REPORT NUMBER TR-P28001-23-NC

NEW CAR ASSESMENT PROGRAM
FRONTAL BARRIER IMPACT TEST

HONDA MOTOR CO., LTD
2009 HONDA FIT SPORT
5-DOOR HATCHBACK

NHTSA NUMBER: M95302

Prepared By:
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SEPTEMBER 19, 2008

FINAL REPORT

PREPARED FOR:
U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
OFFICE OF CRASHWORTHINESS STANDARDS
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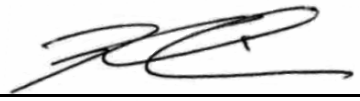
Prepared by:  Date: September 19, 2008

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16. Abstract

A 35 mph (56.3 km/h) frontal barrier impact test was conducted on the subject 2009 Honda Fit Sport 5-Door Hatchback at KARCO Engineering, LLC, in Adelanto, CA, on September 19, 2008. This test was conducted to obtain data indicant of FMVSS 208, 212, 219 (partial), 301, and footwell intrusion performance. The impact velocity was 56.02 km/h. The ambient temperature at the barrier at the time of the crash was 31.1 degrees Celsius. The vehicle's maximum post static crush was 524 mm at DPD 2, to the left of the vehicle's centerline. The test vehicle was equipped with a 3-point continuous belt system and a second generation airbag at both front outboard positions. With respect to FMVSS 208 'Occupant Crash Protection', the occupant injury criteria summary is as follows:

Measurement Description	Units	Threshold	Driver ATD	Passenger ATD
Head Injury Criteria (HIC)	N/A	1000	312.4	336.0
Max. Chest Accel. (3 msec. Chest Clip)	G's	60	38.8	38.7
Left Femur Force	Newtons	10008	-660.1	-4088.4
Right Femur Force	Newtons	10008	-516.5	-2349.6

17. Key Words	18. Distribution Statement
56.3 km/h NCAP Frontal Impact Test New Car Assesment Program (NCAP) 2009 Honda Fit Sport 5-Door Hatchback NHTSA No. M95302	Copies of this report are available from: National Highway Traffic Safety Admin. NHTSA Technical Reference Division 1200 New Jersey Ave., SE, Room W43-410 Washington, DC 20590

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TABLE OF CONTENTS

SECTION 1
PURPOSE AND SUMMARY OF TEST M95302

1.1 PURPOSE

This 35 mph (56.3 km/h) frontal barrier impact test is part of the New Car Assessment Program (NCAP) sponsored by the National Highway Traffic Safety Administration (NHTSA) under Contract No. DTNH22-06-D-00027. The purpose of this test was to obtain vehicle crashworthiness and occupant restraint system performance data for an impact speed in excess of the current 30 mph (48.3 km/h) requirements.

The 35 mph (56.3 km/h) frontal barrier impact test was conducted in accordance with the Office of Crashworthiness Standards (OCS) New Car Assessment Program (NCAP) Laboratory Indicant Test Procedure, dated July 2005. Data was obtained indicant of FMVSS 208 “Occupant Crash Protection”, FMVSS 212, “Windshield Retention”, FMVSS 219, “Windshield Zone Intrusion (Partial)”, and FMVSS 301 “Fuel System Integrity”, performance. Procedures for receiving, inspection, testing and reporting of test results are described in the test procedures and are not repeated in this report.

1.2 SUMMARY

A load cell barrier consisting of 36 load cells was impacted by a 2009 Honda Fit Sport 5-Door Hatchback at a velocity of 56.02 km/h. The test was performed at KARCO Engineering, LLC on September 19, 2008

Three (3) real-time and fourteen (14) high-speed cameras were used to document the frontal barrier impact event. Camera locations and other pertinent camera information can be found in Data Sheet number 14 (page number 24) of this report.

Two Part 572E, 50th percentile male anthropomorphic test devices (ATDs), were placed in the driver and right-front passenger seating positions according to dummy placement instructions specified in the Laboratory Indicant Test Procedure.

Both ATDs were fully instrumented with head (primary and redundant), chest (primary and redundant) and pelvis triaxial accelerometers, chest displacement potentiometers, six-axis upper neck transducers, right/left femur load cells, and lower leg instrumentation. Seat belt load cells were placed on the driver’s and passenger’s lap and shoulder belts to measure dummy torso and pelvic section loading. Shoulder belt spool-off was measured for the driver and passenger dummies. The driver (position 1) ATD (Serial No.035) and the right-front passenger (position 2) ATD (Serial No. 034) were calibrated prior to this test.

One hundred and thirty-two (132) channels of data were recorded using a TDAS data acquisition system. Appendix A contains Pre and Post-Test Photographs, Appendix B contains the Dummy Response data traces, and Appendix C contains the Dummy Calibration data.

There was 100% windshield retention and no intrusion into the protected zone of the windshield during impact. There was no Stoddard solvent leakage after the event, or during any phase of the static rollover.

The maximum static crush of the vehicle was 524 mm at DPD 2, to the left of the vehicle's centerline. Both the driver and passenger side doors remained closed and latched during the impact event, and were operable after the impact.

The driver’s visible contact points were as follows: The driver ATD's head and chest contacted the airbag. The head also contacted the headrest. Both knees contacted the bolster.

The passenger’s visible contact points were as follows: The passenger ATD's head, chest, and abdomen contacted the airbag. The head also contacted the headrest. Both knees contacted the glovebox.

Occupant injury data is contained in table below.

OCCUPANT DATA SUMMARY

ATD Position	HIC 36	3 msec Chest Clip	Chest Defl. (mm)	Left Femur (N)	Right Femur (N)
Driver	312.4	38.8	-32.2	-660.1	-516.5
Passenger	336.0	38.7	-22.9	-4088.4	-2349.6

Additional data plots for this test are available in the research and development section of the NHTSA website. The website can be found at: www.NHTSA.Dot.Gov

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

CONVERSION FACTORS USED IN THIS REPORT*

Quantity	Typical Application	Std Units	Metric Unit	Multiply By
Mass	Vehicle Weight	lb	kg	0.4536
Linear Velocity	Impact Velocity	miles/hr	km/hr	1.609
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

* Based on the Recommended Practice in SAE J916, May 85

DATA SHEET NO. 1

CRASH TEST SUMMARY

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

PRIMARY IMPACT DATA

Measured Parameter	Units	Value
Velocity at Impact	km/h	56.02
Test Weight	kg	1325
Impact Angle	degrees	0
Average Rebound	mm	902
Maximum Static Crush	mm	524

DOOR OPENING AND SEAT TRACK INFORMATION

Description	Driver	Passenger
Front Door Opening	Remained closed and latched, jammed	Remained closed and latched, jammed
Rear Door Opening	Remained closed and latched, operational	Remained closed and latched, operational
Seat Track Shift (mm)	None	None
Seatback Failure	No	No

TEST DUMMY INFORMATION

Description	Driver	Passenger
Dummy Type/Serial No.	50% Male Hybrid III No.035	50% Male Hybrid III No. 034
Head Contact	Airbag, headrest	Airbag, headrest
Chest Contact	Airbag	Airbag
Abdomen Contact	None	Airbag
Left Knee Contact	Bolster	Glovebox
Right Knee Contact	Bolster	Glovebox

MOVIE COVERAGE

Cameras	Standard	Additional
High Speed	16	0
Real Time	1	2
Total	15	2

DATA CHANNELS

Driver ATD Sensors	40
Passenger ATD Sensors	40
Belt Assessment Sensors	8
Vehicle Structure Acclerometers	8
Rigid Barrier Load Cells	36
Total	132

DATA SHEET NO. 2

GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

TEST VEHICLE INFORMATION AND OPTIONS

NHTSA No.	M95302
Make	Honda
Model	Fit Sport
Body Style	5-Door Hatchback
VIN No.	JHMGE87439S000288
Color	Silver
Delivery Date	08/28/08
Odometer (Miles)	24.0
Dealer	Valley Hi Honda
Transmission	5-Speed Manual
Final Drive	Front
Type/No. of Cylinders	Inline 4
Engine Displ. (L)	1.5
Engine Placement	Transverse
Roof Rack	No
Sunroof/T-top	No
Tinted Glass	No
Traction Control	No
Power Brakes	Yes
Front Disc	Yes
Rear Disc	No

Anti-Lock Brakes	Yes
All Wheel Drive	No
Power Steering	Yes
Driver Front Airbag	Yes
Driver Side Torso Airbag	Yes
Driver Side Head Airbag	No
Driver Curtain Airbag	Yes
Pass. Front Airbag	Yes
Pass. Side Torso Airbag	Yes
Pass. Head Airbag	No
Pass. Curtain Airbag	Yes
Pre-Tensioners	Yes
Load Limiters	Yes
Bucket Seats	Yes
Air Conditioning	Yes
AM/FM CD	Yes
Tilt Steering	Yes
Automatic Door Locks	Yes
Power Windows	Yes
Power Seats	No
Other	Active front head restraints

Does the Owner's Manual provide instructions to turn off automatic door locks?	Yes

DATA FROM MANUFACTURER'S LABEL

Manufactured By	HONDA MOTOR CO., LTD
Date of Manufacture	Jul-08

GVWR (kg)	1594
GAWR Front (kg)	872
GAWR Rear (kg)	735

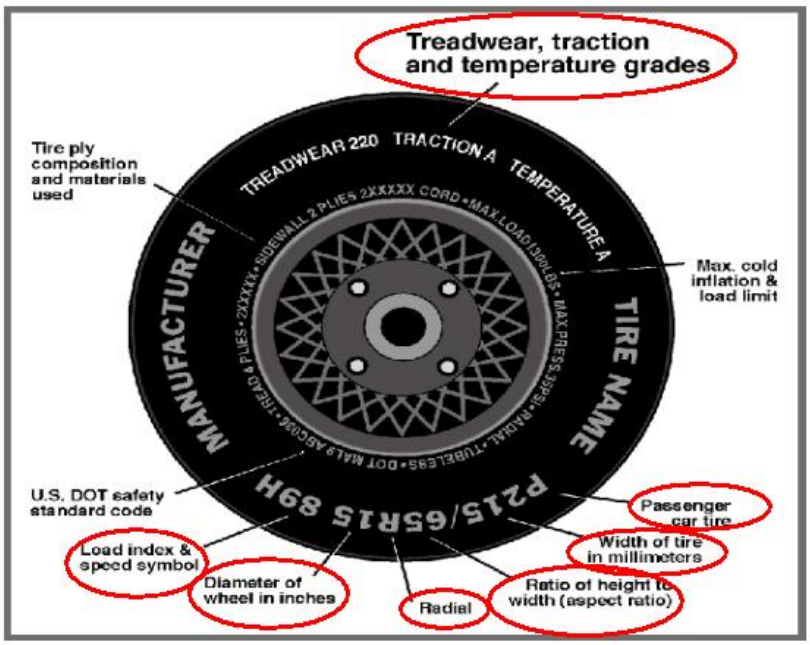
VEHICLE SEATING CAPACITY AND WEIGHT INFORMATION

Measured Parameter	Front	Rear	Third	Total
Type of Seats	Bucket	Bench		
Number of Occupants	2	3		5
Capacity Weight (VCW) (kg)				385
Cargo Weight (RCLW) (kg)				45

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

Collect year, make, model, VIN, items circled in red, and tire manufacturer and tire name.



TIRE INFORMATION

Measured Paramater	Front	Rear
Max. Tire Pressure (kPa)	280	280
Cold Tire Pressure (kPa)	230	230
Recommended Tire Size	185/55R16	185/55R16
Tire Size on Vehicle	185/55R16	185/55R16
Tire Manufacturer	Bridgestone	Bridgestone
Treadwear	300	300
Traction	A	A
Temperature Grades	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	83H	83H
Tire Material	Polyester, Steel, Nylon	Polyester, Steel, Nylon
DOT Safety Code Right	EM7V CMB 2608	EM7V CMB 2608
DOT Safety Code Left	EM7V CMB 2608	EM7V CMB 2608

DATA SHEET NO. 2…(CONTINUED)

GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

TEST VEHICLE WEIGHTS

	Units	As Delivered Weights (UVW)			As Tested Weights (ATW)		
		Front Axle	Rear Axle	Total	Front Axle	Rear Axle	Total
Left	kg	355	212	567	386	276	662
Right	kg	351	215	566	394	269	663
Ratio	%	62.3	37.7	100.0	58.9	41.1	100.0
Totals	kg	706	427	1133	780	545	1325

TARGET TEST WEIGHT CALCULATION

Measured Parameter	Units	Value
Total Delivered Weight (UVW)	kg	1133
Weight of 2 P572 ATD's	kg	152
Rated Cargo/Luggage Weight (RCLW)	kg	45
Calculated Target Vehicle Test Weight (TVTW)	kg	1330

TEST VEHICLE ATTITUDE AND CG

	Units	LF	RF	LR	RR	CG Aft of Front Axle
As Delivered	mm	655	660	670	670	941
As Tested	mm	641	640	636	638	1025

Vehicle Wheel Base (mm): 2495

Weight of Ballast Secured in Cargo Area (kg): 0

Weight of Items Removed (kg): 78

Vehicle Components Removed: Rear bumper, hatch, rear taillights, outboard mirrors, spare tire and tools

*Ballast weight does not include cameras, instrumentation or brake abort system.

FUEL SYSTEM DATA

Fuel System Capacity from Owner's Manual (L): 40.01

Actual Test Volume with Entire Fuel System Filled (L): 31.53

Test Fluid Type: Stoddard Solvent

Kinematic Viscosity: as per ASTM Standard D484-71 Red

Is Vehicle Fuel Pump Electric or Mechanical? electric

If electric, does pump operate with the ignition switch "ON" & engine "OFF"? yes

Fuel System Particulars: After the ignition key is turned from LOCK (0) to ON (II) position, the pump will be filled up for two seconds, and then the pressure is maintained.

DATA SHEET NO. 3

POST-TEST IMPACT DATA

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

SPEED TRAP DATA

Measured Paramater	Units	Requirement	Value
Trap No. 1 Velocity	km/h	55.1 to 57.12	56.02
Trap No. 2 Velocity	km/h	55.1 to 57.12	56.02

VEHICLE STATIC CRUSH

Measured Parameter	Units	Pre-Test	Post-Test	Difference
Left Side	mm	3878	3585	293
Center	mm	4103	3595	508
Right Side	mm	3878	3543	335

VEHICLE REBOUND FROM BARRIER

Measured Paramater	Units	Value
Left Side	mm	910
Center	mm	900
Right Side	mm	895
Average	mm	902

DATA SHEET NO. 4

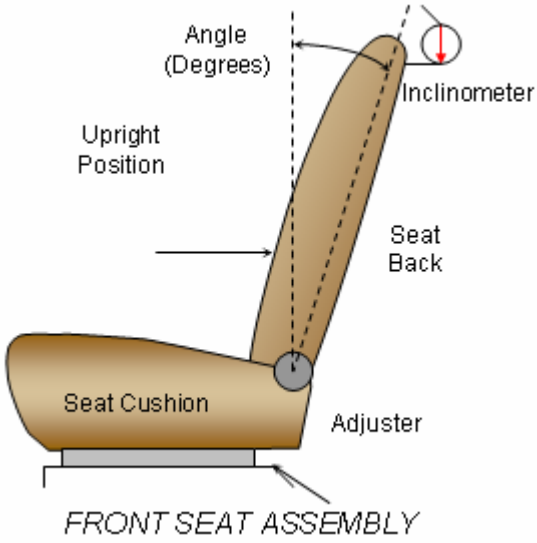
TEST VEHICLE INFORMATION

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

NOMINAL DESIGN RIDING POSITION

The driver and passenger seat backs are positioned to the manufacturer's designated angle. The procedure is as follows: Seat back angle was measured at the headrest, using a digital inclinometer.



SEAT BACK ANGLES

Position	Degrees
Driver w/ Seated Dummy	8.6 @ Headrest
Passenger w/ Seated Dummy	8.6 @ Headrest

SEAT FORE/AFT POSITIONS

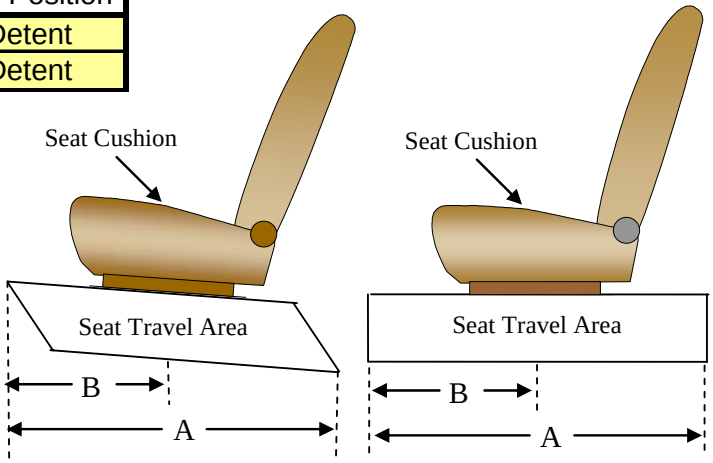
The total seat travel was measured from forward most position to rearmost position. The seat was set at the longitudinal mid position. There were vertical adjustments on the driver seat that was equipped with the vehicle. There were no adjustments on the passenger seat. The driver seat was placed in the lowermost position.

SEAT FORE/AFT POSITIONING

Position	Total Fore/Aft Travel	Placed in Position
Driver Seat	25 Detents	13th Detent
Passenger Seat	25 Detents	13th Detent

SEAT BELT ANCHORAGE

Position number one (1) is the uppermost position.



SEAT BELT ANCHORAGE POSITIONING

	Total Number of Positions	Placed in Position
Driver Seat	4	1
Passenger Seat	4	1

TEST VEHICLE INFORMATION

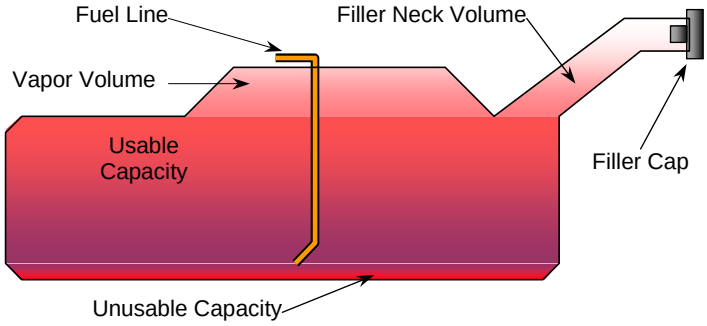
Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

FUEL TANK CAPACITY

	Liters
Usable Capacity of Standard Tank	40.01
Usable Capacity of Optional Tank	
Usable Capacity Used for FMVSS 301	36.79 to 37.59
Actual Amount of Solvent Used	31.53

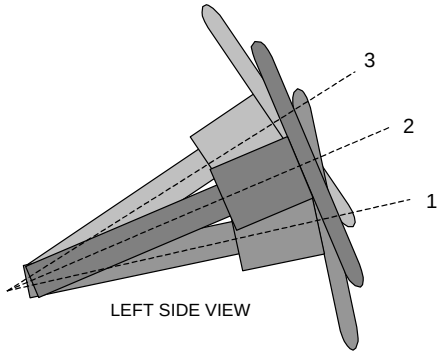
The test vehicle is equipped with an electric fuel pump. The fuel pump will operate for approximately two (2) seconds with the ignition in the "ON" position, after which the fuel pump automatically shuts off. The fuel filler door is located on the left rear fender. The standard fuel tank occupies the area under front row seats.



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.



STEERING COLUMN ASSEMBLY

STEERING COLUMN POSITIONS

	Degrees	Fore/Aft Position
Lowermost - Position No. 1	22.3	192
Geometric Center - Position No. 2	25.9	173
Uppermost - Position No. 3	27.6	165

DATA SHEET NO. 5

DUMMY POSITIONING IN VEHICLE

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

TEST DUMMY POSITION MEASUREMENTS

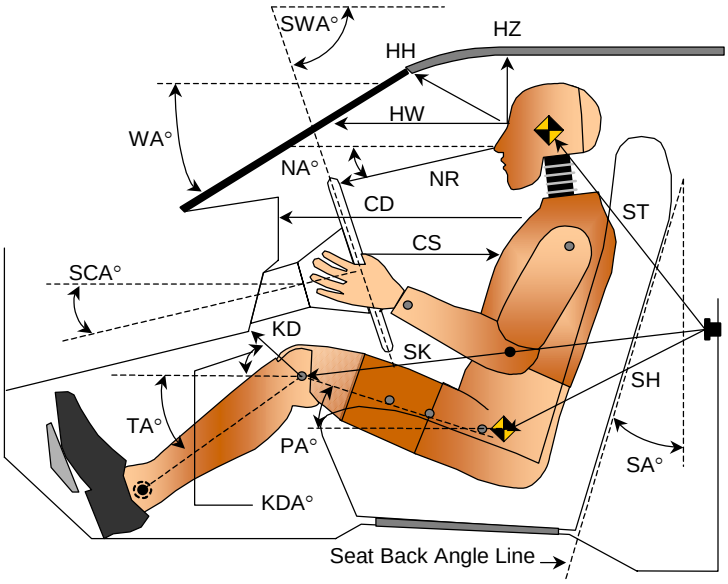
Code	Measurement Description	Driver		Passenger	
		Length (mm)	Angle (°)	Length (mm)	Angle (°)
WA	Windshield angle		22.8		
SWA	Steering wheel angle		64.4		
SCA	Steering column angle		25.6		
SA	Seat Back angle		8.6 @ Headrest		8.6 @ Headrest
HZ	Head to roof (Z)	240	90.0	245	90.0
HH	Head to header	360		345	
HW	Head to windshield	770		715	
HR	Head to side header (Y)	265		260	
NR	Nost to rim	396	8.5		
CD	Chest to dash	590		540	
CS	Chest to steering hub	295			
RA	Rim to abdomen	185			
KDL	Left knee to dash	122	15.3	100	
KDR	Right knee to dash	75		120	6.8
PA	Pelvic angle		24.3		23.8
TA	Tibia Angle		51.4		47.7
KK	Knee to knee	320		254	
SK	Striker to outboard knee	625	2.3	645	6.2
ST	Striker to head	515	81.3	526	79.4
SH	Striker to H-Point	232	0.0	233	0.0
SHY	Striker to H-Point (Y)	235		235	
HS	Head to side window	330		330	
HD	H-Point to door	155		120	
AD	Arm to door	115		62	

DATA SHEET NO. 5…(CONTINUED)

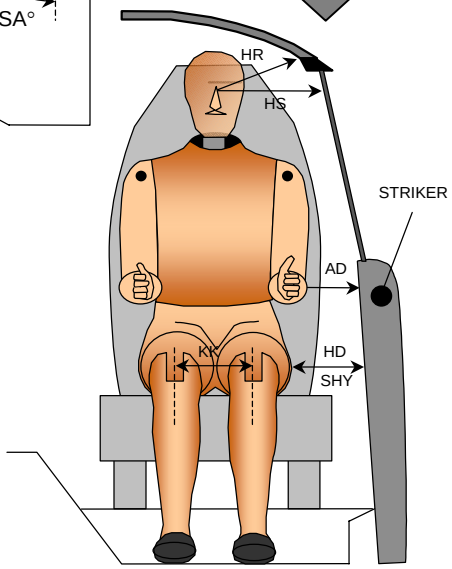
DUMMY POSITIONING IN VEHICLE

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

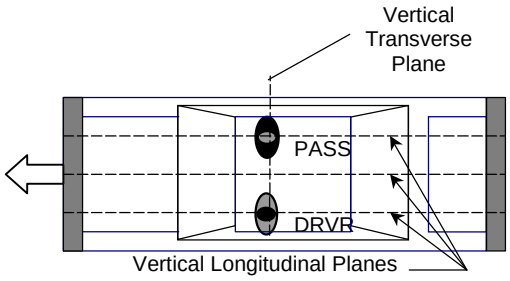
Test Program: NHTSA 35mph NCAP Test Date: 9/19/08



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)



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

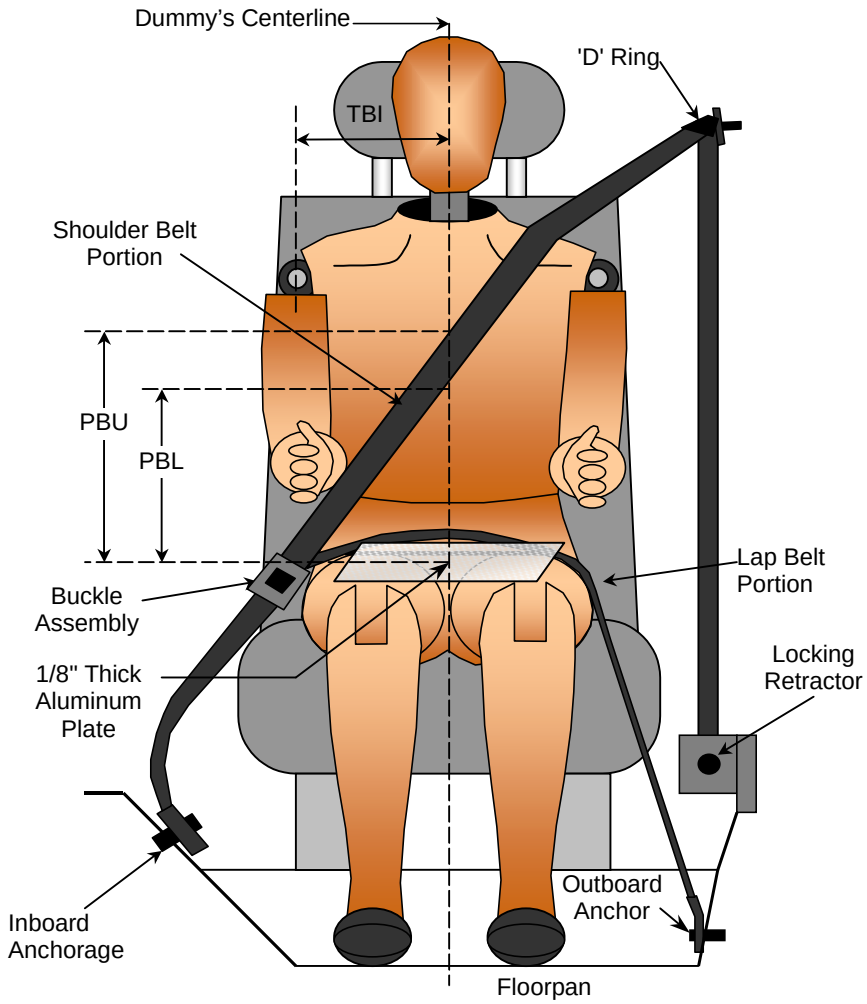


DATA SHEET NO. 6

SEAT BELT POSITIONING DATA

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08



SEAT BELT POSITIONING MEASUREMENTS

Measured Parameter	Units	Driver	Passenger
TBI - Dummy C/L to Lap/Shoulder Belt Intersect	mm	225	225
PBU - Top Surface of Reference to Belt Upper Edge	mm	335	330
PBL - Top Surface of Reference to Belt Lower Edge	mm	260	240
Lap Belt Tension	Newtons	10	10
Shoulder Belt Tension	N/A	Retractor	Retractor

DATA SHEET NO. 7

VEHICLE ACCELEROMETER LOCATIONS

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

VEHICLE ACCELEROMETER PRE-TEST LOCATIONS

No.	Accelerometer Location	Measurement (mm)		
		X	Y	Z
1	Left Rear X-Member	1361	680	338
2	Right Rear X-Member	1343	690	340
3	Engine Top	3392	70	832
4	Engine Bottom	3365	631	140
5	Left Brake Caliper	3214	210	196
6	Right Brake Caliper	3216	212	200
7	Instrument Panel			[1]
8	Left Rear X-Member (Z-Axis)	1361	680	338
9	Right Rear X-Member (Z-Axis)	1343	690	340

Reference Planes: X=From Rear Surface of Vehicle, Y=Vehicle Centerline, Z=Ground Plane

1.) Instrument Panel no longer used by NHTSA.

2.) Instrumentation not installed

DATA SHEET NO. 8

SEAT BELT ASSESSMENT TEST DATA

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

SEAT BELT POSITIONING MEASUREMENTS

Measurement Description	Units	Driver	Passenger
Retractor Reel to D-Ring	mm	680	680
Shoulder Belt Length as Measured on ATD	mm	915	920
Lap Belt Length as Measured on ATD	mm	910	650
Remainder of Belt on Reel	mm	770	825
Total Belt Length for Continuous Webbing Systems	mm	3275	3075

SHOULDER BELT SPOOL-OFF DATA

Measurement Description	Units	Driver	Passenger
As determined mechanically	mm	95	180
As determined electronically	mm	84.9	249.8

BELT STRETCH DATA

Measurement Description	Units	Driver	Passenger
Electronically between belt load cell and D-Ring	mm/cm	*	*
Mechanically	mm/cm		

*Not used with shoulder belt pre-tensioner systems

DATA SHEET NO. 9

SUMMARY OF FMVSS 212 DATA

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

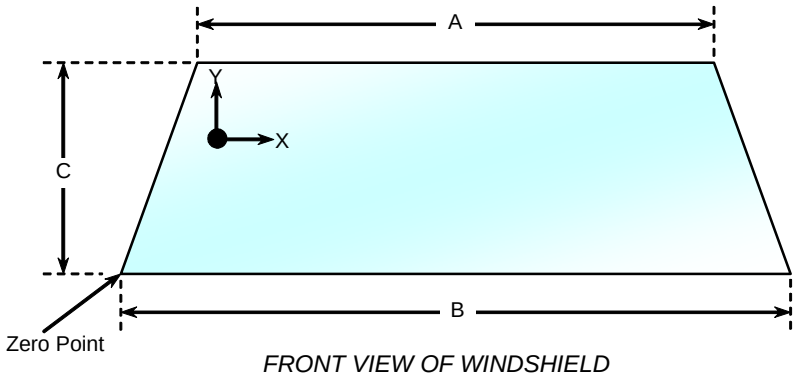
Windshield Mounting Details: Windshield glass is secured to the vehicle frame with rubber cement type adhesive. plastic molding covers the windshield periphery.

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

Temperature of windshield molding during test: 31.1 °C

WINDSHIELD PERIPHERY MEASUREMENTS

Measurement	Pre-Test (mm)	Post-Test (mm)	% of Retention
Left Side	2345	2345	100.0
Right Side	2345	2345	100.0
Total	4690	4690	100.0



FRONT VIEW OF WINDSHIELD

WINDSHIELD DIMENSIONS

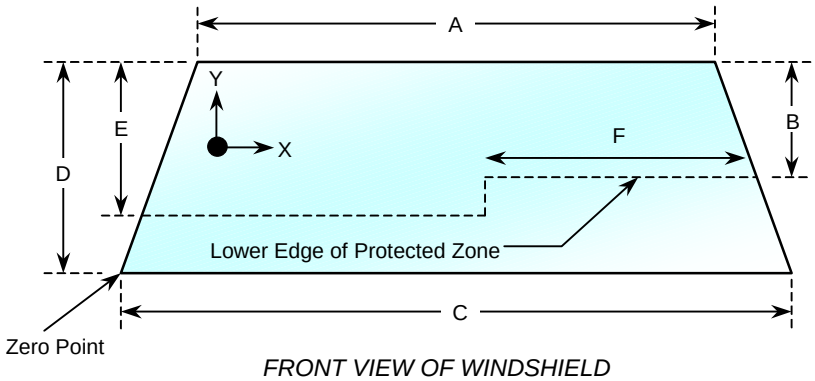
Item	Units	Segment Length	Molding Width
A	mm	1125	18
B	mm	1345	65
C-Left	mm	1110	18
C-Right	mm	1110	18

DATA SHEET NO. 10

WINDSHIELD ZONE INTRUSION FMVSS 219 DATA (PARTIAL)

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08



FRONT VIEW OF WINDSHIELD

WINDSHIELD AND PROTECTED ZONE

Item	Units	Value
A	mm	1125
B	mm	690
C	mm	1345
D	mm	1110
E	mm	725
F	mm	510

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. 11

FMVSS 301 FUEL SYSTEM INTEGRITY POST-IMPACT DATA

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

Test Time: 12:45 PM Temperature: 31.1 ° C

STODDARD SOLVENT SPILLAGE MEASUREMENTS

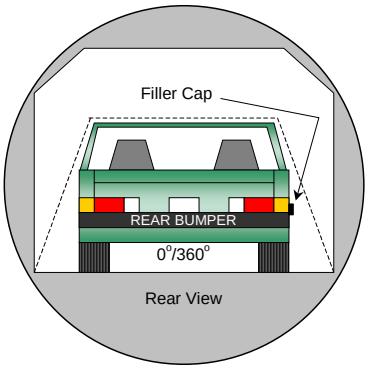
A.	From impact until vehicle motion ceases:	0
	(Maximum allowable = 1 ounce)	
B.	For the 5 minute period after motion ceases:	0
	(Maximum allowable = 5 ounces)	
C.	For the following 25 minutes:	0
	(Maximum allowable = 1 oz/minute)	
D.	Spillage Details:	No leakage occurred

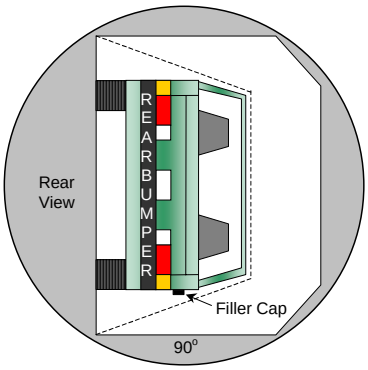
DATA SHEET NO. 12

FMVSS 301 STATIC ROLLOVER DATA

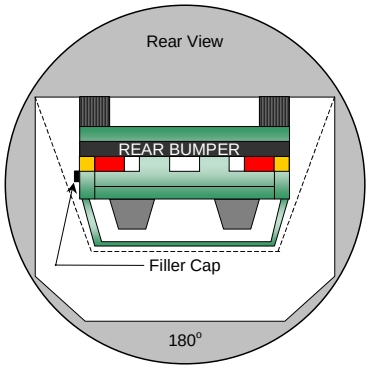
Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

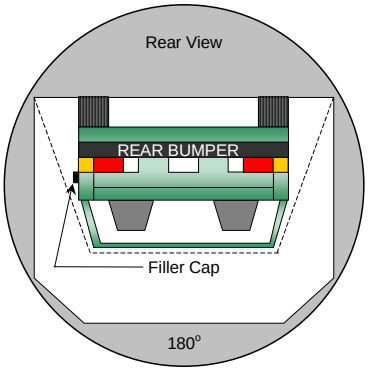




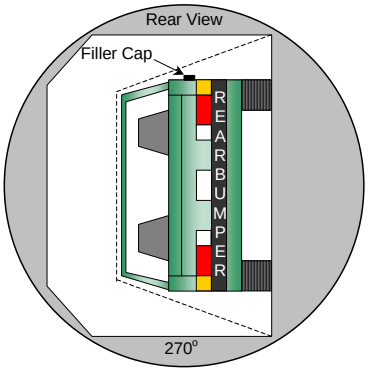
0° to 90°

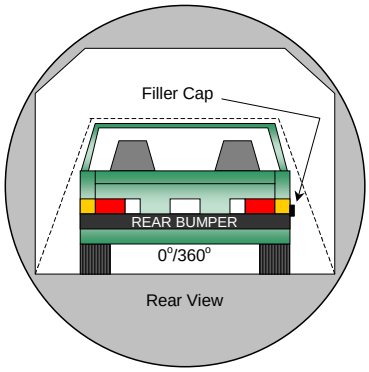


90° to 180°



180° to 270°





270° to 360°

1. The specified fixture rollover rate for each 90° of rotation is 60 to 120 seconds.
2. The position hold time at each position is 300 seconds (minimum).
3. No solvent leakage occurred during rollover.

DATA SHEET NO. 12…(CONTINUED)

FMVSS 301 STATIC ROLLOVER DATA

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

SOLVENT COLLECTION TIME TABLE IN SECONDS

Test Phase	Rotation Time	Hold Time	Total Time
0° to 90°	85	325	410
90° to 180°	84	305	389
180° to 270°	74	310	384
270° to 360°	80	300	380

FMVSS 301 SPILLAGE TABLE REQUIREMENT

First 5 Minutes	5.0
Sixth Minute	1.0
Seventh Minute	1.0
Eighth Minute	1.0

ACTUAL TEST VEHICLE SOLVENT SPILLAGE TABLE (OZ)

Test Phase	First 5 Minutes	Sixth Minute	Seventh Minute	Eighth Minute
0° to 90°	0	0	0	0
90° to 180°	0	0	0	0
180° to 270°	0	0	0	0
270° to 360°	0	0	0	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. 13

VEHICLE MEASUREMENTS

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

VEHICLE MEASUREMENT TABLE

No.	Measurement Description	Units	Pre-Test	Post-Test	Difference
1	Length of test vehicle at centerline	mm	4103	3595	-508
2	RSOV to front of engine	mm	3570	3313	-257
3	RSOV to firewall centerline	mm	3123	3045	-78
4	RSOV to upper leading edge of right door	mm	2765	2763	-2
5	RSOV to upper leading edge of left door	mm	2766	2768	2
6	RSOV to lower leading edge of right door	mm	2720	2714	-6
7	RSOV to lower leading edge of left door	mm	2723	2718	-5
8	RSOV to upper trailing edge of right door	mm	1705	1709	4
9	RSOV to upper trailing edge of left door	mm	1703	1706	3
10	RSOV to lower trailing edge of right door	mm	1706	1703	-3
11	RSOV to lower trailing edge of left door	mm	1708	1703	-5
12	RSOV to bottom of right A-pillar	mm	2621	2612	-9
13	RSOV to bottom of left A-pillar	mm	2626	2619	-7
14	RSOV to firewall on right side	mm	3108	3043	-65
15	RSOV to firewall on left side	mm	3020	3003	-17
16	RSOV to steering column hub	mm	2357	2355	-2
17	Center of steering column to left A-pillar, Y	mm	410	418	8
18	Center of steering column to headlining, Z	mm	425	431	6
19	RSOV to right side of front bumper	mm	3878	3543	-335
20	RSOV to left side of front bumper	mm	3878	3585	-293
21	Length of engine block	mm	480	480	0
RD	RSOV to right side of dash panel	mm	2580	2580	0
CD	RSOV to center of dash panel	mm	2513	2493	-20
LD	RSOV to left side of dash panel	mm	2580	2591	11

DATA SHEET NO. 13…(CONTINUED)

VEHICLE STRUCTURAL MEASUREMENTS

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

VEHICLE STRUCTURAL MEASUREMENT TABLE

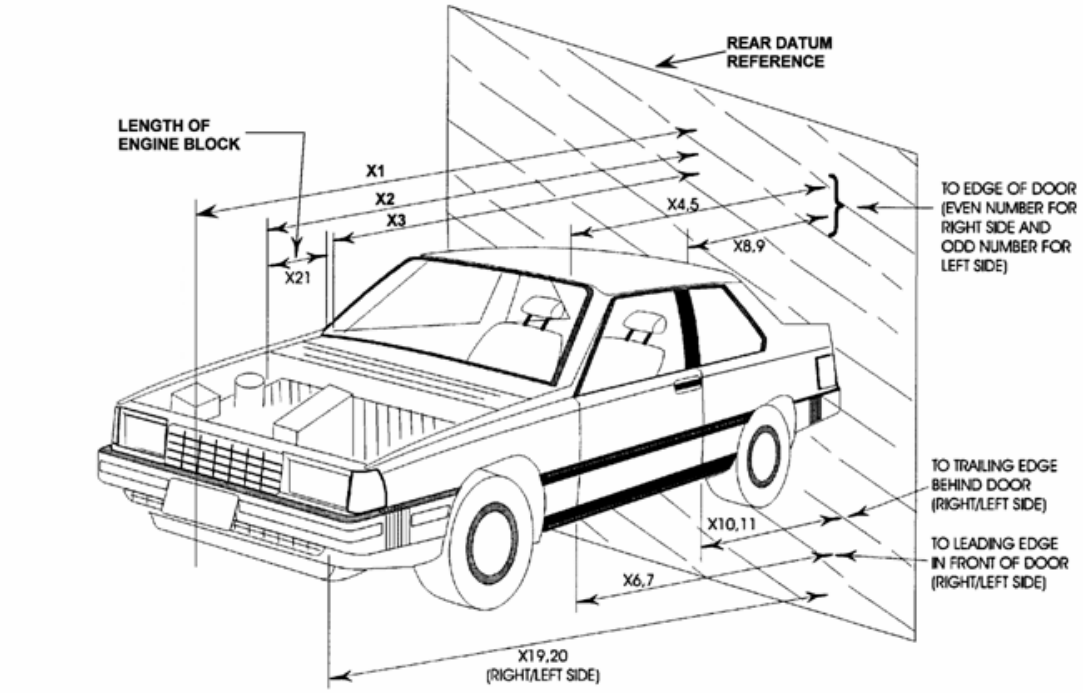
No.	Measurement Description	Units	Pre-Test	Post-Test	Difference
1	Total length	mm	4103	3595	-508
2	Total width	mm	1688	1690	2
3	Front bumper top height	mm	545	600	55
4	Front bumper bottom height	mm	396	175	-221
5	Longitudinal member top height	mm	515	540	25
6	Longtidunal member bottom height	mm	430	441	11
7	Distance between longitudinal members	mm	880	990	110
8	Longitudinal member width	mm	100	88	-12
9	Engine top height	mm	835	857	22
10	Engine bottom height	mm	206	223	17
11	Engine and gearbox width	mm	910	910	0
12	Front bumper-engine distance	mm	530	302	-228
13	Front shock absorber height	mm	860	866	6
14	Front hood leading edge height	mm	655	757	102
15	Distance between front shock absorbers	mm	1130	1104	-26
16	Front bumper-front axle distance	mm	913	482	-431
17	Front axle to A-pillar distance	mm	395	390	-5
18	A Pillar to B Pillar distance	mm	841	835	-6
19	B Pillar to rear axle distance	mm	1040	1042	2
20	B Pillar to C Pillar distance	mm	765	762	-3
21	Roof sill bottom height	mm	1312	1308	-4
22	Roof sill top height	mm	1470	1471	1
23	Floor sill bottom height	mm	179	169	-10
24	Floor sill top height	mm	310	309	-1

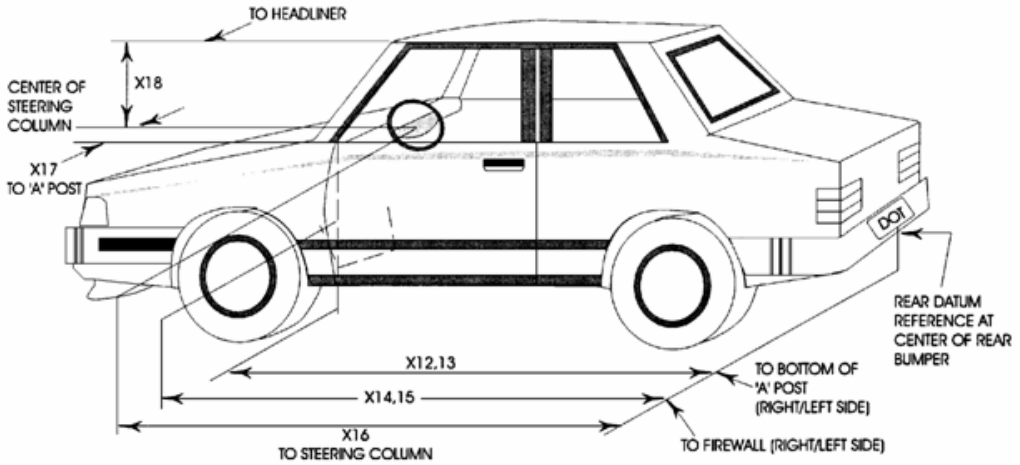
DATA SHEET NO. 13…(CONTINUED)

VEHICLE MEASUREMENTS

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08





DATA SHEET NO. 14

CAMERA LOCATIONS

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

VEHICLE CAMERA MEASUREMENT TABLE

No.	Camera View	Location			Angle (deg)	Film Plane to Head	Lens (mm)	Speed (fps)
		X	Y	Z				
1	Real Time Camera (Panning)	-11412	-8150	-1484	0			30
2	Overall Left Side	-1946	-7191	-801	0	8105	20	1000
3	Closeup Left Side	-1456	-7124	-1003	0	7844	50	1000
4	Driver and Interior View	-6696	-5987	-1071	-17	15570	ZOOM	1000
5	Steering Column (Bottom)	-1972	-8184	-2879	-13	9453	35	1000
6	Steering Column (Top)	-1966	-8141	-3258	-13	9549	35	1000
7	Overall Right Side	-1931	7189	-856	0	7409	20	1000
8	Closeup Right Side	-1491	7131	-1005	0	7079	50	1000
9	Passenger and Interior View	-5136	9516	-2460	-10	10211	ZOOM	1000
10	Right Side View	-1582	7995	-1713	-6	7134	ZOOM	1000
11	Windshield View	-354	0	-5749	-90		24	1000
12	Driver Front View	363	-543	-2548	-34		25	1000
13	Passenger Front View	381	445	-2548	-34		25	1000
14	Pit View of Engine	-756	0	1495	90		12	1000
15	Pit View of Fuel Tank	-3398	0	1495	90		8	1000
16	Real Time Driver	-1926	-8089	-1704	-1	7705	0	30
17	Real Time Passenger	-1433	8047	-1704	-1	7683	0	30

All measurements are made relative to the point of impact.

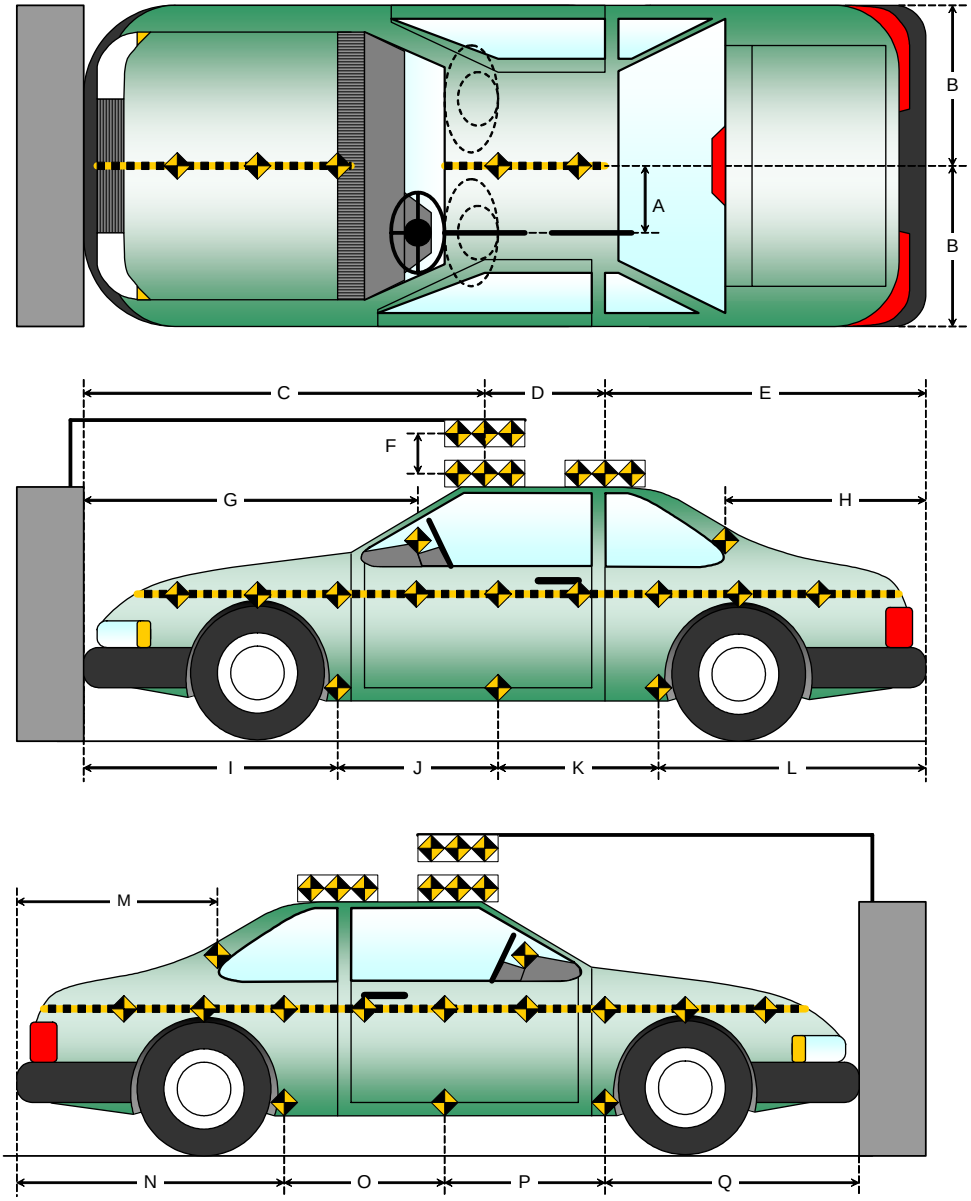
DATA SHEET NO. 15

PHOTOGRAPHIC REFERENCE TARGET LOCATIONS

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

All Dimensions in Millimeters (mm)	
Item	Value
A	375
B	844
C	2094
D	615
E	1489
F	155
G	1592
H	890
I	1334
J	832
K	832
L	1110
M	832
N	1106
O	829
P	829
Q	1353



DATA SHEET NO. 16

VEHICLE INTRUSION MEASUREMENTS

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

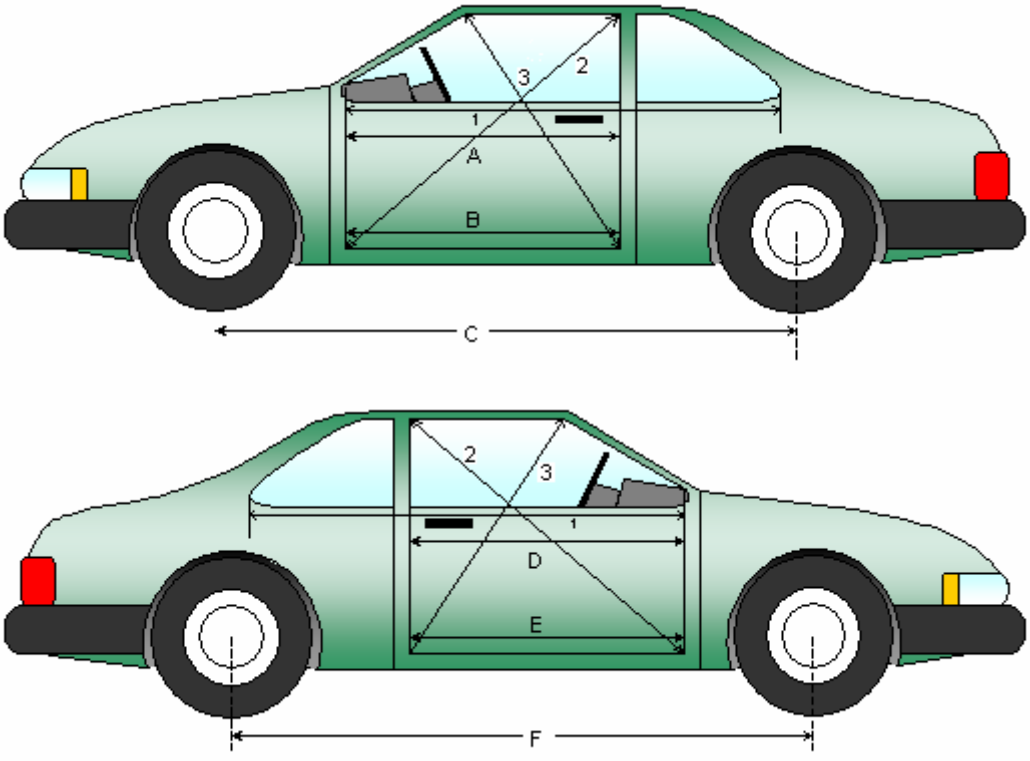
Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

DOOR OPENING WIDTH TABLE

Item	Description	Units	Pre-Test	Post-Test	Difference
1L	Left Side	mm	846	831	15
2L	Left Side (Diagonally)	mm	1456	1450	6
3L	Left Side (Diagonally)	mm	1046	1042	4
1R	Right Side	mm	841	840	1
2R	Right Side (Diagonally)	mm	1466	1465	1
3R	Right Side (Diagonally)	mm	1056	1057	-1

WHEELBASE MEASURMENT TABLE

Item	Description	Units	Pre-Test	Post-Test	Difference
C	Left Side Wheelbase	mm	2495	2414	81
F	Right Side Wheelbase	mm	2495	2446	49



DATA SHEET NO. 16…(CONTINUED)

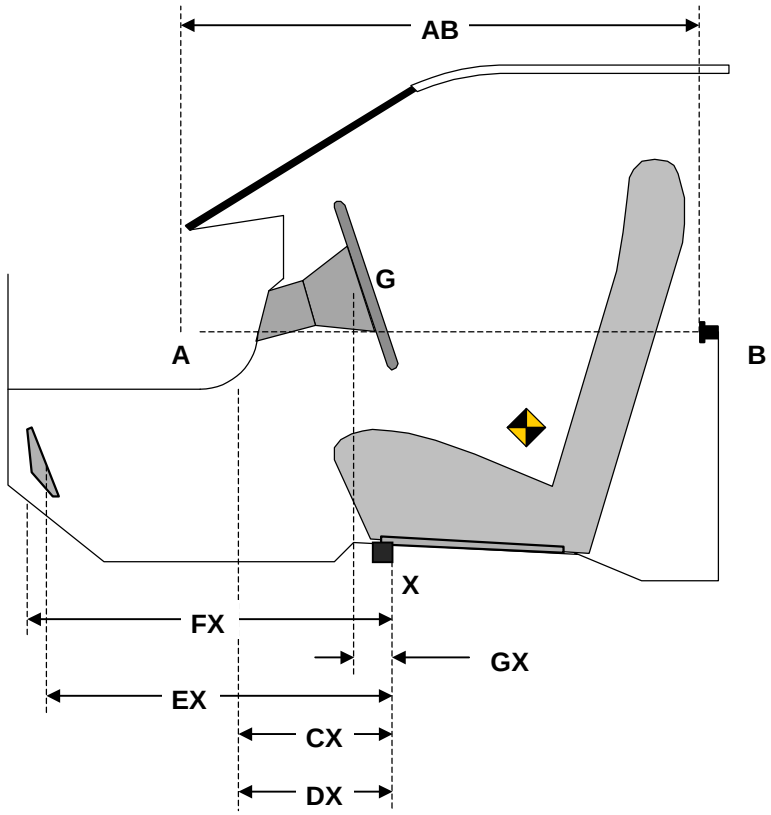
VEHICLE INTRUSION MEASUREMENTS

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

DRIVER COMPARTMENT INTRUSION TABLE

Item	Description	Units	Pre-Test	Post-Test	Difference
AB	Door Opening (Inside Windown Jam)	mm	846	832	14
CX	Left Knee Bolster to X	mm	225	213	12
DX	Right Knee Bolster to X	mm	205	165	40
EX	Brake Pedal to X	mm	465	425	40
FX	Foot Rest to X	mm	470	460	10
GX	Center of Steering Wheel Hub to X	mm	30	47	-17

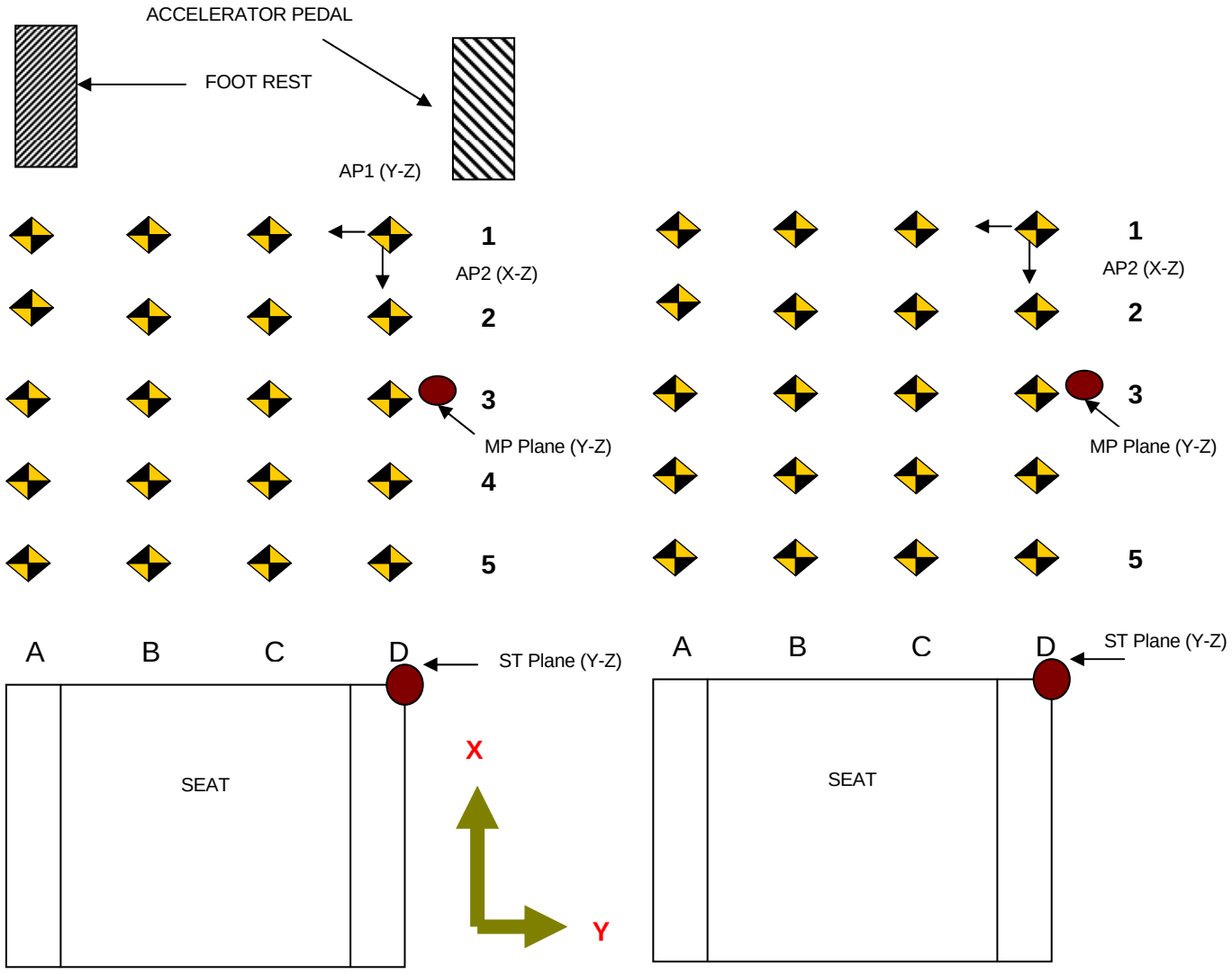


DATA SHEET NO. 16…(CONTINUED)

VEHICLE INTRUSION MEASUREMENTS

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08



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. 16…(CONTINUED)

VEHICLE INTRUSION MEASUREMENTS

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

All measurements in mm

DRIVER FLOORPAN X-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	574	631	608	592	548	596	557	541	26	35	51	51
2	507	552	543	550	483	525	493	509	24	27	50	41
3	449	474	469	469	427	454	435	452	22	20	34	17
4	346	349	347	350	330	332	330	338	16	17	17	12
5	224	227	227	228	210	213	213	219	14	14	14	9

DRIVER FLOORPAN Y-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	3	135	267	384	-3	135	262	366	6	0	5	18
2	2	135	267	382	1	131	254	362	1	4	13	20
3	5	132	268	385	7	124	259	369	-2	8	9	16
4	7	132	270	381	4	124	262	373	3	8	8	8
5	5	131	267	378	4	126	261	369	1	5	6	9

DRIVER FLOORPAN Z-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	-69	-17	-37	-44	-85	-35	-58	-70	16	18	21	26
2	-13	35	19	29	-29	27	-1	9	16	8	20	20
3	56	85	74	78	44	86	70	83	12	-1	4	-5
4	105	102	104	94	102	110	120	118	3	-8	-16	-24
5	89	89	95	95	75	95	110	117	14	-6	-15	-22

DATA SHEET NO. 16…(CONTINUED)

VEHICLE INTRUSION MEASUREMENTS

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

All measurements in mm

PASSENGER FLOORPAN X-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	581	603	622	568	538	563	578	522	43	40	44	46
2	516	521	544	467	495	489	510	506	21	32	34	38
3	335	450	463	345	433	421	436	432	17	29	27	35
4	222	336	340	221	318	313	317	325	17	23	23	20
5	222	221	221	221	207	204	201	204	15	17	20	17

PASSENGER FLOORPAN Y-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	-368	-255	-123	-7	-368	-252	-120	-1	0	-3	-3	-6
2	-374	-253	-124	-1	-365	-249	-119	4	-9	-4	-5	-5
3	-379	-250	-124	-3	-370	-244	-116	2	-9	-6	-8	-5
4	-379	-249	-123	-3	-377	-244	-117	-1	-2	-5	-6	-2
5	-369	-250	-124	-7	-366	-247	-120	-6	-3	-3	-4	-1

PASSENGER FLOORPAN Z-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	-21	-2	9	-29	-23	-20	-18	-51	2	18	27	22
2	53	49	62	53	62	43	43	33	-9	6	19	20
3	109	100	112	110	126	101	107	94	-17	-1	5	16
4	115	128	131	133	142	144	141	136	-27	-16	-10	-3
5	103	121	116	116	125	136	130	111	-22	-15	-14	5

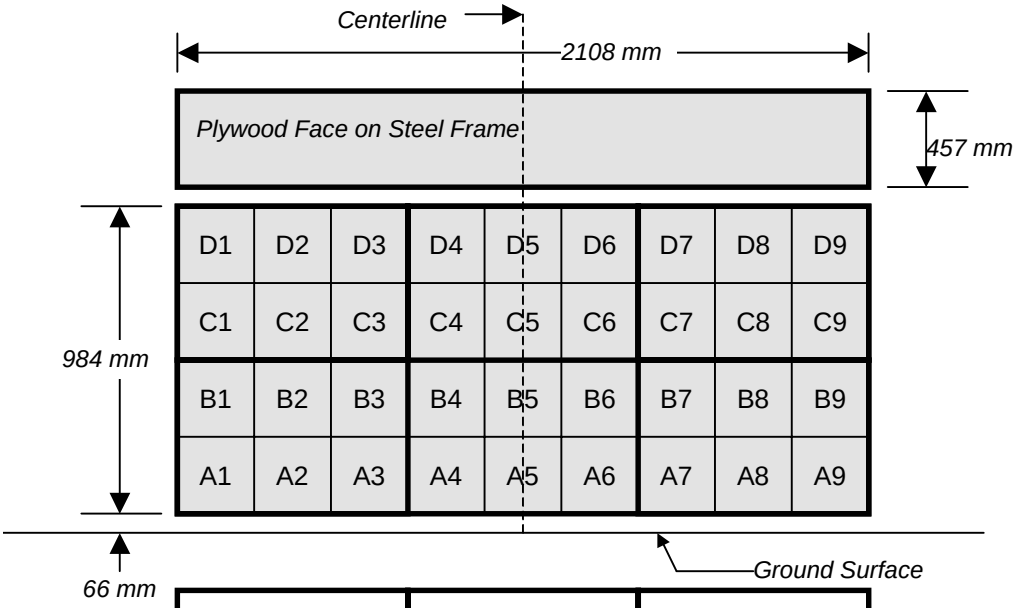
DATA SHEET NO. 17

FIXED BARRIER LOAD CELL LOCATIONS

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

36 Load Cell Rigid Barrier (NHTSA Standard)
Load Cell Locations on Fixed Barrier



D1	D2	D3	D4	D5	D6	D7	D8	D9
C1	C2	C3	C4	C5	C6	C7	C8	C9
B1	B2	B3	B4	B5	B6	B7	B8	B9
A1	A2	A3	A4	A5	A6	A7	A8	A9

Group 4 C1 – D3	Group 5 C4 – D6	Group 6 C7 – D9
Group 1 A1 – B3	Group 2 A4 – B6	Group 3 A7 – B9

6 Groups of 6 Load Cells Each

DATA SHEET NO. 18

ACCIDENT INVESTIGATION DIVISION DATA

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08

VEHICLE INFORMATION

VIN: JHMGE87439S000288 Wheelbase (mm): 2495

Vehicle Size Category: 5-Door Hatchback Test Weight (kg): 1325

ACCELEROMETER DATA

Accelerometer Location: Left rear cross member

Cal. Procedure/Interval: 6 months/drop test

Integration Algorithm: NHTSA Standard Linearity: Good

Impact Velocity (km/h): 56.02

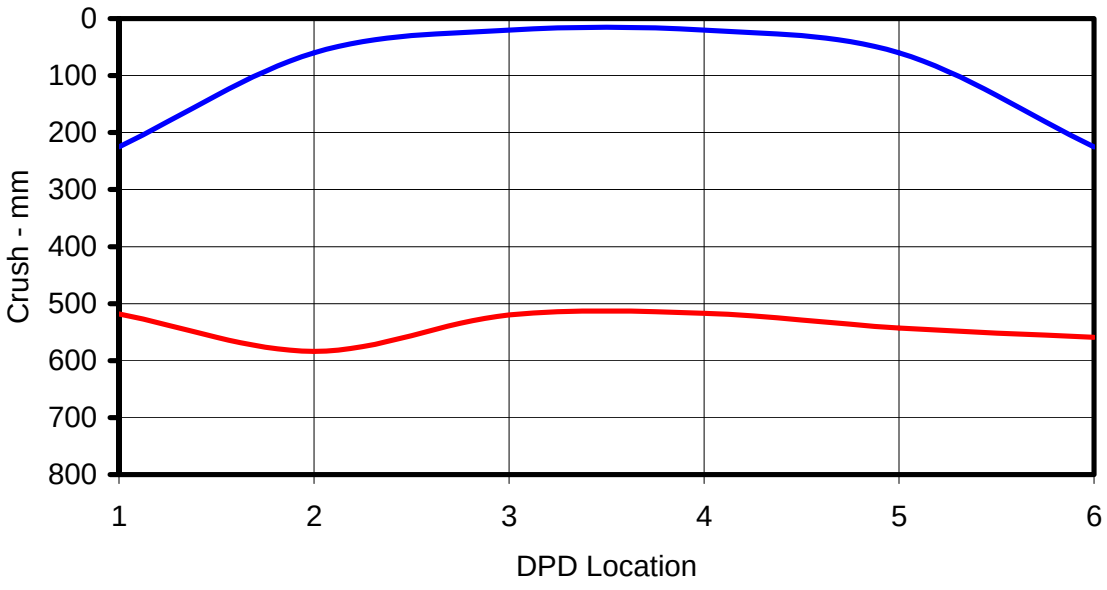
Velocity Change (km/h): 66.0 Time of Separation (msec): 67.9

CRUSH PROFILE

Collision Deformation Classification: 12FDEW6 Midpoint of Damage: Vehicle Centerline

Damage Region Length: 1688 Impact Mode: Full frontal

No.	Measurement Description	Units	Pre-Test	Post-Test	Difference
C1	Crush zone 1 at left side of vehicle	mm	225	518	-293
C2	Crush zone 2 on left side of vehicle	mm	60	584	-524
C3	Crush zone 3 on left side of vehicle	mm	20	520	-500
C4	Crush zone 4 on right side of vehicle	mm	20	517	-497
C5	Crush zone 5 on right side of vehicle	mm	60	543	-483
C6	Crush zone 6 at right side of vehicle	mm	225	559	-334

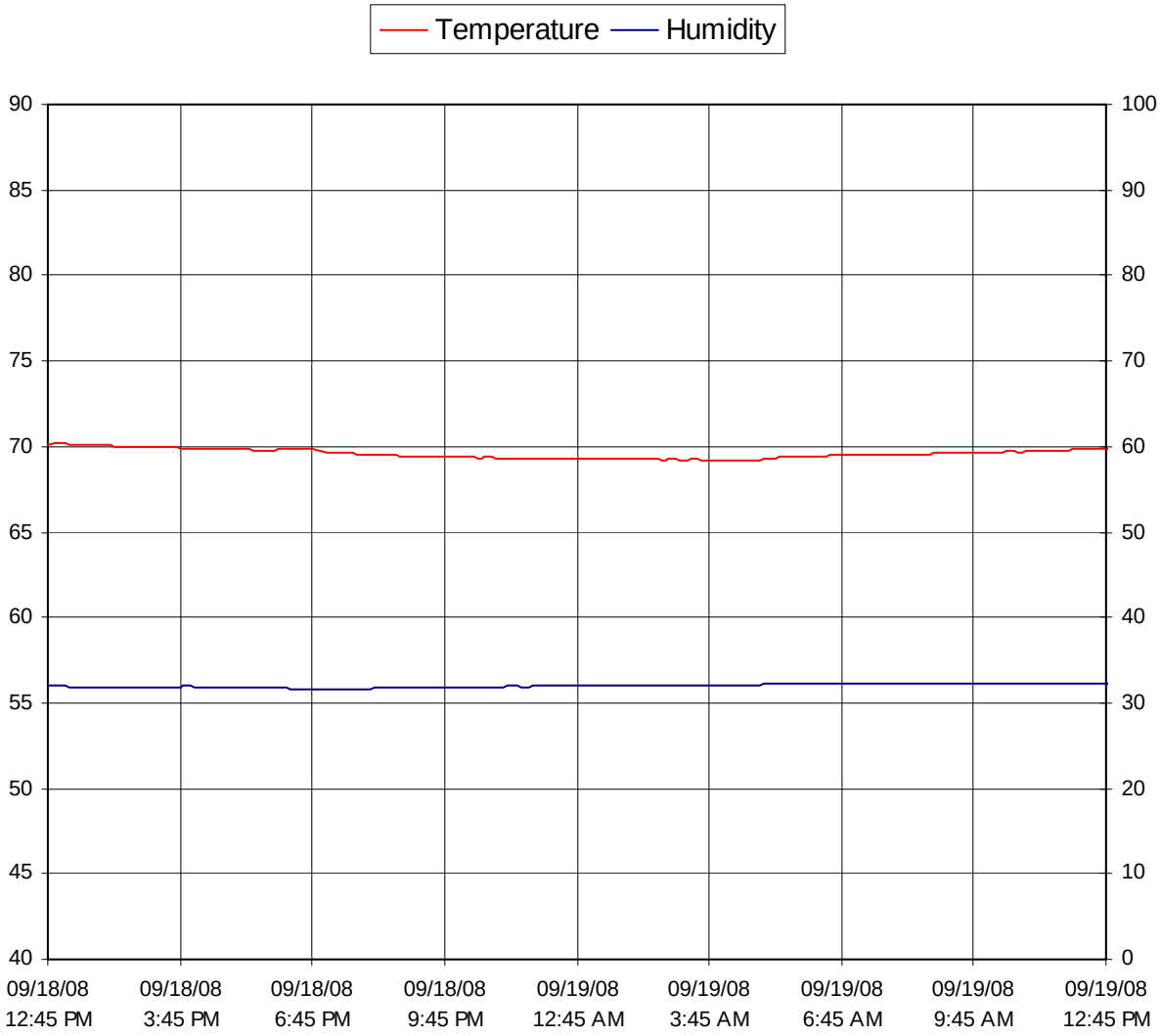


DATA SHEET NO. 19

DUMMY/VEHICLE TEMPERATURE STABILIZATION

Test Vehicle: 2009 Honda Fit Sport 5-Door Hatchback NHTSA No.: M95302

Test Program: NHTSA 35mph NCAP Test Date: 9/19/08



APPENDIX A
PHOTOGRAPHS

LIST OF PHOTOGRAPHS

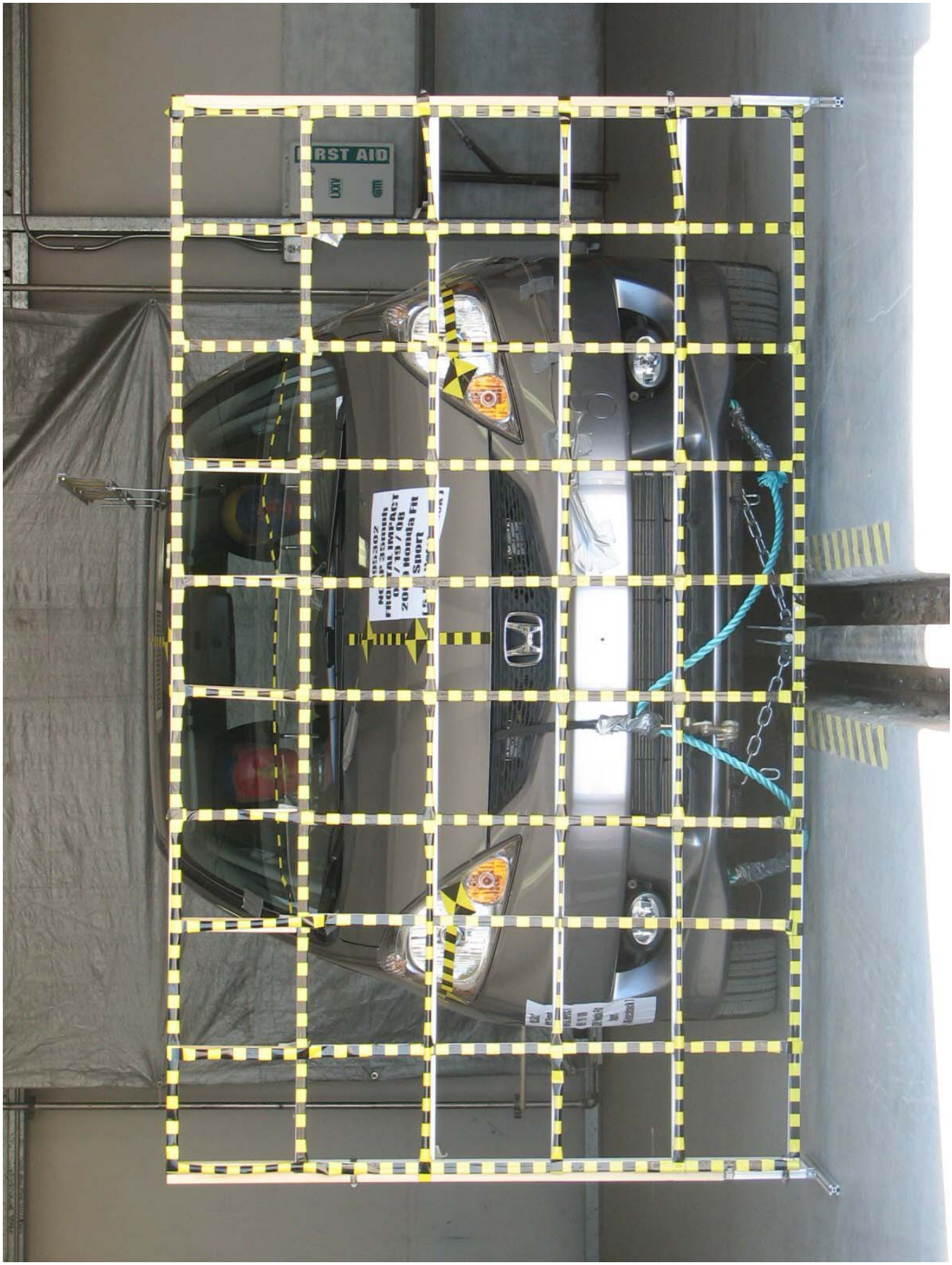


Figure A-1: Load Cell Location

Figure A-2: Manufacturer's Label

Figure A-3: Tire Placard

Figure A-4: Right Front ¾ View, As Received

Figure A-5: Left Rear ¾ View, as Received

Figure A-6: Pre-Test Front View

Figure A-7: Post-Test Front View (Vehicle Moved)

Figure A-8: Pre-Test Left Side View

Figure A-9: Post-Test Left Side View

Figure A-10: Pre-Test Right Side View

Figure A-11: Post-Test Right Side View

Figure A-12: Pre-Test Right Front ¾ View

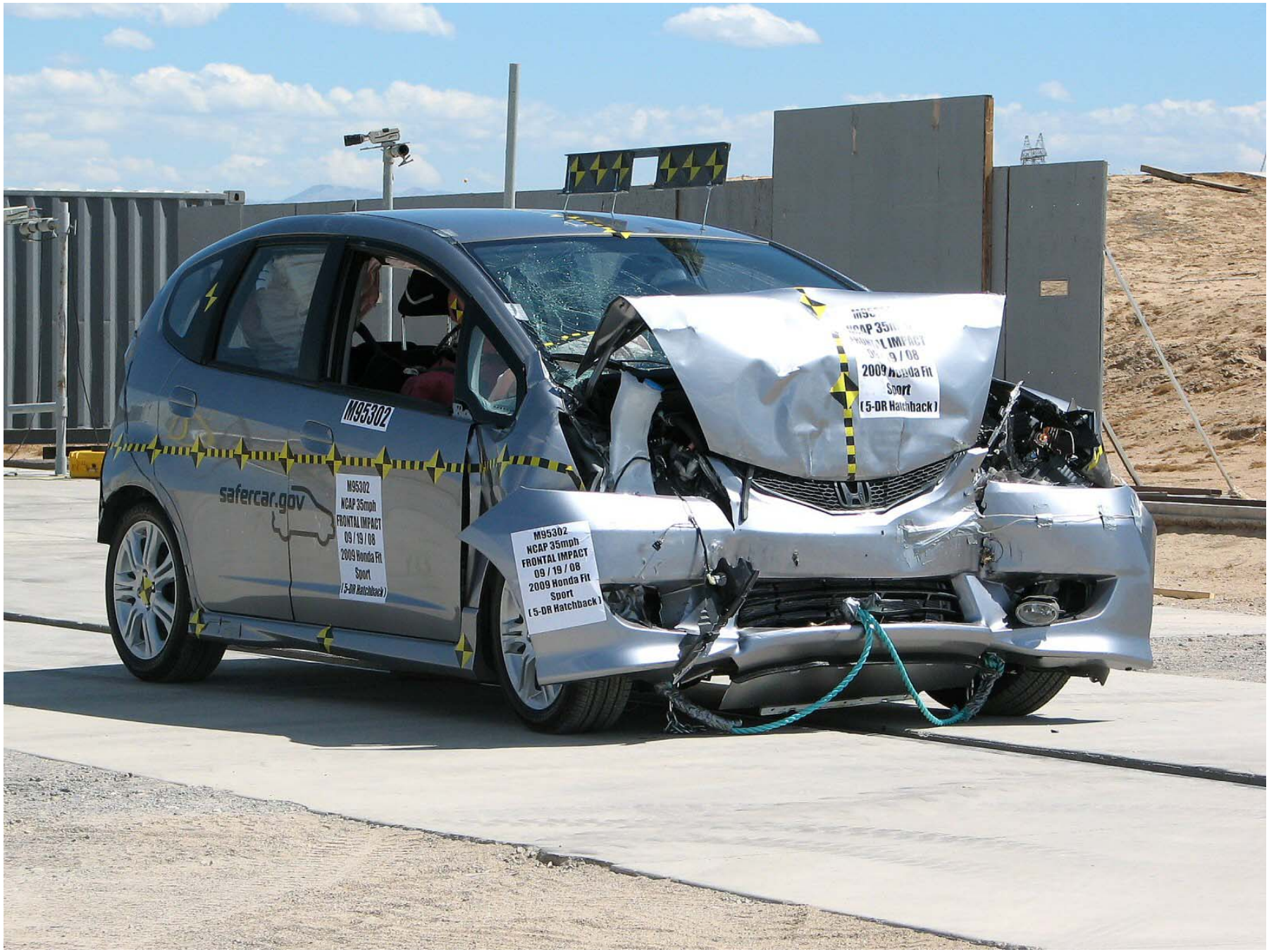


Figure A-13: Post-Test Right Front ¾ View (Vehicle Moved)

Figure A-14: Pre-Test Left Rear ¾ View

Figure A-15: Post-Test Left Rear ¾ View

Figure A-16: Post-Test Left Side ¾ View of Doors After Impact

Figure A-17: Post-Test Right Side ¾ View of Doors After Impact

Figure A-18: Pre-Test Windshield

Figure A-19: Post-Test Windshield

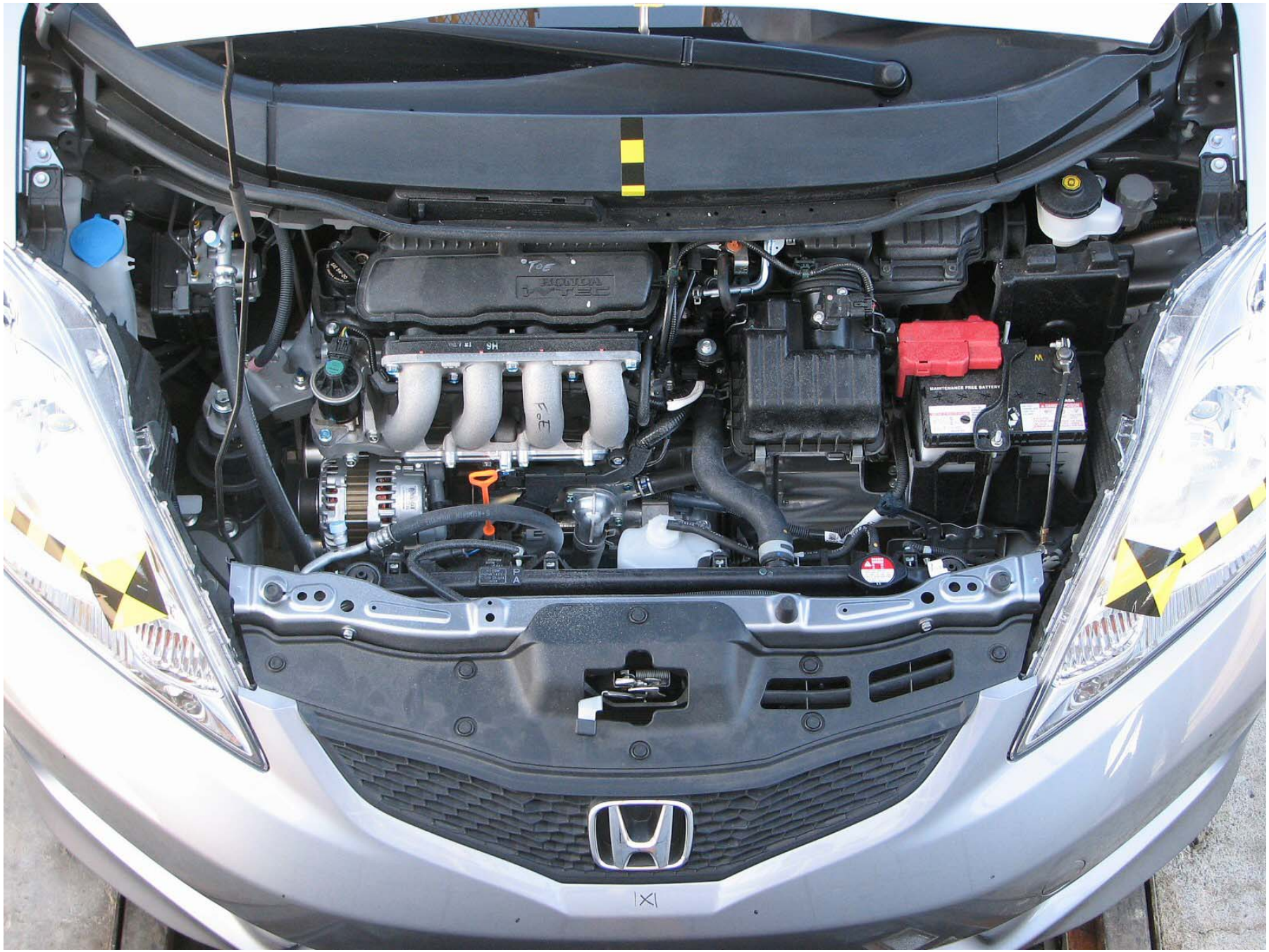


Figure A-20: Pre-Test Engine Compartment

Figure A-21: Post-Test Engine Compartment (Vehicle Moved)

Figure A-22: Pre-Test Fuel Cap

Figure A-23: Post-Test Fuel Cap

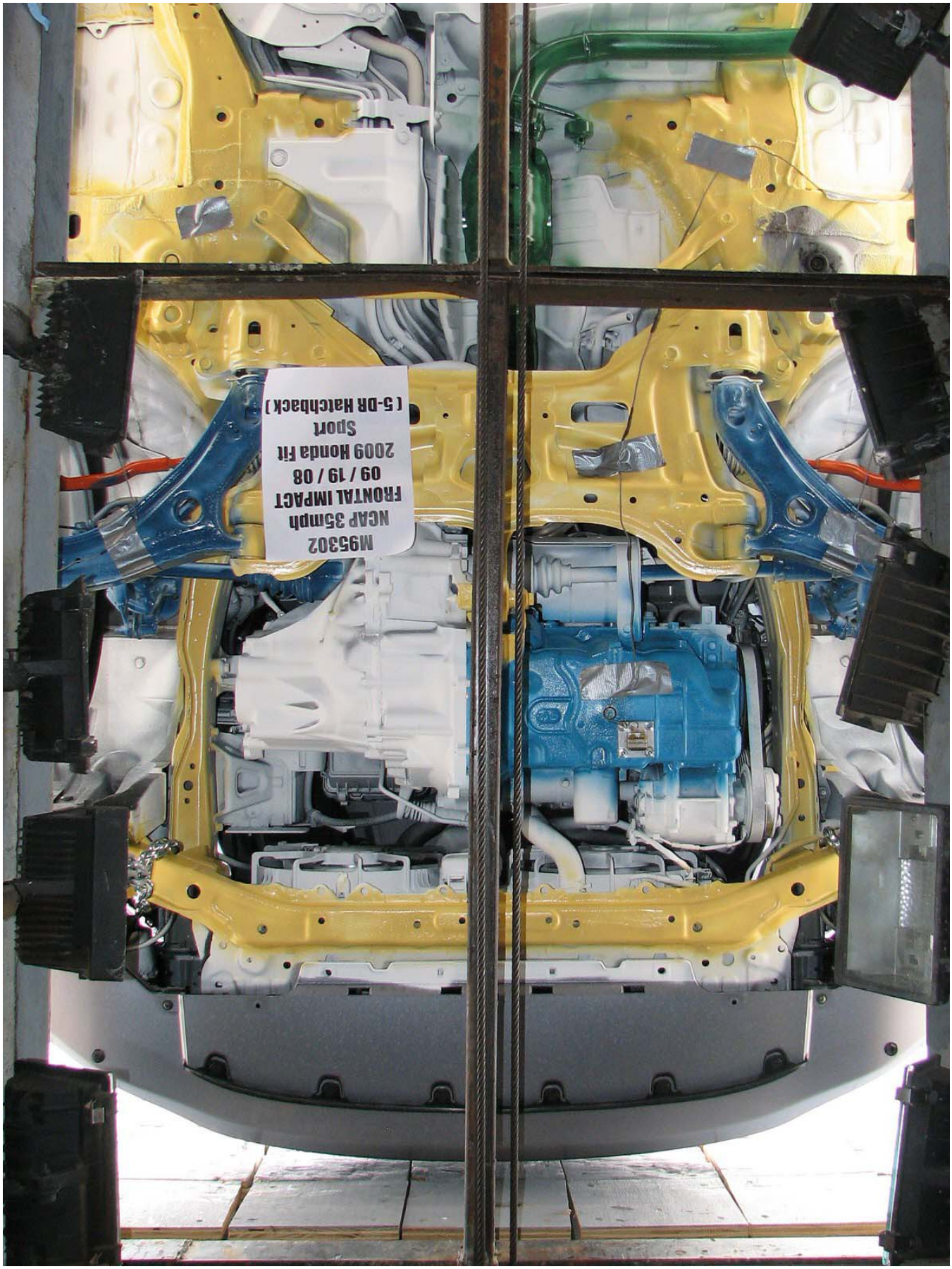


Figure A-24: Pre-Test Front Underbody

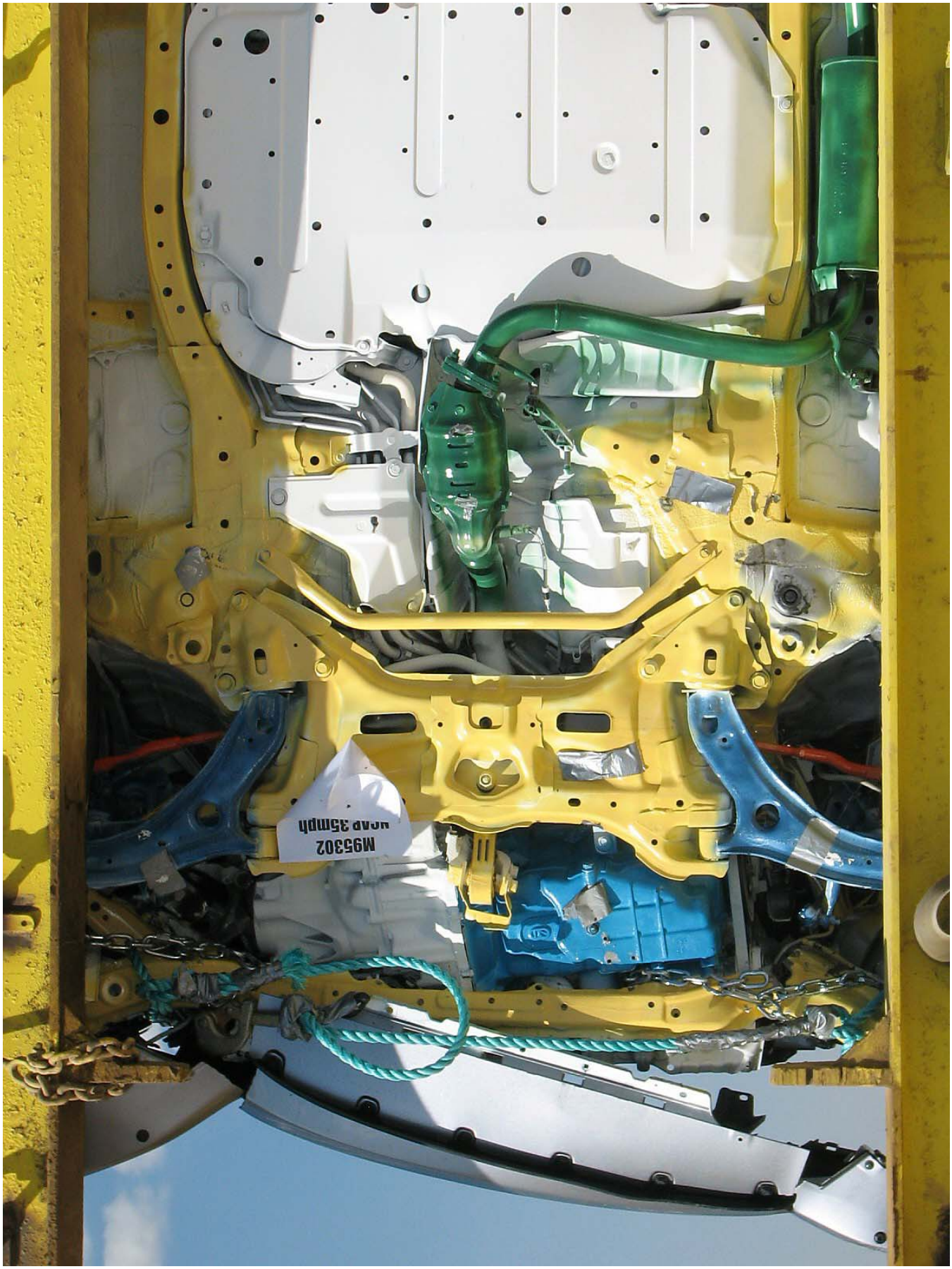


Figure A-25: Post-Test Front Underbody

Figure A-26: Pre-Test Mid Underbody

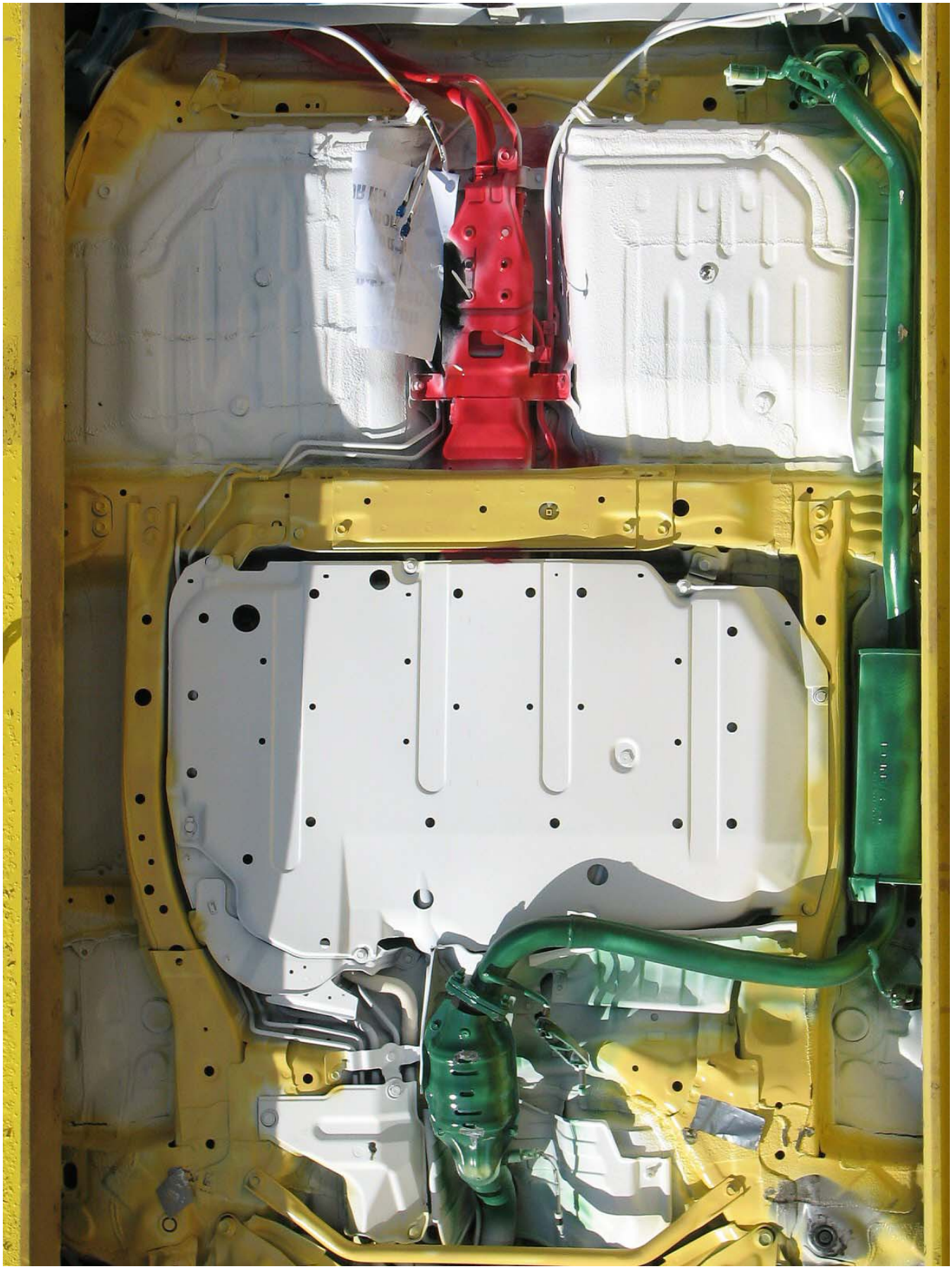


Figure A-27: Post-Test Mid Underbody

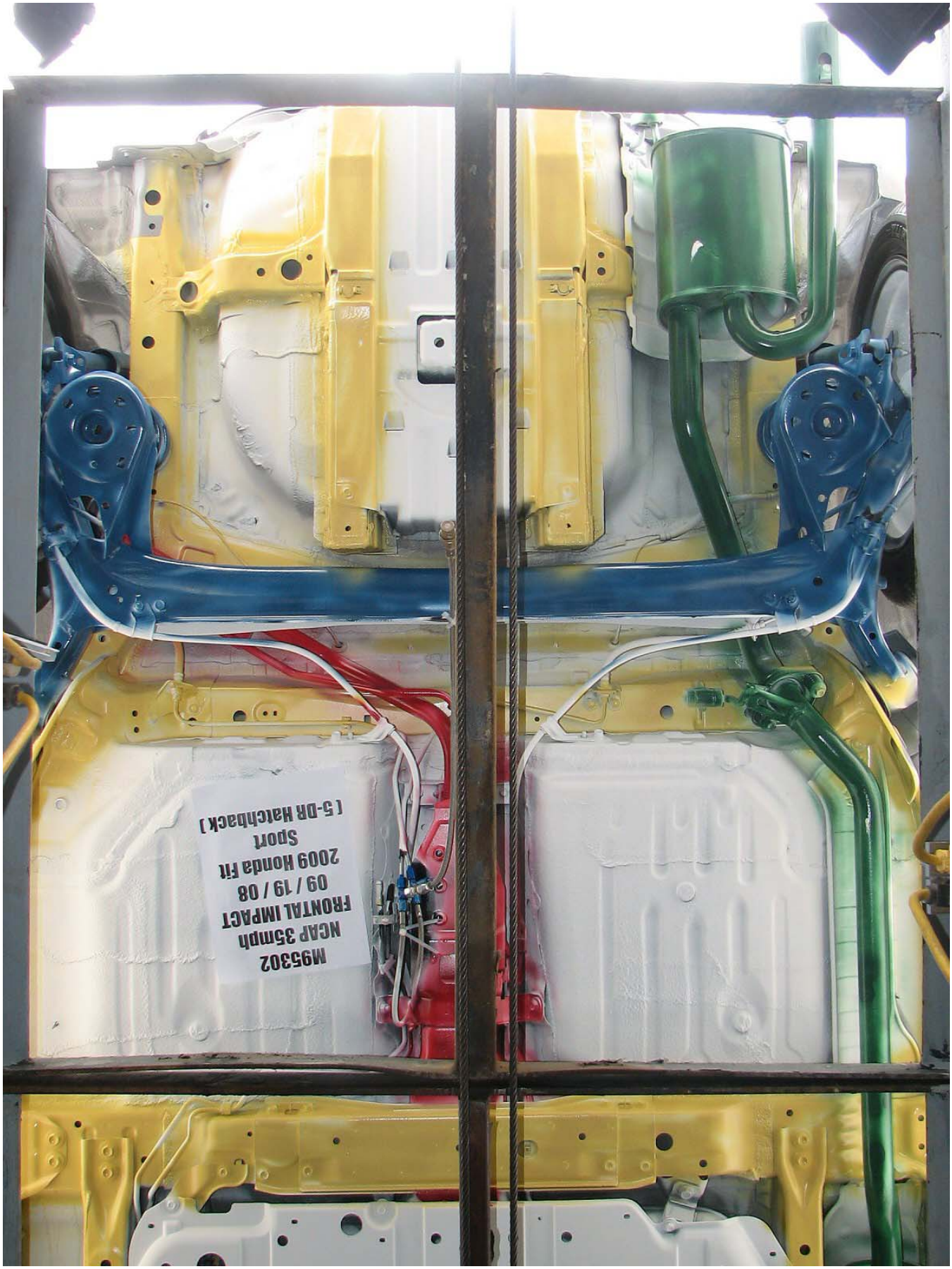


Figure A-28: Pre-Test Rear Underbody

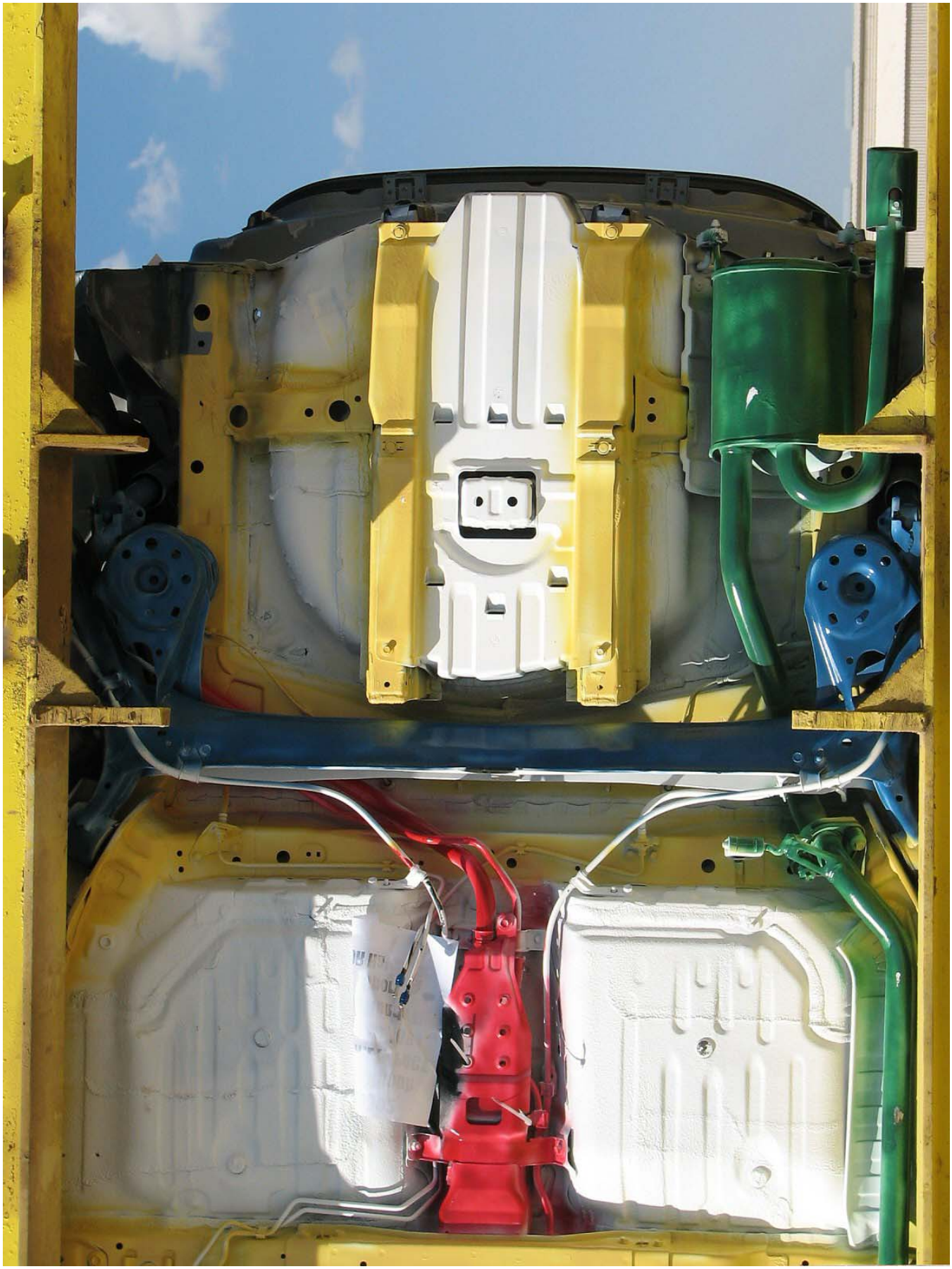


Figure A-29: Post-Test Rear Underbody

Figure A-30: Pre-Test Driver Dummy Front View (Head Position)

Figure A-31: Post-Test Driver Dummy Front View (Head Position)

Figure A-32: Pre-Test Driver Dummy (Through Window)

Figure A-33: Post-Test Driver Dummy (Through Window)

Figure A-34: Pre-Test Driver Dummy (Door Open)

Figure A-35: Post-Test Driver Dummy (Door Open)

Figure A-36: Pre-Test Driver Dummy Feet

Figure A-37: Post-Test Driver Dummy Feet

Figure A-38: Pre-Test Driver Side Knee Bolster

Figure A-39: Post-Test Driver Side Knee Bolster

Figure A-40: Pre-Test Driver Side Floor Pan

Figure A-41: Post-Test Driver Side Floor Pan

Figure A-42: Post-Test Driver Dummy Head

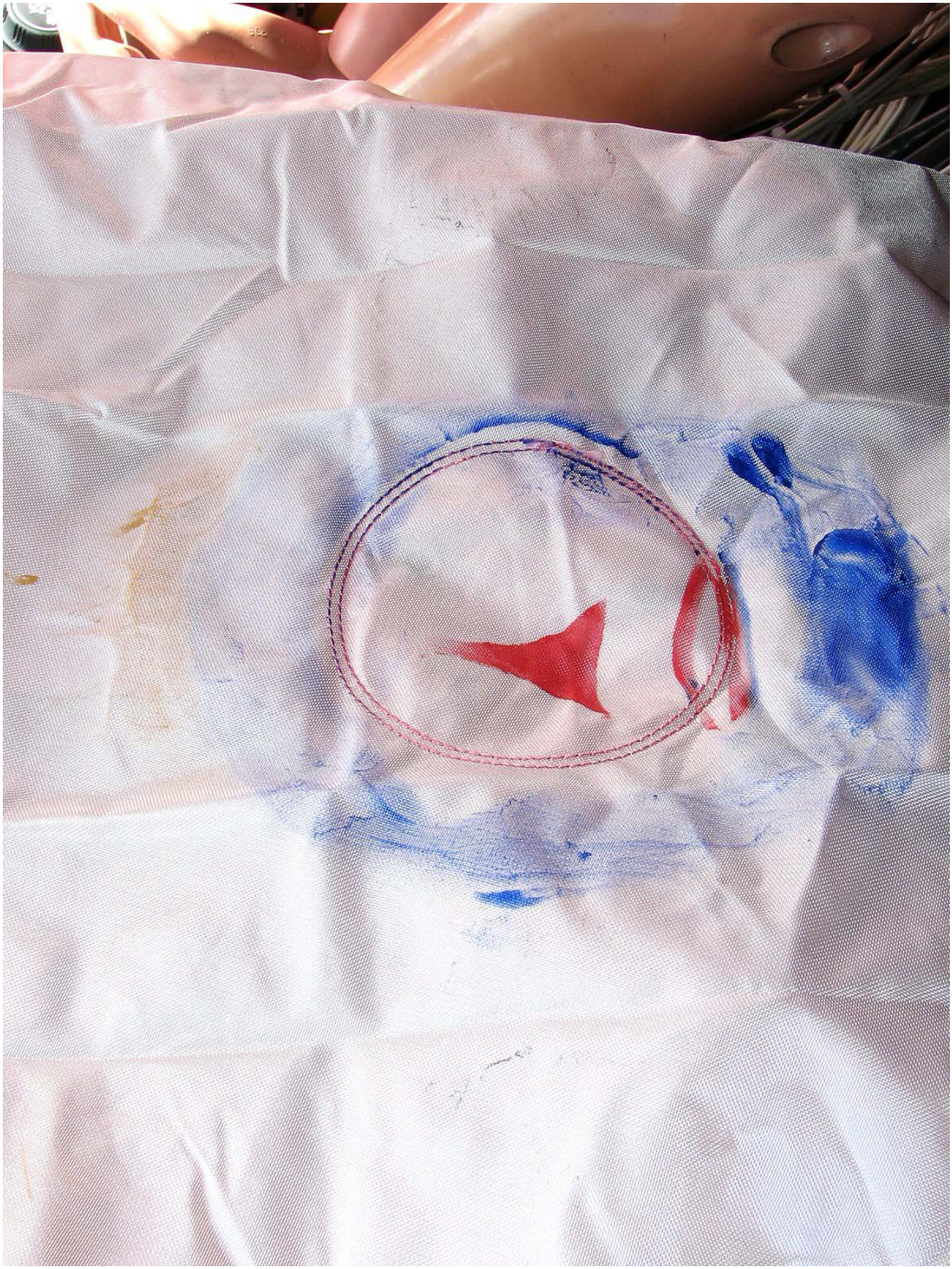


Figure A-43: Post-Test Driver Dummy Airbag Contact

Figure A-44: Pre-Test Passenger Dummy Front View (Head Position)

Figure A-45: Post-Test Passenger Dummy Front View (Head Position)

Figure A-46: Pre-Test Passenger Dummy (Through Window)

Figure A-47: Post-Test Passenger Dummy (Through Window)

Figure A-48: Pre-Test Passenger Dummy (Door Open)

Figure A-49: Post-Test Passenger Dummy (Door Open)

Figure A-50: Pre-Test Passenger Dummy Feet

Figure A-51: Post-Test Passenger Dummy Feet

Figure A-52: Pre-Test Passenger Side Glove Box

Figure A-53: Post-Test Passenger Side Glove Box

Figure A-54: Pre-Test Passenger Side Floor Pan

Figure A-55: Post-Test Passenger Side Floor Pan

Figure A-56: Post-Test Passenger Dummy Head

Figure A-57: Post-Test Passenger Dummy Airbag Contact

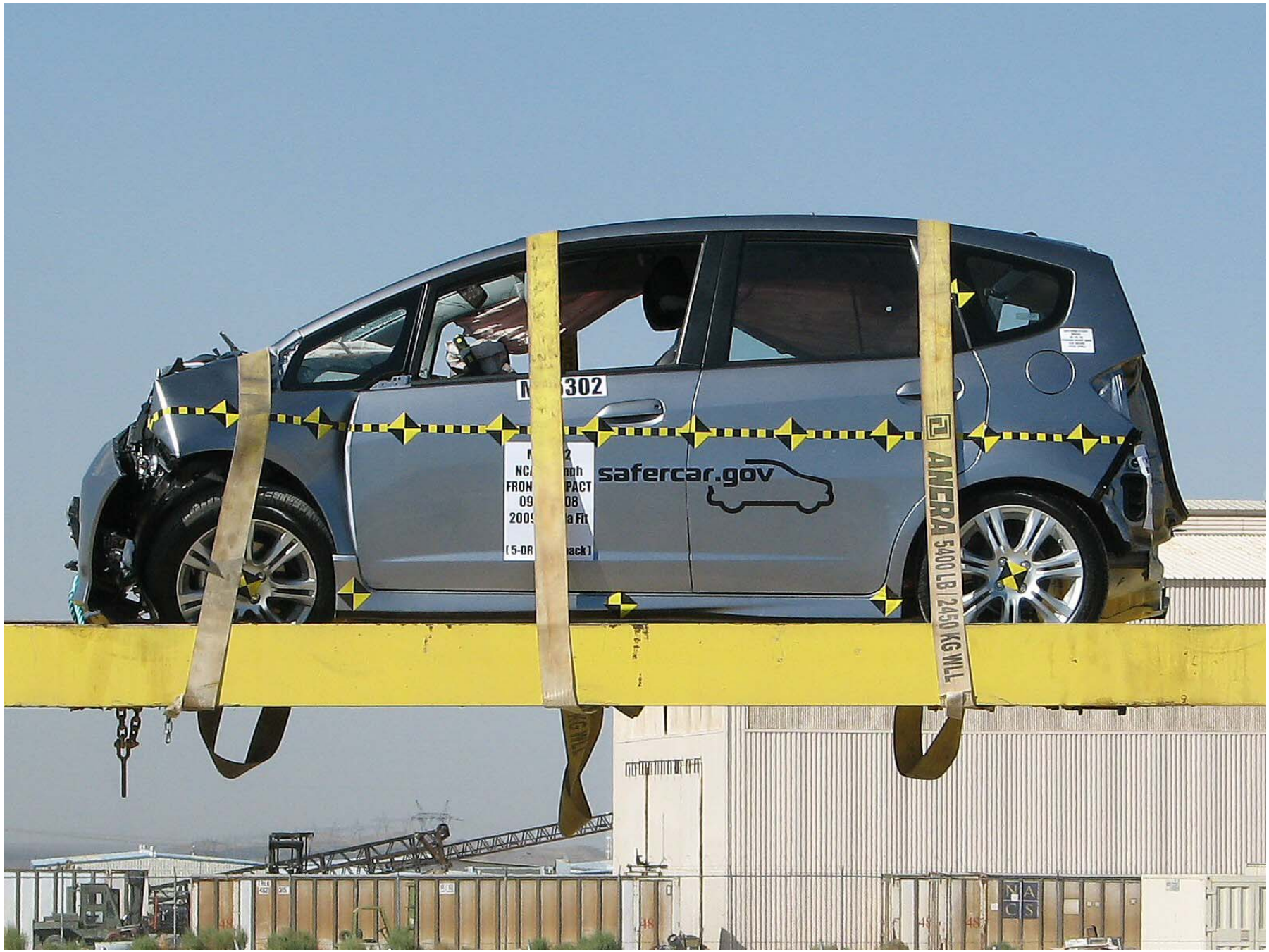


Figure A-58: Vehicle on Rollover Device (0°)

Figure A-59: Vehicle on Rollover Device (90°)

Figure A-60: Vehicle on Rollover Device (180°)

Figure A-61: Vehicle on Rollover Device (270°)

Figure A-62: Vehicle Impact

APPENDIX B
DATA PLOTS

LIST OF DATA PLOTS

The following additional data plots for this test can be obtained from the research and development section of the NHTSA website. The website can be found at www.NHTSA.dot.gov.

Driver Head Primary X Velocity
Driver Head Primary X Displacement
Driver Head Redundant X
Driver Head Redundant Y
Driver Head Redundant Z
Driver Head Resultant Redundant
Driver Head Redundant X Velocity
Driver Head Redundant X Displacement
Driver Upper Neck Force X
Driver Upper Neck Force Y
Driver Upper Neck Force Z
Driver Upper Neck Force Resultant
Driver Upper Neck Moment X
Driver Upper Neck Moment Y
Driver Upper Neck Moment Z
Driver Upper Neck Moment Resultant
Driver Chest Primary X Velocity
Driver Chest Primary X Displacement
Driver Chest Redundant X
Driver Chest Redundant Y
Driver Chest Redundant Z
Driver Chest Resultant Redundant
Driver Chest Redundant X Velocity
Driver Chest Redundant X Displacement
Driver Chest Displacement
Driver Pelvis X
Driver Pelvis Y
Driver Pelvis Z
Driver Pelvis Resultant
Driver Pelvis X Velocity
Driver Pelvis X Displacement
Driver Left Upper Tibia Moment X
Driver Left Upper Tibia Moment Y
Driver Right Upper Tibia Moment X

Passenger Chest Redundant Y

Passenger Chest Redundant Z

Passenger Chest Resultant Redundant

Passenger Chest Redundant X Velocity

Passenger Chest Redundant X Displacement

Passenger Chest Displacement

Passenger Pelvis X

Passenger Pelvis Y

Passenger Pelvis Z

Passenger Pelvis Resultant

Passenger Pelvis X Velocity

Passenger Pelvis X Displacement

Passenger Left Femur Force

Passenger Right Femur Force

Passenger Left Upper Tibia Moment X

Passenger Left Upper Tibia Moment Y

Passenger Right Upper Tibia Moment X

Passenger Right Upper Tibia Moment Y

Passenger Left Lower Tibia Moment X

Passenger Left Lower Tibia Moment Y

Passenger Left Lower Tibia Force Z

Passenger Right Lower Tibia Moment X

Passenger Right Lower Tibia Moment Y

Passenger Right Lower Tibia Force Z

Passenger Left Foot Aft X

Passenger Left Foot Aft Z

Passenger Left Foot Fore Z

Passenger Right Foot Aft X

Passenger Right Foot Aft Z

Passenger Right Foot Fore Z

Passenger Lap Belt Force

Passenger Shoulder Belt Force

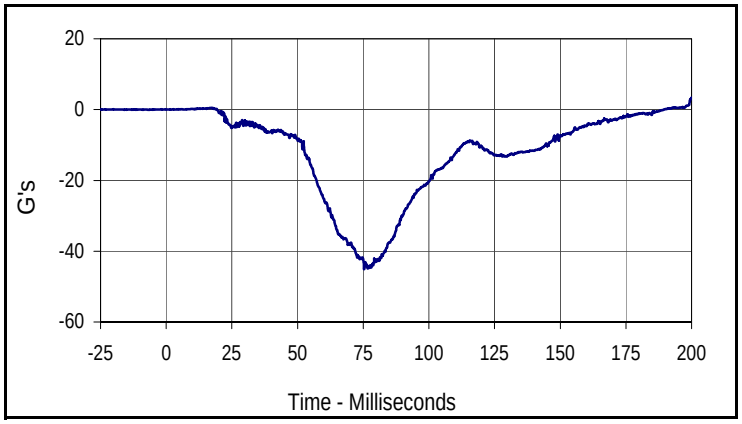
Passenger Shoulder Belt Pullout

Passenger Shoulder Belt Elongation

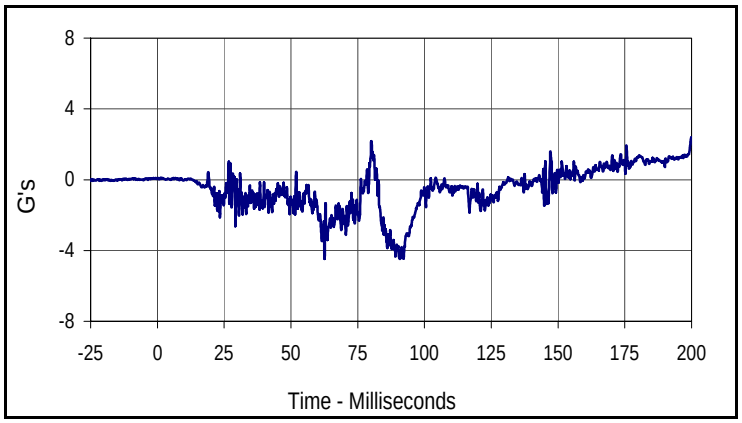
Vehicle Left Rear X

Vehicle Left Rear X Velocity

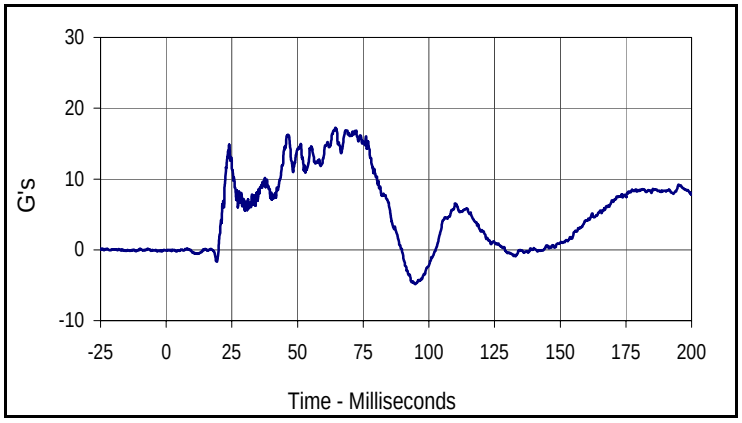
Test Vehicle:	2009 Honda Fit Sport 5-Door Hatchback	Test Date:	9/19/08
Test Program:	NHTSA 35mph NCAP	NHTSA No.:	M95302



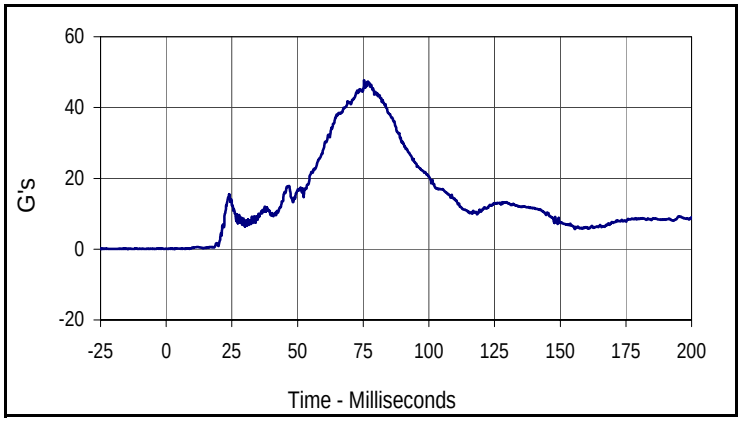
Curve Description			
Driver Head Primary X			
CURNO	Type	SAE Class	Units
001	FIL	1000	G's
Max	Time	Min	Time
3.3	200.0	-45.1	75.4



Curve Description			
Driver Head Primary Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
2.4	200.0	-4.5	62.6

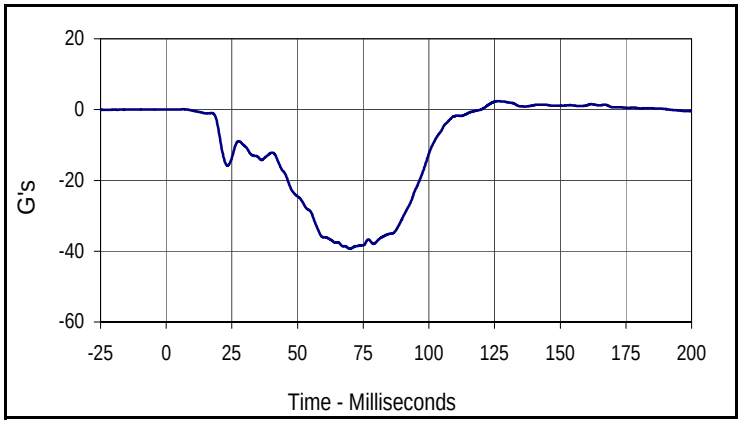


Curve Description			
Driver Head Primary Z			
CURNO	Type	SAE Class	Units
003	FIL	1000	G's
Max	Time	Min	Time
17.3	64.4	-4.9	94.8

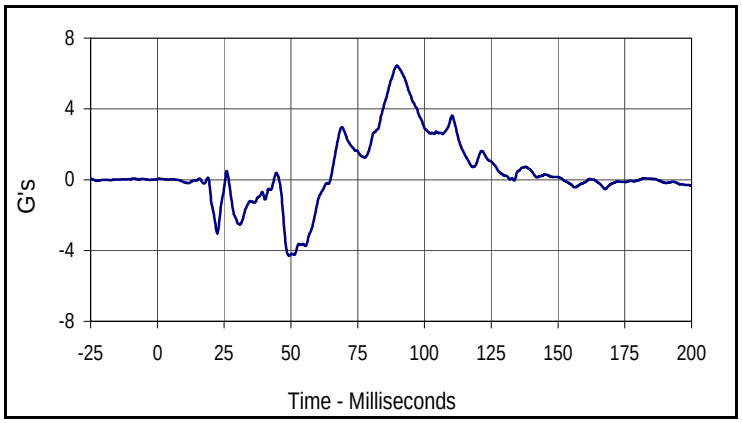


Curve Description			
Driver Head Resultant Primary			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
47.7	75.4	0.0	3.1

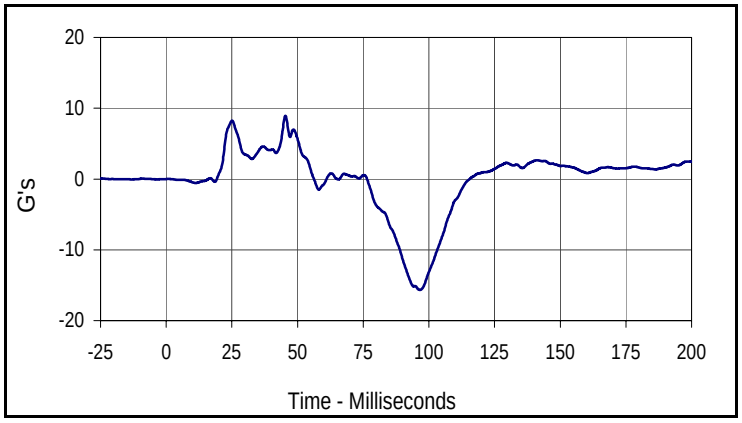
Test Vehicle:	2009 Honda Fit Sport 5-Door Hatchback	Test Date:	9/19/08
Test Program:	NHTSA 35mph NCAP	NHTSA No.:	M95302



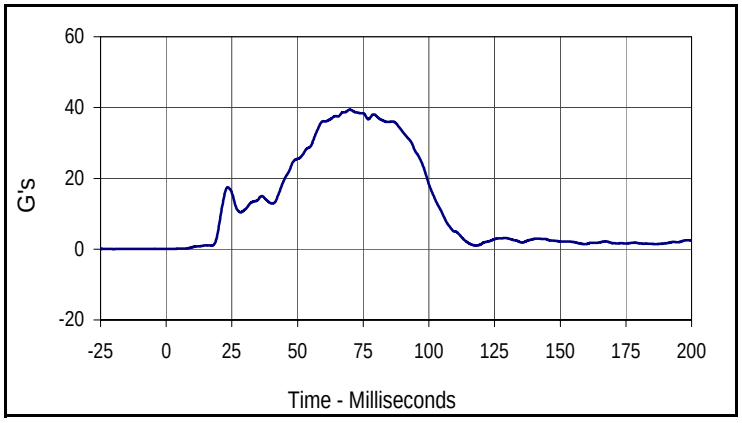
Curve Description			
Driver Chest Primary X			
CURNO	Type	SAE Class	Units
004	FIL	180	G's
Max	Time	Min	Time
2.4	126.4	-39.3	69.9



Curve Description			
Driver Chest Primary Y			
CURNO	Type	SAE Class	Units
005	FIL	180	G's
Max	Time	Min	Time
6.4	89.7	-4.3	49.4

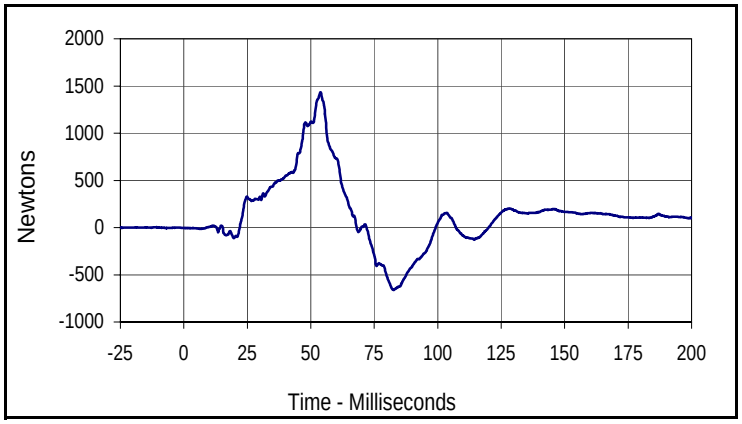


Curve Description			
Driver Chest Primary Z			
CURNO	Type	SAE Class	Units
006	FIL	180	G's
Max	Time	Min	Time
8.9	45.4	-15.7	96.5

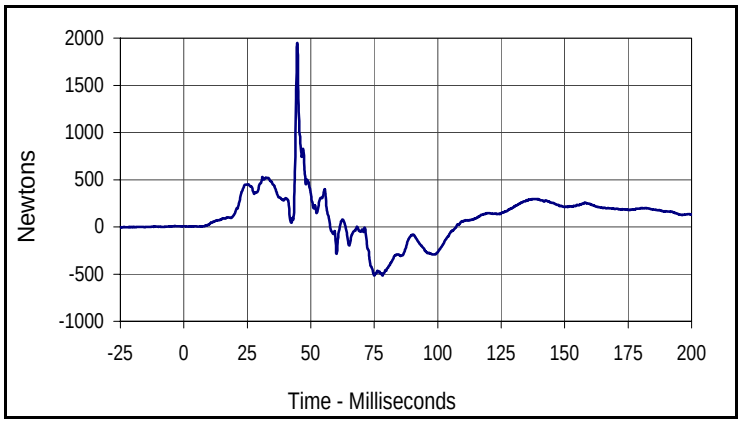


Curve Description			
Driver Chest Resultant Primary			
CURNO	Type	SAE Class	Units
004	RES	180	G's
Max	Time	Min	Time
39.4	69.9	0.0	2.2

Test Vehicle:	2009 Honda Fit Sport 5-Door Hatchback	Test Date:	9/19/08
Test Program:	NHTSA 35mph NCAP	NHTSA No.:	M95302

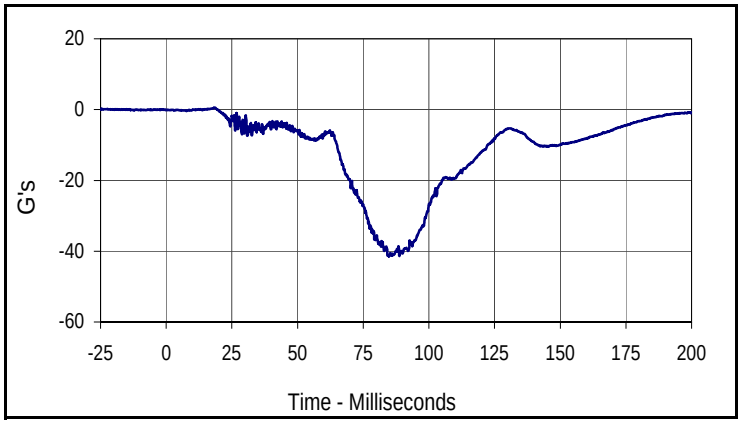


Curve Description			
Driver Left Femur Force Z			
CURNO	Type	SAE Class	Units
007	FIL	600	Newtons
Max	Time	Min	Time
1435.0	53.8	-660.1	82.7

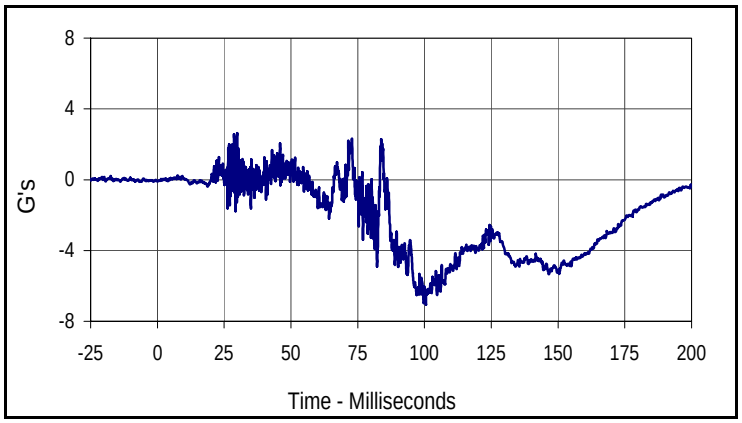


Curve Description			
Driver Right Femur Force Z			
CURNO	Type	SAE Class	Units
008	FIL	600	Newtons
Max	Time	Min	Time
1948.4	44.7	-516.5	78.2

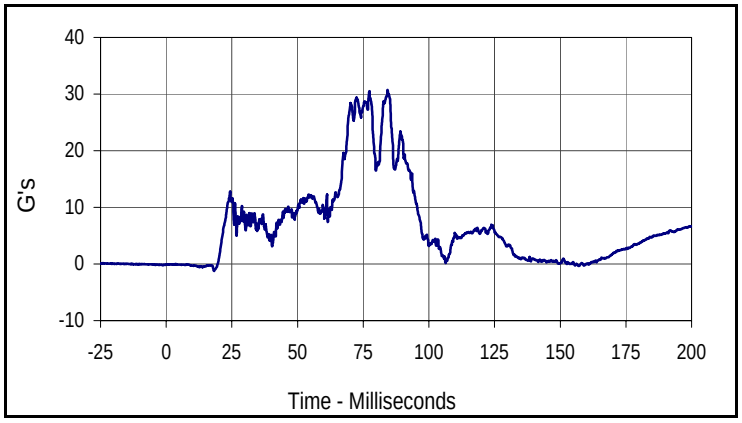
Test Vehicle:	2009 Honda Fit Sport 5-Door Hatchback	Test Date:	9/19/08
Test Program:	NHTSA 35mph NCAP	NHTSA No.:	M95302



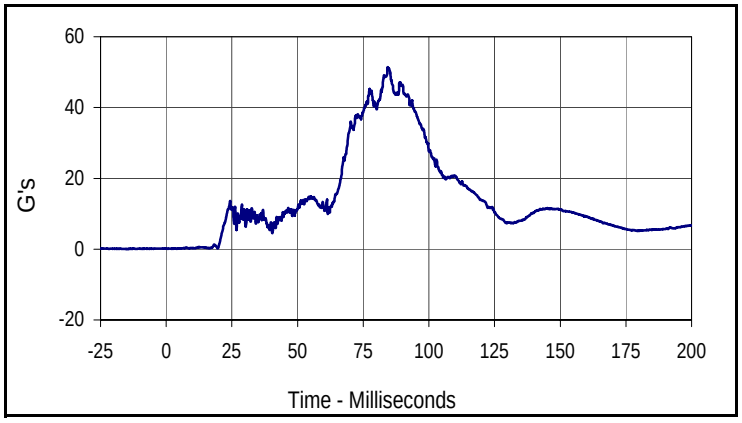
Curve Description			
Passenger Head Primary X			
CURNO	Type	SAE Class	Units
009	FIL	1000	G's
Max	Time	Min	Time
0.6	18.4	-41.5	84.7



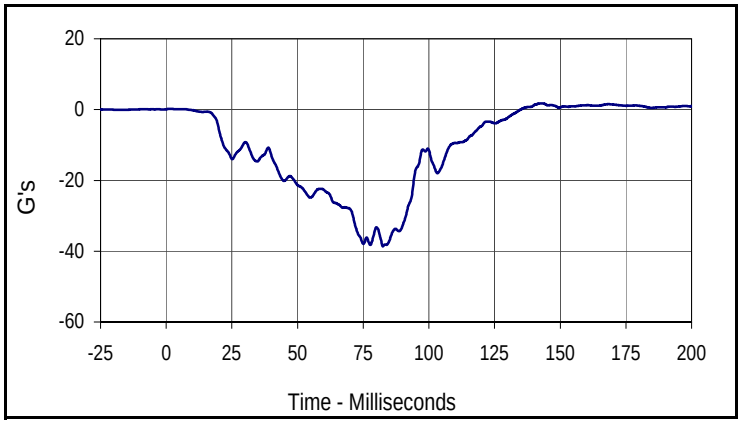
Curve Description			
Passenger Head Primary Y			
CURNO	Type	SAE Class	Units
010	FIL	1000	G's
Max	Time	Min	Time
2.6	29.9	-7.1	100.5



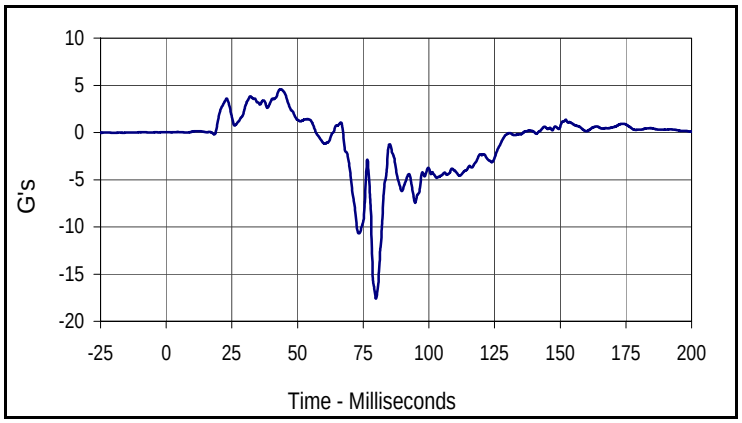
Curve Description			
Passenger Head Primary Z			
CURNO	Type	SAE Class	Units
011	FIL	1000	G's
Max	Time	Min	Time
30.7	84.3	-1.2	18.2



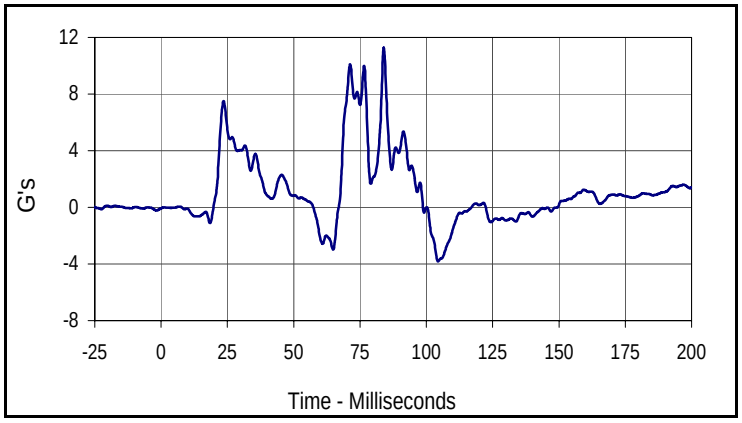
Curve Description			
Passenger Head Resultant Primary			
CURNO	Type	SAE Class	Units
009	RES	1000	G's
Max	Time	Min	Time
51.4	84.3	0.1	4.1



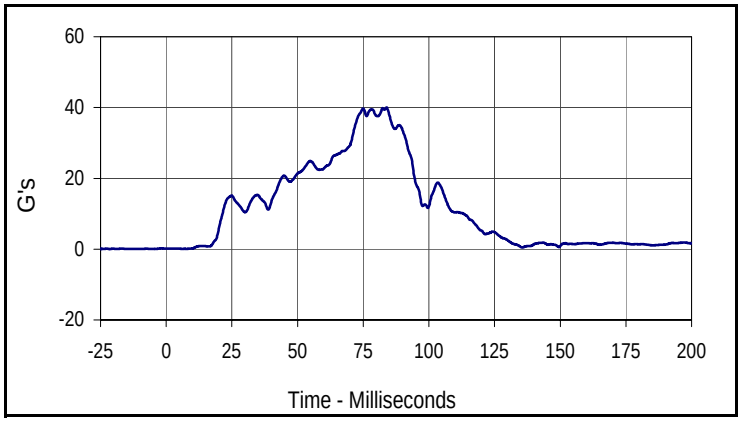
Curve Description			
Passenger Chest Primary X			
CURNO	Type	SAE Class	Units
012	FIL	180	G's
Max	Time	Min	Time
1.8	143.3	-38.6	82.5



Curve Description			
Passenger Chest Primary Y			
CURNO	Type	SAE Class	Units
013	FIL	180	G's
Max	Time	Min	Time
4.6	43.7	-17.6	79.9

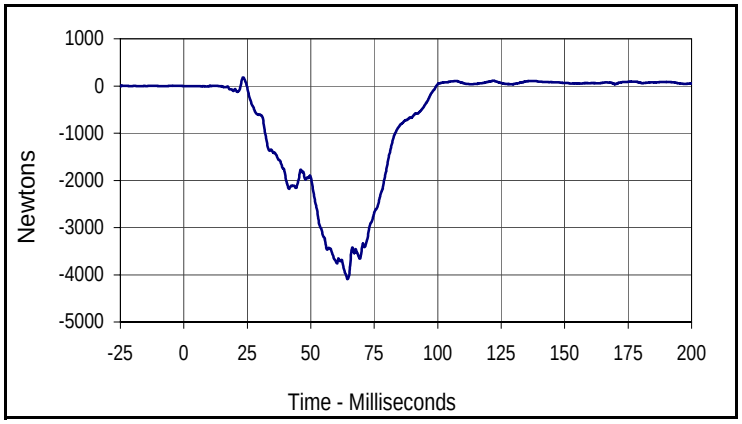


Curve Description			
Passenger Chest Primary Z			
CURNO	Type	SAE Class	Units
014	FIL	180	G's
Max	Time	Min	Time
11.3	84.0	-3.8	104.4

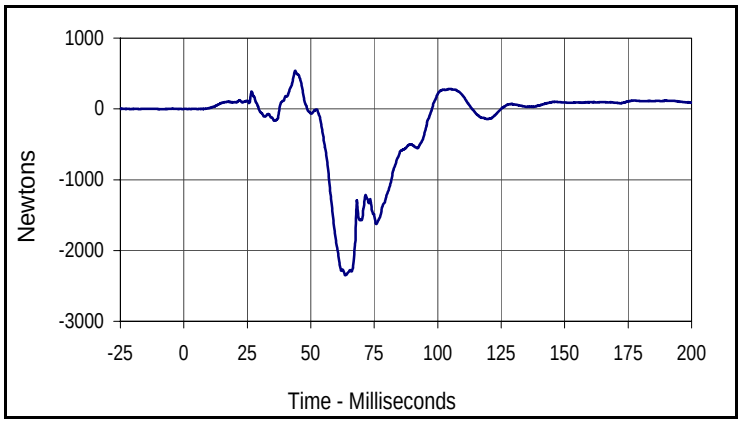


Curve Description			
Passenger Chest Resultant Primary			
CURNO	Type	SAE Class	Units
012	RES	180	G's
Max	Time	Min	Time
40.0	83.9	0.1	8.0

Test Vehicle:	2009 Honda Fit Sport 5-Door Hatchback	Test Date:	9/19/08
Test Program:	NHTSA 35mph NCAP	NHTSA No.:	M95302



Curve Description			
Passenger Left Femur Force Z			
CURNO	Type	SAE Class	Units
015	FIL	600	Newtons
Max	Time	Min	Time
182.1	23.4	-4088.4	64.5

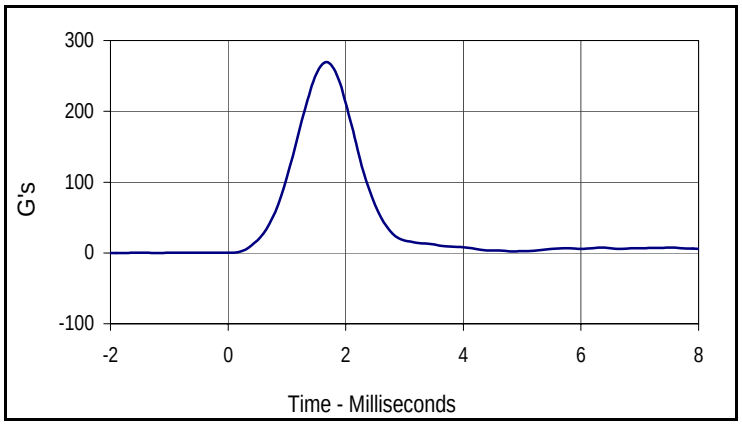


Curve Description			
Passenger Right Femur Force Z			
CURNO	Type	SAE Class	Units
016	FIL	600	Newtons
Max	Time	Min	Time
538.6	43.9	-2349.6	63.5

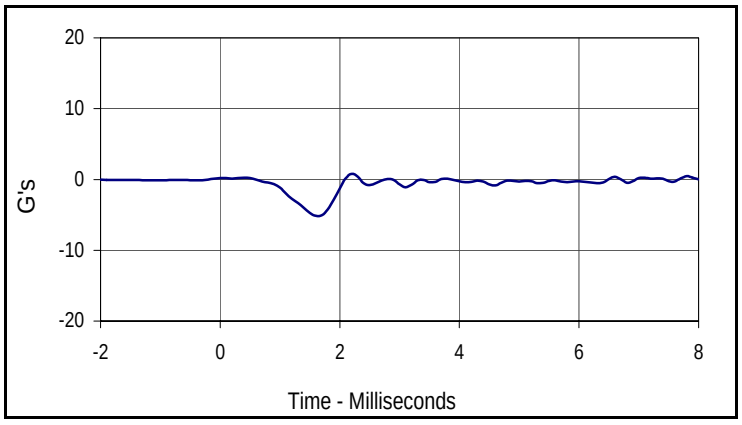
APPENDIX C
DUMMY CALIBRATION DATA

Test Program:	Hybrid III 50th Percentile Male Head Drop Test	Test Date:	9/16/08
ATD Serial No.:	035	Test I.D.:	HD09D

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	269.4	Pass
Peak Lateral Acceleration	G's	≤15.0	5.1	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
		Overall Test Results		Pass



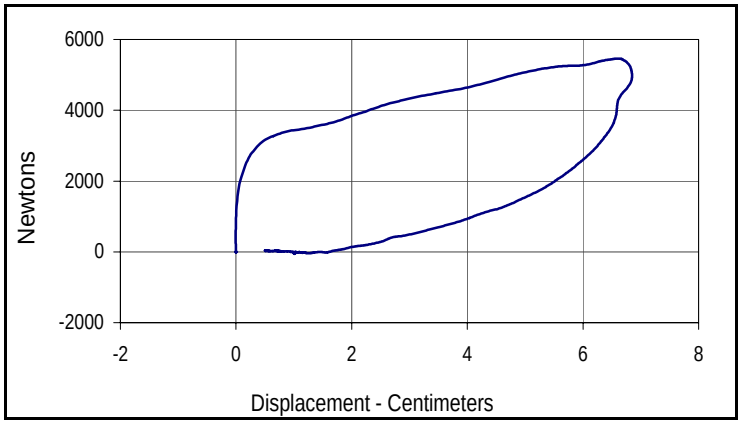
Curve Description			
Head Resultant			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
269.4	1.7	0.1	-2.0



Curve Description			
Head Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
0.8	2.2	-5.1	1.6

Test Program:	Hybrid III 50th Percentile Male Thorax Impact Test	Test Date:	9/16/08
ATD Serial No.:	035	Test I.D.:	CH09C

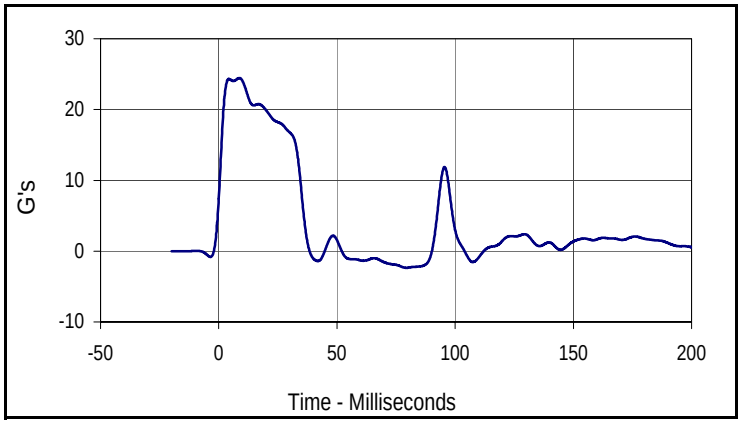
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	6.58 to 6.82	6.73	Pass
Peak Probe Force	Newtons	5159 to 5893	5456	Pass
Peak Sternum Deflection	CM	6.35 to 7.26	6.85	Pass
Internal Hysterysis	%	69 to 85	75.5	Pass
		Overall Test Results		Pass



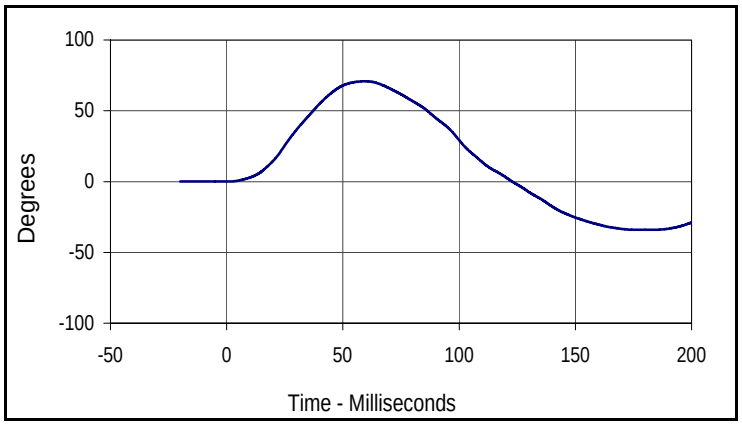
Curve Description			
Probe Force vs. Chest Deflection			
CURNO	Type	SAE Class	Hysterysis
001	FIL	180	75.5
Peak Probe Force		Peak Chest Deflection	
5456		6.85	

Test Program:	Hybrid III 50th Percentile Male Neck Flexion Test	Test Date:	9/20/08
ATD Serial No.:	035	Test I.D.:	NF09C

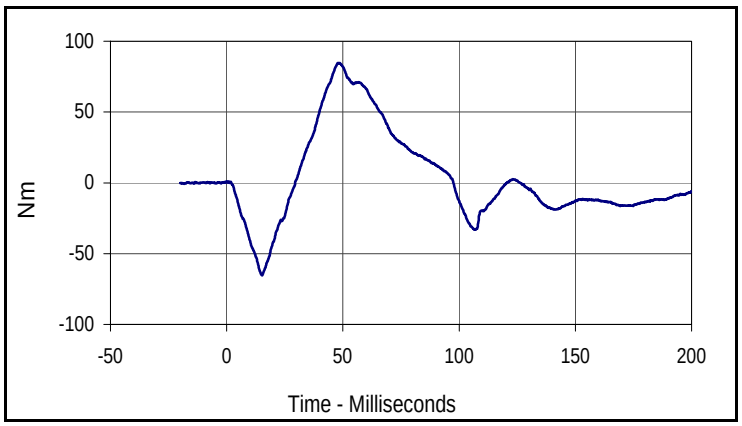
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	6.89 to 7.13	7.04	Pass
Pendulum Deceleration	10 Msec.	G's	22.5 to 27.5	24.1	Pass
	20 Msec.	G's	17.6 to 22.6	19.9	Pass
	30 Msec.	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	36	Pass
Maximum "D" Plane Rotation	Max	Degrees	64.0 to 78.0	70.8	Pass
	Time	Msec.	57.0 to 64.0	59.4	Pass
"D" Plane Rotation Decay, Time To Zero Crossing		Msec.	113.0 to 128.0	122.9	Pass
Moment About Occ. Condyle	Max	Nm	84.1 to 108.5	84.7	Pass
	Time	Msec.	47.0 to 58.0	48.0	Pass
Positive Moment Decay, Time To Zero Crossing		Msec.	97.0 to 107.0	97.6	Pass
			Overall Test Results		Pass



Curve Description			
Pendulum Deceleration			
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
24.4	8.7	-2.4	79.4



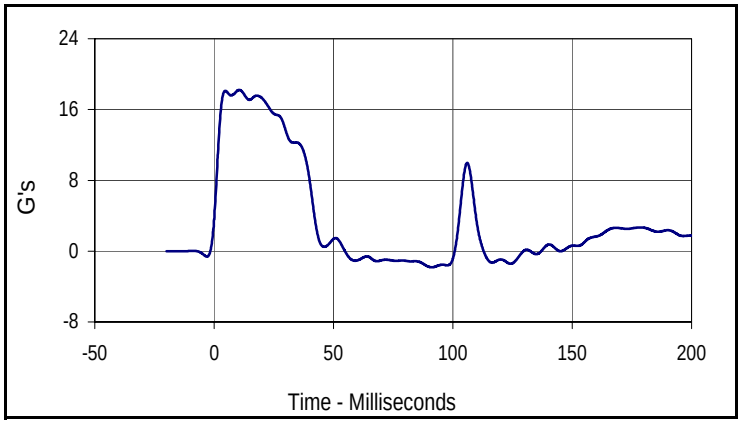
Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
70.8	59.4	-34.1	177.0



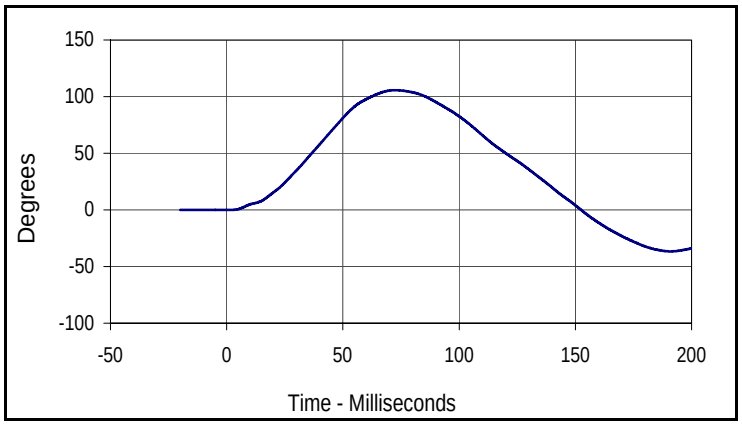
Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
84.7	48.0	-65.3	15.2

Test Program:	Hybrid III 50th Percentile Male Neck Extension Test	Test Date:	9/16/08
ATD Serial No.:	035	Test I.D.:	NE09C

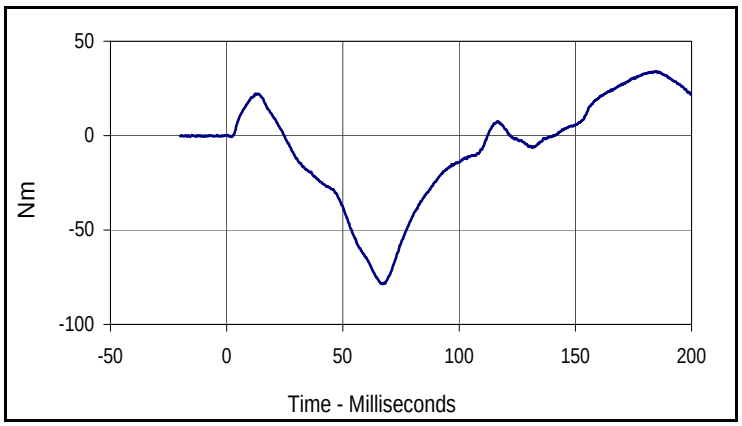
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	5.94 to 6.19	6.16	Pass
Pendulum Deceleration	10 Msec.	G's	17.2 to 21.2	18.2	Pass
	20 Msec.	G's	14.0 to 19.0	17.3	Pass
	30 Msec.	G's	11.0 to 16.0	13.6	Pass
Peak Pendulum Decel. after 30 Msec.		G's	≤ 22.0	13.6	Pass
Deceleration Decay, Time to Cross 5 G's		Msec.	38.0 to 46.0	41.5	Pass
Maximum "D" Plane Rotation	Max	Degrees	81.0 to 106.0	105.7	Pass
	Time	Msec.	72.0 to 82.0	72.4	Pass
"D" Plane Rotation Decay, Time To Zero Crossing		Msec.	147.0 to 174.0	152.5	Pass
Moment About Occ. Condyle	Max	Nm	-52.9 to- 79.9	-78.7	Pass
	Time	Msec.	65.0 to 79.0	67.0	Pass
Positive Moment Decay, Time To Zero Crossing		Msec.	120.0 to 148.0	140.9	Pass
			Overall Test Results		Pass



Curve Description			
Pendulum Deceleration			
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
18.2	10.5	-1.8	91.2



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
105.7	72.4	-36.6	190.9



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
34.0	184.8	-78.7	67.0

Test Program:	Hybrid III 50th Percentile Male Knee Impact Test	Test Date:	9/16/08
ATD Serial No.:	035	Test I.D.:	LK09C , RK09C

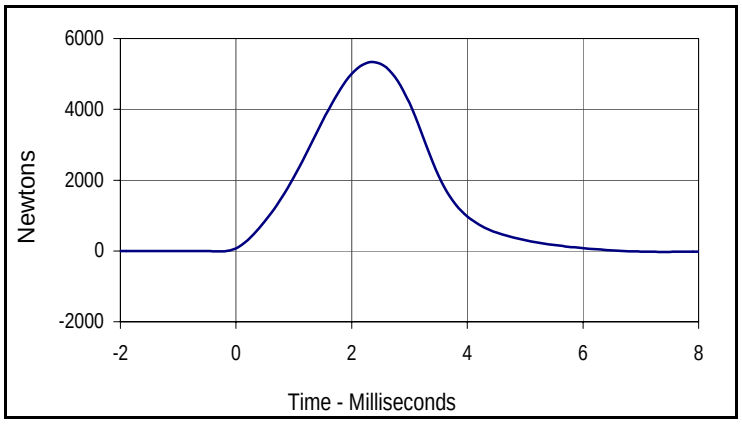
Left Knee

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	2.10	Pass
Peak Probe Force	Newtons	4715 to 5782	5341	Pass
		Overall Test Results		Pass

Right Knee

Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.12	Pass
Peak Probe Force	Newtons	4715 to 5782	5335	Pass
		Overall Test Results		Pass

Curve Description			
Left Knee Probe Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
5341.5	2.5	-24.4	9.5



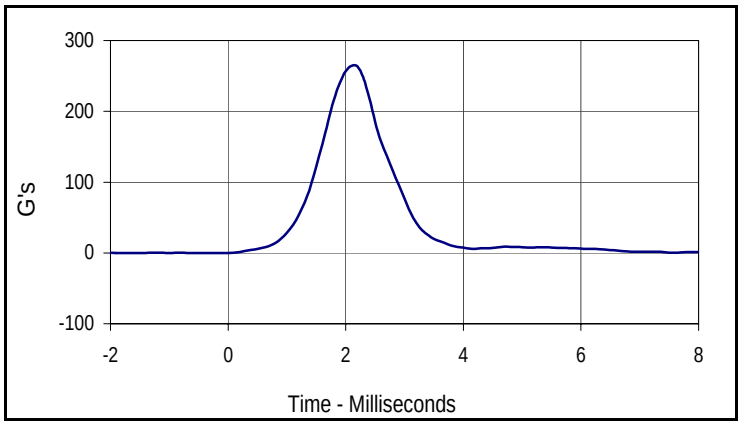
Curve Description			
Right Knee Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	600	Newtons
Max	Time	Min	Time
5335.1	2.4	-26.7	7.4

Test Program:	Hybrid III 50th Percentile Male External Measurements	Test Date:	9/16/08
ATD Serial No.:	035	Test I.D.:	N/A

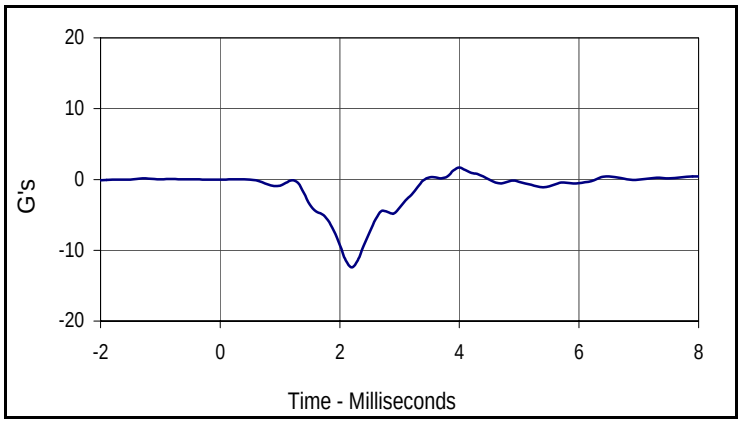
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
A - Total sitting height	mm	879 to 889	883	Pass
B - Shoulder pivot height	mm	505 to 521	514	Pass
C - "H" point height	mm	84 to 89	86	Pass
D - "H" point from seat back	mm	135 to 140	136	Pass
E - Shoulder pivot from back	mm	84 to 94	90	Pass
F - Thigh clearance	mm	140 to 155	148	Pass
G - Elbow back to wrist pivot	mm	290 to 305	295	Pass
H - Skull cap to back line	mm	41 to 46	43	Pass
I - Shoulder to elbow length	mm	330 to 345	343	Pass
J - Elbow rest height	mm	190 to 211	198	Pass
K - Buttock to knee length	mm	579 to 604	580	Pass
L - Poplipteal length	mm	429 to 455	445	Pass
M - Knee pivot height	mm	485 to 500	492	Pass
N - Buttock poplipteal length	mm	452 to 477	473	Pass
O - Chest depth	mm	213 to 229	218	Pass
P - Foot length	mm	251 to 267	258	Pass
V - Shoulder breadth	mm	422 to 437	426	Pass
W - Foot breadth	mm	91 to 107	93	Pass
Y - Chest circumference	mm	970 to 1001	985	Pass
Z - Waist circumference	mm	836 to 866	860	Pass
AA - Location for chest circumference	mm	429 to 434	431	Pass
BB - Location for waist circumference	mm	226 to 231	228	Pass
		Overall Test Results		Pass

Test Program:	Hybrid III 50th Percentile Male Head Drop Test	Test Date:	9/16/08
ATD Serial No.:	034	Test I.D.:	HD09D

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	264.5	Pass
Peak Lateral Acceleration	G's	≤15.0	12.4	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
		Overall Test Results		Pass



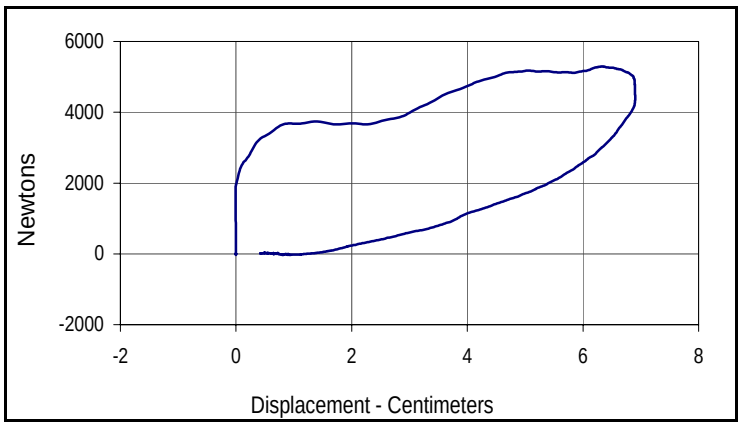
Curve Description			
Head Resultant			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
264.5	2.1	0.0	-1.5



Curve Description			
Head Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
1.7	4.0	-12.4	2.2

Test Program:	Hybrid III 50th Percentile Male Thorax Impact Test	Test Date:	9/17/08
ATD Serial No.:	034	Test I.D.:	CH09D

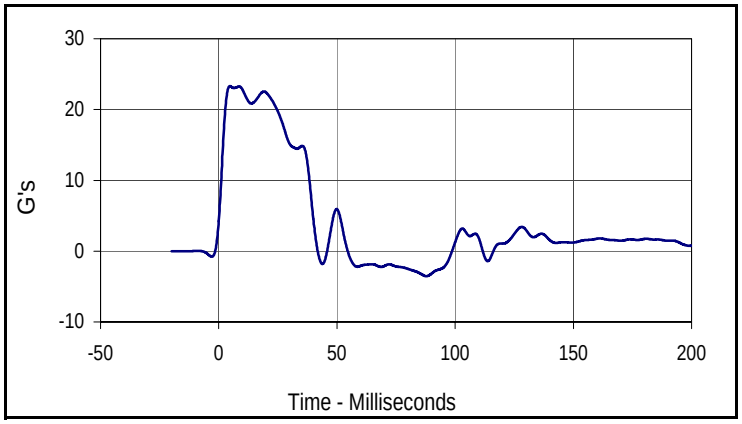
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	6.58 to 6.82	6.74	Pass
Peak Probe Force	Newtons	5159 to 5893	5292	Pass
Peak Sternum Deflection	CM	6.35 to 7.26	6.90	Pass
Internal Hysterysis	%	69 to 85	74.0	Pass
		Overall Test Results		Pass



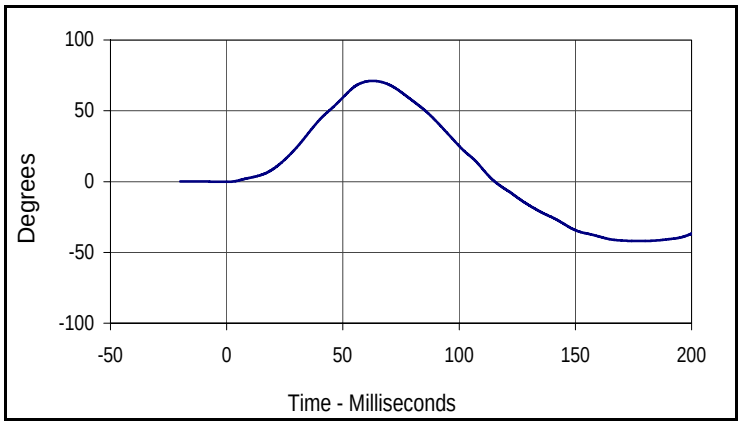
Curve Description			
Probe Force vs. Chest Deflection			
CURNO	Type	SAE Class	Hysterysis
001	FIL	180	74.0
Peak Probe Force		Peak Chest Deflection	
5292		6.90	

Test Program:	Hybrid III 50th Percentile Male Neck Flexion Test	Test Date:	9/16/08
ATD Serial No.:	034	Test I.D.:	NF09D

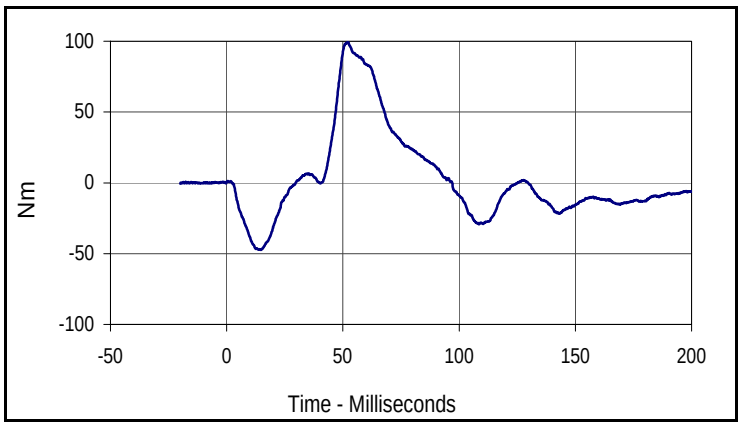
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	6.89 to 7.13	7.04	Pass
Pendulum Deceleration	10 Msec.	G's	22.5 to 27.5	22.8	Pass
	20 Msec.	G's	17.6 to 22.6	22.4	Pass
	30 Msec.	G's	12.5 to 18.5	15.1	Pass
Peak Pendulum Decel. after 30 Msec.		G's	≤ 29.0	15.1	Pass
Deceleration Decay, Time to Cross 5 G's		Msec.	34.0 to 42.0	39.9	Pass
Maximum "D" Plane Rotation	Max	Degrees	64.0 to 78.0	71.2	Pass
	Time	Msec.	57.0 to 64.0	62.7	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	99.3	Pass
	Time	Msec.	47.0 to 58.0	52.1	Pass
Positive Moment Decay, Time To Zero Crossing		Msec.	97.0 to 107.0	97.0	Pass
			Overall Test Results		Pass



Curve Description			
Pendulum Deceleration			
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
23.3	4.7	-3.5	87.8



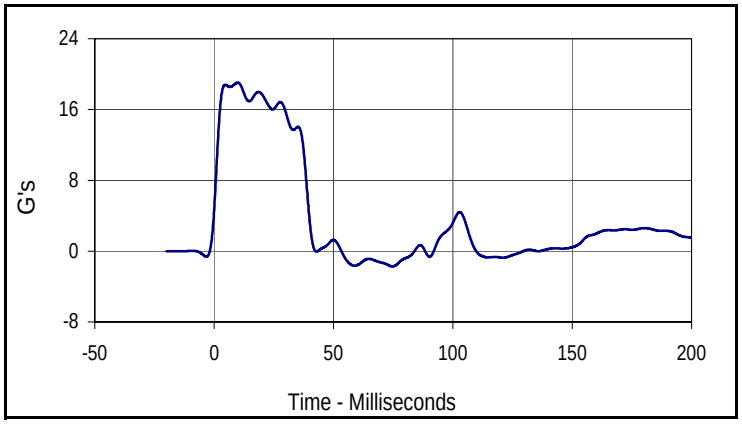
Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
71.2	62.7	-42.0	178.6



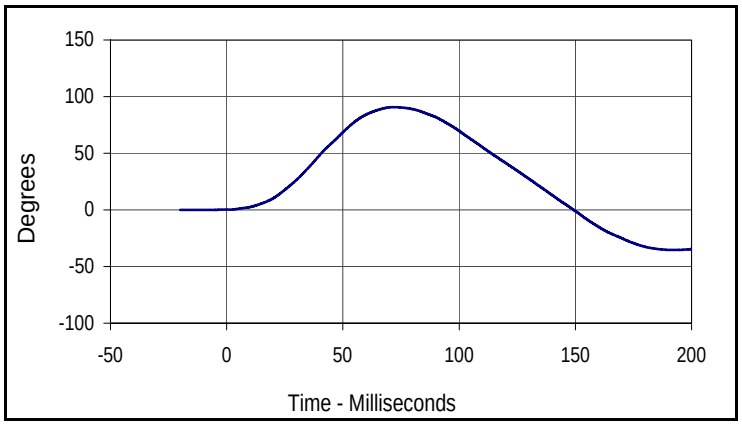
Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
99.3	52.1	-47.4	14.7

Test Program:	Hybrid III 50th Percentile Male Neck Extension Test	Test Date:	9/16/08
ATD Serial No.:	034	Test I.D.:	NE09D

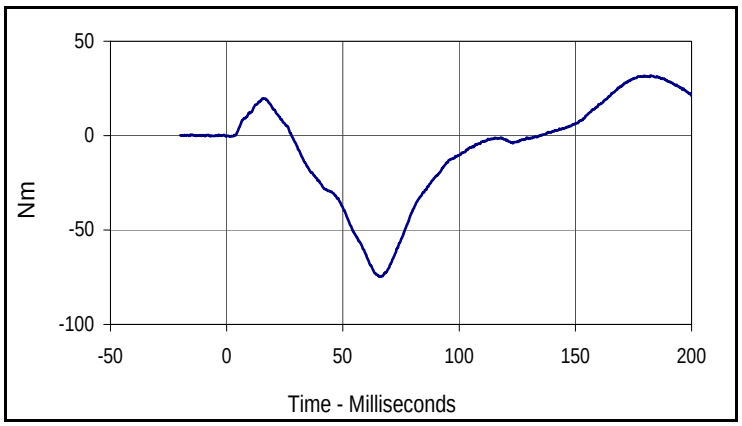
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	5.94 to 6.19	6.16	Pass
Pendulum Deceleration	10 Msec.	G's	17.2 to 21.2	19.0	Pass
	20 Msec.	G's	14.0 to 19.0	17.7	Pass
	30 Msec.	G's	11.0 to 16.0	15.7	Pass
Peak Pendulum Decel. after 30 Msec.		G's	≤ 22.0	15.7	Pass
Deceleration Decay, Time to Cross 5 G's		Msec.	38.0 to 46.0	39.5	Pass
Maximum "D" Plane Rotation	Max	Degrees	81.0 to 106.0	90.7	Pass
	Time	Msec.	72.0 to 82.0	72.0	Pass
"D" Plane Rotation Decay, Time To Zero Crossing		Msec.	147.0 to 174.0	149.3	Pass
Moment About Occ. Condyle	Max	Nm	-52.9 to- 79.9	-74.8	Pass
	Time	Msec.	65.0 to 79.0	65.9	Pass
Positive Moment Decay, Time To Zero Crossing		Msec.	120.0 to 148.0	134.8	Pass
			Overall Test Results		Pass



Curve Description			
Pendulum Deceleration			
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
19.0	9.9	-1.7	74.6



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
90.7	72.0	-35.4	192.3



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
31.9	182.4	-74.8	65.9

Test Program:	Hybrid III 50th Percentile Male Knee Impact Test	Test Date:	9/16/08
ATD Serial No.:	034	Test I.D.:	LK09D , RK09D

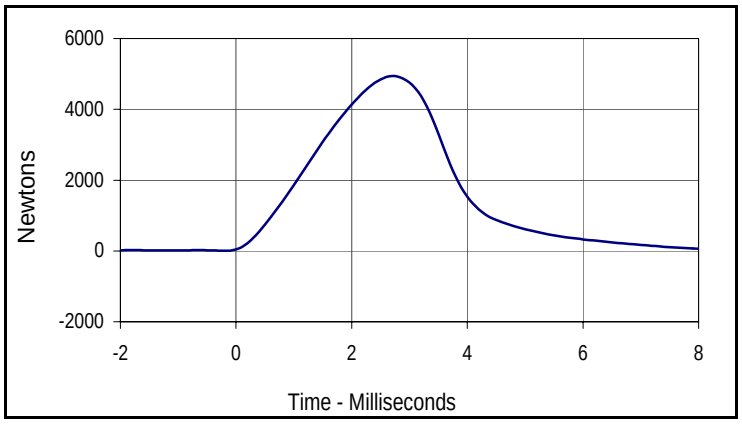
Left Knee

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	2.10	Pass
Peak Probe Force	Newtons	4715 to 5782	4804	Pass
		Overall Test Results		Pass

Right Knee

Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.12	Pass
Peak Probe Force	Newtons	4715 to 5782	4939	Pass
		Overall Test Results		Pass

Curve Description			
Left Knee Probe Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
4803.5	2.6	-12.8	-0.2



Curve Description			
Right Knee Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	600	Newtons
Max	Time	Min	Time
4938.7	2.7	-2.4	9.7

Test Program:	Hybrid III 50th Percentile Male External Measurements	Test Date:	9/16/08
ATD Serial No.:	034	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	518	Pass
C - "H" point height	mm	84 to 89	87	Pass
D - "H" point from seat back	mm	135 to 140	137	Pass
E - Shoulder pivot from back	mm	84 to 94	90	Pass
F - Thigh clearance	mm	140 to 155	149	Pass
G - Elbow back to wrist pivot	mm	290 to 305	296	Pass
H - Skull cap to back line	mm	41 to 46	43	Pass
I - Shoulder to elbow length	mm	330 to 345	343	Pass
J - Elbow rest height	mm	190 to 211	199	Pass
K - Buttock to knee length	mm	579 to 604	596	Pass
L - Poplipteal length	mm	429 to 455	452	Pass
M - Knee pivot height	mm	485 to 500	491	Pass
N - Buttock poplipteal length	mm	452 to 477	470	Pass
O - Chest depth	mm	213 to 229	215	Pass
P - Foot length	mm	251 to 267	260	Pass
V - Shoulder breadth	mm	422 to 437	431	Pass
W - Foot breadth	mm	91 to 107	102	Pass
Y - Chest circumference	mm	970 to 1001	997	Pass
Z - Waist circumference	mm	836 to 866	862	Pass
AA - Location for chest circumference	mm	429 to 434	430	Pass
BB - Location for waist circumference	mm	226 to 231	230	Pass
		Overall Test Results		Pass

Test Program:	Dummy Damage Checklist	Test Date:	9/16/08
ATD Serial No.:	035	Test I.D.:	N/A

GENERAL	DAMAGED	OK
Outer skin on entire dummy		X
Head ballast secure		X
Gashes, rips, general appearance, etc.		X
Neck-Broken or cracks in rubber		X
Check that upper neck bracket is firmly attached to lwr neck bracket		X
Three rubber bumpers in place		X
Spine- Broken or cracks in rubber		X
Check for looseness at the condyle joint		X
Nodding blocks- cracked or out of position		X
Ribs- Check all ribs and rib supports for damage (bent or broken)		X
Check damping material or separation or cracks		X
OTHER		
CHEST DISPLACEMENT ASSEMBLY		
Bent shaft		X
Slider arm riding correctly, in track		X
TRANSDUCER LEADS		
Torn cables		X
ACCELEROMETER MOUNTINGS		
Check for secure mounting		X
KNEES		
Check outer skin, insert and casting (without removing insert)		X
Knee sliders - Wires intact		X
Knee sliders- Rubber returned to "at rest position"		X
LIMBS		
Check for normal movement and adjustment		X
PELVIS		
Inspect for breakage, especially at iliac crest		X

Comments on repair or replacement parts:

Test Program:	Dummy Damage Checklist	Test Date:	9/16/08
ATD Serial No.:	034	Test I.D.:	N/A

GENERAL	DAMAGED	OK
Outer skin on entire dummy		X
Head ballast secure		X
Gashes, rips, general appearance, etc.		X
Neck-Broken or cracks in rubber		X
Check that upper neck bracket is firmly attached to lwr neck bracket		X
Three rubber bumpers in place		X
Spine- Broken or cracks in rubber		X
Check for looseness at the condyle joint		X
Nodding blocks- cracked or out of position		X
Ribs- Check all ribs and rib supports for damage (bent or broken)		X
Check damping material or separation or cracks		X
OTHER		
CHEST DISPLACEMENT ASSEMBLY		
Bent shaft		X
Slider arm riding correctly, in track		X
TRANSDUCER LEADS		
Torn cables		X
ACCELEROMETER MOUNTINGS		
Check for secure mounting		X
KNEES		
Check outer skin, insert and casting (without removing insert)		X
Knee sliders - Wires intact		X
Knee sliders- Rubber returned to "at rest position"		X
LIMBS		
Check for normal movement and adjustment		X
PELVIS		
Inspect for breakage, especially at iliac crest		X

Comments on repair or replacement parts: