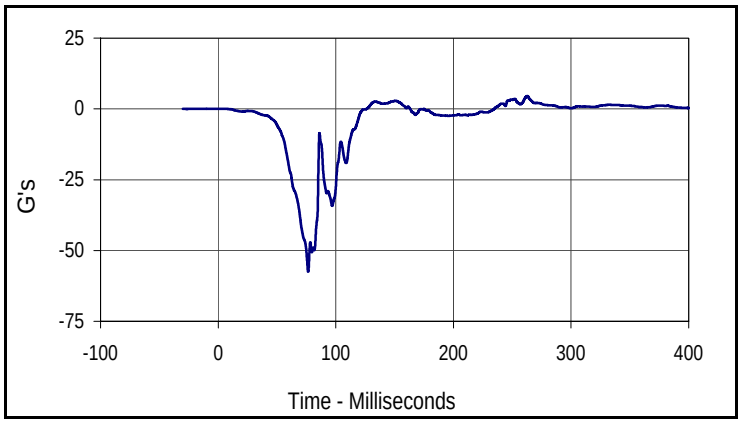
Curve Description			
(Target Vehicle) Left Rear Pass. Lower Neck Moment X			
CURNO	Type	SAE Class	Units
234	FIL	600	Newtons
Max	Time	Min	Time
127.7	114.9	-29.8	184.3



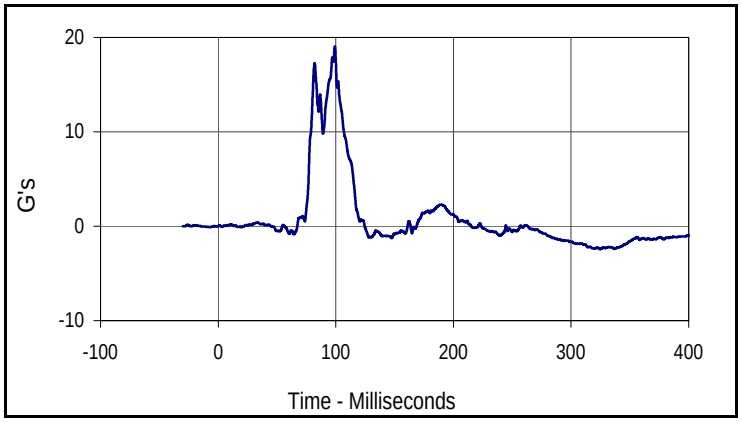
Curve Description			
(Target Vehicle) Left Rear Pass. Lower Neck Moment Y			
CURNO	Type	SAE Class	Units
235	FIL	600	Newtons
Max	Time	Min	Time
498.2	111.3	-51.9	196.2



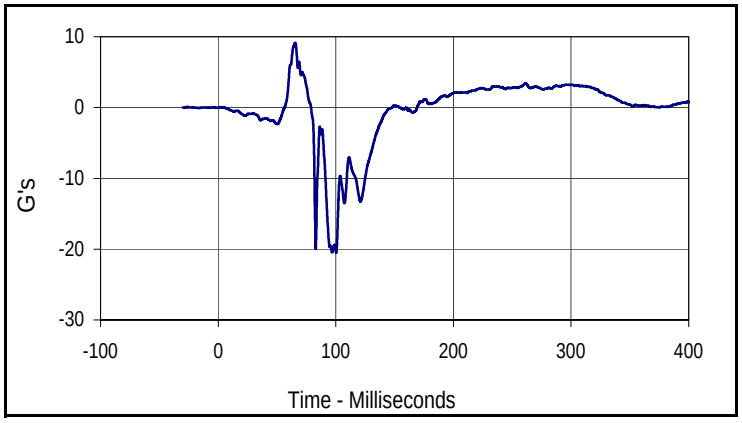
Curve Description			
(Target Vehicle) Left Rear Pass. Lower Neck Moment Z			
CURNO	Type	SAE Class	Units
236	FIL	600	Newtons
Max	Time	Min	Time
38.4	116.5	-16.9	262.0



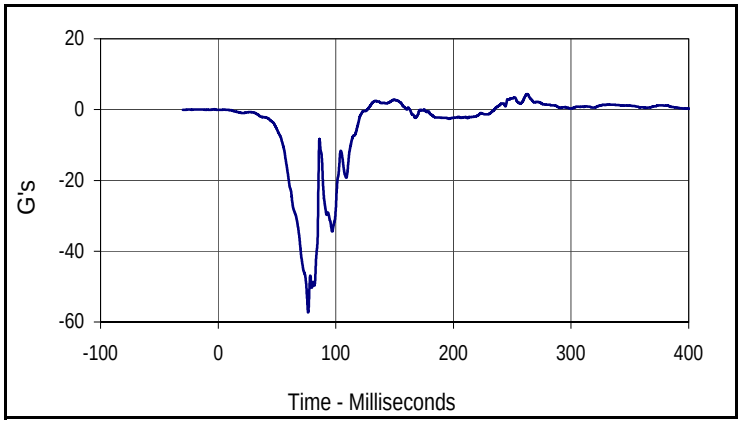
Curve Description			
(Target Vehicle) Left Rear Pass. Chest X Primary			
CURNO	Type	SAE Class	Units
237	FIL	180	G's
Max	Time	Min	Time
4.5	262.8	-57.5	76.5



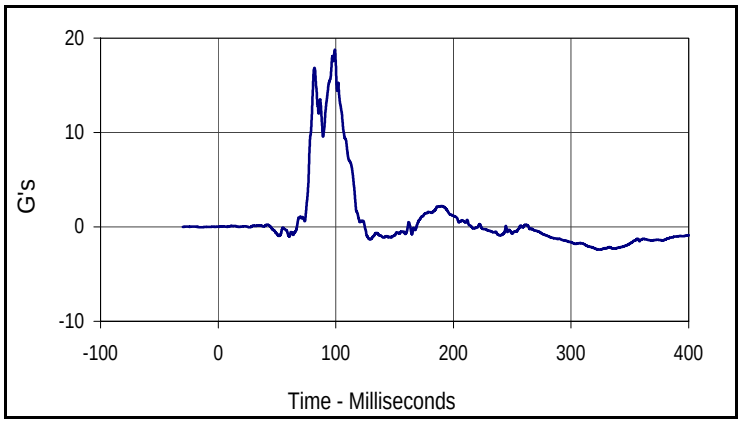
Curve Description			
(Target Vehicle) Left Rear Pass. Chest Y Primary			
CURNO	Type	SAE Class	Units
238	FIL	180	G's
Max	Time	Min	Time
19.1	99.2	-2.4	324.5



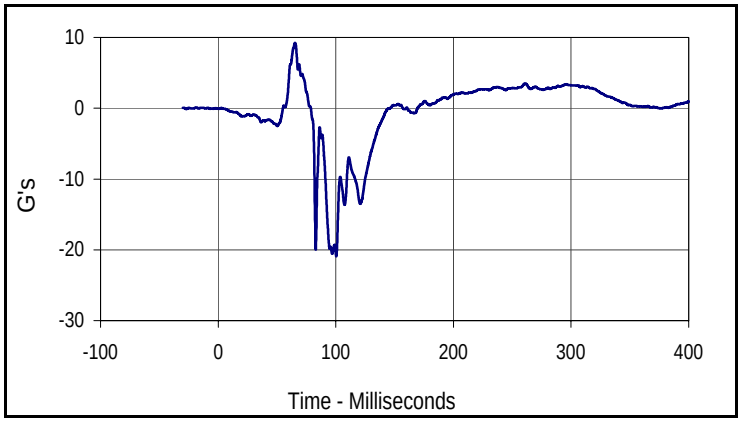
Curve Description			
(Target Vehicle) Left Rear Pass. Chest Z Primary			
CURNO	Type	SAE Class	Units
239	FIL	180	G's
Max	Time	Min	Time
9.2	65.5	-20.5	100.3



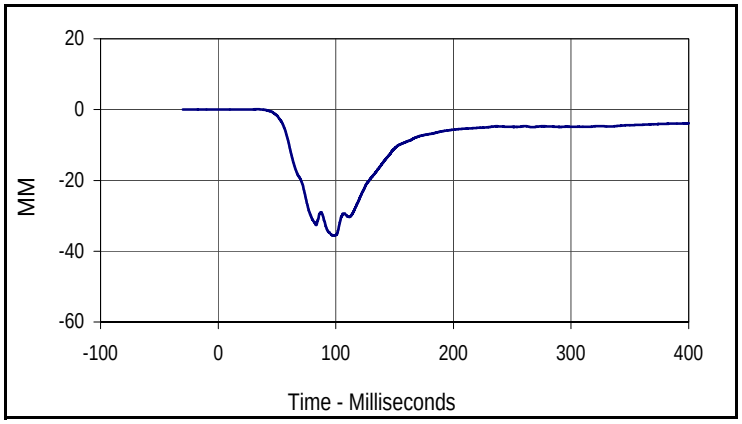
Curve Description			
(Target Vehicle) Left Rear Pass. Chest X Redundant			
CURNO	Type	SAE Class	Units
240	FIL	180	G's
Max	Time	Min	Time
4.4	262.8	-57.3	76.5



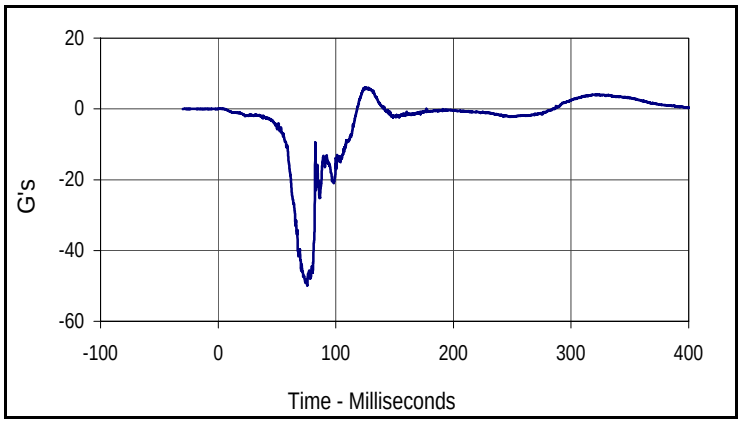
Curve Description			
(Target Vehicle) Left Rear Pass. Chest Y Redundant			
CURNO	Type	SAE Class	Units
241	FIL	180	G's
Max	Time	Min	Time
18.8	99.2	-2.4	323.4



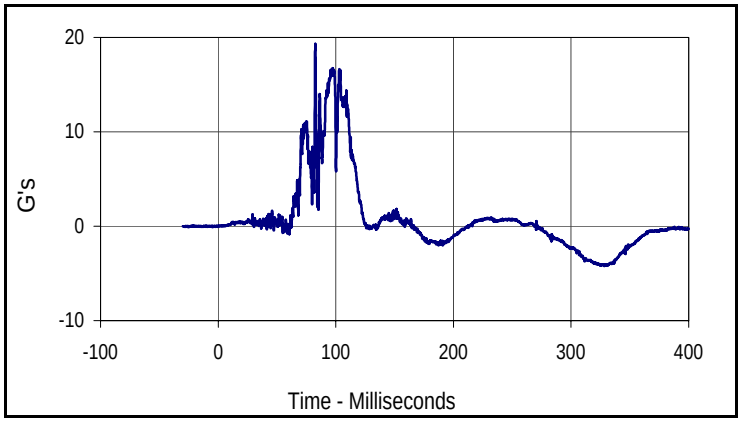
Curve Description			
(Target Vehicle) Left Rear Pass. Chest Z Redundant			
CURNO	Type	SAE Class	Units
242	FIL	180	G's
Max	Time	Min	Time
9.2	65.4	-20.9	100.4



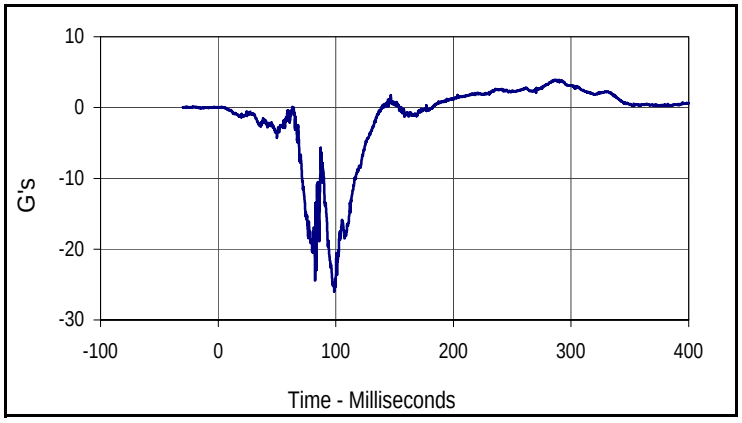
Curve Description			
(Target Vehicle) Left Rear Pass. Chest Deflection			
CURNO	Type	SAE Class	Units
243	FIL	600	MM
Max	Time	Min	Time
0.1	34.8	-35.6	97.9



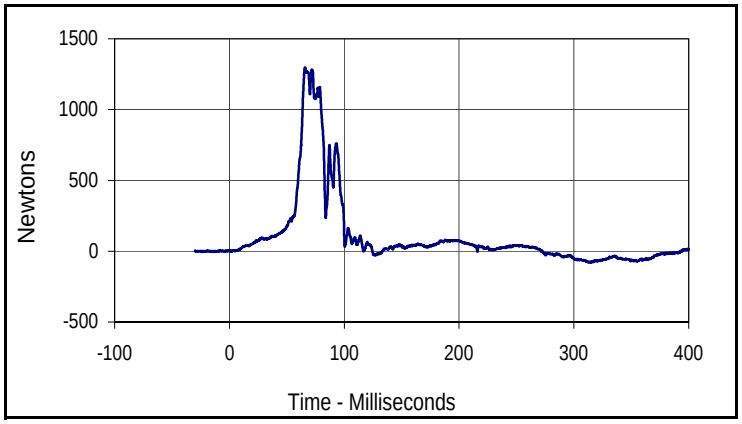
Curve Description			
(Target Vehicle) Left Rear Pass. Pelvis X			
CURNO	Type	SAE Class	Units
244	FIL	1000	G's
Max	Time	Min	Time
6.1	125.7	-49.9	75.6



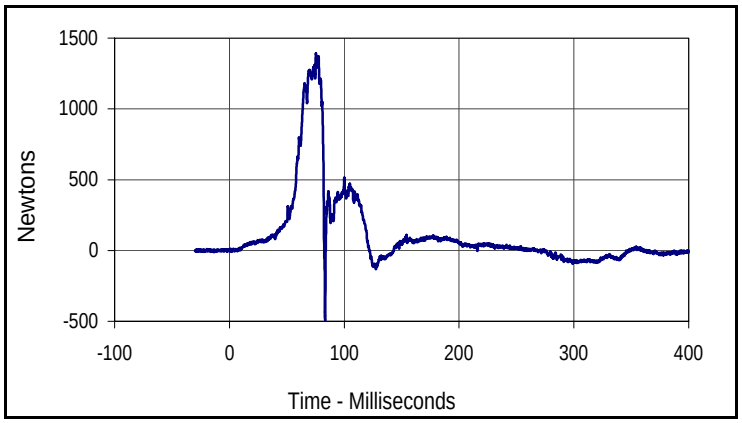
Curve Description			
(Target Vehicle) Left Rear Pass. Pelvis Y			
CURNO	Type	SAE Class	Units
245	FIL	1000	G's
Max	Time	Min	Time
19.3	82.5	-4.2	327.9



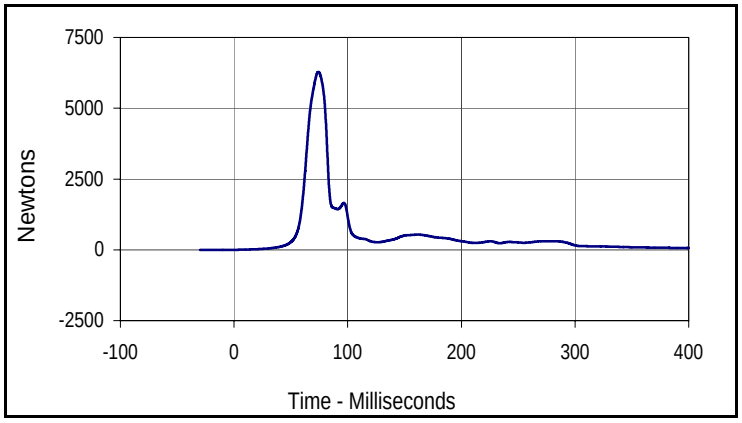
Curve Description			
(Target Vehicle) Left Rear Pass. Pelvis Z			
CURNO	Type	SAE Class	Units
246	FIL	1000	G's
Max	Time	Min	Time
3.9	286.9	-26.0	98.7



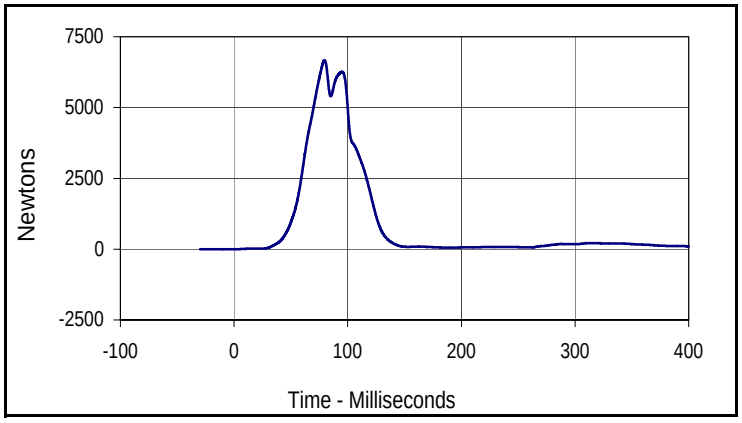
Curve Description			
(Target Vehicle) Left Rear Pass. Left Femur Force Z			
CURNO	Type	SAE Class	Units
247	FIL	600	Newtons
Max	Time	Min	Time
1296.4	66.0	-79.1	312.9



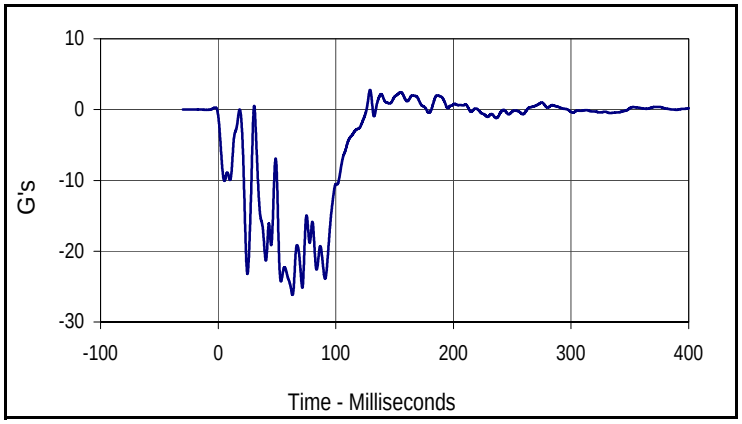
Curve Description			
(Target Vehicle) Left Rear Pass. Right Femur Force Z			
CURNO	Type	SAE Class	Units
248	FIL	600	Newtons
Max	Time	Min	Time
1391.1	75.3	-492.4	83.3



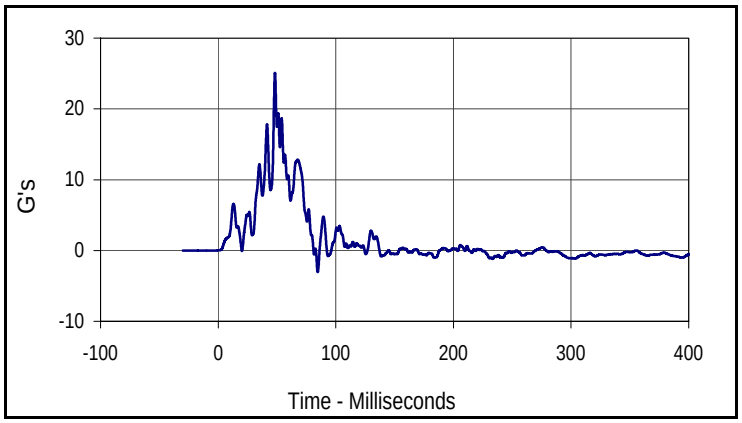
Curve Description			
(Target Vehicle) Left Rear Pass. Lap Belt Force			
CURNO	Type	SAE Class	Units
249	FIL	60	Newtons
Max	Time	Min	Time
6285.1	74.2	2.1	1.5



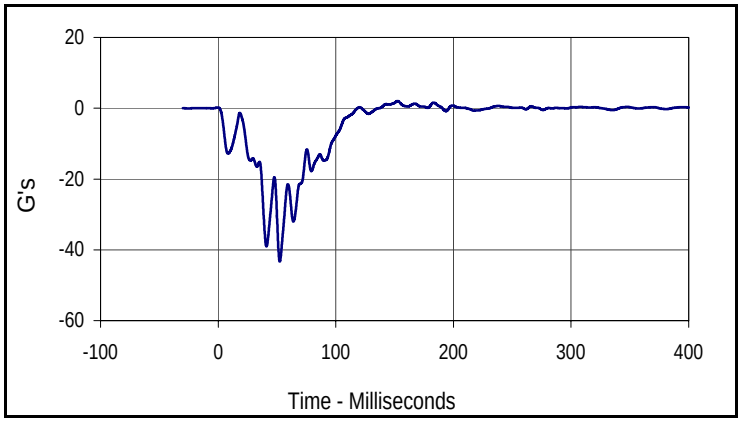
Curve Description			
(Target Vehicle) Left Rear Pass. Shoulder Belt Force			
CURNO	Type	SAE Class	Units
250	FIL	60	Newtons
Max	Time	Min	Time
6668.5	79.6	1.7	2.3



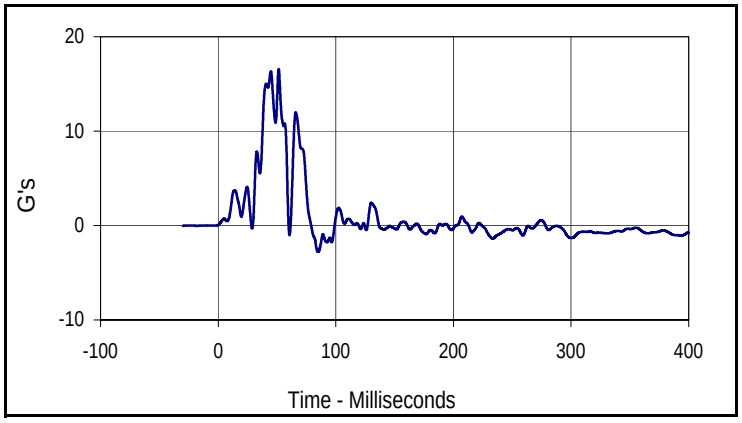
Curve Description			
Target Vehicle Left Rear Sill X			
CURNO	Type	SAE Class	Units
251	FIL	60	G's
Max	Time	Min	Time
2.8	129.2	-26.2	63.2



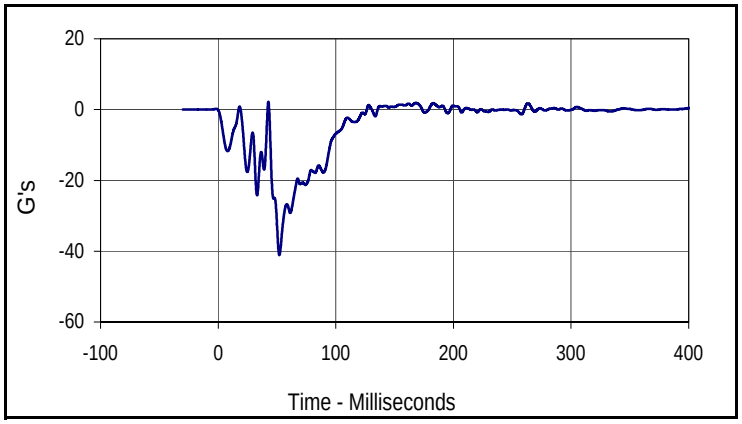
Curve Description			
Target Vehicle Left Rear Sill Y			
CURNO	Type	SAE Class	Units
252	FIL	60	G's
Max	Time	Min	Time
25.1	48.3	-3.0	84.7



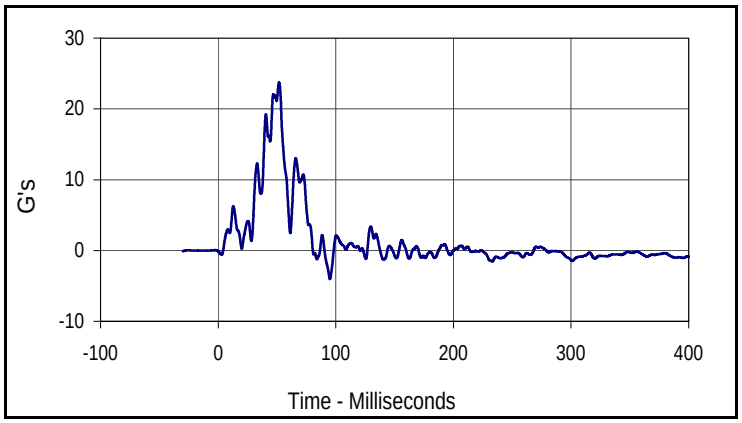
Curve Description			
Target Vehicle Right Rear Sill X			
CURNO	Type	SAE Class	Units
253	FIL	60	G's
Max	Time	Min	Time
2.0	152.5	-43.3	52.4



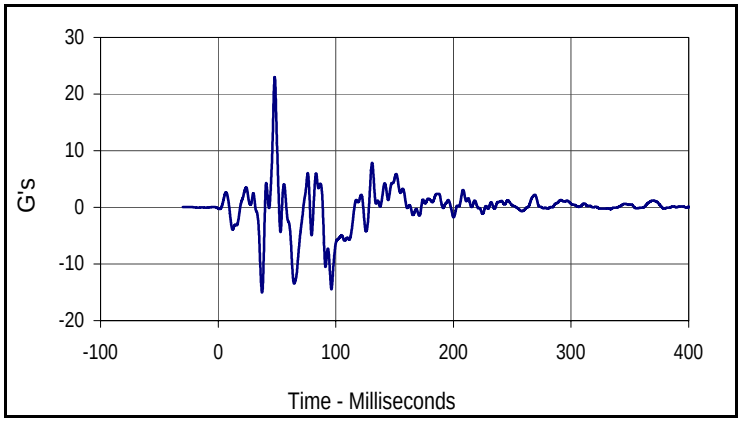
Curve Description			
Target Vehicle Right Rear Sill Y			
CURNO	Type	SAE Class	Units
254	FIL	60	G's
Max	Time	Min	Time
16.6	51.5	-2.8	85.0



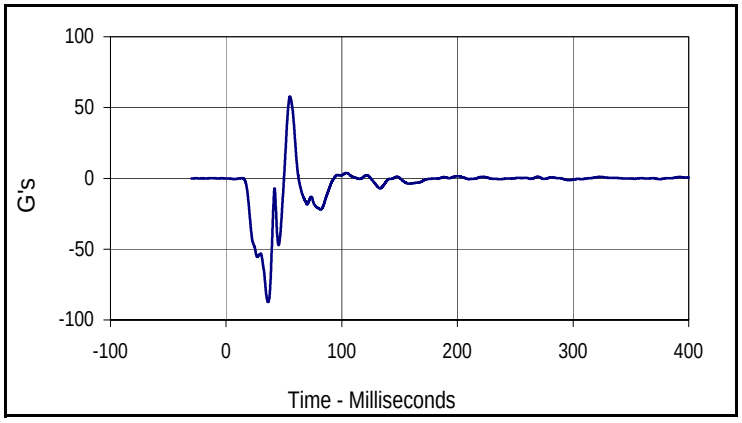
Curve Description			
Target Vehicle CG X			
CURNO	Type	SAE Class	Units
255	FIL	60	G's
Max	Time	Min	Time
2.2	42.7	-41.1	52.0



Curve Description			
Target Vehicle CG Y			
CURNO	Type	SAE Class	Units
256	FIL	60	G's
Max	Time	Min	Time
23.7	51.8	-4.0	95.0

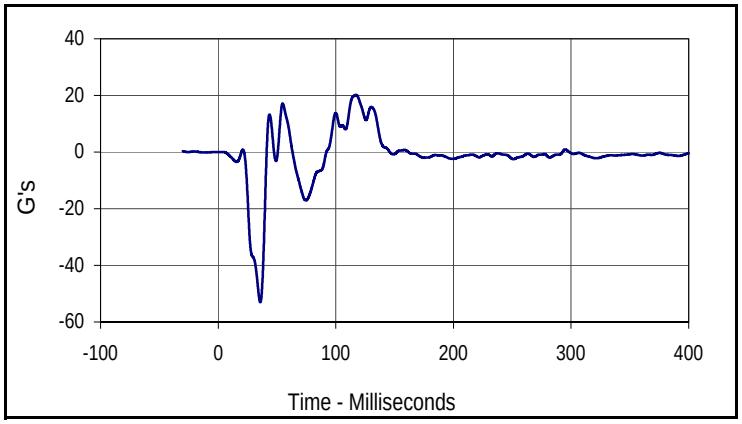


Curve Description			
Target Vehicle CG Z			
CURNO	Type	SAE Class	Units
257	FIL	60	G's
Max	Time	Min	Time
23.0	48.1	-15.0	37.3

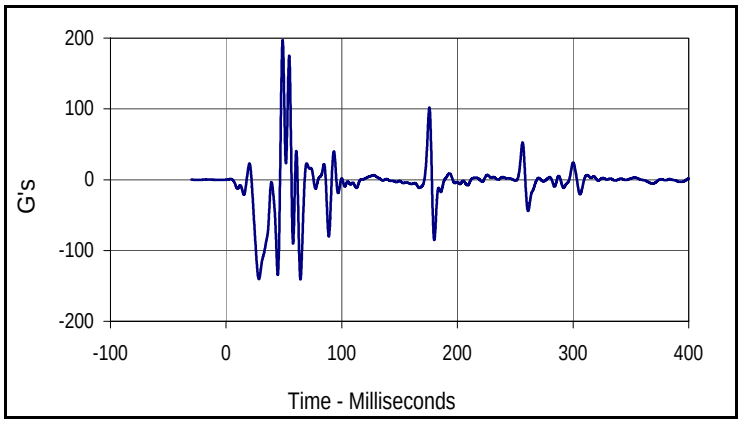


Curve Description			
Target Vehicle Engine Top X			
CURNO	Type	SAE Class	Units
258	FIL	60	G's
Max	Time	Min	Time
57.8	55.2	-87.3	36.3

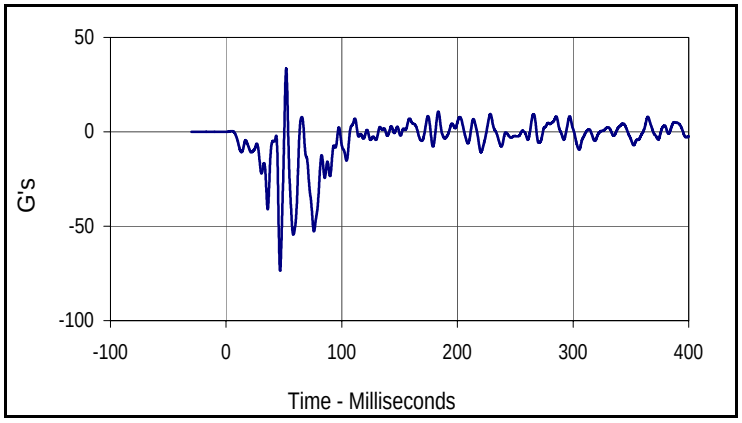
Test Vehicle:	2007 Ford 500 SEL 4-Door Sedan (Target)	NHTSA No.:	R70211
Test Program:	70 mph, 15°, 50% Offset Vehicle to Vehicle	Test Date:	1/8/10



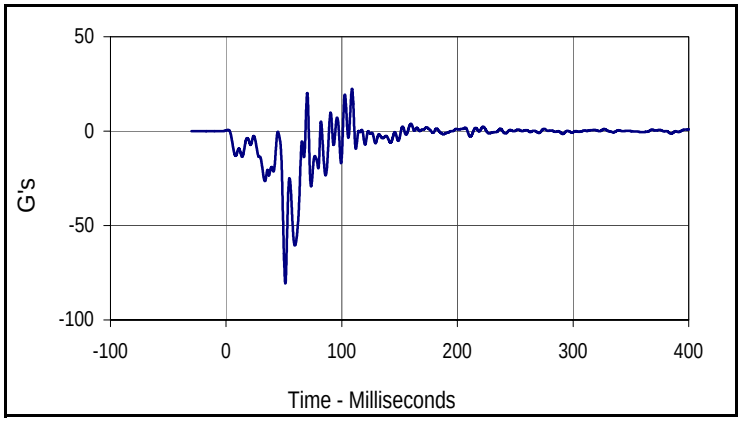
Curve Description			
Target Vehicle Engine Bottom X			
CURNO	Type	SAE Class	Units
259	FIL	60	G's
Max	Time	Min	Time
20.2	117.3	-53.0	35.8



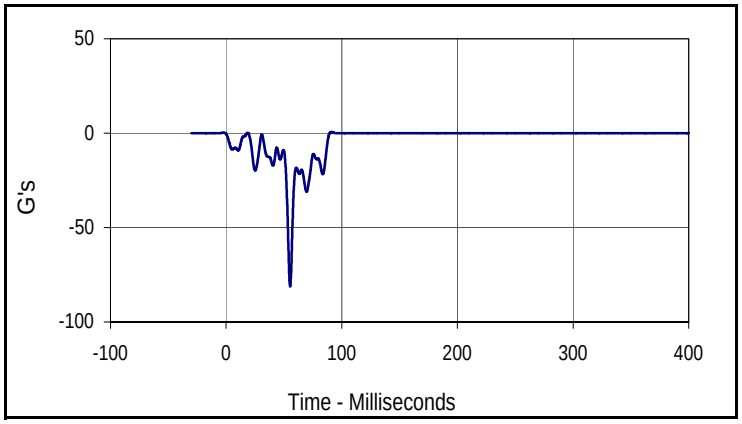
Curve Description			
Target Vehicle Left Brake Caliper X			
CURNO	Type	SAE Class	Units
260	FIL	60	G's
Max	Time	Min	Time
197.1	48.9	-140.6	64.3



Curve Description			
Target Vehicle Right Brake Caliper X			
CURNO	Type	SAE Class	Units
261	FIL	60	G's
Max	Time	Min	Time
33.6	52.0	-73.6	46.7

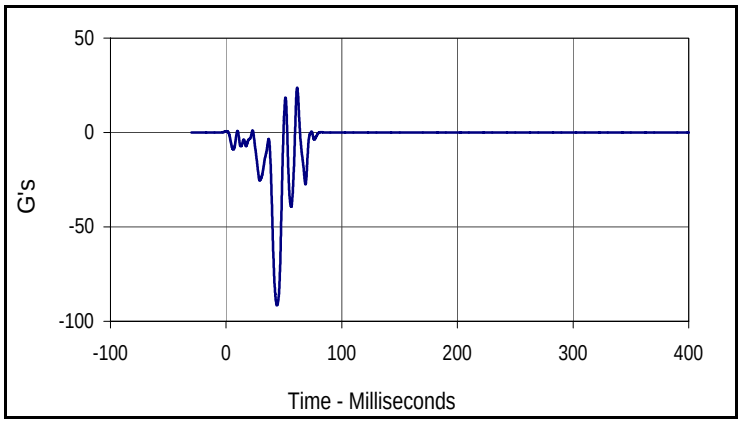


Curve Description			
Target Vehicle Instrument Panel X			
CURNO	Type	SAE Class	Units
262	FIL	60	G's
Max	Time	Min	Time
22.3	108.9	-80.6	51.2



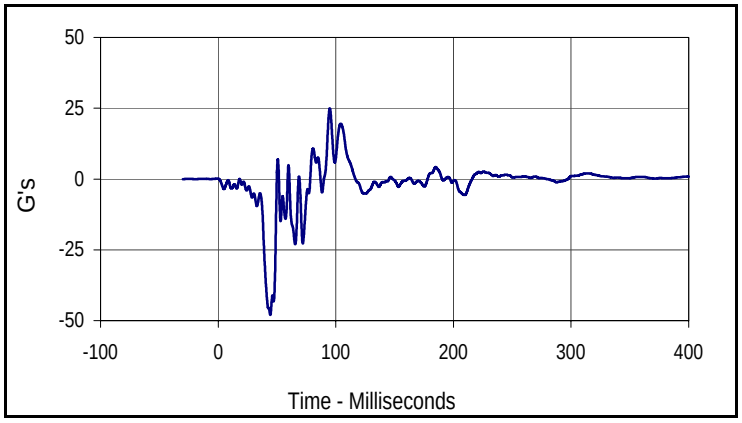
Curve Description			
Target Vehicle Driver Mid Seat Track X			
CURNO	Type	SAE Class	Units
263	FIL	60	G's
Max	Time	Min	Time
0.7	90.9	-81.1	55.4

* Channel failed at 87.5 msec.

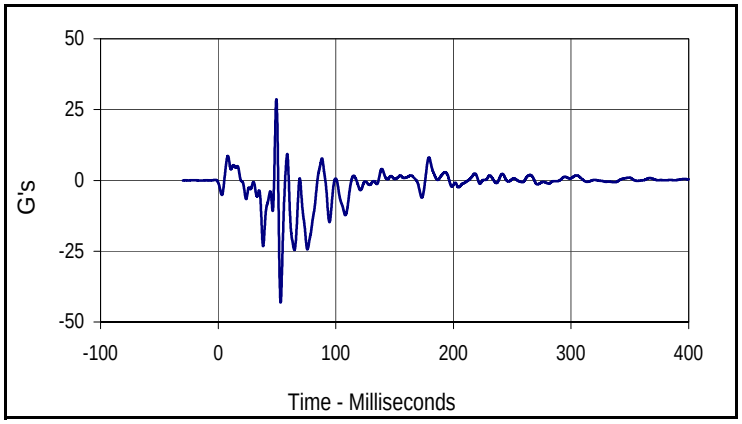


Curve Description			
Target Vehicle Accelerator Pedal X			
CURNO	Type	SAE Class	Units
264	FIL	60	G's
Max	Time	Min	Time
23.7	61.5	-91.5	44.0

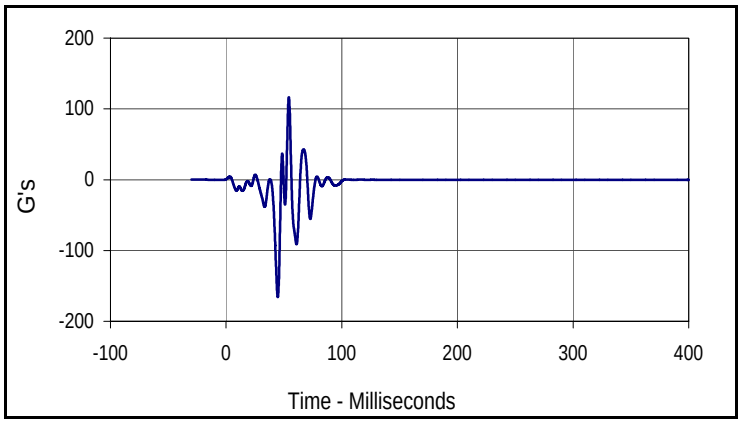
* Channel failed at 76.5 msec.



Curve Description			
Target Vehicle Accelerator Pedal Y			
CURNO	Type	SAE Class	Units
265	FIL	60	G's
Max	Time	Min	Time
24.9	94.9	-48.0	44.3

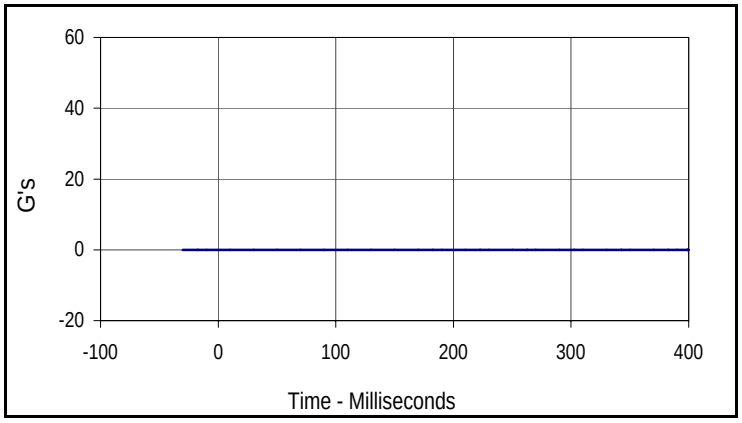


Curve Description			
Target Vehicle Accelerator Pedal Z			
CURNO	Type	SAE Class	Units
266	FIL	60	G's
Max	Time	Min	Time
28.6	49.5	-43.1	53.1



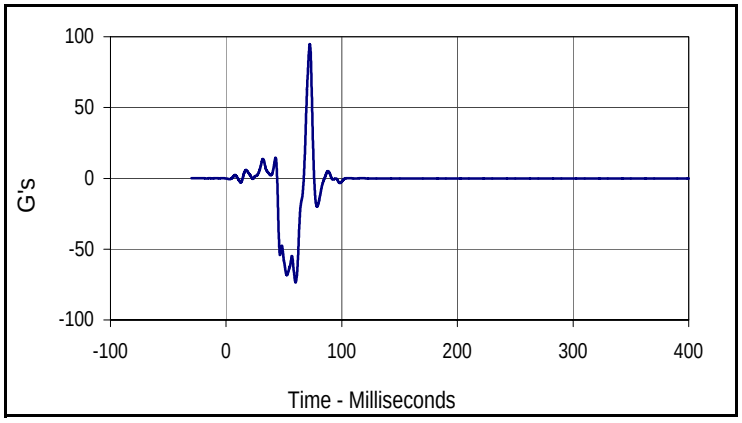
Curve Description			
Target Vehicle Brake Pedal X			
CURNO	Type	SAE Class	Units
267	FIL	60	G's
Max	Time	Min	Time
116.3	54.3	-165.7	44.7

* Channel failed at 100.5 msec.



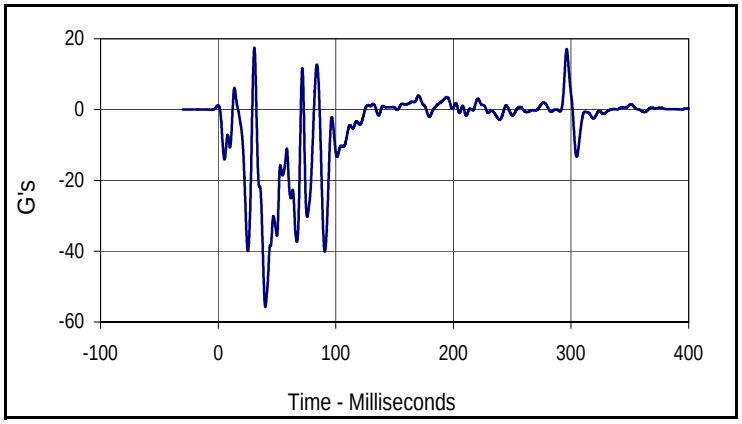
Curve Description			
Target Vehicle Brake Pedal Y			
CURNO	Type	SAE Class	Units
268	FIL	60	G's
Max	Time	Min	Time
0.0	0.0	0.0	0.0

* Channel failed, no data

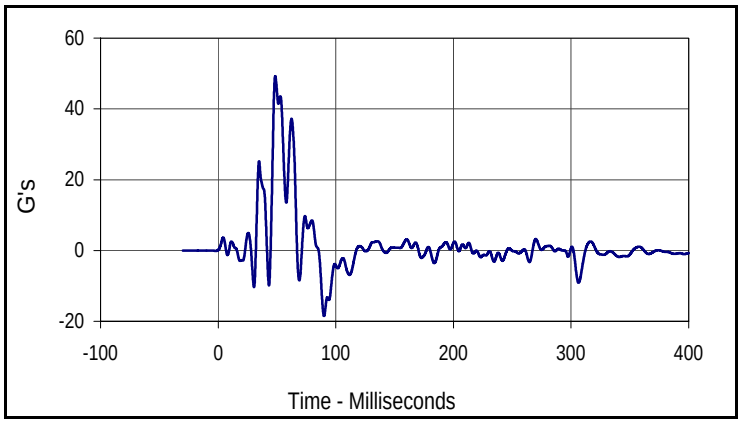


Curve Description			
Target Vehicle Brake Pedal Z			
CURNO	Type	SAE Class	Units
269	FIL	60	G's
Max	Time	Min	Time
94.7	72.4	-73.5	60.1

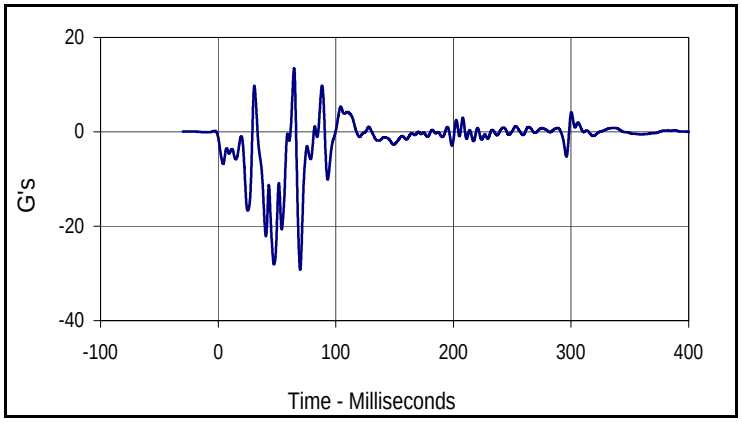
* Channel failed at 101.0 msec.



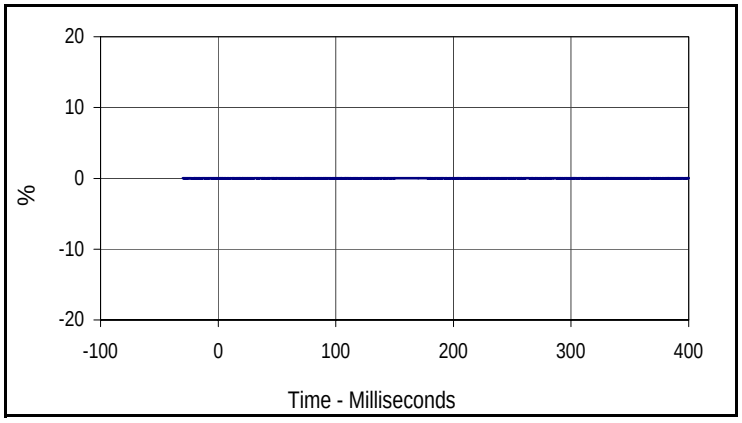
Curve Description			
Target Vehicle Foot Rest X			
CURNO	Type	SAE Class	Units
270	FIL	60	G's
Max	Time	Min	Time
17.5	30.8	-55.8	40.1



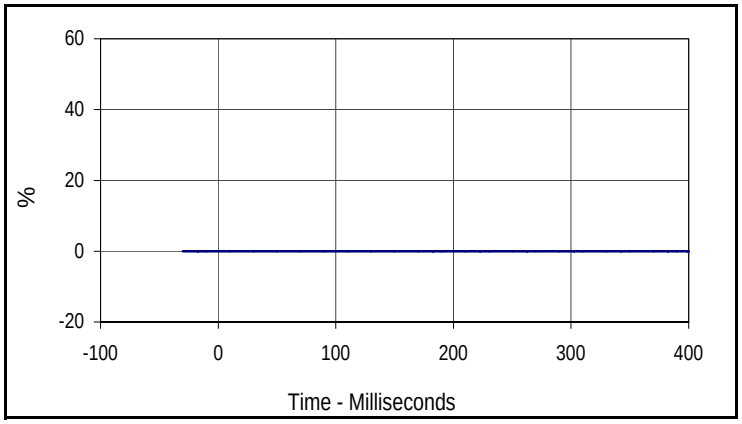
Curve Description			
Target Vehicle Foot Rest Y			
CURNO	Type	SAE Class	Units
271	FIL	60	G's
Max	Time	Min	Time
49.2	48.5	-18.4	90.0



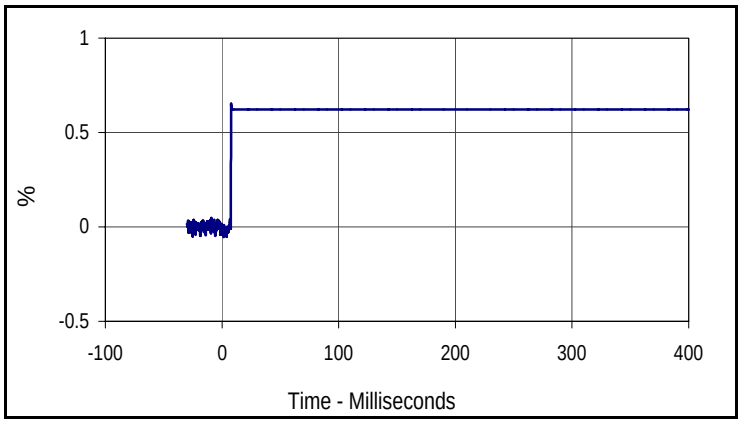
Curve Description			
Target Vehicle Foot Rest Z			
CURNO	Type	SAE Class	Units
272	FIL	60	G's
Max	Time	Min	Time
13.4	64.6	-29.2	69.7



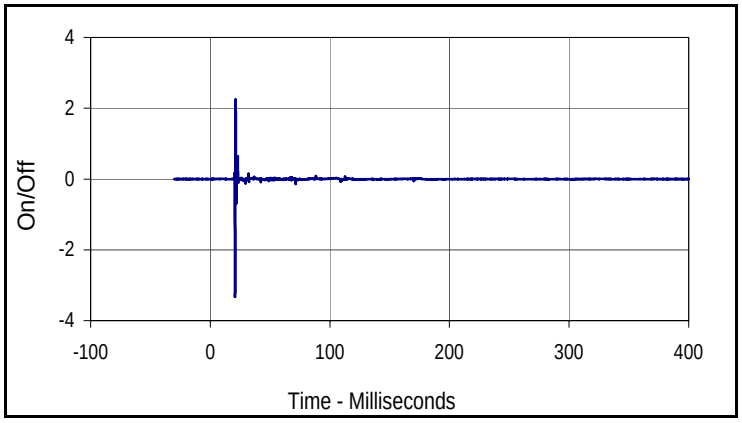
Curve Description			
(Target Vehicle) Driver Foot Rest Contact			
CURNO	Type	SAE Class	Units
273	FIL	1000	%
Max	Time	Min	Time
0.0	150.3	0.0	264.6



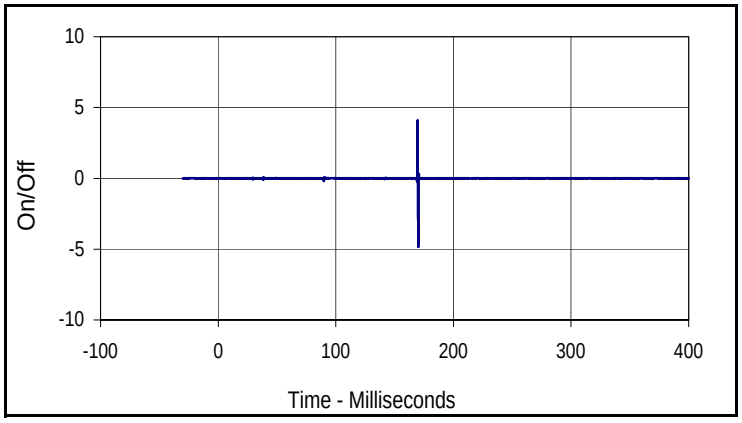
Curve Description			
(Target Vehicle) Driver Accelerator Contact			
CURNO	Type	SAE Class	Units
274	FIL	1000	%
Max	Time	Min	Time
0.0	0.0	0.0	0.0



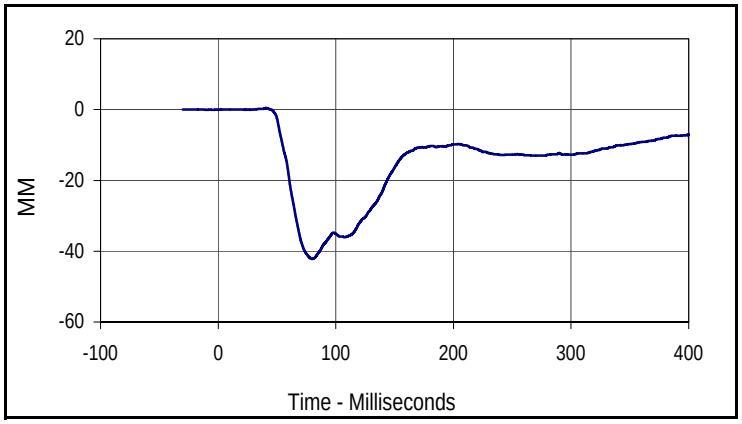
Curve Description			
(Target Vehicle) Driver Knee Contact			
CURNO	Type	SAE Class	Units
275	FIL	1000	%
Max	Time	Min	Time
0.7	7.9	-0.1	1.4



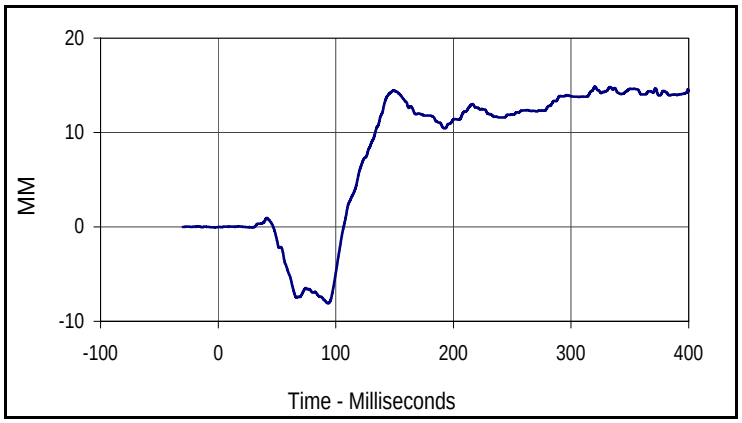
Curve Description			
(Target Vehicle) Driver Front Airbag Squib Stage 1			
CURNO	Type	SAE Class	Units
276	FIL	1000	On/Off
Max	Time	Min	Time
2.2	21.3	-3.3	20.7



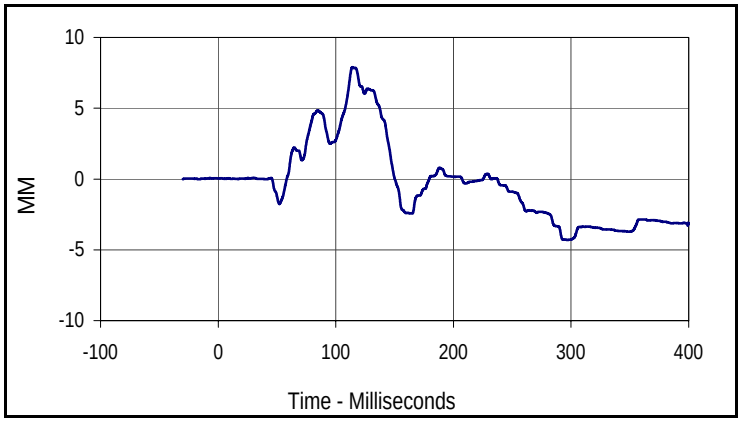
Curve Description			
(Target Vehicle) Driver Front Airbag Squib Stage 2			
CURNO	Type	SAE Class	Units
277	FIL	1000	On/Off
Max	Time	Min	Time
4.1	169.5	-4.8	170.1



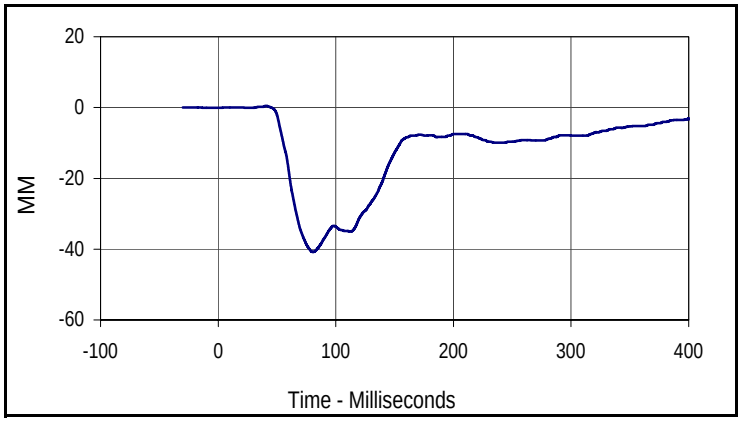
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Upper Right X			
CURNO	Type	SAE Class	Units
278	CALC	N/A	MM
Max	Time	Min	Time
0.5	40.5	-42.2	79.4



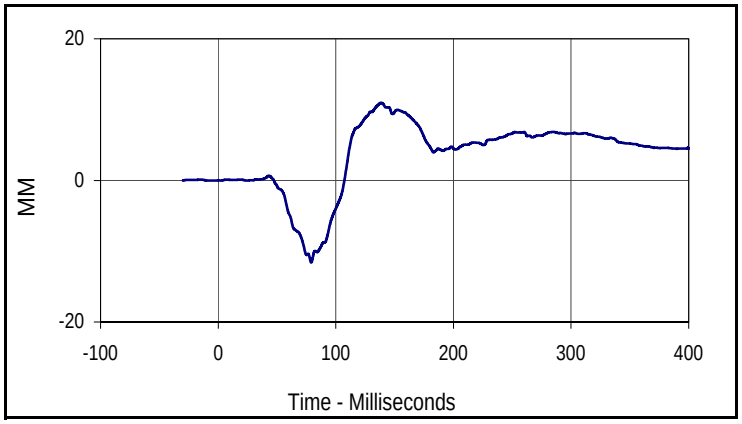
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Upper Right Y			
CURNO	Type	SAE Class	Units
279	CALC	N/A	MM
Max	Time	Min	Time
14.9	320.2	-8.1	93.1



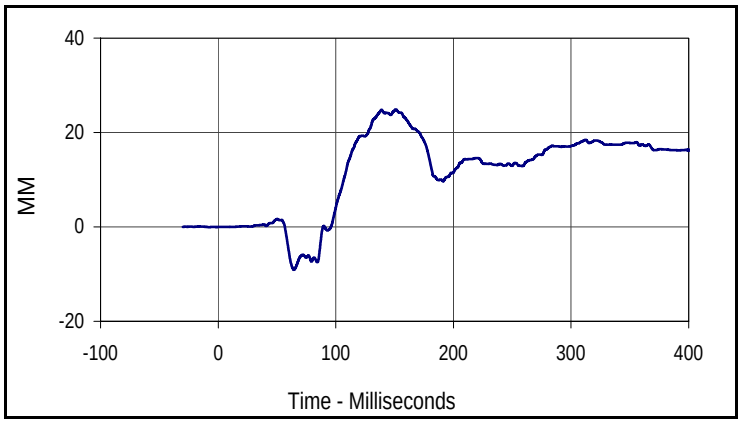
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Upper Right Z			
CURNO	Type	SAE Class	Units
280	CALC	N/A	MM
Max	Time	Min	Time
7.9	113.9	-4.3	296.2



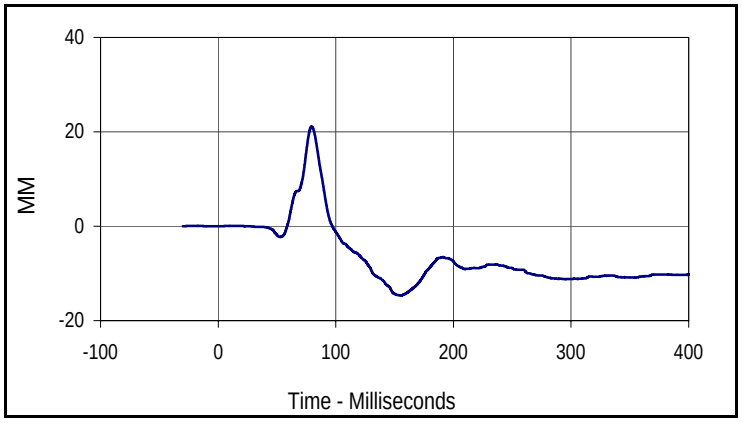
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Upper Right D			
CURNO	Type	SAE Class	Units
281	CALC	N/A	MM
Max	Time	Min	Time
0.5	40.6	-40.8	80.3



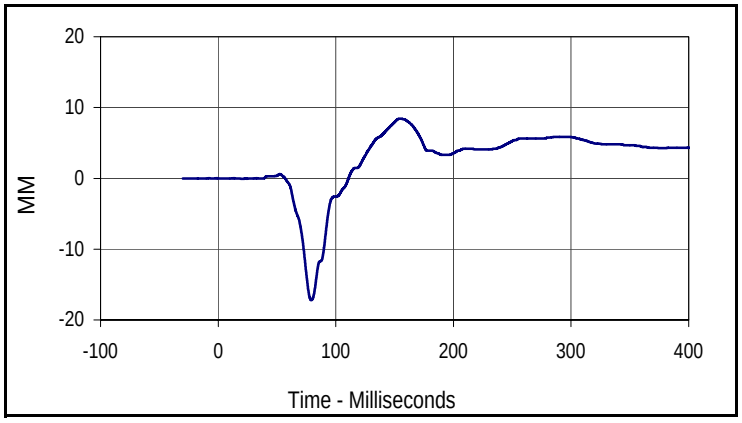
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Lower Right X			
CURNO	Type	SAE Class	Units
282	CALC	N/A	MM
Max	Time	Min	Time
11.0	138.4	-11.6	79.1



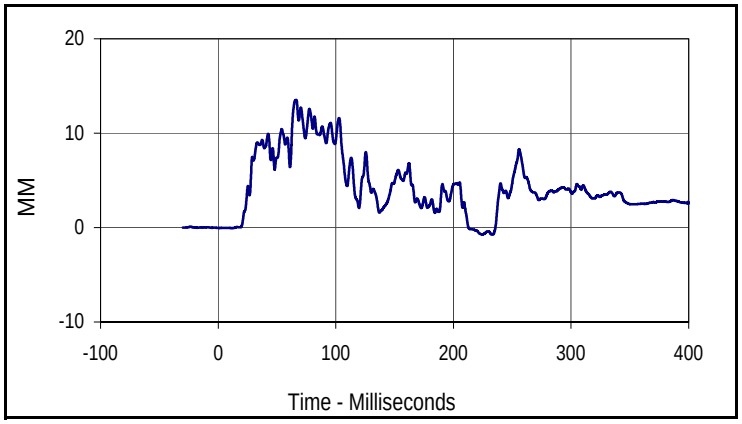
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Lower Right Y			
CURNO	Type	SAE Class	Units
283	CALC	N/A	MM
Max	Time	Min	Time
24.9	151.1	-9.1	64.3



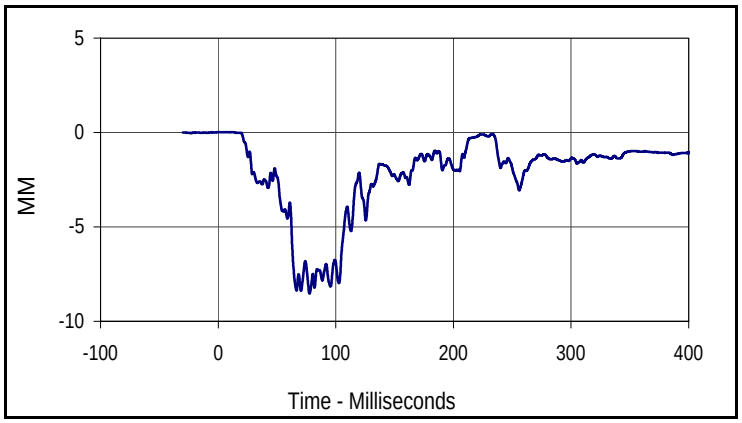
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Lower Right Z			
CURNO	Type	SAE Class	Units
284	CALC	N/A	MM
Max	Time	Min	Time
21.1	79.4	-14.7	155.1



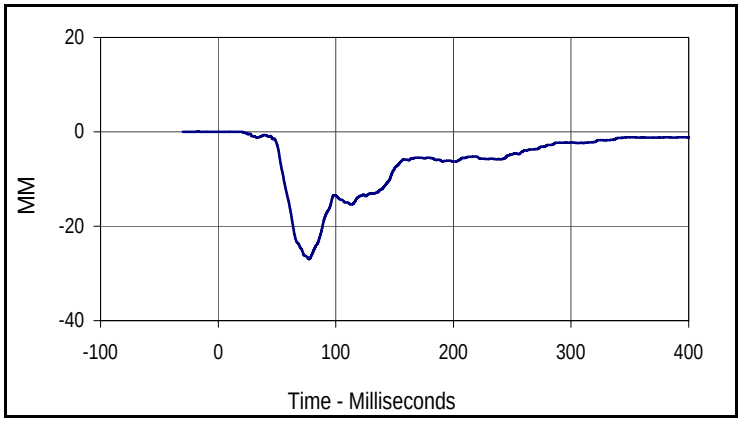
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Lower Right D			
CURNO	Type	SAE Class	Units
285	CALC	N/A	MM
Max	Time	Min	Time
8.4	153.9	-17.2	79.0



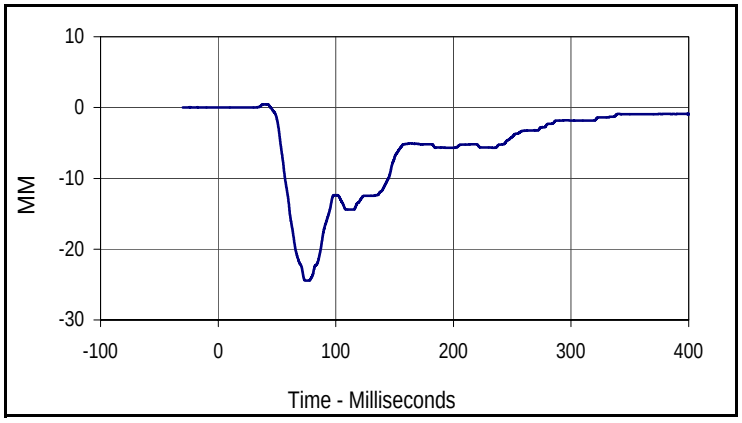
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Upper Left X			
CURNO	Type	SAE Class	Units
286	CALC	N/A	MM
Max	Time	Min	Time
13.5	66.3	-0.8	232.9



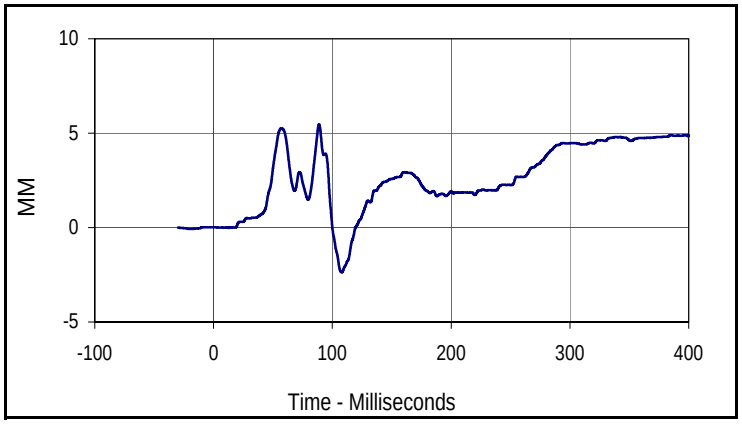
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Upper Left Y			
CURNO	Type	SAE Class	Units
287	CALC	N/A	MM
Max	Time	Min	Time
0.0	11.6	-8.5	77.6



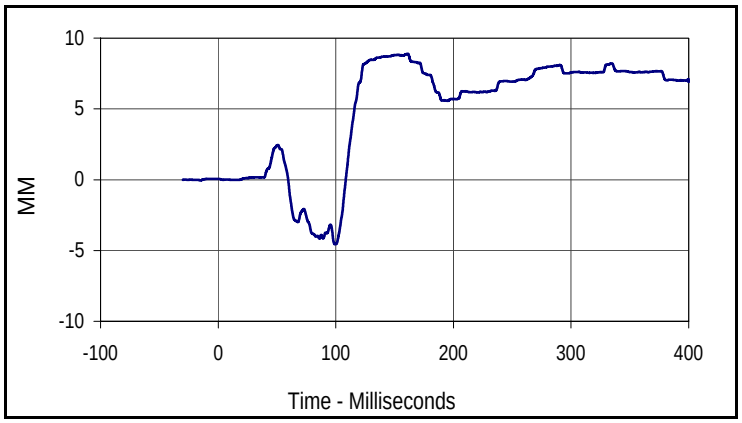
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Upper Left Z			
CURNO	Type	SAE Class	Units
288	CALC	N/A	MM
Max	Time	Min	Time
0.0	4.5	-27.0	77.3



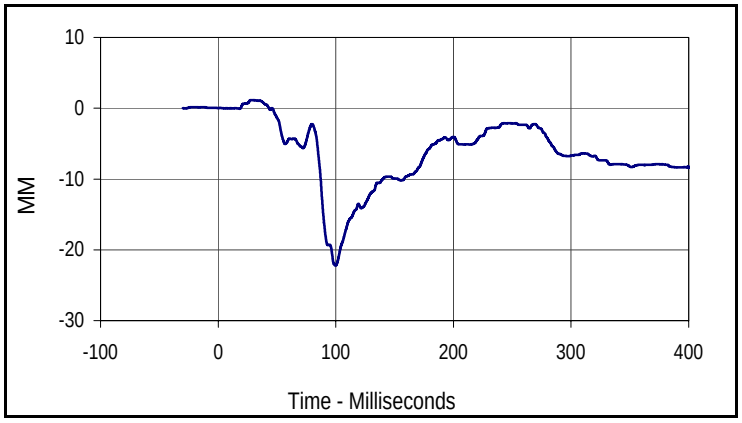
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Upper Left D			
CURNO	Type	SAE Class	Units
289	CALC	N/A	MM
Max	Time	Min	Time
0.5	38.4	-24.5	76.9



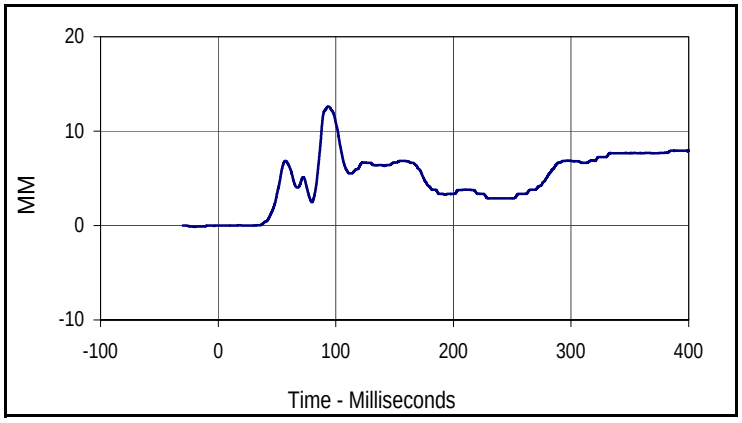
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Lower Left X			
CURNO	Type	SAE Class	Units
290	CALC	N/A	MM
Max	Time	Min	Time
5.5	88.8	-2.4	107.8



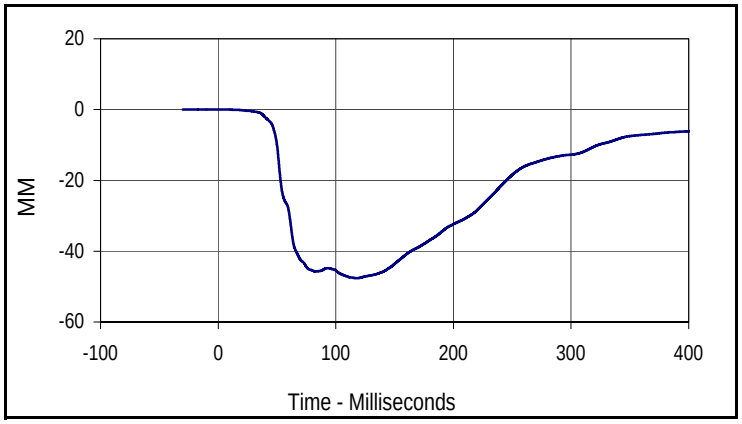
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Lower Left Y			
CURNO	Type	SAE Class	Units
291	CALC	N/A	MM
Max	Time	Min	Time
8.9	160.6	-4.6	99.1



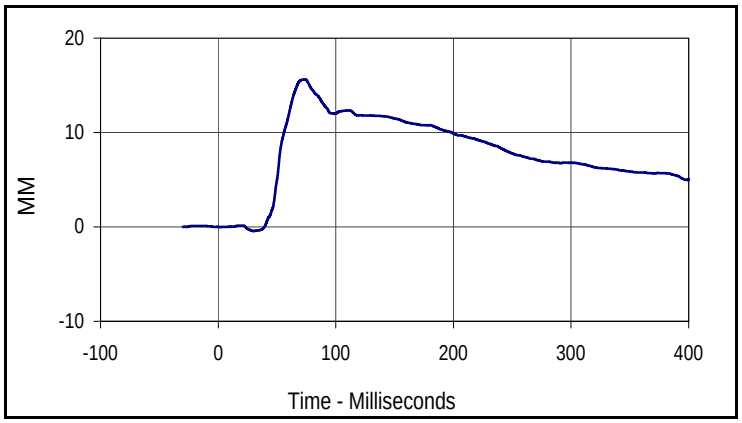
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Lower Left Z			
CURNO	Type	SAE Class	Units
292	CALC	N/A	MM
Max	Time	Min	Time
1.2	27.8	-22.2	99.8



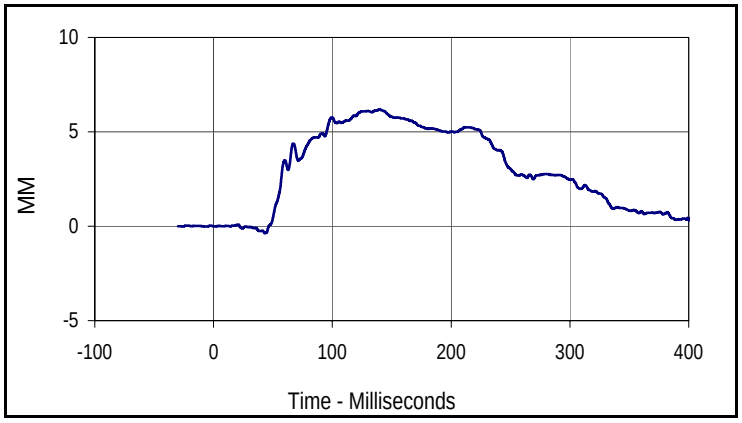
Curve Description			
(Bullet Vehicle) Driver THOR CRUX Lower Left D			
CURNO	Type	SAE Class	Units
293	CALC	N/A	MM
Max	Time	Min	Time
12.6	93.4	0.0	0.7



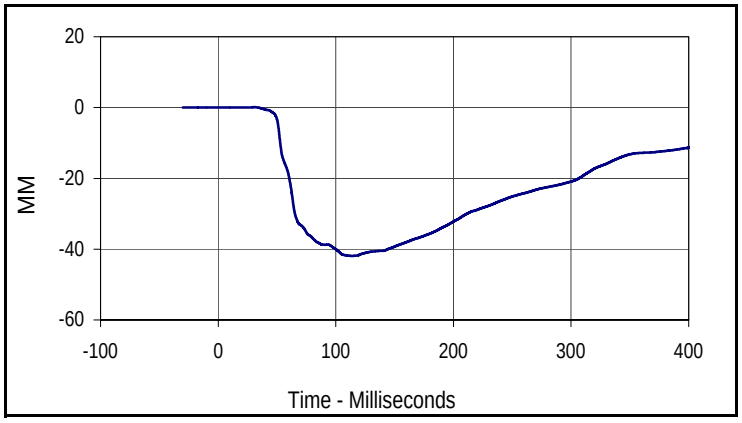
Curve Description			
(Bullet Vehicle) Driver Right Lower Abdomen X			
CURNO	Type	SAE Class	Units
294	CALC	N/A	MM
Max	Time	Min	Time
0.0	0.0	-47.7	117.0



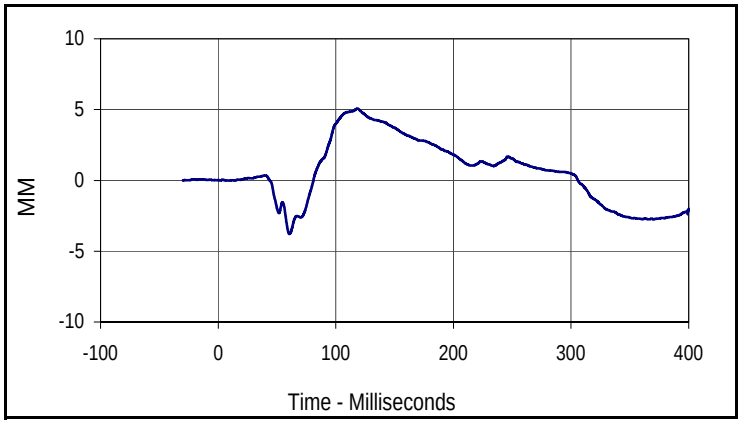
Curve Description			
(Bullet Vehicle) Driver Right Lower Abdomen Y			
CURNO	Type	SAE Class	Units
295	CALC	N/A	MM
Max	Time	Min	Time
15.6	73.5	-0.5	30.2



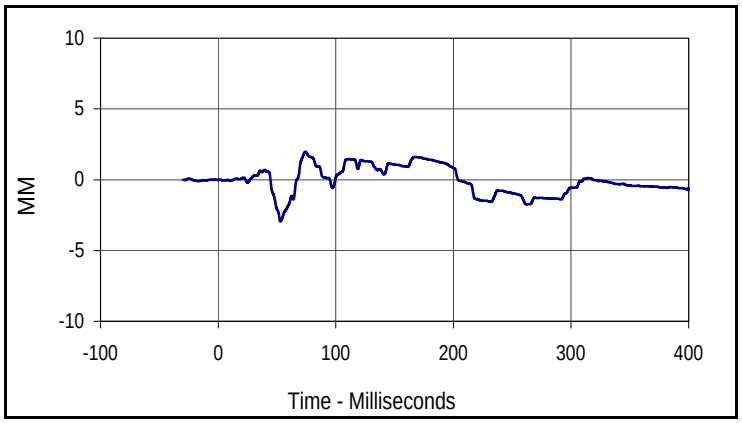
Curve Description			
(Bullet Vehicle) Driver Right Lower Abdomen Z			
CURNO	Type	SAE Class	Units
296	CALC	N/A	MM
Max	Time	Min	Time
6.2	139.1	-0.4	43.0



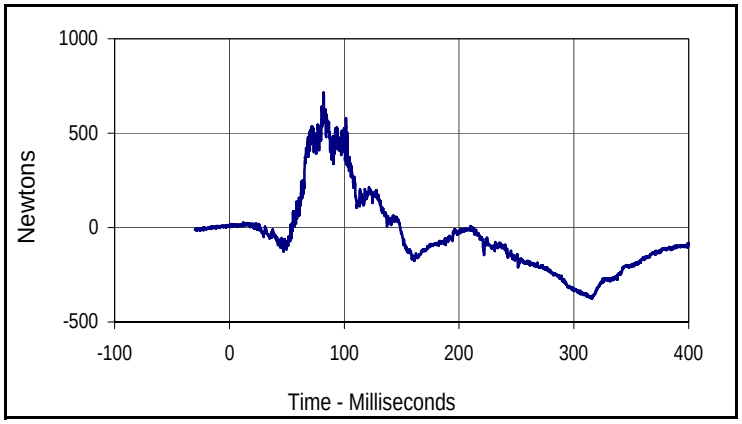
Curve Description			
(Bullet Vehicle) Driver Left Lower Abdomen X			
CURNO	Type	SAE Class	Units
297	CALC	N/A	MM
Max	Time	Min	Time
0.1	30.7	-41.9	112.9



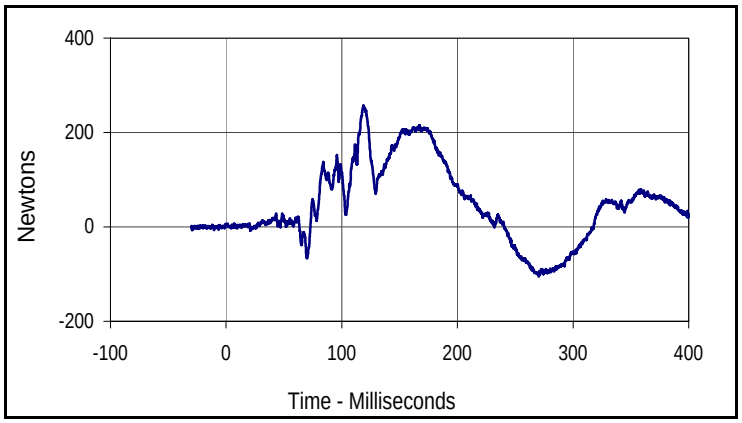
Curve Description			
(Bullet Vehicle) Driver Left Lower Abdomen Y			
CURNO	Type	SAE Class	Units
298	CALC	N/A	MM
Max	Time	Min	Time
5.1	118.1	-3.8	60.5



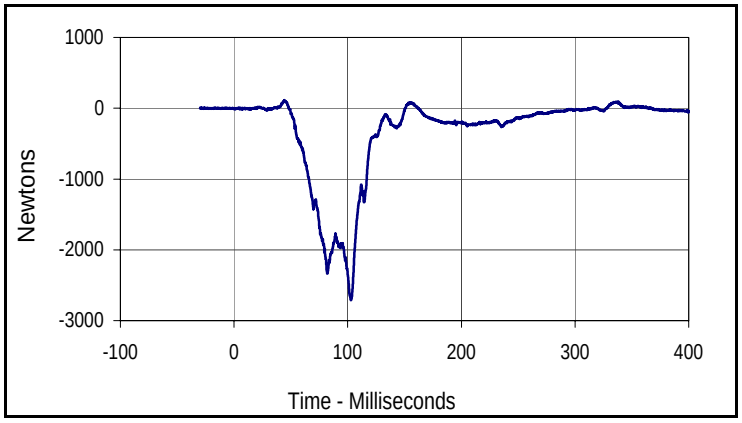
Curve Description			
(Bullet Vehicle) Driver Left Lower Abdomen Z			
CURNO	Type	SAE Class	Units
299	CALC	N/A	MM
Max	Time	Min	Time
2.0	73.9	-3.0	52.9



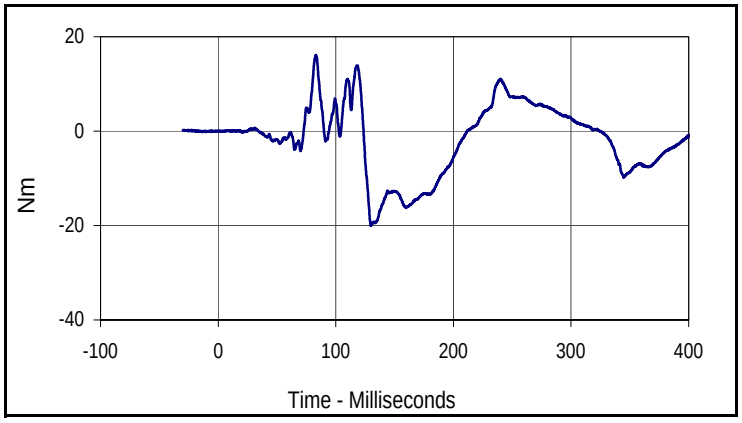
Curve Description			
(Bullet Vehicle) Driver Upper Neck Force X			
CURNO	Type	SAE Class	Units
300	CALC	N/A	Newtons
Max	Time	Min	Time
714.6	82.1	-376.7	315.9



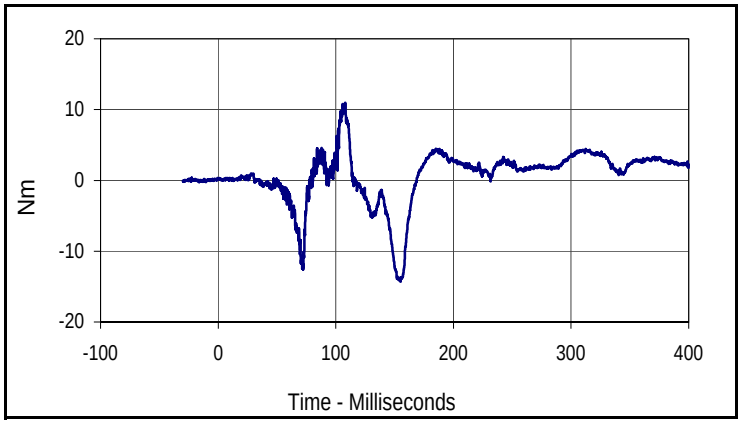
Curve Description			
(Bullet Vehicle) Driver Upper Neck Force Y			
CURNO	Type	SAE Class	Units
301	CALC	N/A	Newtons
Max	Time	Min	Time
257.8	118.8	-105.2	270.4



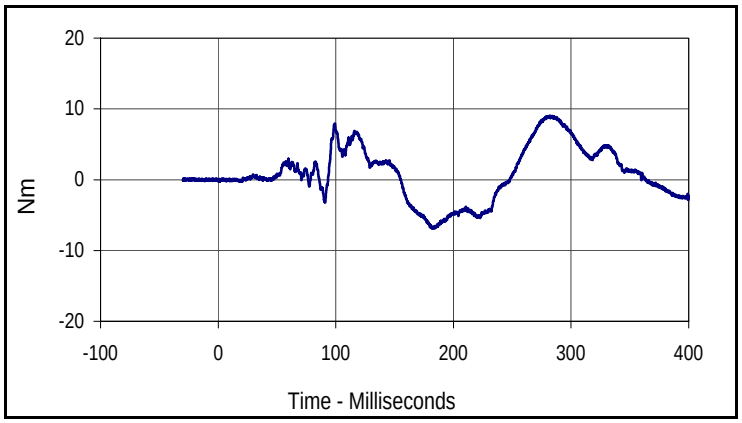
Curve Description			
(Bullet Vehicle) Driver Upper Neck Force Z			
CURNO	Type	SAE Class	Units
302	CALC	N/A	Newtons
Max	Time	Min	Time
113.1	44.3	-2713.0	102.9



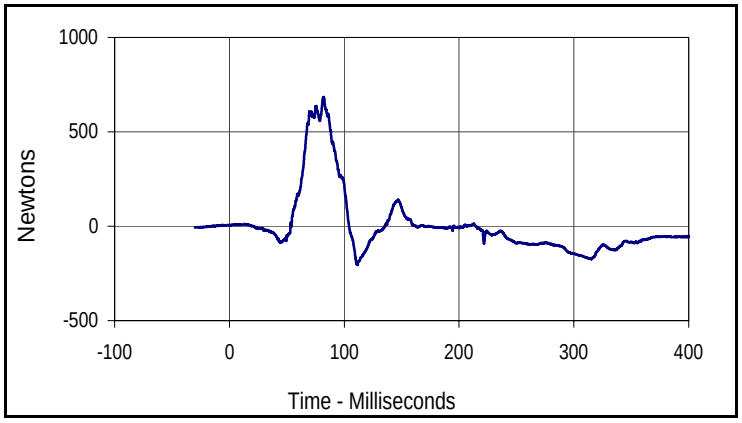
Curve Description			
(Bullet Vehicle) Driver Upper Neck Moment X			
CURNO	Type	SAE Class	Units
303	CALC	N/A	Nm
Max	Time	Min	Time
16.1	82.9	-20.1	129.8



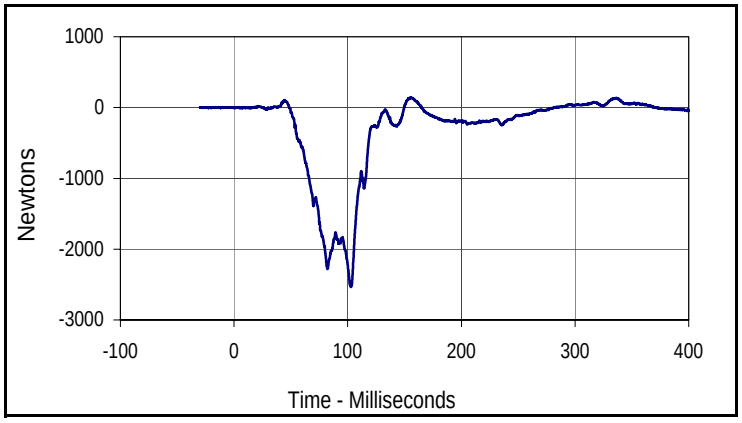
Curve Description			
(Bullet Vehicle) Driver Upper Neck Moment Y			
CURNO	Type	SAE Class	Units
304	CALC	N/A	Nm
Max	Time	Min	Time
11.0	108.0	-14.3	155.1



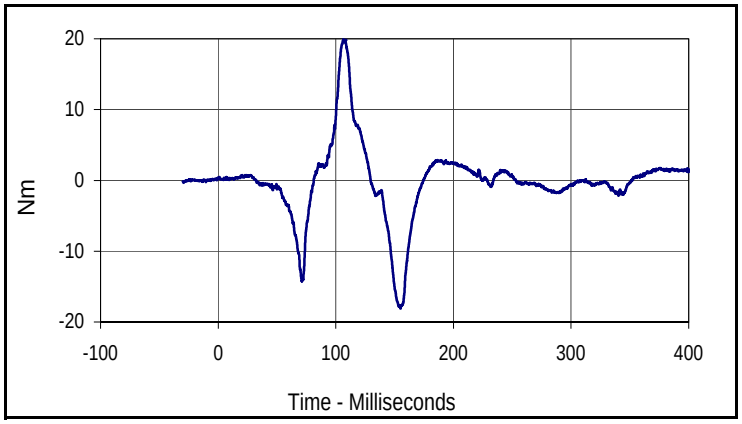
Curve Description			
(Bullet Vehicle) Driver Upper Neck Moment Z			
CURNO	Type	SAE Class	Units
305	CALC	N/A	Nm
Max	Time	Min	Time
9.0	282.0	-6.9	183.9



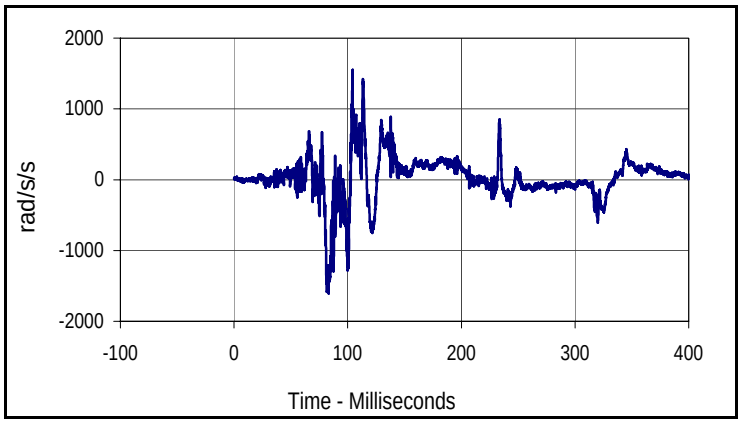
Curve Description			
(Bullet Vehicle) Driver OC Force X			
CURNO	Type	SAE Class	Units
306	CALC	N/A	Newtons
Max	Time	Min	Time
684.2	82.2	-204.9	111.3



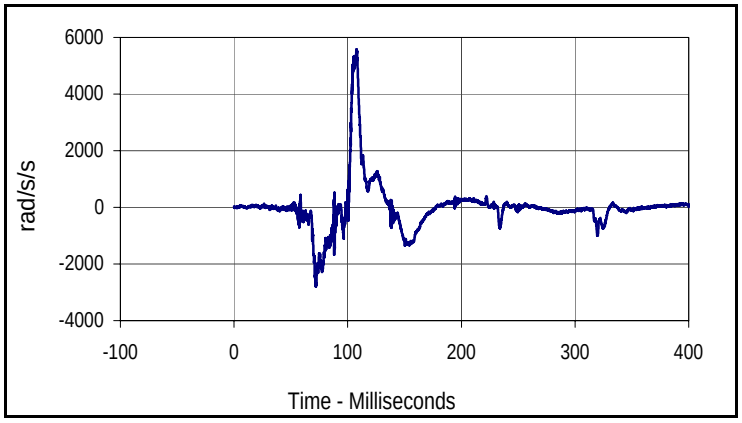
Curve Description			
(Bullet Vehicle) Driver OC Force Z			
CURNO	Type	SAE Class	Units
307	CALC	N/A	Newtons
Max	Time	Min	Time
140.1	155.6	-2536.0	102.9



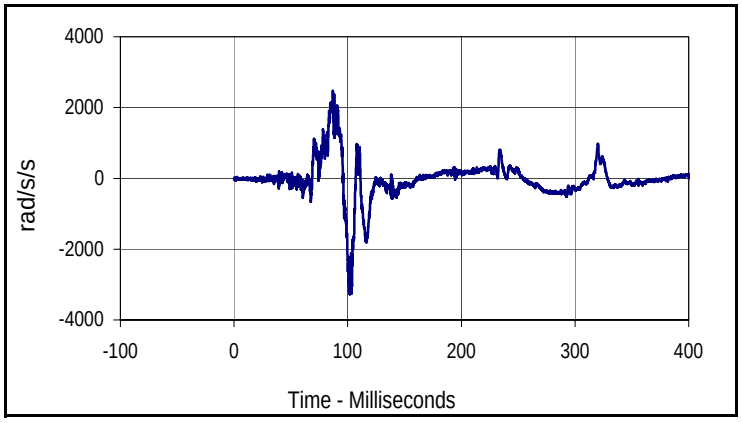
Curve Description			
(Bullet Vehicle) Driver OC Moment Y			
CURNO	Type	SAE Class	Units
308	CALC	N/A	Nm
Max	Time	Min	Time
19.9	106.5	-18.1	155.0



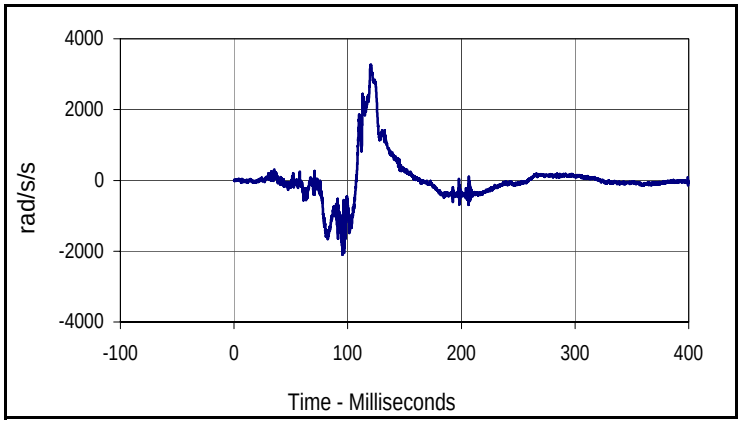
Curve Description			
(Bullet Vehicle) Driver Head Angular Acceleration X			
CURNO	Type	SAE Class	Units
309	CALC	N/A	rad/s/s
Max	Time	Min	Time
1541.5	104.3	-1607.5	83.3



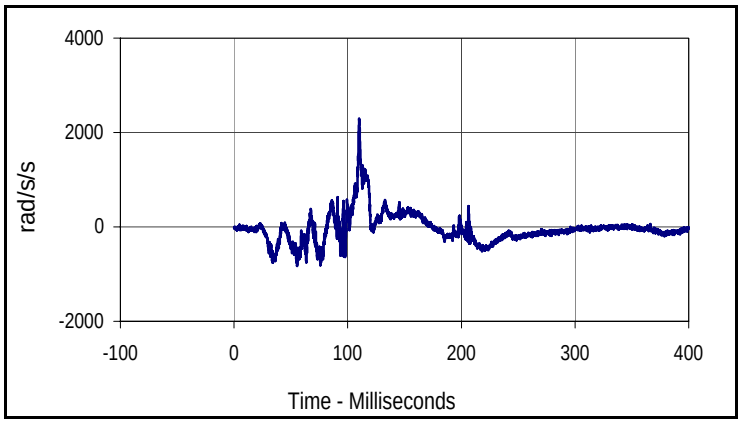
Curve Description			
(Bullet Vehicle) Driver Head Angular Acceleration Y			
CURNO	Type	SAE Class	Units
310	CALC	N/A	rad/s/s
Max	Time	Min	Time
5580.5	107.9	-2796.9	72.1



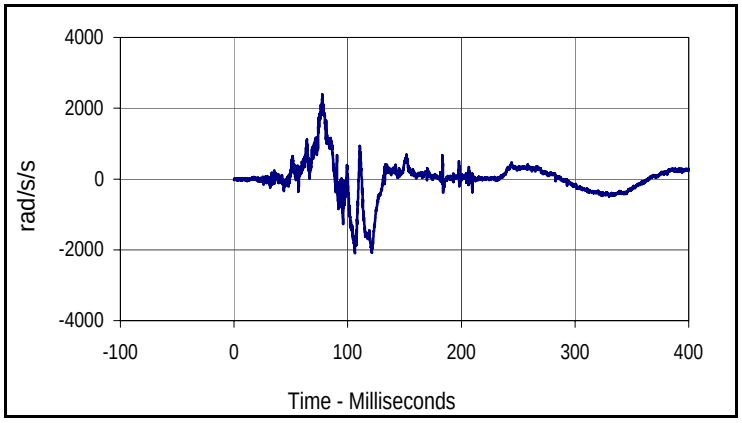
Curve Description			
(Bullet Vehicle) Driver Head Angular Acceleration Z			
CURNO	Type	SAE Class	Units
311	CALC	N/A	rad/s/s
Max	Time	Min	Time
2466.3	87.0	-3274.9	101.8



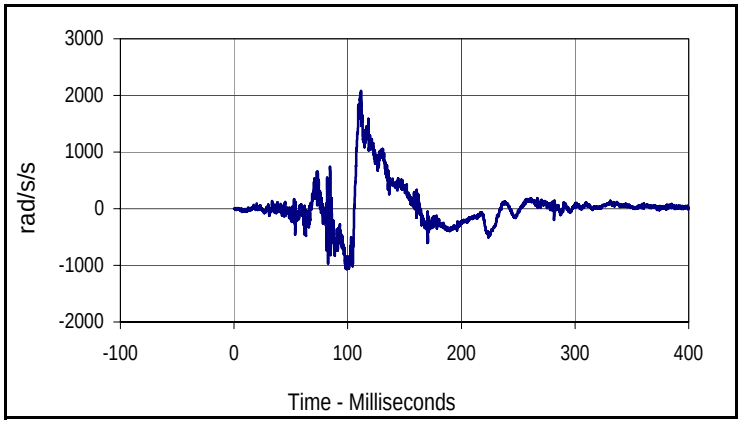
Curve Description			
(Target Vehicle) Driver 50th Head Angular Acceleration X			
CURNO	Type	SAE Class	Units
312	CALC	N/A	rad/s/s
Max	Time	Min	Time
3277.7	120.3	-2088.7	95.4



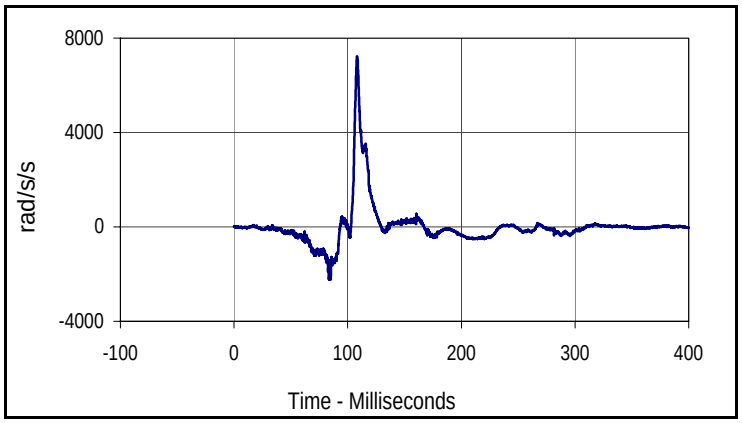
Curve Description			
(Target Vehicle) Driver 50th Head Angular Acceleration Y			
CURNO	Type	SAE Class	Units
313	CALC	N/A	rad/s/s
Max	Time	Min	Time
2290.1	110.1	-830.3	55.5



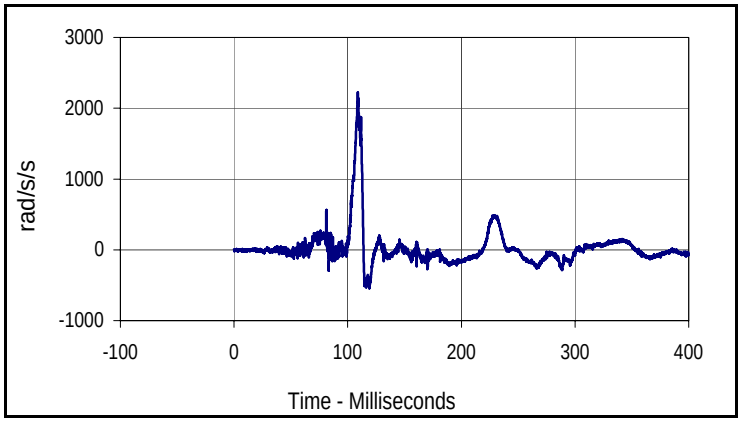
Curve Description			
(Target Vehicle) Driver 50th Head Angular Acceleration Z			
CURNO	Type	SAE Class	Units
314	CALC	N/A	rad/s/s
Max	Time	Min	Time
2391.8	77.7	-2093.5	106.3



Curve Description			
(Target Vehicle) Left Rear Pass. Head Angular Acceleration X			
CURNO	Type	SAE Class	Units
315	CALC	N/A	rad/s/s
Max	Time	Min	Time
2071.8	111.8	-1067.5	99.1



Curve Description			
(Target Vehicle) Left Rear Pass. Head Angular Acceleration Y			
CURNO	Type	SAE Class	Units
316	CALC	N/A	rad/s/s
Max	Time	Min	Time
7227.8	108.2	-2236.4	83.5

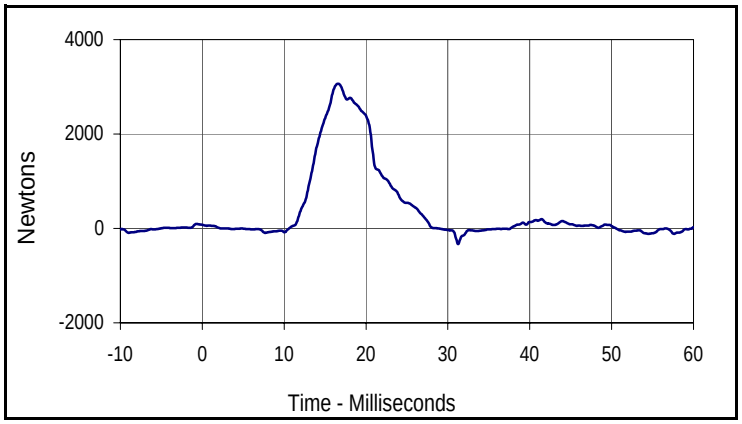


Curve Description			
(Target Vehicle) Left Rear Pass. Head Angular Acceleration Z			
CURNO	Type	SAE Class	Units
317	CALC	N/A	rad/s/s
Max	Time	Min	Time
2221.9	108.9	-544.3	119.1

APPENDIX C
DUMMY CERTIFICATION DATA

Test Program:	Thor-LX Dynamic Heel of Foot Impact Test	Test Date:	1/4/10
Serial No.:	G110	Test I.D.:	Heel05

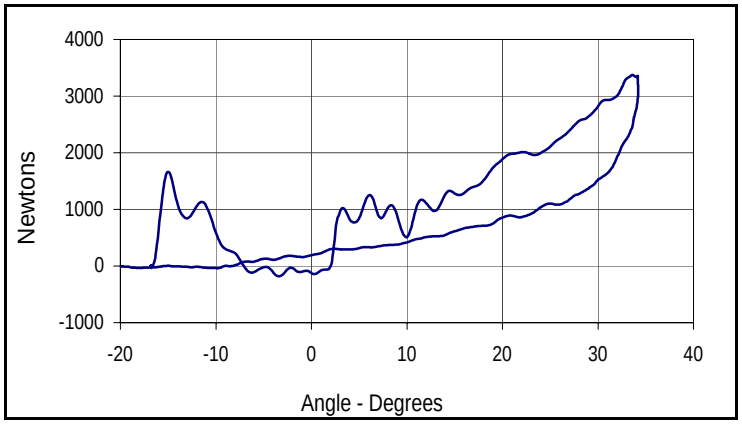
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	3.90 to 4.10	3.96	Pass
Peak Lower Tibia Compressive Force	Newtons	2738 to 3346	3067	Pass
		Overall Test Results		Pass



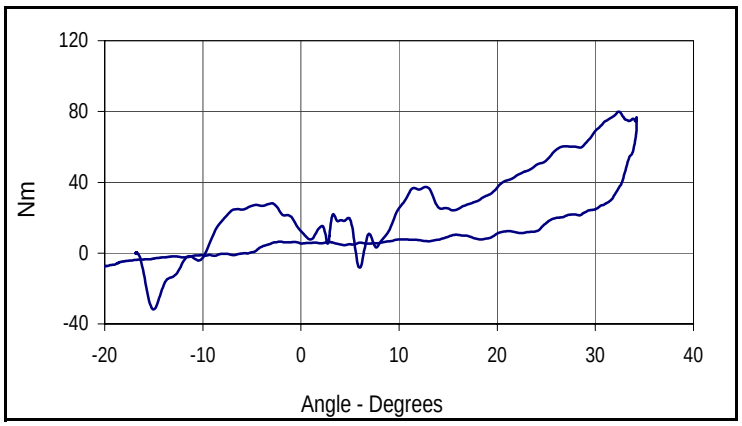
Curve Description			
Peak Lower Tibia Compressive Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
3066.5	16.6	-327.3	31.2

Test Program:	Thor-LX Dynamic Ball of Foot Impact Test		Test Date:	1/4/10	
Serial No.:	G110		Test I.D.:	Ball005	

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.90 to 5.10	5.03	Pass
Peak Lower Tibia Compressive Force	Newtons	2956 to 3613	3373	Pass
Peak Ankle Y Axis Rotation	Deg	32.7 to 39.9	34.2	Pass
Peak Ankle Resistive Moment	Nm	77.1 to 94.2	79.9	Pass
		Overall Test Results		Pass



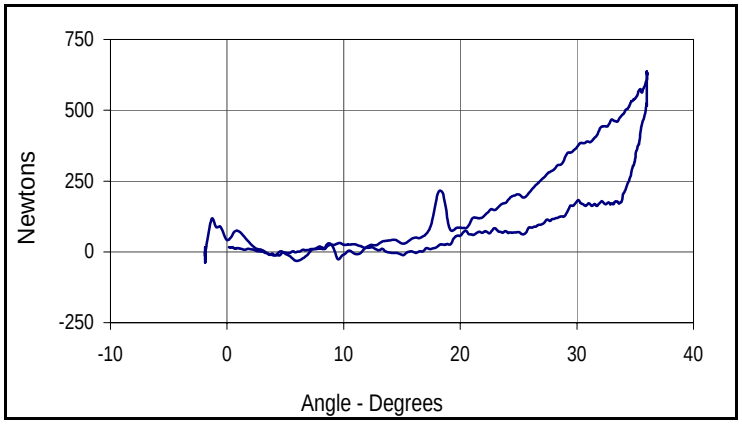
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
3372.5	33.6	-183.5	-3.4



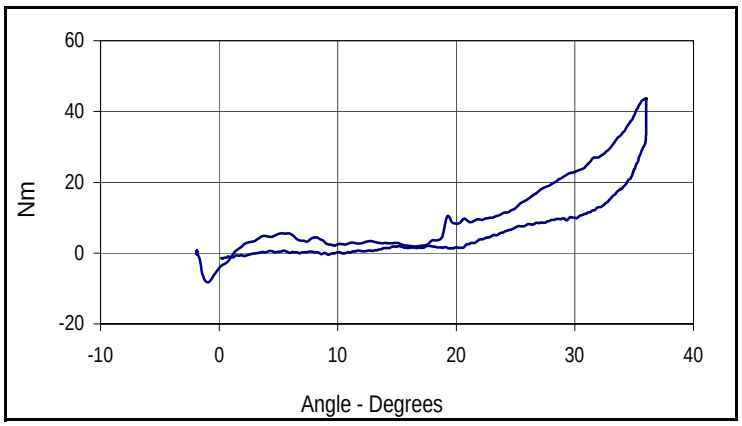
Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
79.9	32.4	-31.7	-15.1

Test Program:	Thor-LX Dynamic Inversion Impact Test	Test Date:	1/4/10
Serial No.:	G110	Test I.D.:	INV005

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	1.90 to 2.10	1.93	Pass
Peak Lower Tibia Compressive Force	Newtons	552 to 675	637	Pass
Peak Ankle X Axis Rotation	Deg	30.3 to 37.0	36.0	Pass
Peak Ankle Resistive Moment	Nm	36.3 to 44.4	43.7	Pass
		Overall Test Results		Pass



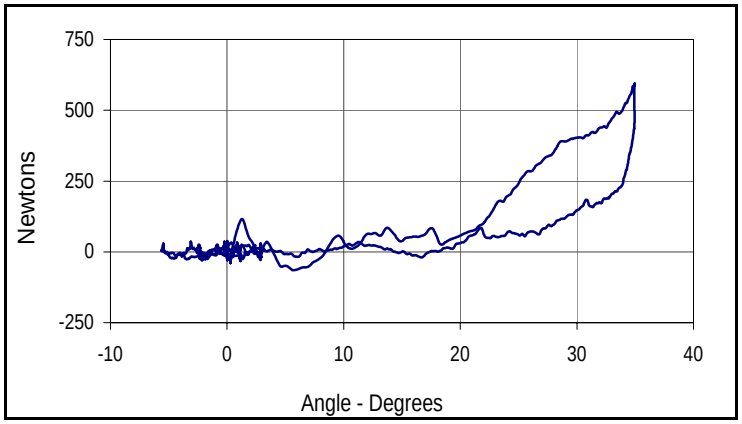
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
637.3	36.0	-37.4	-1.9



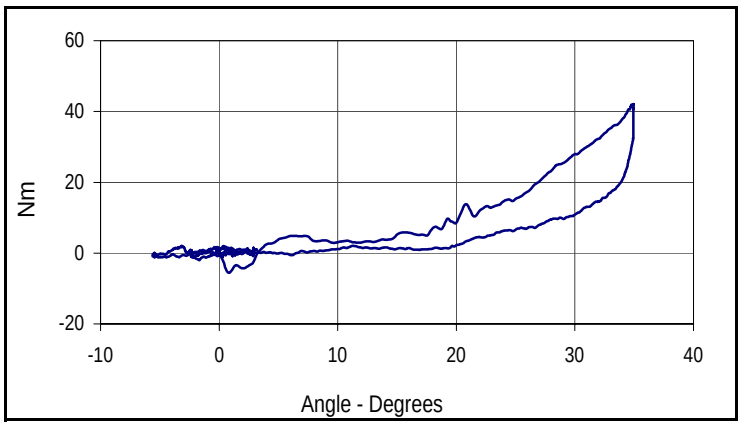
Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
43.7	36.0	-8.3	-0.9

Test Program:	Thor-LX Dynamic Eversion Impact Test	Test Date:	1/5/10	
Serial No.:	G110	Test I.D.:	EV005	

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	1.90 to 2.10	1.99	Pass
Peak Lower Tibia Compressive Force	Newtons	552 to 675	594	Pass
Peak Ankle X Axis Rotation	Deg	30.3 to 37.0	34.9	Pass
Peak Ankle Resistive Moment	Nm	36.3 to 44.4	42.1	Pass
		Overall Test Results		Pass



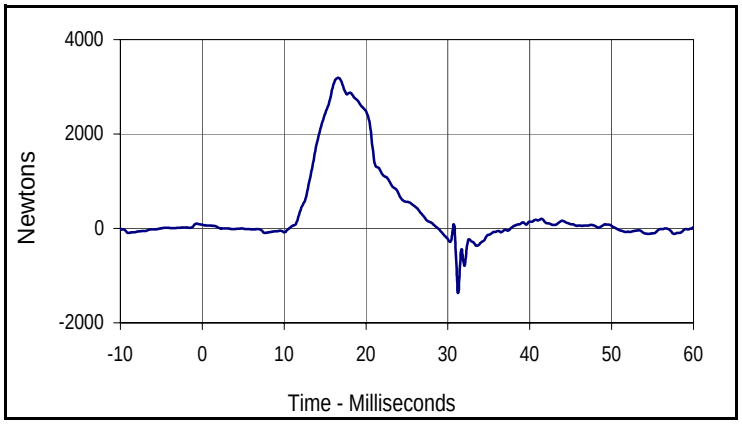
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
593.6	34.9	-65.1	5.8



Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
42.1	34.9	-5.6	0.8

Test Program:	Thor-LX Dynamic Heel of Foot Impact Test		Test Date:	1/4/10	
Serial No.:	G109		Test I.D.:	Heel06	

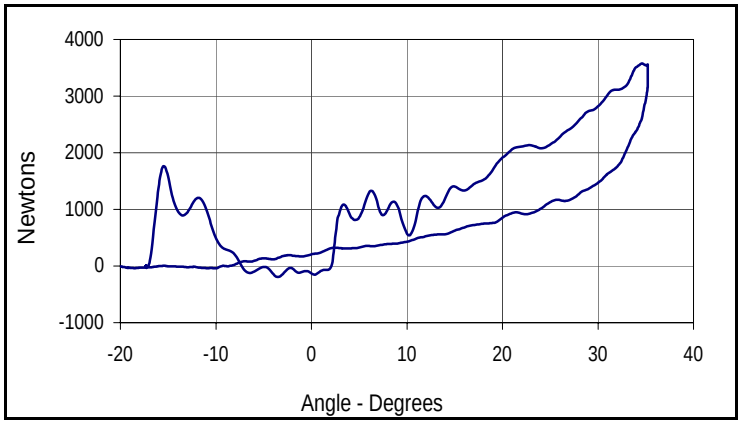
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	3.90 to 4.10	3.96	Pass
Peak Lower Tibia Compressive Force	Newtons	2738 to 3346	3190	Pass
		Overall Test Results		Pass



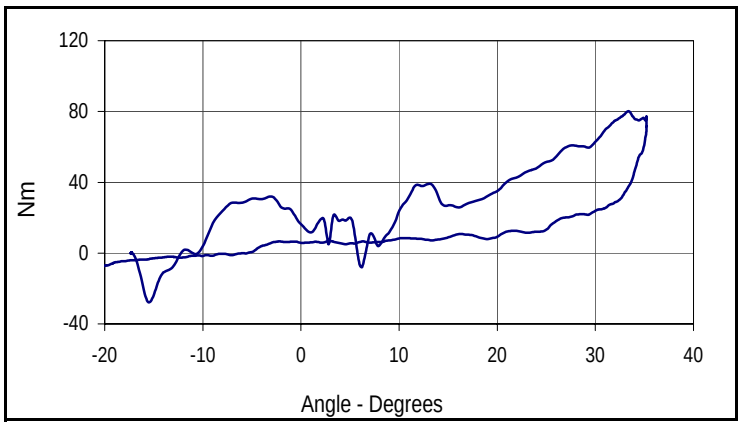
Curve Description			
Peak Lower Tibia Compressive Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
3190.3	16.6	-1362.2	31.2

Test Program:	Thor-LX Dynamic Ball of Foot Impact Test		Test Date:	1/4/10	
Serial No.:	G109		Test I.D.:	Ball006	

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.90 to 5.10	4.95	Pass
Peak Lower Tibia Compressive Force	Newtons	2956 to 3613	3578	Pass
Peak Ankle Y Axis Rotation	Deg	32.7 to 39.9	35.2	Pass
Peak Ankle Resistive Moment	Nm	77.1 to 94.2	80.2	Pass
		Overall Test Results		Pass



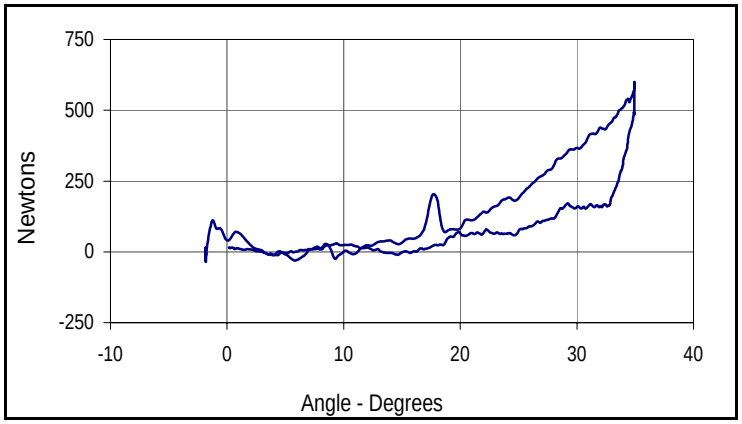
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
3577.9	34.6	-194.6	-3.5



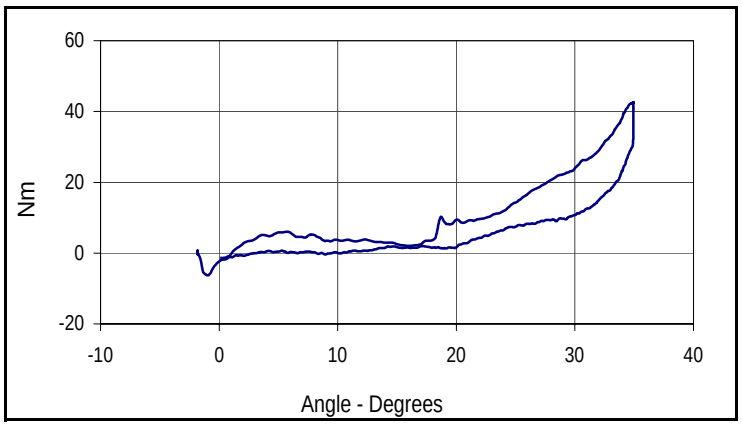
Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
80.2	33.4	-27.7	-15.6

Test Program:	Thor-LX Dynamic Inversion Impact Test	Test Date:	1/4/10
Serial No.:	G109	Test I.D.:	INV006

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	1.90 to 2.10	2.05	Pass
Peak Lower Tibia Compressive Force	Newtons	552 to 675	600	Pass
Peak Ankle X Axis Rotation	Deg	30.3 to 37.0	34.9	Pass
Peak Ankle Resistive Moment	Nm	36.3 to 44.4	42.6	Pass
		Overall Test Results		Pass



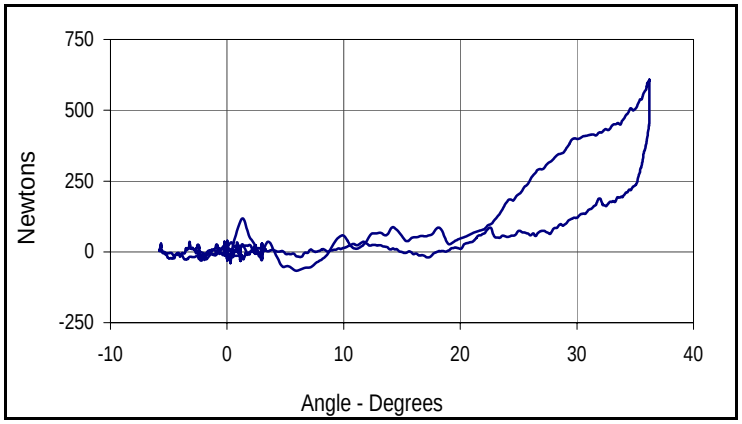
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
599.6	34.9	-35.2	-1.8



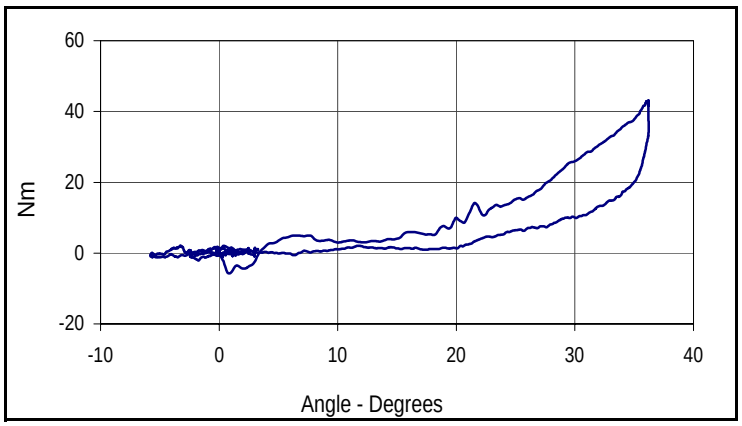
Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
42.6	34.9	-6.3	-1.0

Test Program:	Thor-LX Dynamic Eversion Impact Test	Test Date:	1/5/10
Serial No.:	G109	Test I.D.:	EV006

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	1.90 to 2.10	1.94	Pass
Peak Lower Tibia Compressive Force	Newtons	552 to 675	608	Pass
Peak Ankle X Axis Rotation	Deg	30.3 to 37.0	36.2	Pass
Peak Ankle Resistive Moment	Nm	36.3 to 44.4	43.1	Pass
		Overall Test Results		Pass



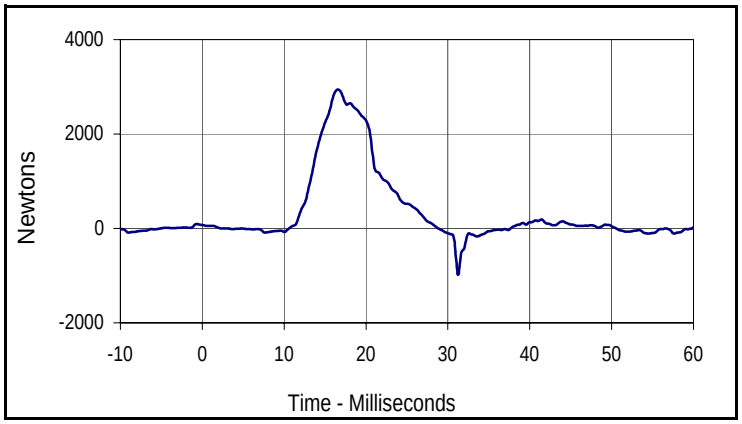
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
608.1	36.2	-66.9	6.0



Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
43.1	36.2	-5.7	0.8

Test Program:	Thor-LX Dynamic Heel of Foot Impact Test	Test Date:	1/4/10
Serial No.:	G038	Test I.D.:	Heel07

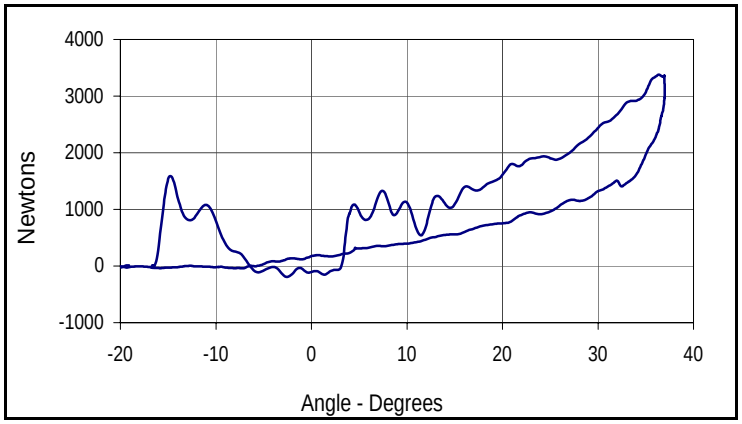
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	3.90 to 4.10	3.96	Pass
Peak Lower Tibia Compressive Force	Newtons	2738 to 3346	2943	Pass
		Overall Test Results		Pass



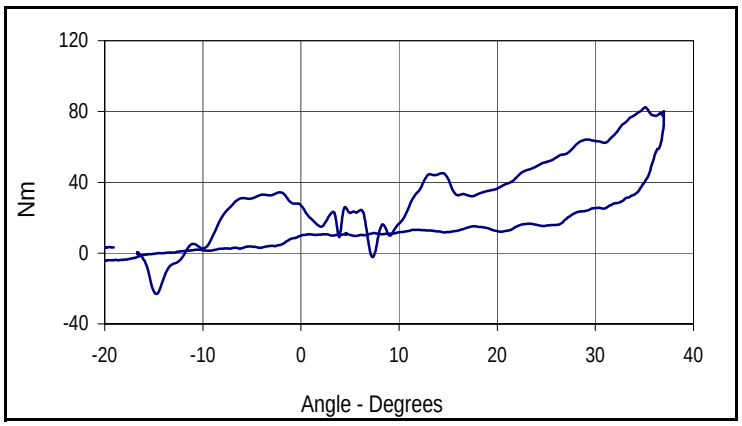
Curve Description			
Peak Lower Tibia Compressive Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
2942.6	16.6	-978.7	31.2

Test Program:	Thor-LX Dynamic Ball of Foot Impact Test	Test Date:	1/4/10
Serial No.:	G038	Test I.D.:	Ball007

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.90 to 5.10	5.04	Pass
Peak Lower Tibia Compressive Force	Newtons	2956 to 3613	3378	Pass
Peak Ankle Y Axis Rotation	Deg	32.7 to 39.9	37.0	Pass
Peak Ankle Resistive Moment	Nm	77.1 to 94.2	82.3	Pass
		Overall Test Results		Pass



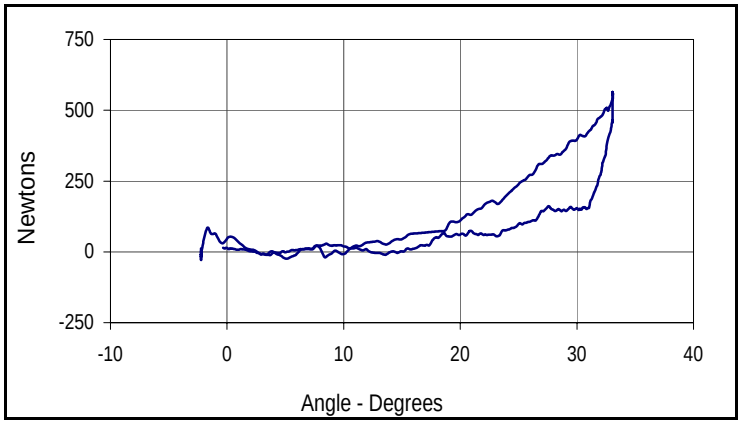
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
3377.9	36.4	-194.6	-2.5



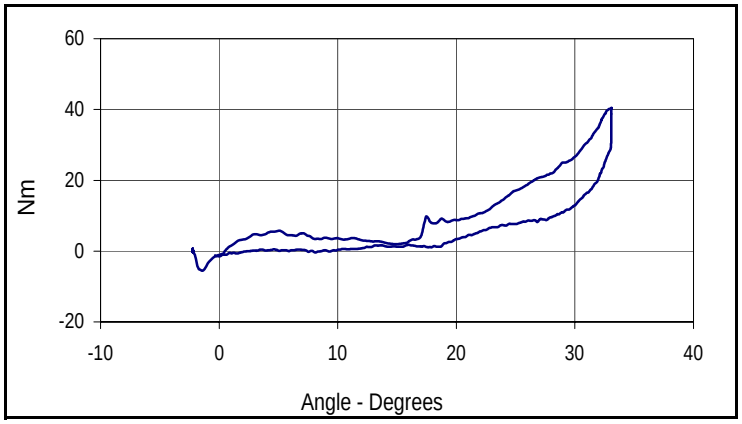
Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
82.3	35.1	-22.9	-14.9

Test Program:	Thor-LX Dynamic Inversion Impact Test	Test Date:	1/4/10
Serial No.:	G038	Test I.D.:	INV007

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	1.90 to 2.10	1.99	Pass
Peak Lower Tibia Compressive Force	Newtons	552 to 675	565	Pass
Peak Ankle X Axis Rotation	Deg	30.3 to 37.0	33.1	Pass
Peak Ankle Resistive Moment	Nm	36.3 to 44.4	40.5	Pass
		Overall Test Results		Pass



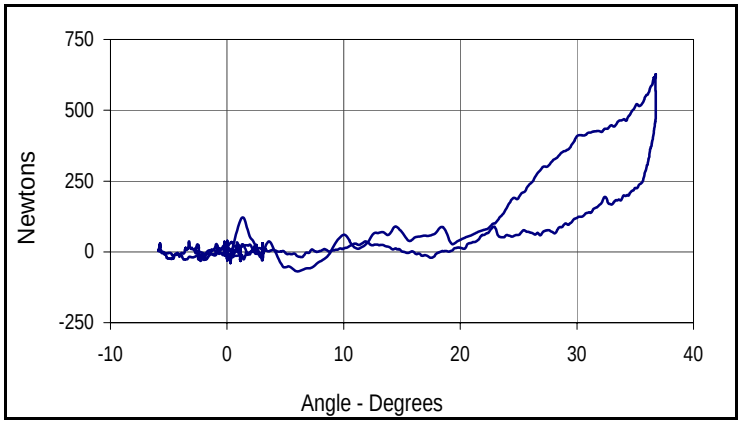
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
564.5	33.1	-28.0	-2.2



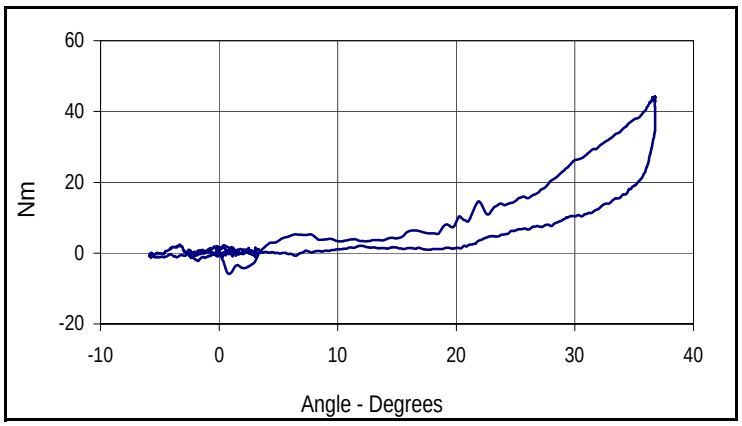
Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
40.5	33.1	-5.5	-1.4

Test Program:	Thor-LX Dynamic Eversion Impact Test	Test Date:	1/5/10
Serial No.:	G038	Test I.D.:	EV007

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	1.90 to 2.10	1.95	Pass
Peak Lower Tibia Compressive Force	Newtons	552 to 675	626	Pass
Peak Ankle X Axis Rotation	Deg	30.3 to 37.0	36.8	Pass
Peak Ankle Resistive Moment	Nm	36.3 to 44.4	44.2	Pass
		Overall Test Results		Pass



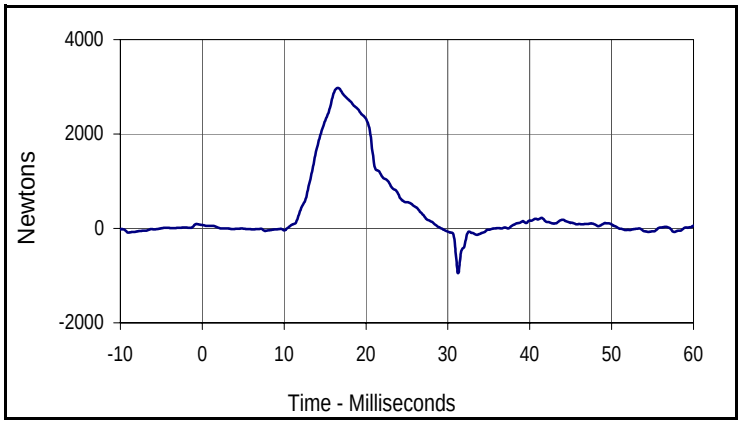
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
626.3	36.8	-68.7	6.0



Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
44.2	36.7	-5.9	0.9

Test Program:	Thor-LX Dynamic Heel of Foot Impact Test	Test Date:	1/4/10	
Serial No.:	G039	Test I.D.:	Heel08	

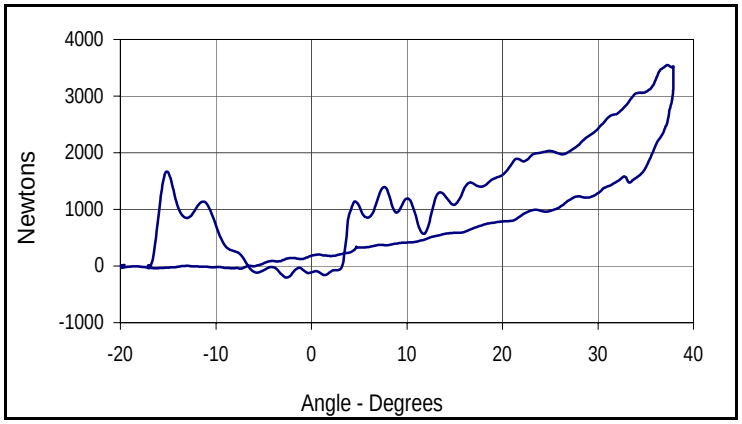
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	3.90 to 4.10	4.04	Pass
Peak Lower Tibia Compressive Force	Newtons	2738 to 3346	2977	Pass
		Overall Test Results		Pass



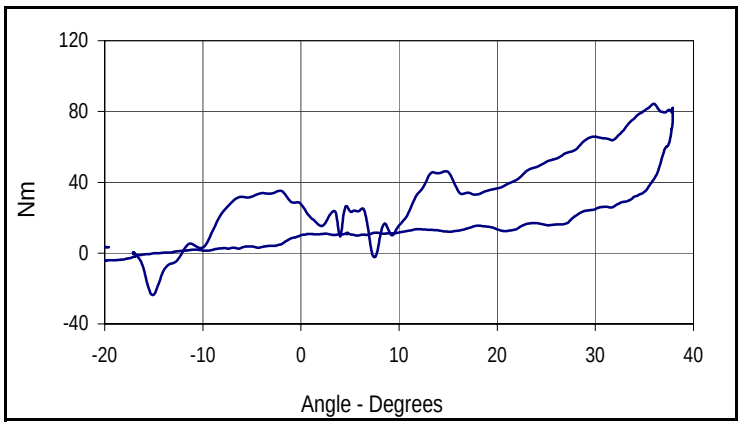
Curve Description			
Peak Lower Tibia Compressive Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
2977.1	16.6	-943.7	31.2

Test Program:	Thor-LX Dynamic Ball of Foot Impact Test	Test Date:	1/4/10
Serial No.:	G039	Test I.D.:	Ball008

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	4.90 to 5.10	4.95	Pass
Peak Lower Tibia Compressive Force	Newtons	2956 to 3613	3547	Pass
Peak Ankle Y Axis Rotation	Deg	32.7 to 39.9	37.9	Pass
Peak Ankle Resistive Moment	Nm	77.1 to 94.2	84.4	Pass
		Overall Test Results		Pass



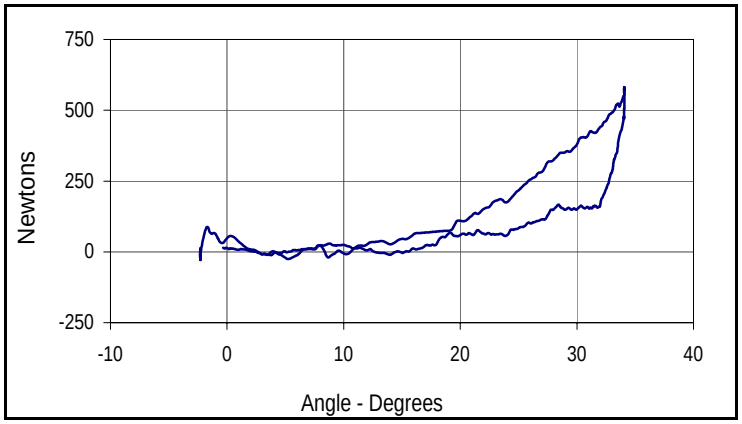
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
3547.5	37.3	-204.3	-2.6



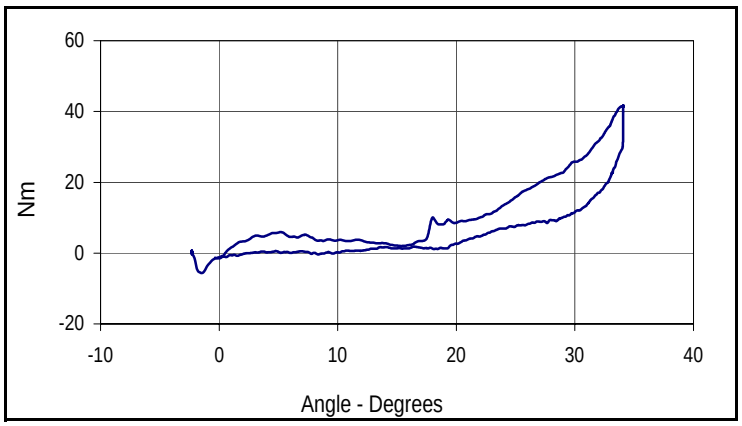
Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
84.4	36.0	-23.5	-15.2

Test Program:	Thor-LX Dynamic Inversion Impact Test	Test Date:	1/4/10
Serial No.:	G039	Test I.D.:	INV008

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	1.90 to 2.10	1.93	Pass
Peak Lower Tibia Compressive Force	Newtons	552 to 675	582	Pass
Peak Ankle X Axis Rotation	Deg	30.3 to 37.0	34.1	Pass
Peak Ankle Resistive Moment	Nm	36.3 to 44.4	41.7	Pass
		Overall Test Results		Pass



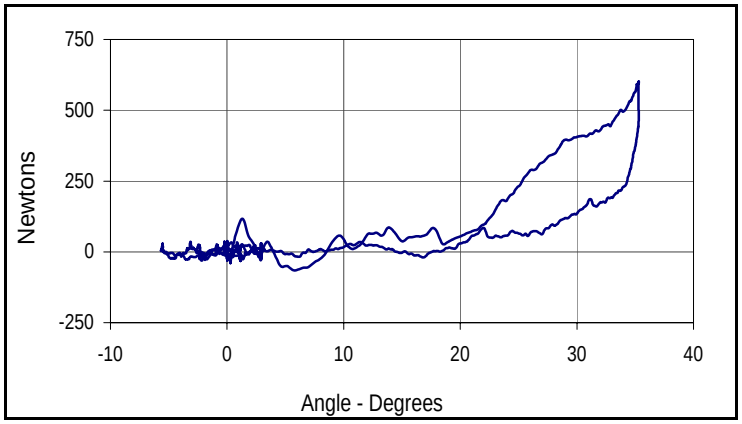
Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
581.8	34.1	-29.0	-2.3



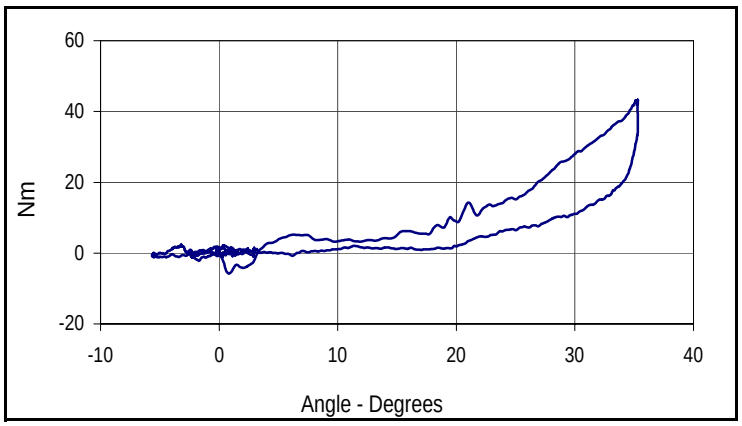
Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
41.7	34.1	-5.7	-1.5

Test Program:	Thor-LX Dynamic Eversion Impact Test		Test Date:	1/5/10	
Serial No.:	G039		Test I.D.:	EV008	

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	1.90 to 2.10	1.96	Pass
Peak Lower Tibia Compressive Force	Newtons	552 to 675	601	Pass
Peak Ankle X Axis Rotation	Deg	30.3 to 37.0	35.3	Pass
Peak Ankle Resistive Moment	Nm	36.3 to 44.4	43.3	Pass
		Overall Test Results		Pass



Curve Description			
Peak Lower Tibia Compressive Force vs. Angle			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Angle	Min	Angle
601.4	35.3	-66.0	5.8

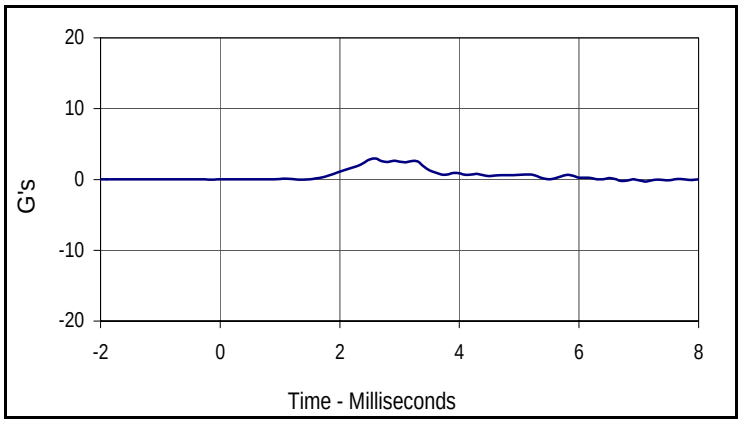


Curve Description			
Peak Ankle Resistive Moment vs. Angle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Angle	Min	Angle
43.3	35.3	-5.8	0.8

Test Program:	Hybrid III 50th Percentile Male Head Drop Test	Test Date:	1/4/10
ATD Serial No.:	055	Test I.D.:	HD01A

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Peak Resultant Acceleration	G's	225.0 to 275.0	225.3	Pass
Peak Lateral Acceleration	G's	≤15.0	3.0	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
		Overall Test Results		Pass

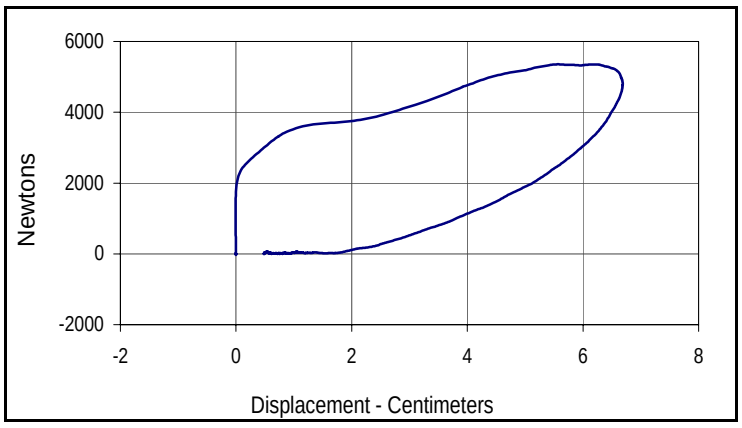
Curve Description			
Head Resultant			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
225.3	2.7	0.0	-1.9



Curve Description			
Head Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
3.0	2.6	0.0	1.4

Test Program:	Hybrid III 50th Percentile Male Thorax Impact Test	Test Date:	1/4/10
ATD Serial No.:	055	Test I.D.:	CH01A

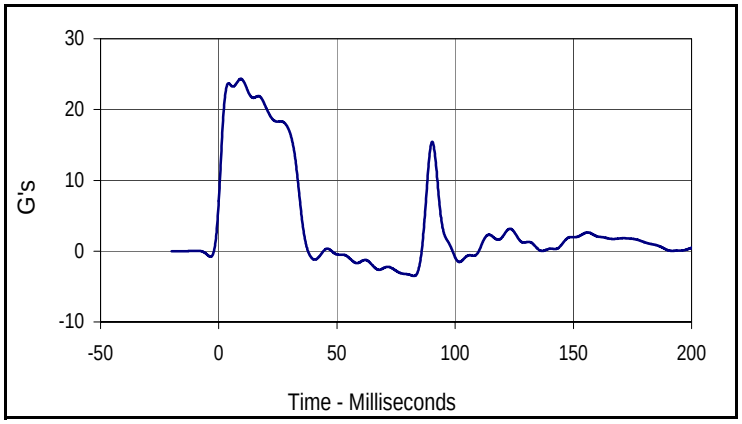
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	6.58 to 6.82	6.70	Pass
Peak Probe Force	Newtons	5159 to 5893	5354	Pass
Peak Sternum Deflection	CM	6.35 to 7.26	6.69	Pass
Internal Hysterysis	%	69 to 85	73.7	Pass
		Overall Test Results		Pass



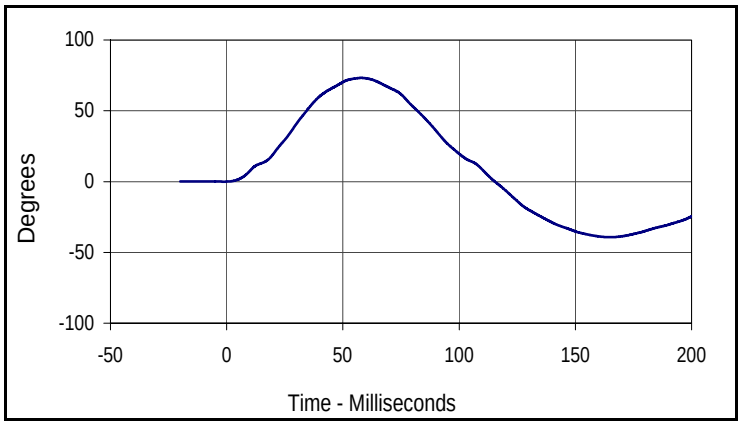
Curve Description			
Probe Force vs. Chest Deflection			
CURNO	Type	SAE Class	Hysterysis
001	FIL	180	73.7
Peak Probe Force		Peak Chest Deflection	
5354		6.69	

Test Program:	Hybrid III 50th Percentile Male Neck Flexion Test	Test Date:	1/4/10
ATD Serial No.:	055	Test I.D.:	NF01A

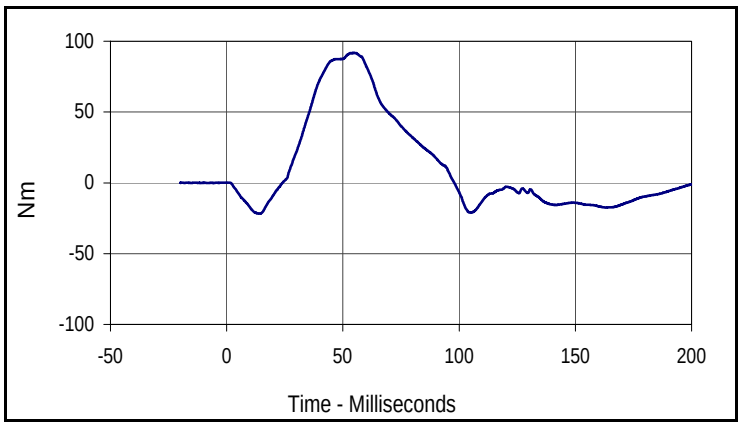
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	6.89 to 7.13	7.01	Pass
Pendulum Deceleration	10 Msec.	G's	22.5 to 27.5	24.2	Pass
	20 Msec.	G's	17.6 to 22.6	20.3	Pass
	30 Msec.	G's	12.5 to 18.5	16.8	Pass
Peak Pendulum Decel. after 30 Msec.		G's	≤ 29.0	16.8	Pass
Deceleration Decay, Time to Cross 5 G's		Msec.	34.0 to 42.0	35.1	Pass
Maximum "D" Plane Rotation	Max	Degrees	64.0 to 78.0	73.2	Pass
	Time	Msec.	57.0 to 64.0	57.9	Pass
"D" Plane Rotation Decay, Time To Zero Crossing		Msec.	113.0 to 128.0	115.4	Pass
Moment About Occ. Condyle	Max	Nm	84.1 to 108.5	91.8	Pass
	Time	Msec.	47.0 to 58.0	54.5	Pass
Positive Moment Decay, Time To Zero Crossing		Msec.	97.0 to 107.0	98.0	Pass
			Overall Test Results		Pass



Curve Description			
Pendulum Deceleration			
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
24.3	9.3	-3.5	82.6



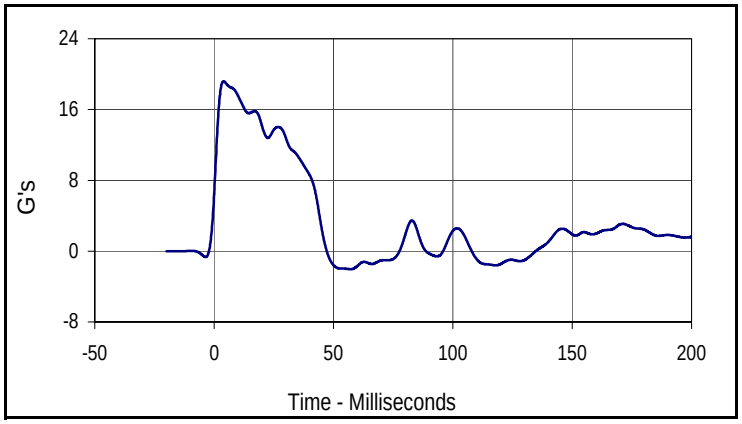
Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
73.2	57.9	-39.3	164.8



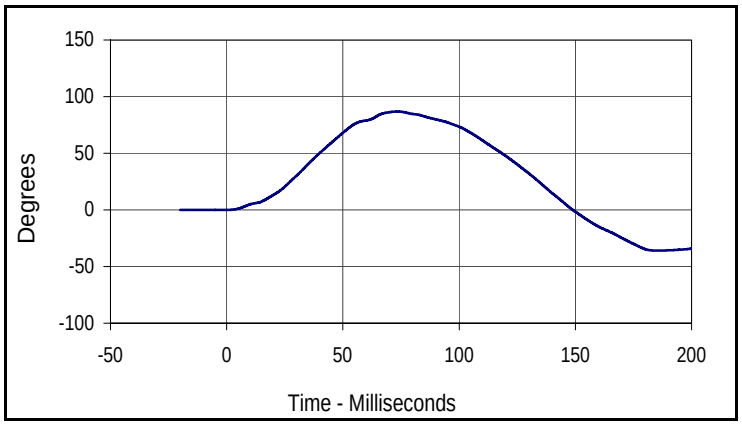
Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
91.8	54.5	-21.8	13.8

Test Program:	Hybrid III 50th Percentile Male Neck Extension Test	Test Date:	1/4/10
ATD Serial No.:	055	Test I.D.:	NE01A

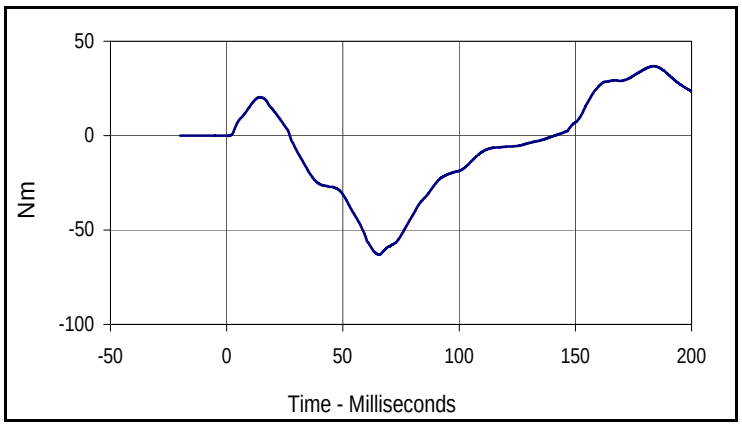
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	5.94 to 6.19	6.08	Pass
Pendulum Deceleration	10 Msec.	G's	17.2 to 21.2	17.6	Pass
	20 Msec.	G's	14.0 to 19.0	14.2	Pass
	30 Msec.	G's	11.0 to 16.0	12.8	Pass
Peak Pendulum Decel. after 30 Msec.		G's	≤ 22.0	12.8	Pass
Deceleration Decay, Time to Cross 5 G's		Msec.	38.0 to 46.0	43.6	Pass
Maximum "D" Plane Rotation	Max	Degrees	81.0 to 106.0	86.9	Pass
	Time	Msec.	72.0 to 82.0	73.3	Pass
"D" Plane Rotation Decay, Time To Zero Crossing		Msec.	147.0 to 174.0	148.9	Pass
Moment About Occ. Condyle	Max	Nm	-52.9 to- 79.9	-63.1	Pass
	Time	Msec.	65.0 to 79.0	65.5	Pass
Positive Moment Decay, Time To Zero Crossing		Msec.	120.0 to 148.0	141.2	Pass
			Overall Test Results		Pass



Curve Description			
Pendulum Deceleration			
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
19.2	3.9	-2.0	57.1



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
86.9	73.3	-35.9	185.5



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
36.8	183.4	-63.1	65.5

Test Program:	Hybrid III 50th Percentile Male Knee Impact Test	Test Date:	1/4/10
ATD Serial No.:	055	Test I.D.:	LK01A , RK01B

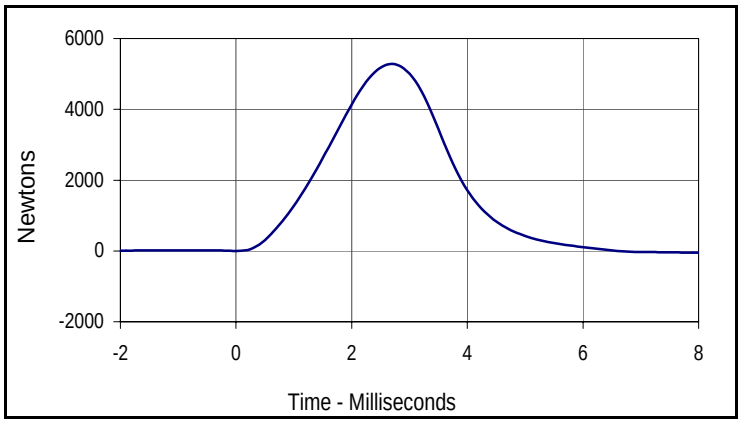
Left Knee

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.09	Pass
Peak Probe Force	Newtons	4715 to 5782	5259	Pass
		Overall Test Results		Pass

Right Knee

Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.10	Pass
Peak Probe Force	Newtons	4715 to 5782	5284	Pass
		Overall Test Results		Pass

Curve Description			
Left Knee Probe Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
5259.3	2.7	-41.1	8.1



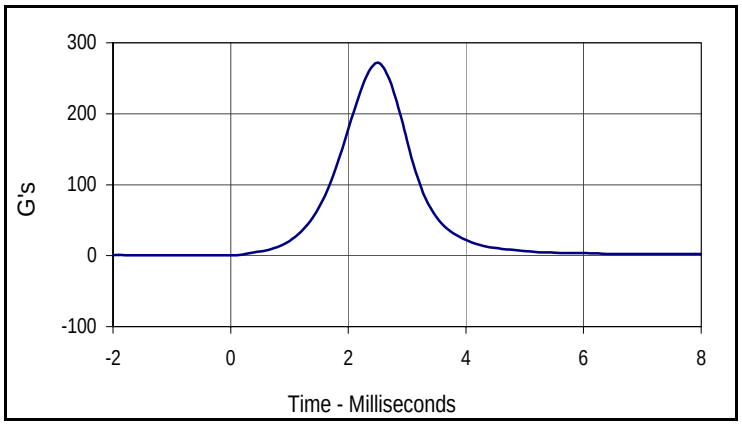
Curve Description			
Right Knee Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	600	Newtons
Max	Time	Min	Time
5284.2	2.7	-49.9	7.9

Test Program:	Hybrid III 50th Percentile Male External Measurements	Test Date:	1/4/10
ATD Serial No.:	055	Test I.D.:	N/A

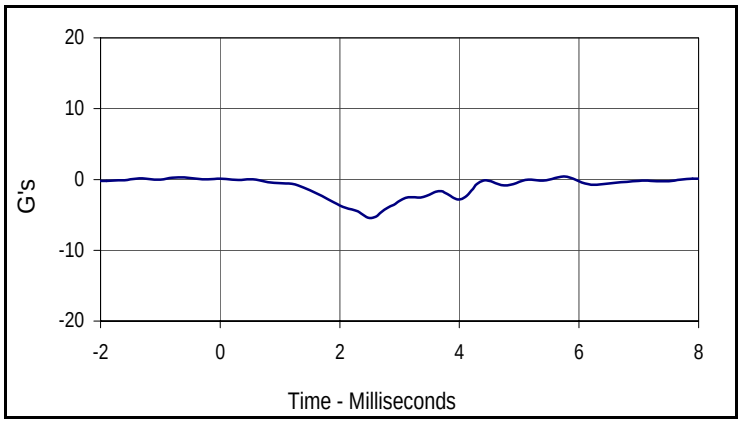
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
A - Total sitting height	mm	879 to 889	885	Pass
B - Shoulder pivot height	mm	505 to 521	506	Pass
C - "H" point height	mm	84 to 89	87	Pass
D - "H" point from seat back	mm	135 to 140	139	Pass
E - Shoulder pivot from back	mm	84 to 94	89	Pass
F - Thigh clearance	mm	140 to 155	150	Pass
G - Elbow back to wrist pivot	mm	290 to 305	300	Pass
H - Skull cap to back line	mm	41 to 46	44	Pass
I - Shoulder to elbow length	mm	330 to 345	335	Pass
J - Elbow rest height	mm	190 to 211	209	Pass
K - Buttock to knee length	mm	579 to 604	591	Pass
L - Poplipteal length	mm	429 to 455	447	Pass
M - Knee pivot height	mm	485 to 500	492	Pass
N - Buttock poplipteal length	mm	452 to 477	475	Pass
O - Chest depth	mm	213 to 229	221	Pass
P - Foot length	mm	251 to 267	254	Pass
V - Shoulder breadth	mm	422 to 437	425	Pass
W - Foot breadth	mm	91 to 107	102	Pass
Y - Chest circumference	mm	970 to 1001	992	Pass
Z - Waist circumference	mm	836 to 866	864	Pass
AA - Location for chest circumference	mm	429 to 434	430	Pass
BB - Location for waist circumference	mm	226 to 231	229	Pass
		Overall Test Results		Pass

Test Program:	Hybrid III 5th Percentile Female Head Drop Test	Test Date:	1/5/10
ATD Serial No.:	630	Test I.D.:	HD01B

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Peak Resultant Acceleration	G's	250.0 to 300.0	271.8	Pass
Peak Lateral Acceleration	G's	≤15.0	5.5	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
		Overall Test Results		Pass



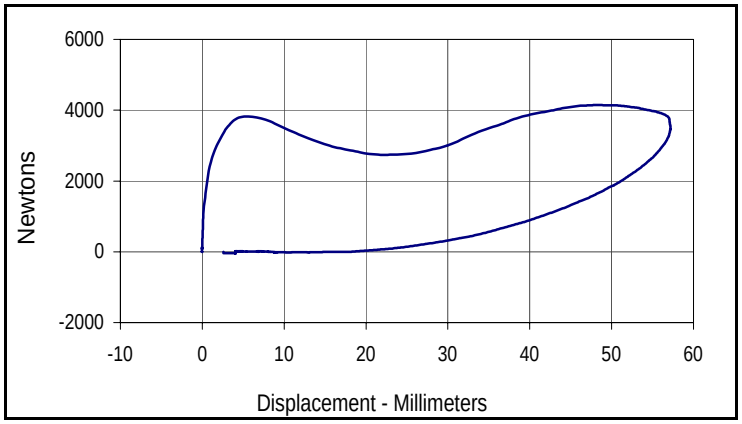
Curve Description			
Head Resultant			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
271.8	2.5	0.5	0.0



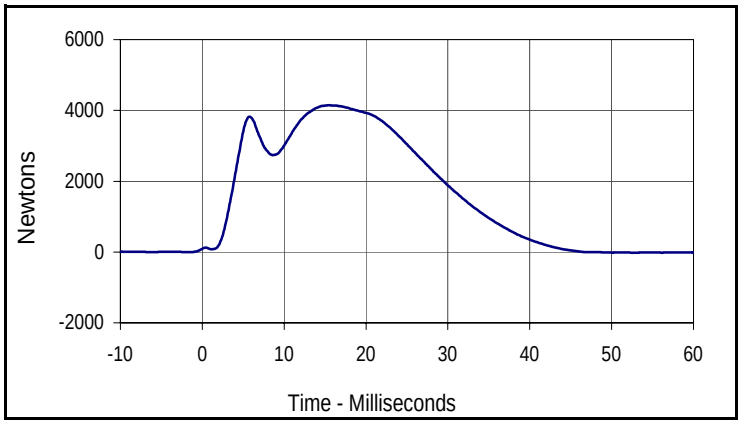
Curve Description			
Head Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
0.4	5.7	-5.5	2.5

Test Program:	Hybrid III 5th Percentile Female Thorax Impact Test	Test Date:	1/5/10
ATD Serial No.:	630	Test I.D.:	CH01B

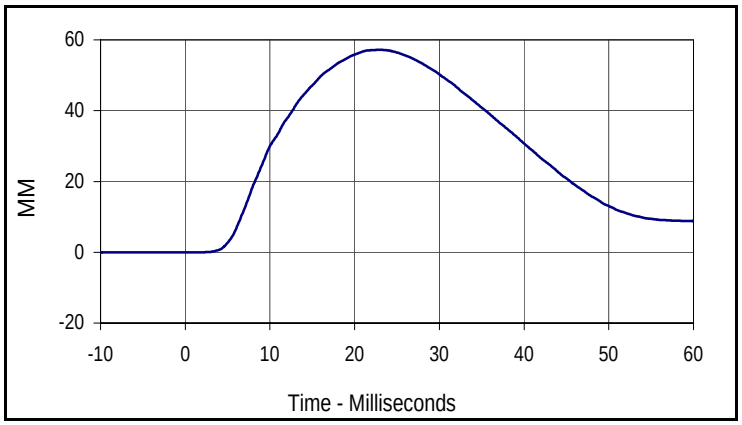
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	6.59 to 6.83	6.74	Pass
Peak Chest Deflection	MM	50.0 to 58.0	57.2	Pass
Peak Force Between 50 and 58 MM	Newtons	3900 to 4400	4146	Pass
Peak Force Between 18 and 50 MM	Newtons	≤4600	4139	Pass
Internal Hysterysis	%	69 to 85	80.5	Pass
		Overall Test Results		Pass



Curve Description			
Probe Force vs. Chest Deflection			
CURNO	Type	SAE Class	Hysterysis
003	FIL	180	80.5
Peak Probe Force		Peak Chest Displ.	
4145.6		57.2	



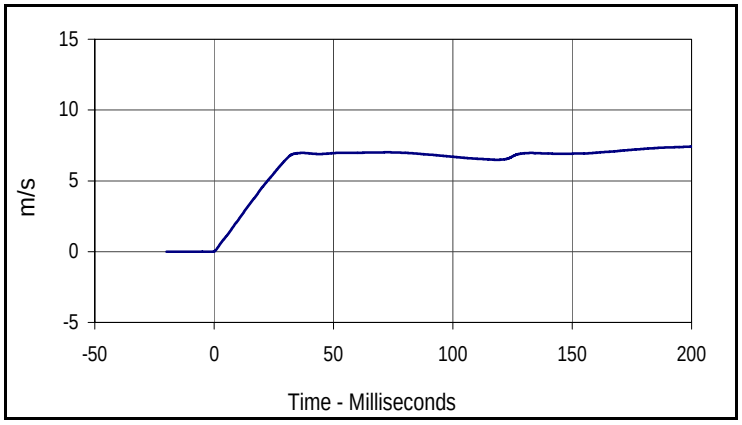
Curve Description			
Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	180	Newtons
Max	Time	Min	Time
4145.6	15.4	-52.9	187.8



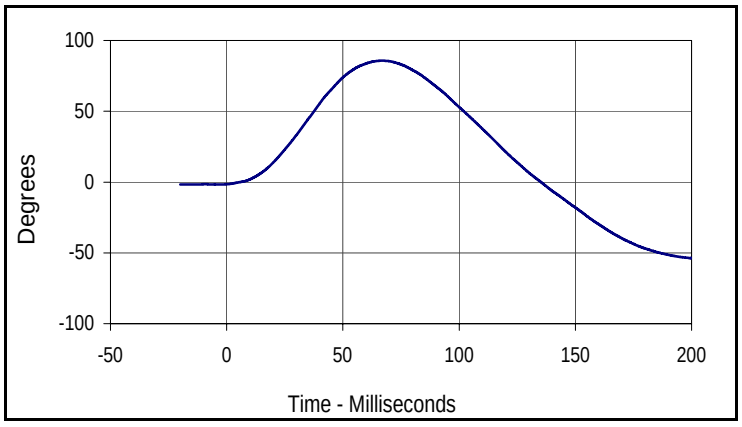
Curve Description			
Chest Deflection			
CURNO	Type	SAE Class	Units
001	FIL	180	MM
Max	Time	Min	Time
57.2	22.9	0.0	-8.5

Test Program:	Hybrid III 5th Percentile Female Neck Flexion Test	Test Date:	1/5/10
ATD Serial No.:	630	Test I.D.:	NF01B

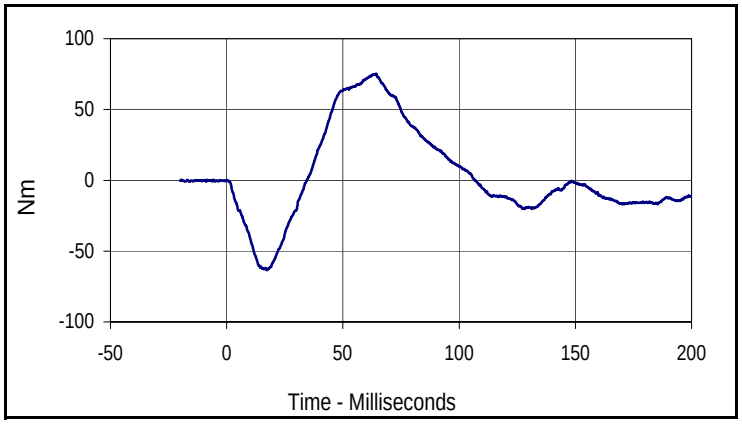
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	6.89 to 7.13	6.94	Pass
Pendulum Deceleration	10 Msec.	m/s	2.1 to 2.5	2.2	Pass
	20 Msec.	m/s	4.0 to 5.0	4.5	Pass
	30 Msec.	m/s	5.8 to 7.0	6.5	Pass
"D" Plane Rotation	Max	Degrees	77.0 to 91.0	85.7	Pass
Peak Moment in Rotation	Max	Nm	69.0 to 83.0	75.4	Pass
Positive Moment Decay, Time To 10 Nm		Msec.	80.0 to 100.0	98.6	Pass
			Overall Test Results		Pass



Curve Description			
Pendulum Velocity			
CURNO	Type	SAE Class	Units
001	FIL	180	m/s
Max	Time	Min	Time
7.4	200.0	0.0	-0.7



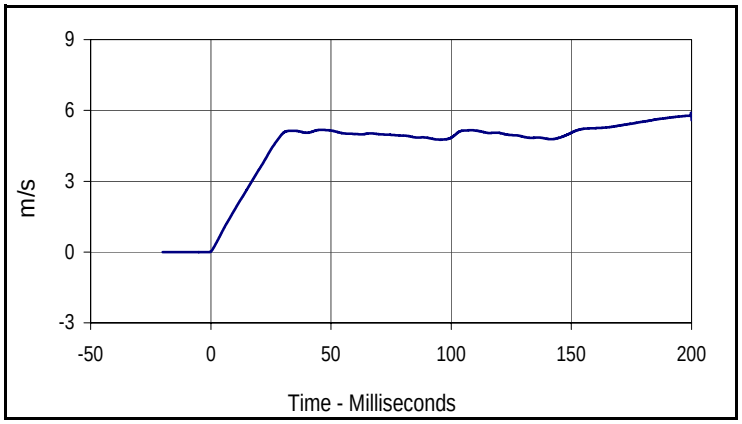
Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
85.7	66.9	-53.7	200.0



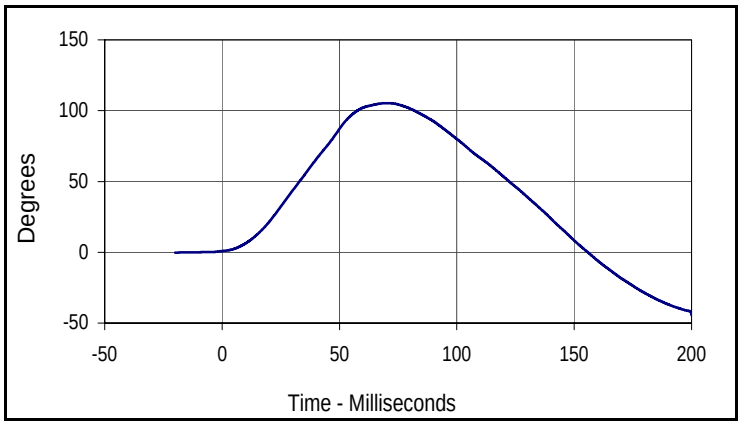
Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Time	Min	Time
75.4	64.2	-63.3	17.3

Test Program:	Hybrid III 5th Percentile Female Neck Extension Test	Test Date:	1/5/10
ATD Serial No.:	630	Test I.D.:	NE01B

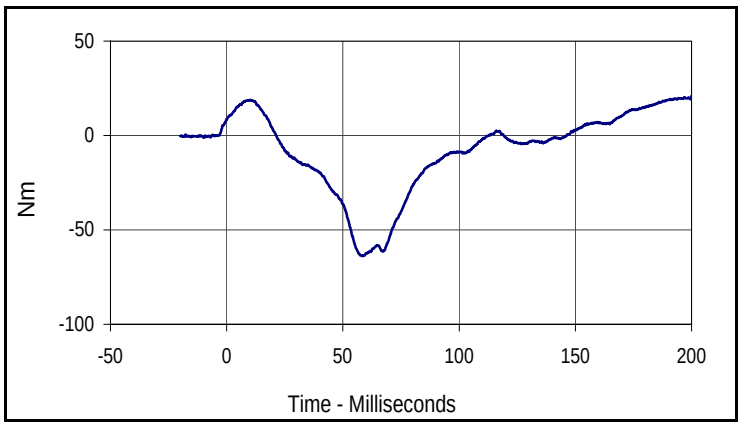
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	5.95 to 6.19	5.96	Pass
Pendulum Deceleration	10 Msec.	m/s	1.5 to 1.9	1.8	Pass
	20 Msec.	m/s	3.1 to 3.9	3.5	Pass
	30 Msec.	m/s	4.6 to 5.6	5.0	Pass
"D" Plane Rotation	Max	Degrees	99.0 to 114.0	105.3	Pass
Peak Moment in Rotation	Max	Nm	-53.0 to -65.0	-63.8	Pass
Positive Moment Decay, Time To -10 Nm		Msec.	94.0 to 114.0	95.2	Pass
			Overall Test Results		Pass



Curve Description			
Pendulum Velocity			
CURNO	Type	SAE Class	Units
001	FIL	180	m/s
Max	Time	Min	Time
5.9	199.9	0.0	-0.9



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
105.3	69.9	-44.5	200.0



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
002	FIL	600	Nm
Max	Time	Min	Time
21.1	200.0	-64.9	58.4

Test Program:	Hybrid III 5th Percentile Female Knee Impact Test	Test Date:	1/5/10
ATD Serial No.:	630	Test I.D.:	LK01C , RK01D

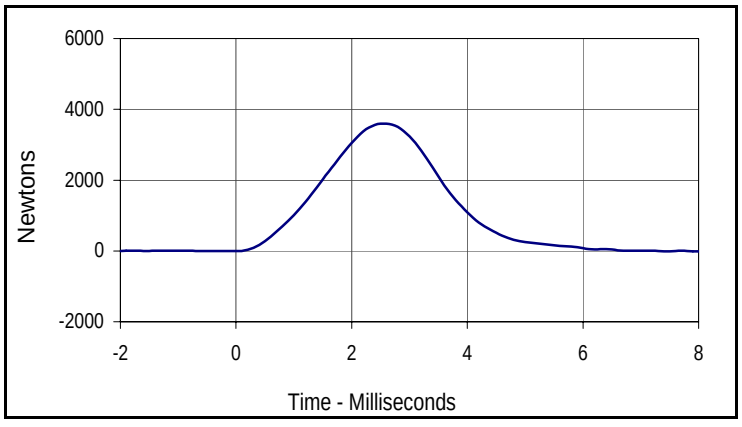
Left Knee

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.11	Pass
Peak Probe Force	Newtons	3450 to 4060	3804	Pass
		Overall Test Results		Pass

Right Knee

Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.09	Pass
Peak Probe Force	Newtons	3450 to 4060	3598	Pass
		Overall Test Results		Pass

Curve Description			
Left Knee Probe Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
3803.8	2.6	-15.6	7.6



Curve Description			
Right Knee Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	600	Newtons
Max	Time	Min	Time
3597.8	2.6	-16.0	8.3

Test Program:	Hybrid III 5th Percentile Female Torso Flexion Test	Test Date:	1/5/10
ATD Serial No.:	630	Test I.D.:	TF01B

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	^{o}C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Initial reference plane angle	Degrees	≤20.0	3.5	Pass
Peak Force at 45 +/-0.5 degrees	Newtons	320.0 to 390.0	354.3	Pass
Torso rotation rate	deg/sec	0.5 to 1.5	1.5	Pass
Final reference plane angle	Degrees	+/-8	2.8	Pass
		Overall Test Results		Pass

Test Program:	Hybrid III 5th Percentile Female External Measurements	Test Date:	1/5/10
ATD Serial No.:	630	Test I.D.:	N/A

Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory relative humidity	%	10 to 70	30	Pass
A - Total sitting height	mm	774.7 to 800.1	780	Pass
B - Shoulder pivot height	mm	431.8 to 457.2	445	Pass
C - "H" point height (Reference)	mm	81.3 to 86.3	85	Pass
D - "H" point from seat back (Ref.)	mm	144.8 to 149.8	145	Pass
E - Shoulder pivot from backline	mm	68.6 to 83.8	83	Pass
F - Thigh clearance	mm	119.4 to 134.6	130	Pass
G - Back of elbow to wrist pivot	mm	243.9 to 259.1	250	Pass
H - Head to back line	mm	40.7 to 45.7	45	Pass
I - Shoulder to elbow length	mm	276.8 to 297.2	291	Pass
J - Elbow rest heignt	mm	182.8 to 203.2	202	Pass
K - Buttock to knee length	mm	520.7 to 546.1	543	Pass
L - Poplipteal height	mm	355.6 to 376.0	357	Pass
M - Knee pivot height	mm	393.7 to 419.1	416	Pass
N - Buttock poplipteal length	mm	414.0 to 439.4	423	Pass
O - Chest depth without jacket	mm	175.3 to 190.5	187	Pass
P - Foot length	mm	218.5 to 233.7	231	Pass
R - Buttock to knee pivot length	mm	457.2 to 482.6	476	Pass
S - Head breadth	mm	137.1 to 147.3	145	Pass
T - Head depth	mm	177.8 to 188.0	185	Pass
U - Hip breadth	mm	299.7 to 314.9	300	Pass
V - Shoulder breadth	mm	350.5 to 365.7	364	Pass
W - Foot breadth	mm	78.8 to 94.0	90	Pass
X - Head circumference	mm	528.3 to 548.7	543	Pass
Y - Chest circumference with jacket	mm	850.8 to 881.3	865	Pass
Z - Waist circumference	mm	759.5 to 789.9	773	Pass
AA - Location for chest circumference	mm	299.7 to 309.9	300	Pass
BB - Location for waist circumference	mm	160.1 to 170.2	164	Pass
		Overall Test Results		Pass

APPENDIX D
SUPPLEMENTARY INFORMATION

BULLET VEHICLE DRIVER ATD INITIAL ANGLES OF POTENTIOMETERS

THOR S/N: 0006										Sensitivity (JARI)	Sensitivity (GESAC)	Setup Angle (GESAC) for *.set file
Sensor		Mfg	S/N	Capacity	Unit-1	Unit-2	Range	Direction	CFC	V/Unit-1	V/Unit-1	Degrees
NKCRP		Contolec	pd210-4B	318	deg	mV	1000	Rear +	180	0.031551	0.031551	
CX-1ULB		Contolec	CRUX-0040	318	deg	mV	2000	Rear +	180	0.031103	0.031103	151.6418
CX-2ULM		Contolec	CRUX-0041	318	deg	mV	2000	Rear +	180	0.031087	0.031087	256.3945
CX-3ULE		Contolec	CRUX-0042	318	deg	mV	2000	Rear +	180	0.0309	0.0309	74.82515
CX-1URB		Contolec	CRUX-0001	318	deg	mV	2000	Rear +	180	0.031531	0.031531	169.3518
CX-2URM		Contolec	CRUX-0307	318	deg	mV	2000	Rear +	180	0.031107	0.031107	72.01164
CX-3URE		Contolec	CRUX-0003	318	deg	mV	2000	Rear +	180	0.03199	0.03199	244.6895
CX-1LLB		Contolec	CRUX-0023	318	deg	mV	2000	Rear +	180	0.030492	0.030492	170.6074
CX-2LLM		Contolec	CRUX-0357	318	deg	mV	2000	Rear +	180	0.030519	0.030519	76.07653
CX-3LLE		Contolec	CRUX-0317	318	deg	mV	2000	Rear +	180	0.031613	0.031613	204.8654
CX-1LRB		Contolec	CRUX-0043	318	deg	mV	2000	Rear +	180	0.031539	0.031539	160.5694
CX-2LRM		Contolec	CRUX-0706	318	deg	mV	2000	Rear +	180	0.031197	0.031197	230.9136
CS-3LRE		Contolec	CRUX-0074	318	deg	mV	2000	Rear +	180	0.031896	0.031896	172.6564
DP1-L	LString	Space-Age	256	101.6	mm	mV	10000	Rear +	180	0.094593	0.094593	185.03
DP2-L	LZ-Pot	Contolec	0107	318	deg	mV	1000	Rear +	180	0.0299	0.0299	163.95
DP3-L	LY-Pot	Duncan	0410	360	deg	mV	1000	Rear +	180	0.031701	0.031701	154.24
DP1-R	RString	Space-Age	014486	101.6	mm	mV	10000	Rear +	180	0.096073	0.096073	188.02
DP2-R	RZ-Pot	Contolec	0104	318	deg	mV	1000	Rear +	180	0.028875	0.028875	153.13
DP3-R	RY-Pot	Duncan	0361	360	deg	mV	1000	Rear +	180	0.031631	0.031631	160.77

BULLET VEHICLE DRIVER ATD TILT SENSOR MEASUREMENTS

Channel	THOR NT	Tilt Sensor	
		X	Y
0	Head	1.1	8.1
1	Neck	-1.7	-12.0
2	Thoracic Spine	-30.2	94.1
3	Lumbar Spine	-6.1	34.5
4	Pelvis	176.6	9.0
	Neck Pitch Setting	Neutral	
	Spine Pitch Setting	Slouch	