

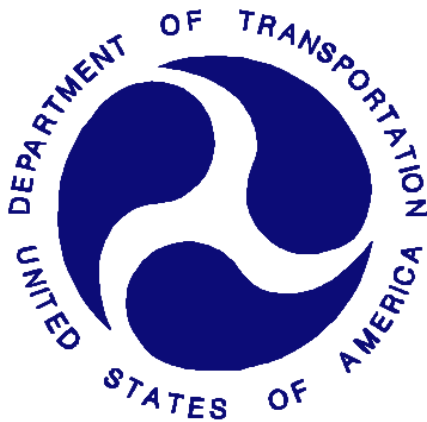
REPORT NUMBER TR-P26174-01-NC

**NEW CAR ASSESSMENT PROGRAM
FRONTAL BARRIER IMPACT TEST**

**HONDA OF AMERICA MFG., INC.
2007 ACURA RDX
5-DOOR MPV**

NHTSA NUMBER: H75301

**PREPARED BY:
KARCO ENGINEERING, LLC
9270 HOLLY ROAD
ADELANTO, CALIFORNIA 92301**



OCTOBER 3, 2006

FINAL REPORT

**PREPARED FOR:
U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
RULEMAKING
OFFICE OF CRASHWORTHINESS STANDARDS
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400 SEVENTH STREET, SW, ROOM 5311
WASHINGTON, D.C. 20590**

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Date of Acceptance

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Date of Acceptance

Technical Report Documentation Page

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16. Abstract A 35 mph (56.30 km/h) frontal barrier impact was conducted on a 2007 Acura RDX 5-Door MPV at Karco Engineering, LLC on 10/3/06. This test was conducted to obtain data indicant of FMVSS 208, 212, 219 (partial), 301, and footwell intrusion performance. The impact velocity is 55.63 km/h. The ambient temperature at the barrier face at the time of impact is 28.0 degrees Celcius. The vehicle's maximum post-test static crush is 604 mm at the vehicle's centerline. The test vehicle is equipped with a 3-point continuous belt system and second generation supplemental airbags in both front outboard seating positions. With respect to FMVSS 208 "Occupant Crash Protection", the occupant injury criteria summary is as follows:																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Measurement Description</th> <th style="width: 15%;">Units</th> <th style="width: 15%;">Threshold</th> <th style="width: 15%;">Driver ATD</th> <th style="width: 20%;">Passenger ATD</th> </tr> </thead> <tbody> <tr> <td>Head Injury Criteria (HIC)</td> <td>N/A</td> <td>1000</td> <td>175.6</td> <td>430.9</td> </tr> <tr> <td>Max. Chest Accel. (3 msec Clip)</td> <td>G's</td> <td>60</td> <td>40.2</td> <td>37.5</td> </tr> <tr> <td>Left Femur Force</td> <td>Newtons</td> <td>10008</td> <td>-2514.4</td> <td>-5680.8</td> </tr> <tr> <td>Right Femur Force</td> <td>Newtons</td> <td>10008</td> <td>-2359.3</td> <td>-2694.0</td> </tr> </tbody> </table>				Measurement Description	Units	Threshold	Driver ATD	Passenger ATD	Head Injury Criteria (HIC)	N/A	1000	175.6	430.9	Max. Chest Accel. (3 msec Clip)	G's	60	40.2	37.5	Left Femur Force	Newtons	10008	-2514.4	-5680.8	Right Femur Force	Newtons	10008	-2359.3	-2694.0
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SECTION 1
PURPOSE AND SUMMARY OF TEST H75301

1.1 PURPOSE

This 35 mph (56.30 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 (48.30 km/h) requirements.

The 35 mph (56.30 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 May 2006. 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 was impacted by a 2007 Acura RDX 5-Door MPV at a velocity of 55.63 km/h. The test was performed at Karco Engineering, LLC on October 3, 2006.

Three (3) real-time and fifteen (15) 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 also placed on the driver's and passenger's lap and shoulder belts to measure dummy torso and pelvic section loading. Also, shoulder belt spool-off was measured for the driver and passenger dummy. The driver (position 1) ATD (Serial No. 35) and the right-front passenger (position 2) ATD (Serial No. 34) were calibrated one test 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 percent windshield retention and there was no intrusion into the protected zone of the windshield during the impact event. 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 604 mm at the vehicle's centerline and both the driver and the 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 and the abdomen had no contact. Both knees contacted the knee bolster.

The passenger's visible contact points were as follows: The passenger ATD's head, chest and abdomen contacted the airbag. Both knees contacted the knee bolster.

Occupant injury data is contained in table below.

OCCUPANT DATA SUMMARY

ATD Position	HIC 36	Clip (g)	Chest Defl. (mm)	Left Femur (N)	Right Femur (N)
Driver	175.6	40.2	-34.4	-2514.4	-2359.3
Passenger	430.9	37.5	-19.6	-5680.8	-2694.0

SECTION 2
OCCUPANT AND VEHICLE INFORMATION/DATA SHEETS

Test Vehicle: 2007 Acura RDX 5-Door MPV

NHTSA No.: H75301

Test Program: 2007 NHTSA 35 MPH NCAP

Test Date: 10/3/06

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	°F	°C	=(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: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

PRIMARY IMPACT DATA

Measured Parameter	Units	Value
Velocity at Impact	km/h	55.63
Test Weight	kg	1971
Impact Angle	degrees	0
Average Rebound	mm	760
Maximum Static Crush	mm	604

DOOR OPENING AND SEAT TRACK INFORMATION

Description	Driver	Passenger
Front Door opening	Remained closed and latched, opened w/o tools	Remained closed and latched, opened w/o tools
Rear Door Opening	Remained closed and latched, opened w/o tools	Remained closed and latched, opened w/o tools
Seat Track Shift (mm)	None	None
Seat Back Failure	No	No

TEST DUMMY INFORMATION

Description	Driver	Passenger
Dummy Type/ Serial No.	50% Male Hybrid III No. 35	50% Male Hybrid III No. 34
Head Contact	Airbag	Airbag
Chest Contact	Airbag	Airbag
Abdomen Contact	None	Airbag
Left Knee Contact	Knee Bolster	Knee Bolster
Right Knee Contact	Knee Bolster	Knee Bolster

MOVIE COVERAGE

Cameras	Standard	Additional
High Speed	13	2
Real Time	1	2
Total	14	4

DATA CHANNELS

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

DATA SHEET NO. 2
GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

TEST VEHICLE INFORMATION AND OPTIONS

NHTSA No.	H75301
Make	Acura
Model	RDX
Body Style	5-Door MPV
Vin No.	5J8TB18227A003863
Color	Slate Grey
Delivery Date	9/8/2006
Odometer (Miles)	75.1
Dealer	Acura of Riverside
Transmission	Automatic
Final Drive	AWD
Type/No. Cyl.	Inline 4
Engine Disp. (L)	2.3
Engine Placement	Transverse
Roof Rack	No
Sunroof/T-Top	Yes
Tinted Glass	Yes
Traction Control	Yes
Power Brakes	Yes
Front Disc	Yes
Rear Disc	Yes

Anti-Lock Brakes	Yes
All Wheel Drive	Yes
Power Steering	Yes
Driver Front Airbag	Yes
Driver Side Airbag	Yes
Driver Head Airbag	No
Driver Curtain Airbag	Yes
Pass. Airbag	Yes
Pass. Side Airbag	Yes
Pass. Head Airbag	No
Pass. Curtain Airbag	Yes
Pre-Tensioners	Yes
Load Limiters	Yes
Bucket Seats	Yes
Air. Cond.	Yes
AM/FM CD player	Yes
Tilt Steering	Yes
Automatic Door Locks	Yes
Power Windows	Yes
Power Seats	Yes
Other	None

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

Yes

DATA FROM MANUFACTURER

Manufactured By	Honda of America MFG., INC.
Date of Manufacture	Aug-06

GWR (kg)	2220
GAWR Front (kg)	1155
GAWR Rear (kg)	1080

VEHICLE SEATING AND CAPACITY WEIGHT INFORMATION

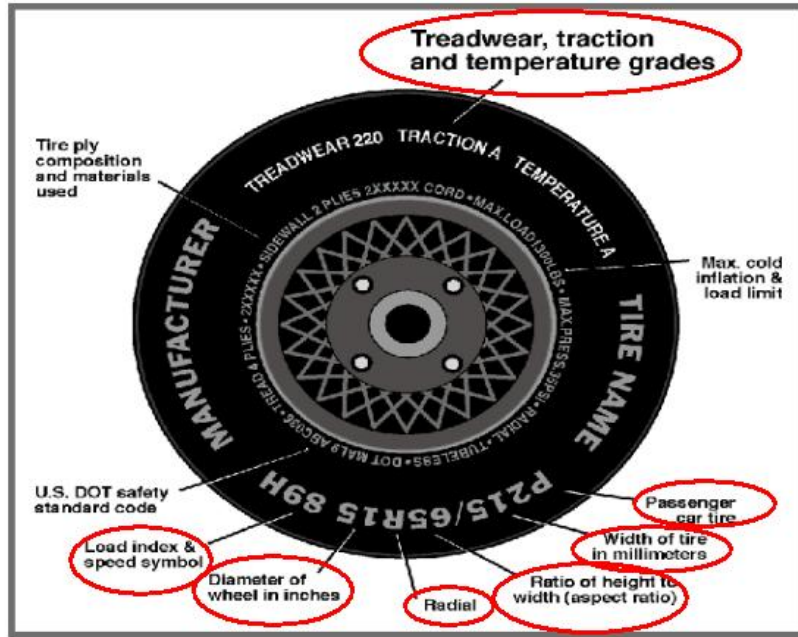
Measured Parameter	Front	Rear	Third	Total
Type of Seats	Bucket	Bucket		
Number of Occupants	2	3		5
Capacity Weight (VCW) (kg)				395
Cargo Weight (RCLW) (kg)				54

DATA SHEET NO. 2...(CONTINUED)
GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

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



TIRE INFORMATION

Measured Parameter	Front	Rear
Max. Tire Pressure (kpa)	300	300
Cold Pressure (kpa)	220	220
Recommended Tire Size	P235/55 R18	P235/55 R18
Tire Size on Vehicle	P235/55 R18	P235/55 R18
Tire Manufacturer	Michelin	Michelin
Treadwear	300	300
Traction	A	A
Temperature Grades	A	A
Tire Plies Sidewall	2 Polyester	2 Polyester
Tire Plies Body	2 Polyester, 2 Steel, 1 Polyamide	2 Polyester, 2 Steel, 1 Polyamide
Load Index/Speed Symbol	99V	99V
Tire Material	Polyester, Steel, Polyamide	Polyester, Steel, Polyamide
DOT Safety Code Right	B935 PHFX 3106	B935 PHFX 3106
DOT Safety Code Left	B935 PHFX 3106	B935 PHFX 3106

DATA SHEET NO. 2...(CONTINUED)
GENERAL TEST AND VEHICLE PARAMETER DATA

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

TEST VEHICLE WEIGHTS

	Units	As Delivered Weights (UVW)			As Tested Weights (ATW)		
		Front Axle	Rear Axle	Total	Front Axle	Rear Axle	Total
Left	kg	512	394	906	533	450	983
Right	kg	503	365	868	546	442	988
Ratio	%	57.2	42.8	100	54.7	45.3	100
Totals	kg	1015	759	1774	1079	892	1971

TARGET TEST WEIGHT CALCULATION

Measured Parameter	Units	Value
Total Delivered Weight (UVW)	kg	1774
Weight of 2 P572 ATD's	kg	152
Rated Cargo/Luggage Wt. (RCLW)	kg	54
Calculated Vehicle Target Wt. (TVTW)	kg	1980

TEST VEHICLE ATTITUDE AND CG

	Units	LF	RF	LR	RR	CG (aft of front axle)
As Delivered	mm	788	785	788	789	1138
As Tested	mm	785	778	775	765	1204

Vehicle Wheel Base (mm) 2658

Weight of Ballast Secured in cargo area (kg) 0

Weight of Items Removed (kg) 71

Vehicle Components Removed Rear hatch, rear bumper, spare tire, spare tire changing tools, under floor storage tray

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

FUEL SYSTEM DATA

Fuel System Capacity From Owners Manual (L) 68.13

Actual Test Volume with entire fuel System Filled (L) 63.36

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 ignition switch "On" & engine "OFF" Yes

Fuel System Particulars: Electric fuel pump. Activated when electrical system is activated
Fuel pump will run for 3 seconds when ignition is in "on" position.

**DATA SHEET NO. 3
POST-TEST IMPACT DATA**

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

SPEED TRAP DATA

Measured Parameter	Units	Requirement	Value
Trap No.1 Velocity (Primary)	km/h	55.51 to 57.12	55.63
Trap No.2 Velocity (Redun.)	km/h	55.51 to 57.12	55.73

VEHICLE STATIC CRUSH

Measured Parameter	Units	Pre-Test	Post-Test	Difference
Left Side	mm	4412	3959	-453
Center	mm	4591	3987	-604
Right Side	mm	4412	3998	-414

VEHICLE REBOUND FROM BARRIER

Measured Parameter	Units	Value
Left Side	mm	730
Center	mm	780
Right Side	mm	770
Average	mm	760

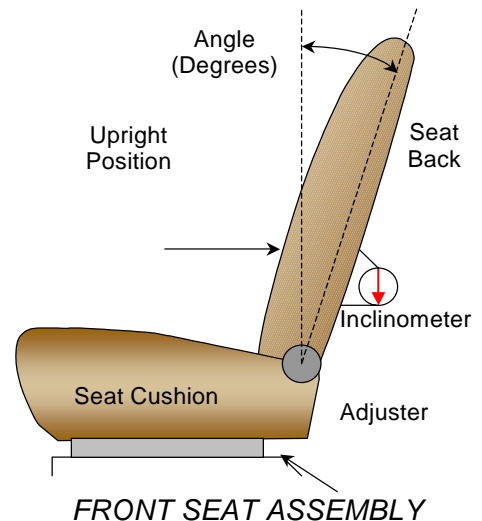
**DATA SHEET NO. 4
TEST VEHICLE INFORMATION**

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

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 of the seat back using a digital inclinometer.



SEAT BACK ANGLES

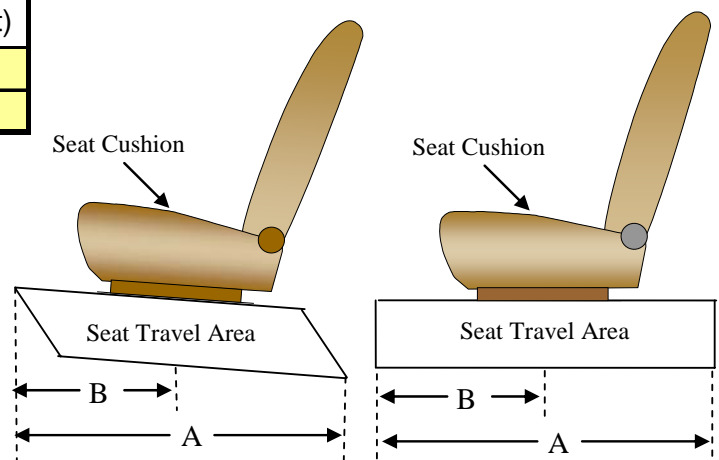
	Deg.
Driver w/seated Dummy	7.3 @ headrest
Passenger w/seated Dummy	7.0 @ headrest

SEAT FORE/AFT POSITIONS

The total seat travel was measured from forward most position at the highest vertical seat height to rearmost position at the lowest vertical seat height. The seat was set at the longitudinal mid position with the vertical adjustment at the lowest position obtainable for the driver and passenger.

SEAT FORE/AFT POSITIONING

	Total Fore/Aft Travel (Detent)	Placed in Position (Detent)
Driver Seat	290 mm	145 mm
Passenger Seat	25 detent	12 detent



SEAT BELT UPPER ANCHORAGE

Position number one (1) is the uppermost position.

SEAT BELT UPPER ANCHORAGE

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

DATA SHEET NO. 4...(CONTINUED)
TEST VEHICLE INFORMATION

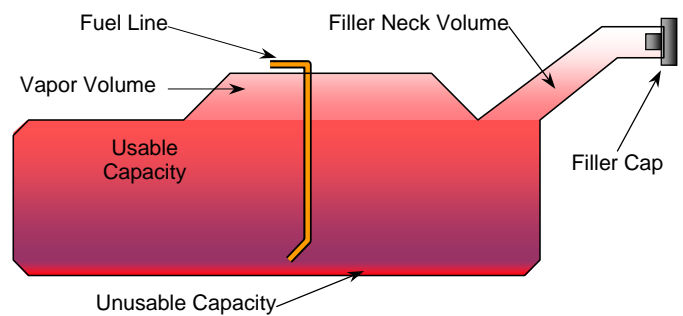
Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

FUEL TANK CAPACITY

	Liters
Usable Capacity of "Standard Tank"	68.13
Usable Capacity of "Optional" Tank	
Usable Capacity used for FMVSS 301	62.68 to 64.04
Actual Amount of Solvent used	63.36

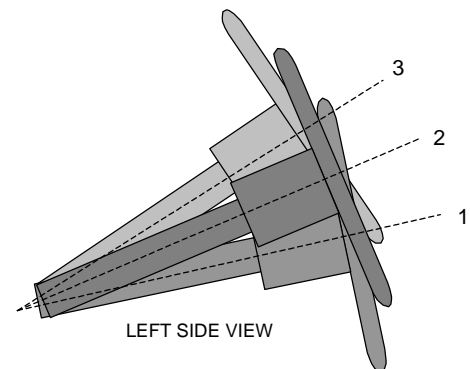
The test vehicle is equipped with an electric fuel pump. The fuel pump operates for approximately two seconds after the ignition is placed in the "ON" position, after which the fuel pump automatically shuts off. The fuel filler door is located on the left rear fender. The standard fuel tank occupies the area under 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.



STEERING COLUMN ASSEMBLY

STEERING COLUMN POSITIONS

	Degrees	Fore/Aft Position (mm)
Lowermost position No. 1	23.2	161
Geometric center position No. 2	26.3	180
Uppermost position No. 3	29.5	199

DATA SHEET NO. 5
DUMMY POSITIONING IN VEHICLE

Test Vehicle: 2007 Acura RDX 5-Door MPV
Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
Test Date: 10/3/06

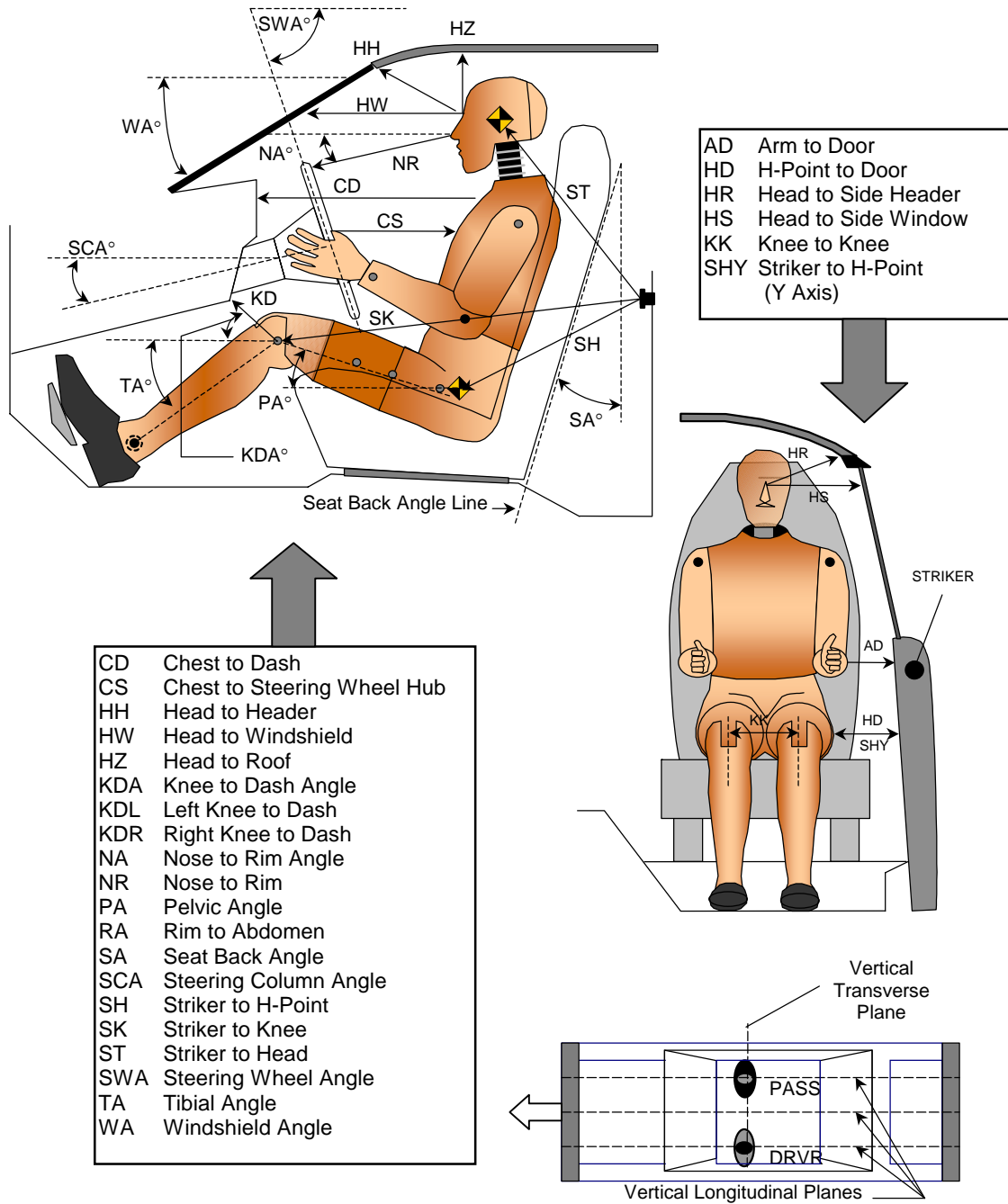
TEST DUMMY POSITION MEASUREMENTS

Code	Measurement Description	Driver		Passenger	
		Length (mm)	Angle (deg)	Length (mm)	Angle (deg)
WA	Windshield Angle		29.0		
SWA	Steering Wheel Angle		63.7		
SCA	Steering Column Angle		26.3		
SA	Seat Back Angle		7.3 @ headrest		7.0 @ headrest
HZ	Head to Roof (Z)	224	90.0	165	90.0
HH	Head to Header	345		310	
HW	Head to Windshield	640		690	
HR	Head to Side Header (Y)	285		260	
NR	Nose to Rim	380	2.8		
CD	Chest to Dash	565		590	
CS	Chest to Steering Hub	300			
RA	Rim to Abdomen	180			
KDL	Left Knee to Dash	155	40.0	90	
KDR	Right Knee to Dash	95		120	21.5
PA	Pelvic Angle		23.3		20.5
TA	Tibia Angle		48.7		41.4
KK	Knee to Knee (Y)	335		276	
SK	Striker to Knee	618	1.2	660	3.4
ST	Striker to Head	547	76.0	577	83.0
SH	Striker to H-Point	270	22.0	330	13.0
SHY	Striker to H-Point (Y)	250		250	
HS	Head to Side Window	380		335	
HD	H-Point to Door (Y)	200		200	
AD	Arm to Door (Y)	130		130	

DATA SHEET NO. 5...(CONTINUED)
DUMMY POSITIONING IN VEHICLE

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

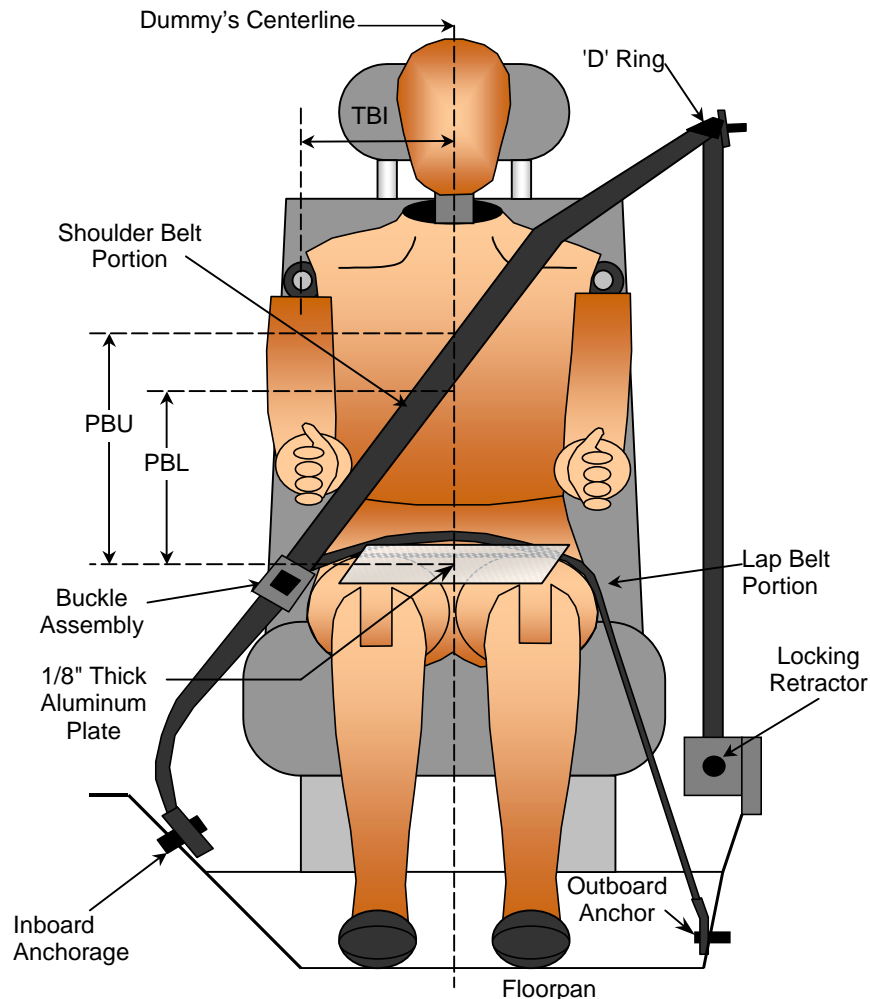


DUMMY MEASUREMENTS FOR FRONT SEAT OCCUPANTS

DATA SHEET NO. 6
SEAT BELT POSITIONING DATA

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06



SEAT BELT POSITIONING MEASUREMENTS

Measured Parameter	Units	Driver	Passenger
TBI - Dummy C/L to Lap/Shoulder Belt Intersect	mm	220	220
PBU - Top Surface of reference to belt upper edge	mm	340	340
PBL - Top Surface of reference to belt lower edge	mm	258	250
Lap Belt Tension	Newtons	10	10
Shoulder Belt Tension	N/A	Retractor	Retractor

**DATA SHEET NO. 7
VEHICLE ACCELEROMETER LOCATION**

Test Vehicle: 2007 Acura RDX 5-Door MPV

NHTSA No.: H75301

Test Program: 2007 NHTSA 35mph NCAP

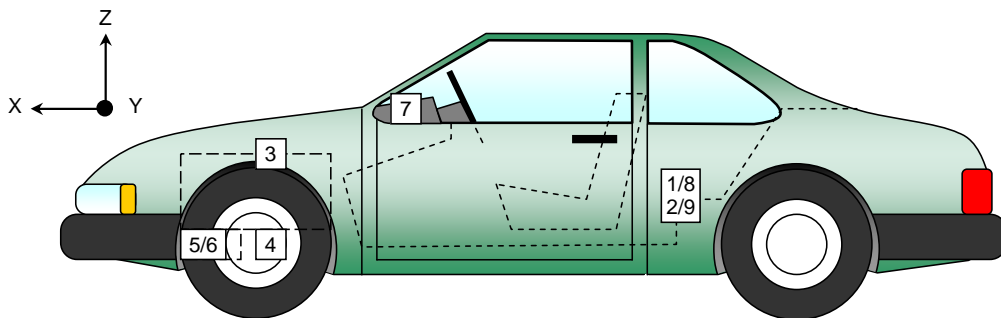
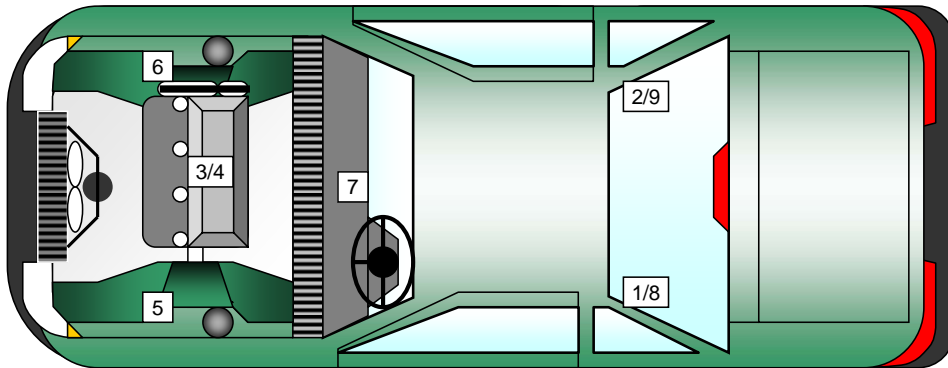
Test Date: 10/3/06

VEHICLE ACCELEROMETER PRE-TEST LOCATIONS

No.	Accelerometer Location	Measurements (mm)		
		X	Y	Z
1	Left Rear X-Member	1765	-760	482
2	Right Rear X-Member	1765	760	482
3	Engine Top	3771	280	1005
4	Engine Bottom	3884	200	206
5	Left Brake Caliper	3724	-646	335
6	Right Brake Caliper	3724	646	335
7	Instrument Panel			
8	Left Rear X-Member (Z-Axis)	1765	-760	482
9	Right Rear X-Member (Z-Axis)	1765	760	482

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

1.) Instrument Panel no longer used by NHTSA



**DATA SHEET NO. 8
SEAT BELT ASSESSMENT TEST DATA**

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

SEAT BELT POSITIONING MEASUREMENTS

Measurement Description	Units	Driver	Passenger
Retractor Reel to "D" ring	mm	800	800
Shoulder Belt length as measured on ATD	mm	920	925
Lap Belt length as measured on ATD	mm	600	560
Remainder of belt on reel	mm	1060	950
Total belt length for continuous webbing systems	mm	3380	3235

SHOULDER BELT SPOOL-OFF DATA

Measurement Description	Units	Driver	Passenger
As determined mechanically	mm	170.0	210.0
As determined electronically	mm	175.4	297.0

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: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

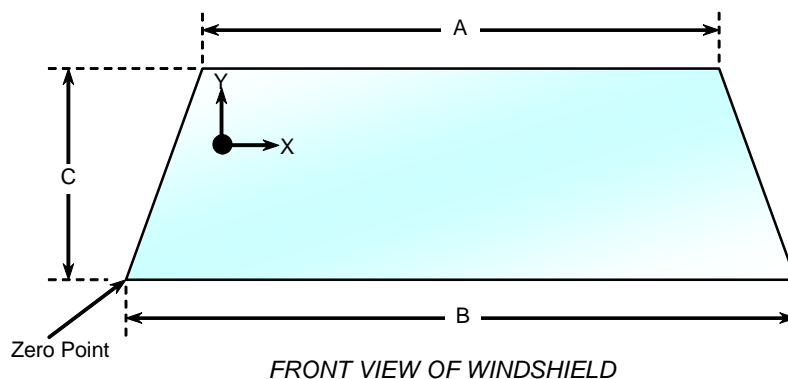
Windshield Mounting Details: Windshield glass is secured to the vehicle frame with a rubber type adhesive. No molding covers the windshield periphery at any point.

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: 21.1 °C

WINDSHIELD PERIPHERY MEASUREMENTS

Measurement	Pre-Test(mm)	Post-Test(mm)	% of Retention
Left Side	2250	2250	100
Right Side	2250	2250	100
Total	4500	4500	100



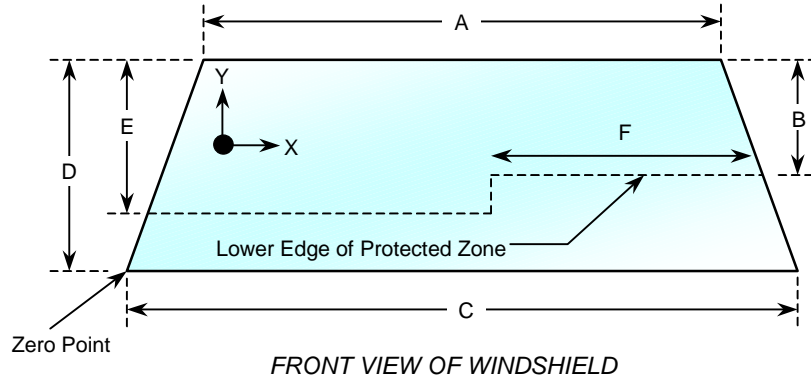
WINDSHIELD DIMENSIONS

Item	Units	Segment Length	Molding Width
A	mm	1235	19
B	mm	1505	87
C-Left	mm	880	26
C-Right	mm	880	26

DATA SHEET NO. 10
WINDSHIELD ZONE INTRUSION FMVSS 219 DATA (PARTIAL)

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06



**WINDSHIELD AND
 PROTECTED ZONE**

Item	Units	Value
A	mm	1235
B	mm	551
C	mm	1505
D	mm	880
E	mm	565
F	mm	395

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: 2007 Acura RDX 5-Door MPV

NHTSA No.: H75301

Test Program: 2007 NHTSA 35 MPH NCAP

Test Date: 10/3/06

Test Time: 12:49 PM

Temperature: 28.0 Deg. C.

STODDARD SOLVENT SPILLAGE MEASUREMENTS

A. From impact until vehicle motion ceases: 0.0 oz.
(Maximum Allowable = 1 ounce)

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

C. For the following 25 minutes: 0.0 oz.
(Maximum Allowable = 1 oz./minute)

D. Spillage Location Details: No leakage occurred

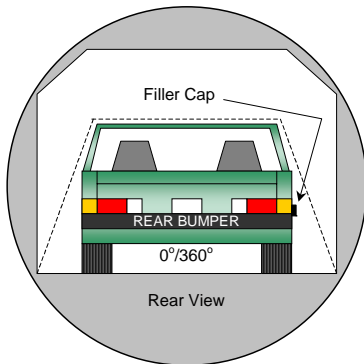
DATA SHEET NO. 12
FMVSS 301 STATIC ROLLOVER DATA

Test Vehicle: 2007 Acura RDX 5-Door MPV

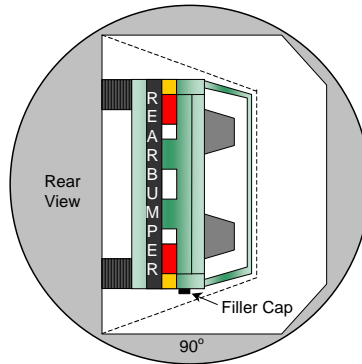
NHTSA No.: H75301

Test Program: 2007 NHTSA 35 MPH NCAP

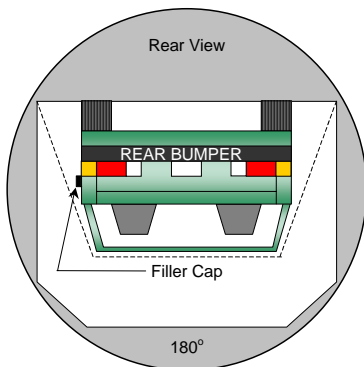
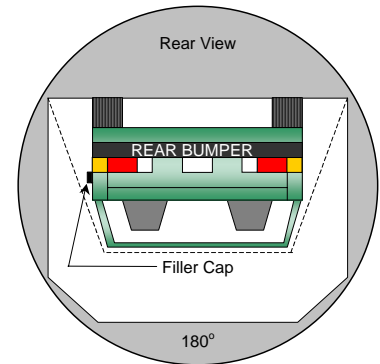
Test Date: 10/3/06



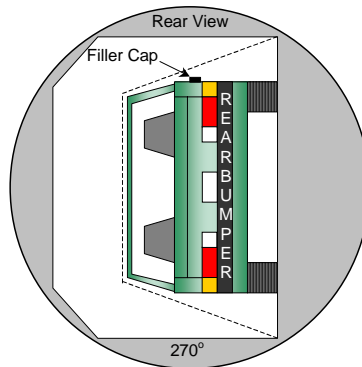
0° to 90°



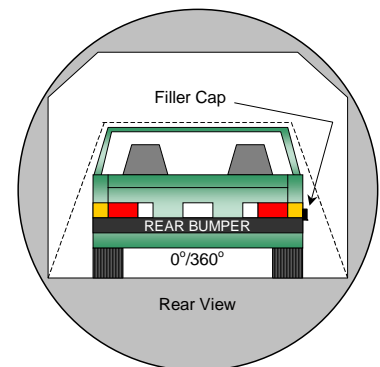
90° to 180°



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: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

SOLVENT COLLECTION TIME TABLE IN SECONDS

Test Phase	Rotation Time	Hold Time	Total Time
0° to 90°	82	300	382
90° to 180°	79	300	379
180° to 270°	77	300	377
270° to 360°	77	300	377

FMVSS 301 SPILLAGE TABLE REQUIREMENT (oz.)

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: 2007 Acura RDX 5-Door MPV
Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
Test Date: 10/3/06

VEHICLE MEASUREMENT TABLE

No.	Measurement Description	Units	Pre-Test	Post-Test	Diff.
1	Total length of vehicle at centerline	mm	4591	3987	-604
2	RSOV to front of engine	mm	4117	3760	-357
3	RSOV to firewall centerline	mm	3615	3590	-25
4	RSOV to leading edge of right door	mm	3150	3153	3
5	RSOV to leading edge of left door	mm	3130	3136	6
6	RSOV to lower leading edge of right door	mm	3155	3155	0
7	RSOV to lower leading edge of left door	mm	3140	3130	-10
8	RSOV to upper trailing edge of right door	mm	2035	2049	14
9	RSOV to upper trailing edge of left door	mm	2013	2029	16
10	RSOV to lower trailing edge of right door	mm	2075	2084	9
11	RSOV to lower trailing edge of left door	mm	2060	2061	1
12	RSOV to bottom of right 'A' pillar	mm	3112	3155	43
13	RSOV to bottom of left 'A' pillar	mm	3110	3138	28
14	RSOV to firewall on right side	mm	3671	3514	-157
15	RSOV to firewall on left side	mm	3657	3546	-111
16	RSOV to steering column	mm	2705	2694	-11
17	Center of steering column to left 'A' pillar	mm	425	407	-18
18	Center of steering column to headlining	mm	430	430	0
19	RSOV to right side of front bumper	mm	4412	3998	-414
20	RSOV to left side of front bumper	mm	4412	3959	-453
21	Length of engine block	mm	600	600	0
RD	RSOV to right side of dash panel	mm	3031	2964	-67
CD	RSOV to center of dash panel	mm	2940	2891	-49
LD	RSOV to left side of dash panel	mm	3011	2940	-71

DATA SHEET NO. 13...(CONTINUED)
VEHICLE STRUCTURAL MEASUREMENTS

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

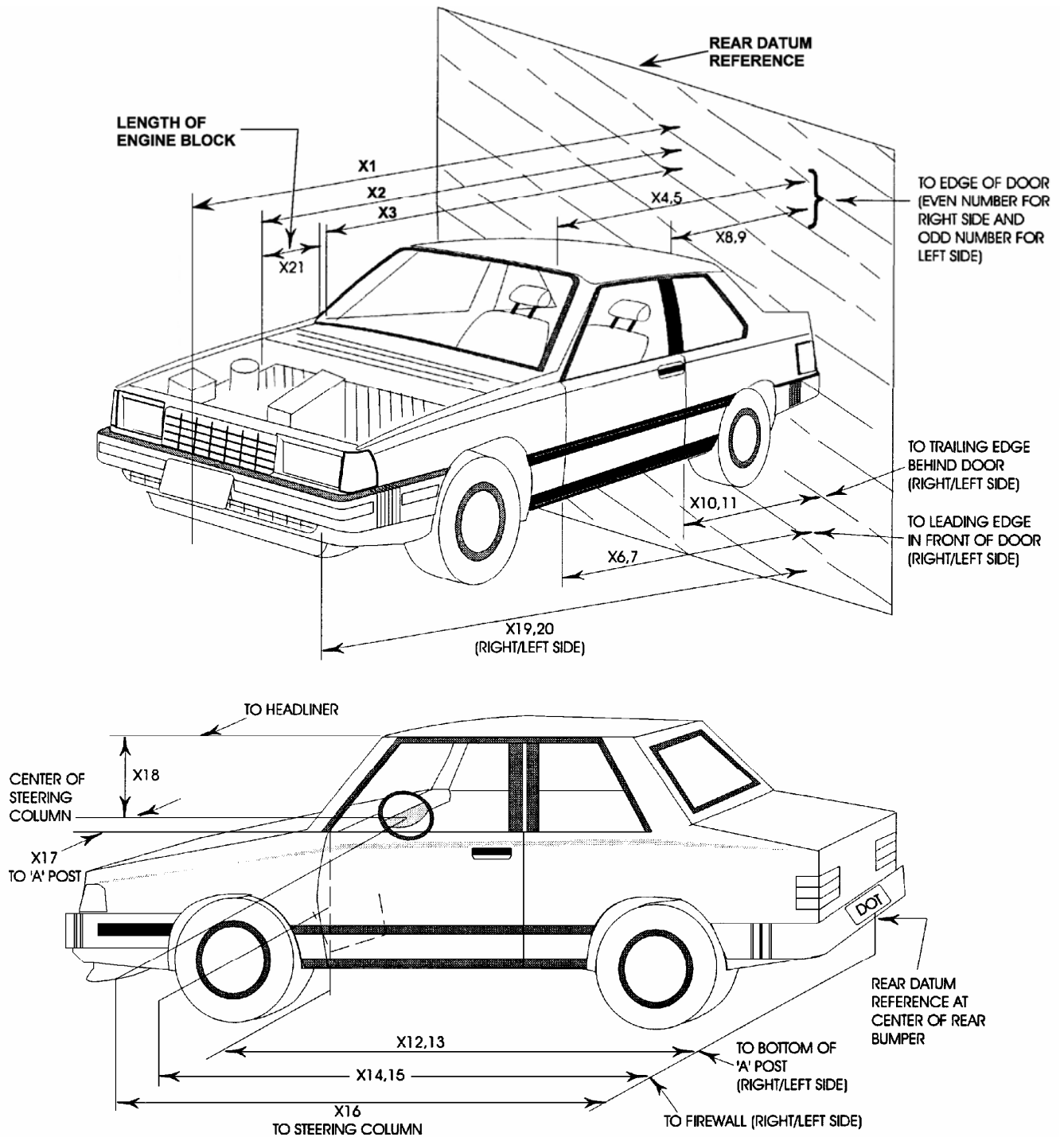
VEHICLE STRUCTURAL MEASUREMENT TABLE

No.	Measurement Description	Units	Pre-Test	Post-Test	Diff.
1	Total length	mm	4591	3987	-604
2	Total width	mm	1857	1858	1
3	Bumper top height	mm	830	800	-30
4	Bumper bottom height	mm	401	421	20
5	Longitudinal member top height	mm	581	420	-161
6	Longitudinal member bottom height	mm	501	450	-51
7	Distance between longitudinal members	mm	900	940	40
8	Longitudinal member width	mm	40	40	0
9	Engine top height	mm	1038	1058	20
10	Engine bottom height	mm	206	256	50
11	Engine and gear box width	mm	827	827	0
12	Front bumper to engine distance	mm	477	245	-232
13	Front shock absorber fixing width	mm	1010	1052	42
14	Bonnet leading edge height	mm	906	1074	168
15	Front shock absorber fixing width	mm	1168	1111	-57
16	Front bumper to front axle distance	mm	955	1056	101
17	Front axle to 'A' pillar distance	mm	514	430	-84
18	'A' pillar to 'B' pillar distance	mm	1080	1006	-74
19	'B' pillar to rear axle distance	mm	1091	1106	15
20	'B' pillar to 'C' pillar distance	mm	900	905	5
21	Roof sill bottom height	mm	1418	1438	20
22	Roof sill top height	mm	1585	1592	7
23	Floor sill bottom height	mm	474	466	-8
24	Floor sill top height	mm	291	227	-64

DATA SHEET NO. 13...(CONTINUED)
VEHICLE MEASUREMENTS

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06



**DATA SHEET NO. 14
CAMERA LOCATIONS**

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

VEHICLE CAMERA MEASUREMENT TABLE

No.	Camera View	Location (mm)			Angle (deg.)	Film Plane to Head	Lens (mm)	Speed (fps)
		X	Y	Z				
1	Real Time Camera (Panning)	-15223	-8245	-1676	0			30
2	Overall Left Side	-1789	-7822	-1287	0	8565	20mm	1000
3	Closeup Left Side	-1687	-7128	-1172	0	7874	50mm	1000
4	Driver and Interior View	-9012	-12378	-4312	-17	15482	ZOOM	1000
5	Steering Column (Bottom)	-1565	-8768	-2554	-13	9895	35mm	1000
6	Steering Column (Top)	-1765	-8697	-3200	-13	10085	35mm	1000
7	Overall Right Side	-2790	2984	-1243	0	3653	20mm	1000
8	Closeup Right Side	-2156	6875	-1288	0	6982	50mm	1000
9	Passenger and Interior View	-5743	3456	-2509	-10	6024	ZOOM	1000
10	Right Side View	-2243	7012	-1473	-6	7178	ZOOM	1000
11	Windshield View	-610	10	-5654	-90		24mm	1000
12	Driver Front View	534	-567	-2576	-34		25mm	1000
13	Passenger Front View	299	560	-2655	-34		25mm	1000
14	Pit View of Engine	-487	15	1576	90		12mm	1000
15	Pit View of Fuel Tank	-3786	12	1544	90		8mm	1000
16	Driver Side O.B.	-2856	765	-1533	-7		12mm	1000
17	Passenger Side O.B.	-2823	-510	-1364	-7		12mm	1000
18	Real Time Camera	1865	5659	-1104	-1	7053		30

All measurements are made relative to the point of impact.

DATA SHEET NO. 15
PHOTOGRAPHIC REFERENCE TARGET LOCATIONS

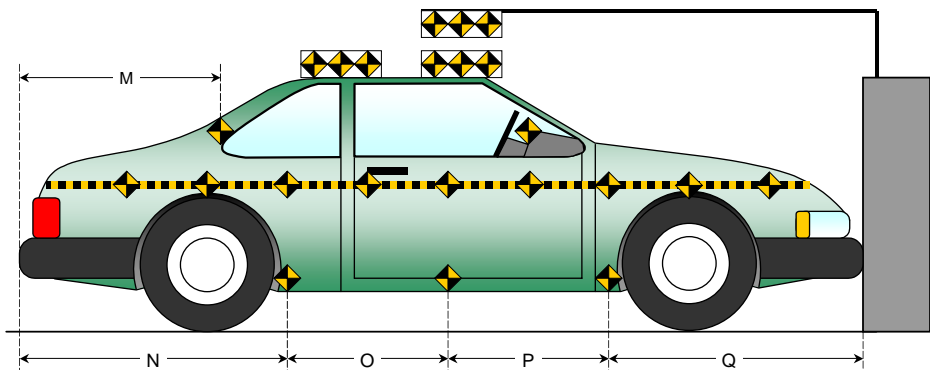
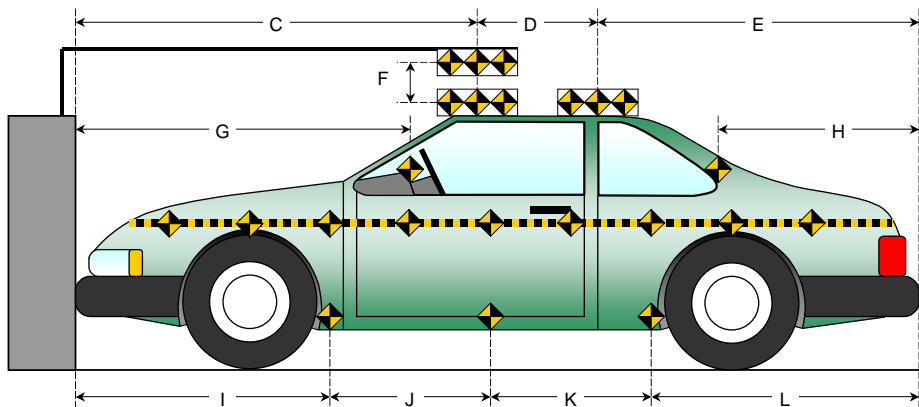
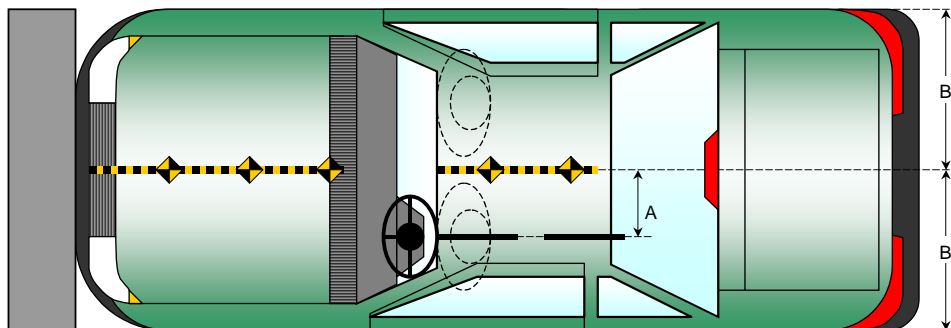
Test Vehicle: 2007 Acura RDX 5-Door MPV

NHTSA No.: H75301

Test Program: 2007 NHTSA 35 MPH NCAP

Test Date: 10/3/06

All Dimensions in (mm)	
Item	Value
A	
B	928
C	
D	
E	
F	
G	1727
H	1228
I	1538
J	785
K	785
L	1488
M	1220
N	1488
O	785
P	785
Q	1538



DATA SHEET NO. 16
VEHICLE INTRUSION MEASUREMENTS

Test Vehicle: 2007 Acura RDX 5-Door MPV
Test Program: 2007 NHTSA 35 MPH NCAP

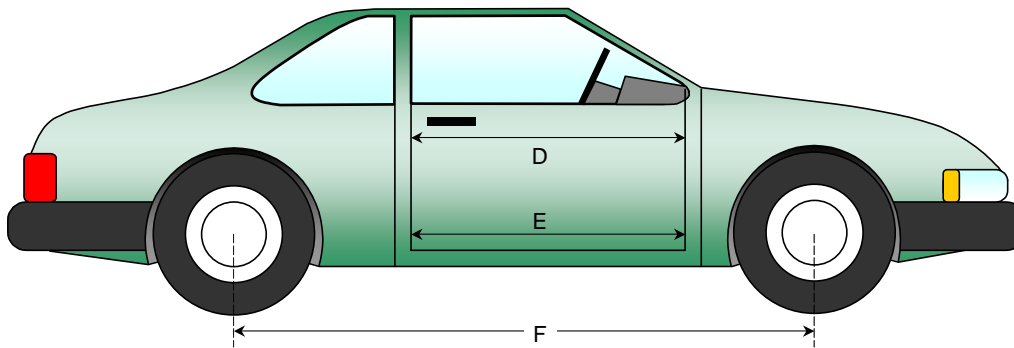
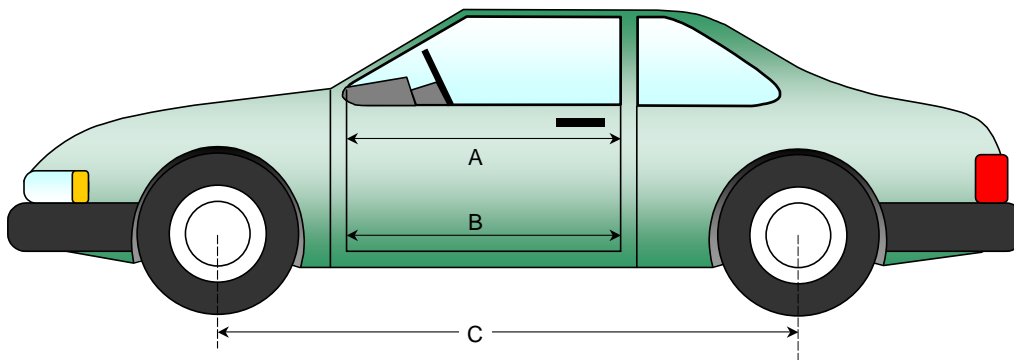
NHTSA No.: H75301
Test Date: 10/3/06

DOOR OPENING WIDTH TABLE

Item	Description	Units	Pre-Test	Post-Test	Diff.
A	Left Side Upper	mm	1023	1026	3
B	Left Side Lower	mm	841	846	5
D	Right Side Upper	mm	1022	1028	6
E	Right Side Lower	mm	833	832	-1

WHEELBASE MEASUREMENT TABLE

Item	Description	Units	Pre-Test	Post-Test	Diff.
C	Left Side Wheel Base	mm	2658	2580	-78
F	Right Side Wheel Base	mm	2658	2570	-88



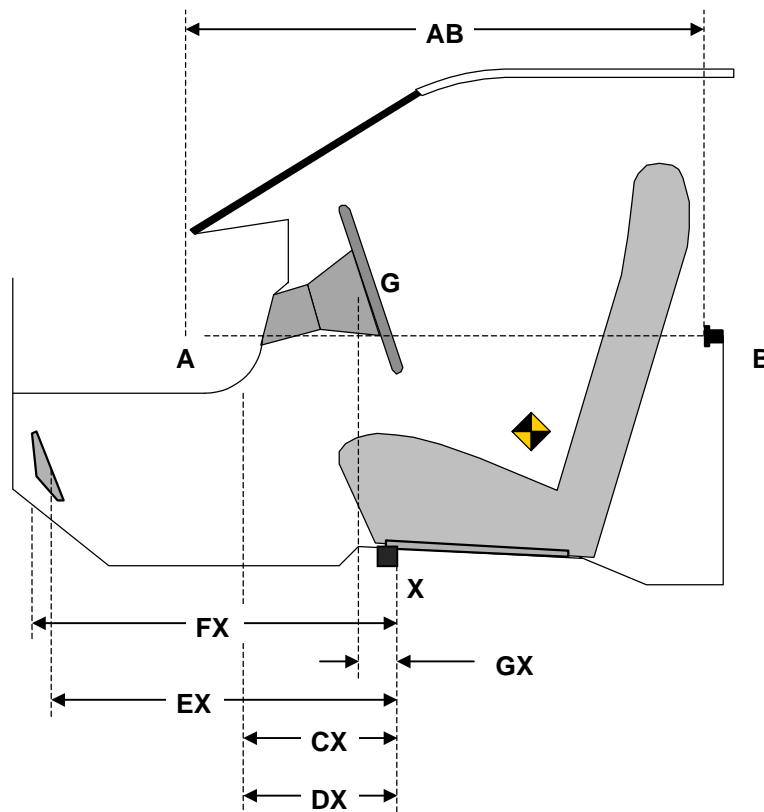
DATA SHEET NO. 16...(CONTINUED)
VEHICLE INTRUSION MEASUREMENTS

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

DRIVER COMPARTMENT INTRUSION TABLE

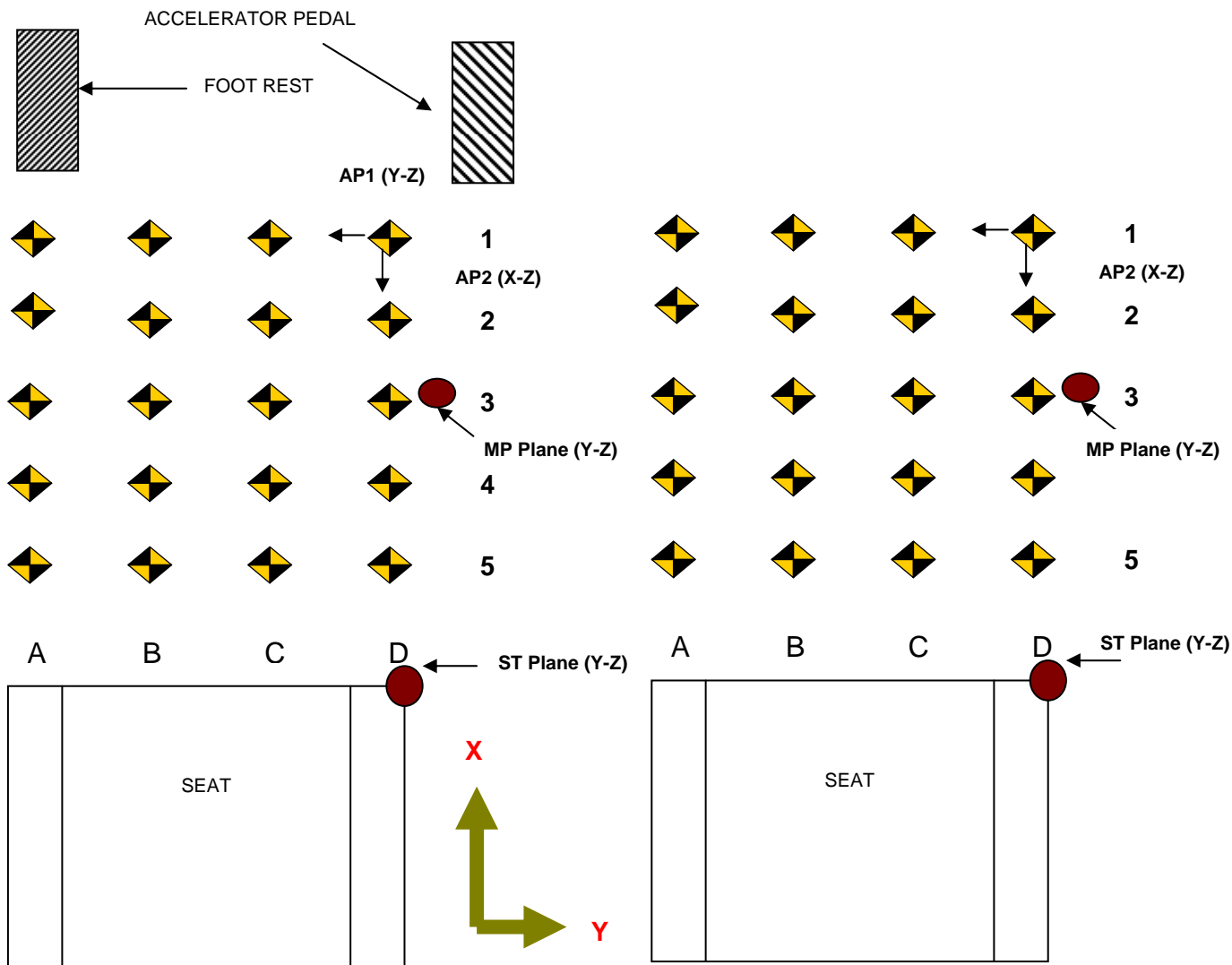
Item	Description	Units	Pre-Test	Post-Test	Diff.
AB	Door Opening (Inside window jam)	mm	1023	1026	3
CX	Left Knee Bolster to X	mm	324	268	-56
DX	Right Knee Bolster to X	mm	304	316	12
EX	Brake Pedal to X	mm	632	561	-71
FX	Foot Rest to X	mm	626	571	-55
GX	Center of Steering Wheel Hub to X	mm	166	168	2



**DATA SHEET NO. 16...(CONTINUED)
VEHICLE INTRUSION MEASUREMENTS**

Test Vehicle: 2007 Acura RDX 5-Door MPV
Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
Test Date: 10/3/06



- 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: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

All measurements in mm

DRIVER FLOOR PAN X-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	664	733	738	712	608	659	665	614	-56	-74	-73	-98
2	597	650	648	629	549	592	584	571	-48	-58	-64	-58
3	524	529	532	527	487	478	474	476	-37	-51	-58	-51
4	430	435	437	441	404	377	391	393	-26	-58	-46	-48
5	332	335	346	346	313	301	298	293	-19	-34	-48	-53

DRIVER FLOOR PAN Y-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	3	106	216	384	73	179	288	441	70	73	72	57
2	8	110	220	369	62	173	283	440	54	63	63	71
3	2	118	220	379	54	169	274	432	52	51	54	53
4	12	121	220	381	73	169	272	424	61	48	52	43
5	19	126	218	386	73	178	276	430	54	52	58	44

DRIVER FLOOR PAN Z-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	-115	-44	-44	-71	-153	-96	-89	-142	-38	-52	-45	-71
2	-37	9	12	-42	-75	-15	-14	-25	-38	-24	-26	17
3	40	45	44	9	15	28	33	73	-25	-17	-11	64
4	49	33	44	62	-5	10	32	73	-54	-23	-12	11
5	52	45	33	58	14	21	26	31	-38	-24	-7	-27

DATA SHEET NO. 16...(CONTINUED)
VEHICLE INTRUSION MEASUREMENTS

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

All measurements in mm

PASSENGER FLOOR PAN X-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	690	697	709	701	680	671	664	647	-10	-26	-45	-54
2	606	608	619	637	604	593	594	563	-2	-15	-25	-74
3	506	516	526	547	517	507	511	526	11	-9	-15	-21
4	406	411	419	435	437	427	463	426	31	16	44	-9
5	306	309	320	335	348	334	334	330	42	25	14	-5

PASSENGER FLOOR PAN Y-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	-427	-343	-239	-87	-346	-253	-150	4	81	90	89	91
2	-433	-335	-232	-77	-352	-257	-151	-2	81	78	81	75
3	-425	-326	-220	-70	-359	-256	-151	-7	66	70	69	63
4	-418	-310	-209	-53	-353	-260	-155	-9	65	50	54	44
5	-409	-305	-198	-36	-367	-253	-155	5	42	52	43	41

PASSENGER FLOOR PAN Z-AXIS

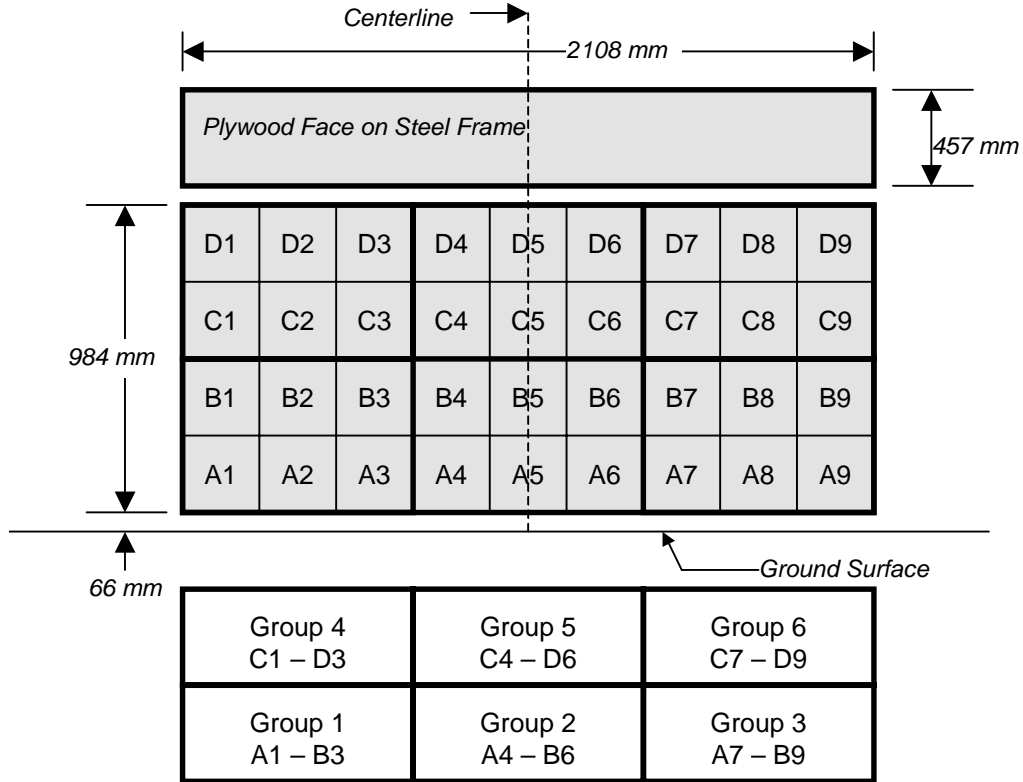
	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	6	20	23	10	4	-3	-6	-11	-2	-23	-29	-21
2	83	75	76	75	84	71	70	53	1	-4	-6	-22
3	101	106	100	99	128	123	112	100	27	17	12	1
4	101	98	101	107	110	121	111	90	9	23	10	-17
5	99	101	105	111	107	116	121	133	8	15	16	22

DATA SHEET NO. 17
FIXED BARRIER LOAD CELL LOCATIONS

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
 Test Date: 10/3/06

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



6 Groups of 6 Load Cells Each

DATA SHEET NO. 18
ACCIDENT INVESTIGATION DIVISION DATA

Test Vehicle: 2007 Acura RDX 5-Door MPV
Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
Test Date: 10/3/06

VEHICLE INFORMATION

VIN: 5J8TB18227A003863
Vehicle Size Category: 5-Door

Wheel base (mm): 2658
Test Weight (kg): 1971

ACCELEROMETER DATA

Accelerometer Location: Left rear cross member
Cal. Procedure/Interval: 6 months / drop test
Integration Algorithm: NHTSA Standard
Impact Velocity (km/h): 55.63
Velocity Change (km/h): 64.5

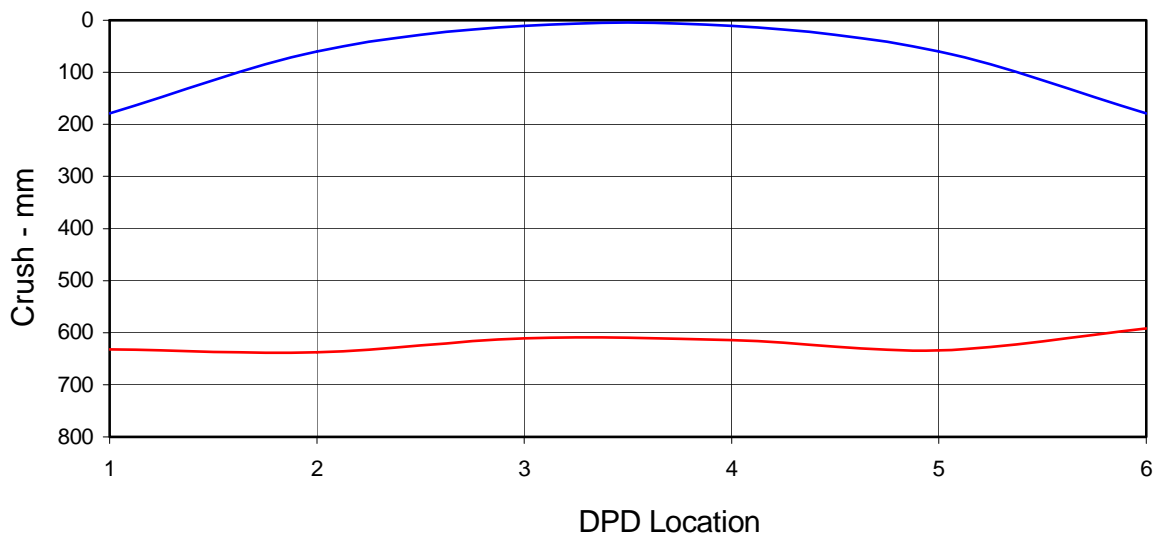
Linearity: Good

Time of Separation (msec): 75.8

CRUSH PROFILE

Collision Deformation Classification: 12FDEW6 Midpoint of Damage: Vehicle Centerline
Damage Region Length (mm): 1458 Impact Mode: Full Frontal

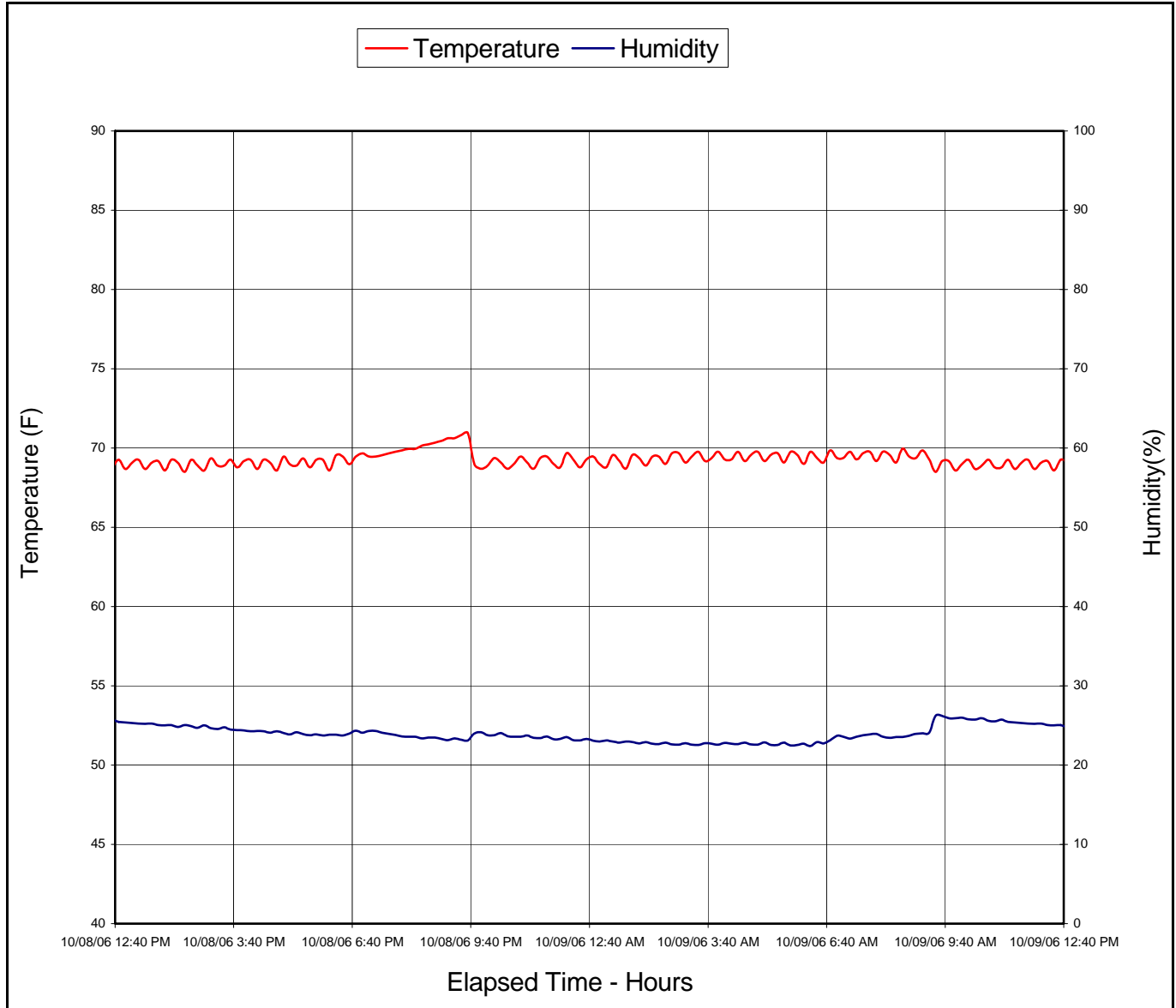
No.	Measurement Description	Units	Pre-Test	Post-Test	Difference
C1	Crush zone 1 at left side	mm	179	632	-453
C2	Crush zone 2 on left side	mm	60	638	-578
C3	Crush zone 3 on left side	mm	11	611	-600
C4	Crush zone 4 on right side	mm	11	614	-603
C5	Crush zone 5 on right side	mm	60	634	-574
C6	Crush zone 6 at right side	mm	179	592	-413



DATA SHEET NO. 19
DUMMY/VEHICLE TEMPERATURE STABILIZATION

Test Vehicle: 2007 Acura RDX 5-Door MPV
Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: H75301
Test Date: 10/3/06



APPENDIX A
PHOTOGRAPHS

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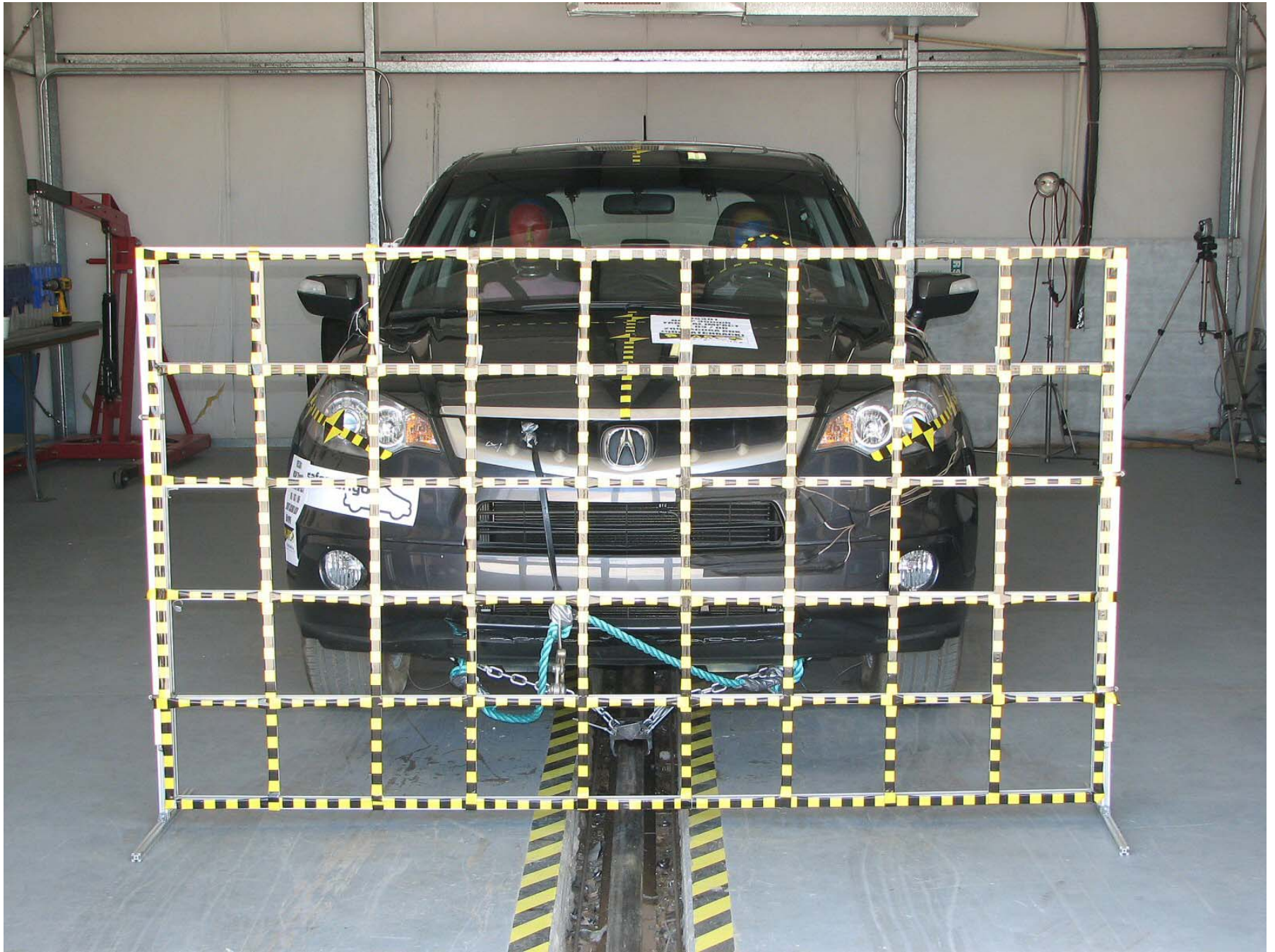


Figure A-1: Load Cell Location

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MFD. BY HONDA OF AMERICA MFG., INC. 08/06
GVWR 2220KG (4894LBS) TIRE SIZE RIM SIZE
GAWR F 1155KG (2546LBS) P235/55R18 99V 18X7 1/2J
GAWR R 1080KG (2381LBS) P235/55R18 99V 18X7 1/2J
THIS VEHICLE CONFORMS TO ALL APPLICABLE
FEDERAL MOTOR VEHICLE SAFETY
AND THEFT PREVENTION STANDARDS IN EFFECT
ON THE DATE OF MANUFACTURE SHOWN ABOVE.
V.I.N.: 5J8TB18227A003863 TYPE: MPV



STK 7 AA5 - NH658P - A - A

Figure A-2: Manufacturer's Label



TIRE AND LOADING INFORMATION

SEATING CAPACITY : TOTAL 5 : FRONT 2 : REAR 3

The combined weight of occupants and cargo should never exceed 395kg or 870lbs

TIRE	SIZE	COLD TIRE PRESSURE	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION
FRONT	P235/55R18 99V	220KPA, 32PSI	
REAR		220KPA, 32PSI	
SPARE	T165/80D17 104M	420KPA, 60PSI	

KA

Figure A-3: Tire Placard



Figure A-4: Right Front $\frac{3}{4}$ View, As Received



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Figure A-5: Left Rear $\frac{3}{4}$ View, as Received



Figure A-6: Pre-Test Front View

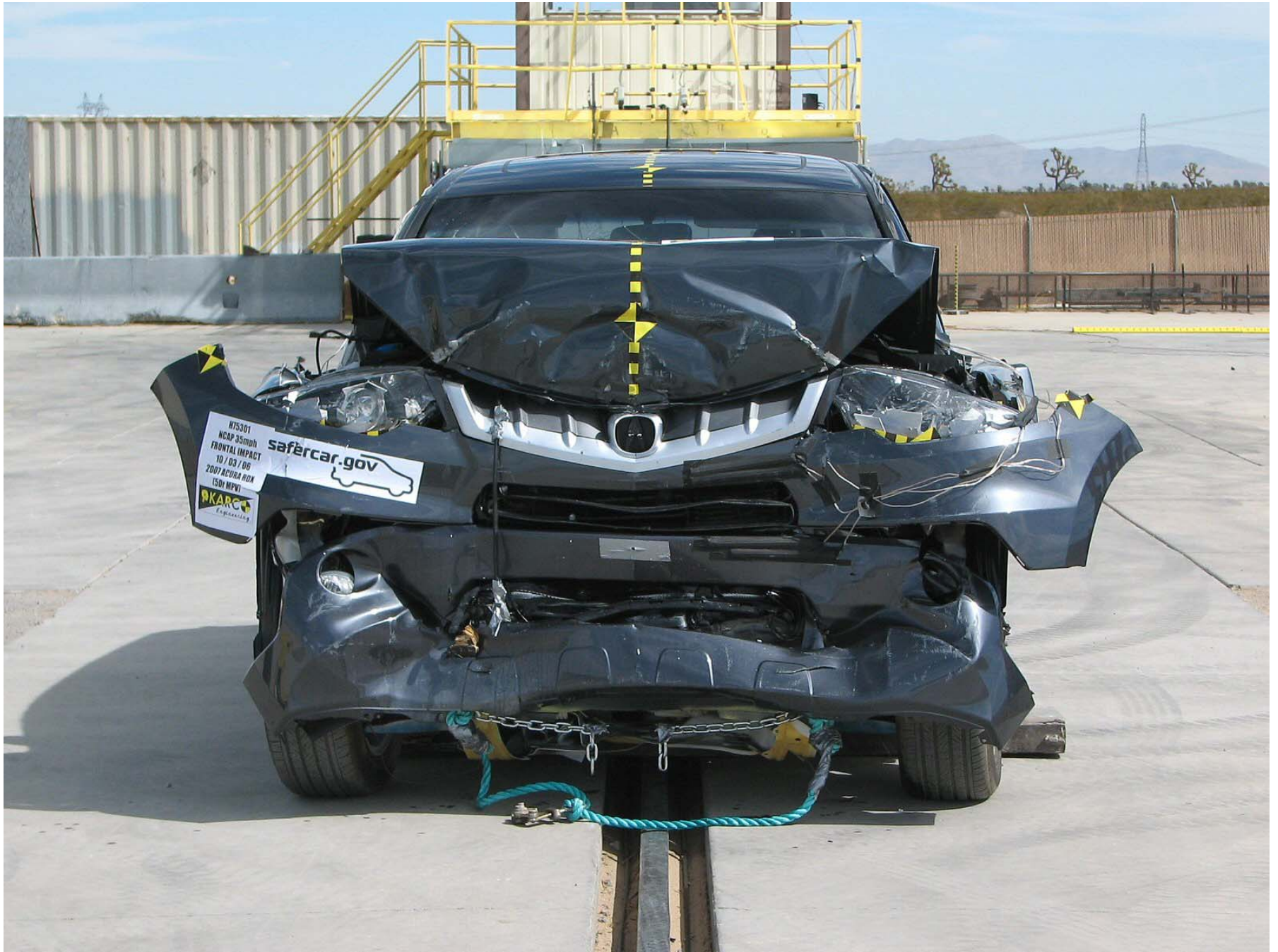


Figure A-7: Post-Test Front View (Vehicle Moved)



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 3/4 View



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



Figure A-14: Pre-Test Left Rear $\frac{3}{4}$ 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

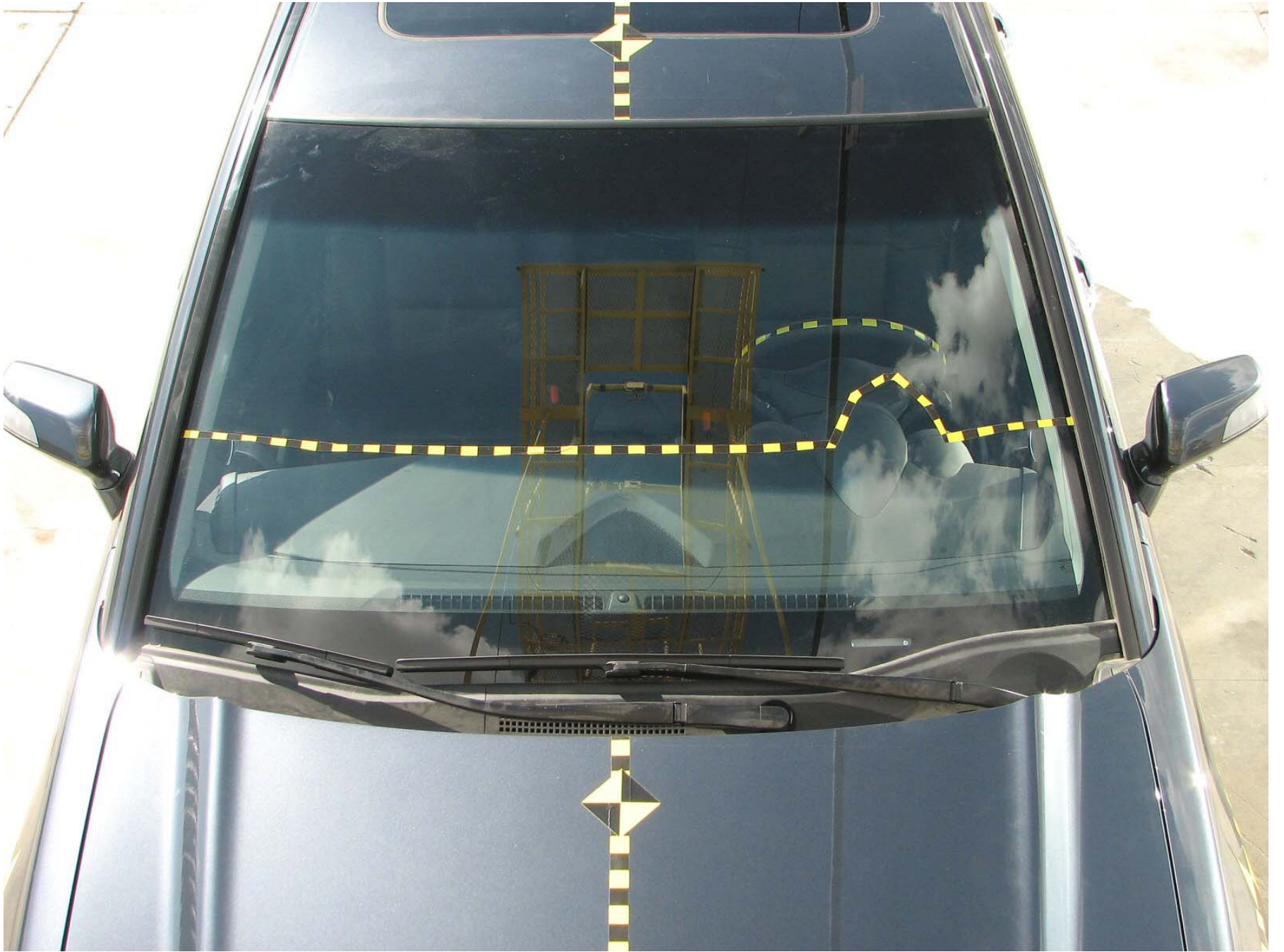


Figure A-18: Pre-Test Windshield



Figure A-19: Post-Test Windshield

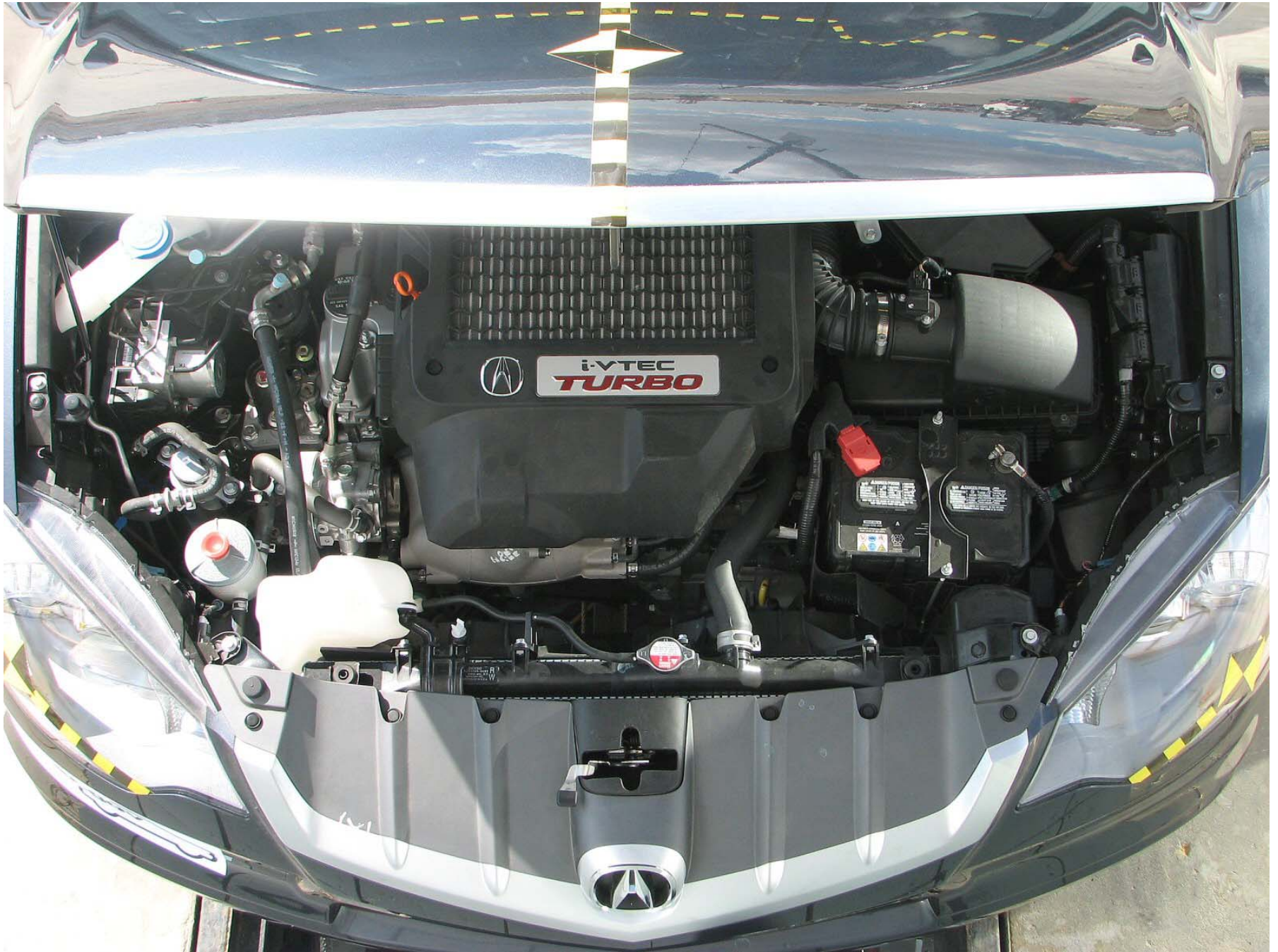


Figure A-20: Pre-Test Engine Compartment



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



Figure A-22: Pre-Test Fuel Cap



Figure A-23: Post-Test Fuel Cap

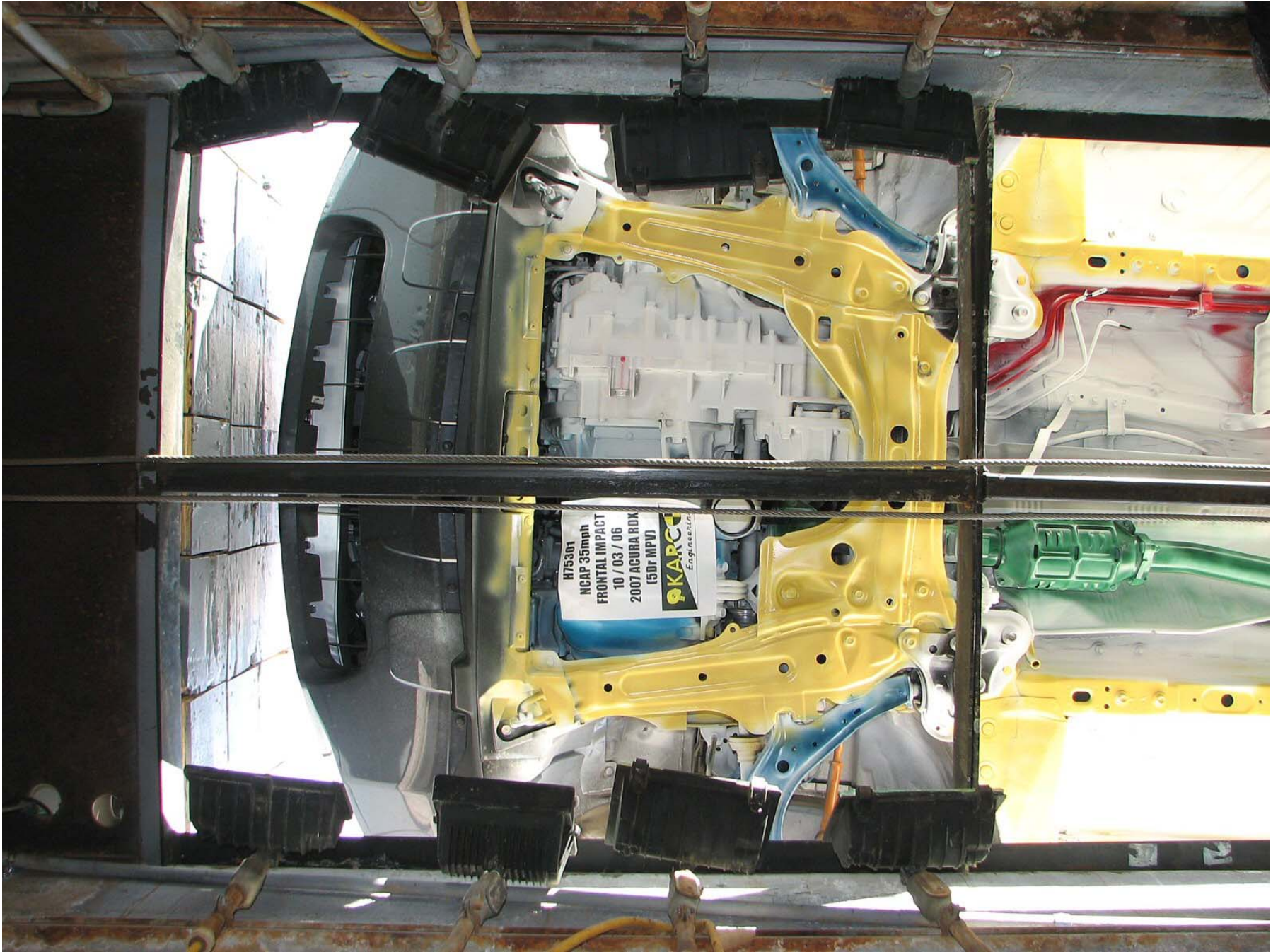


Figure A-24: Pre-Test Front Underbody

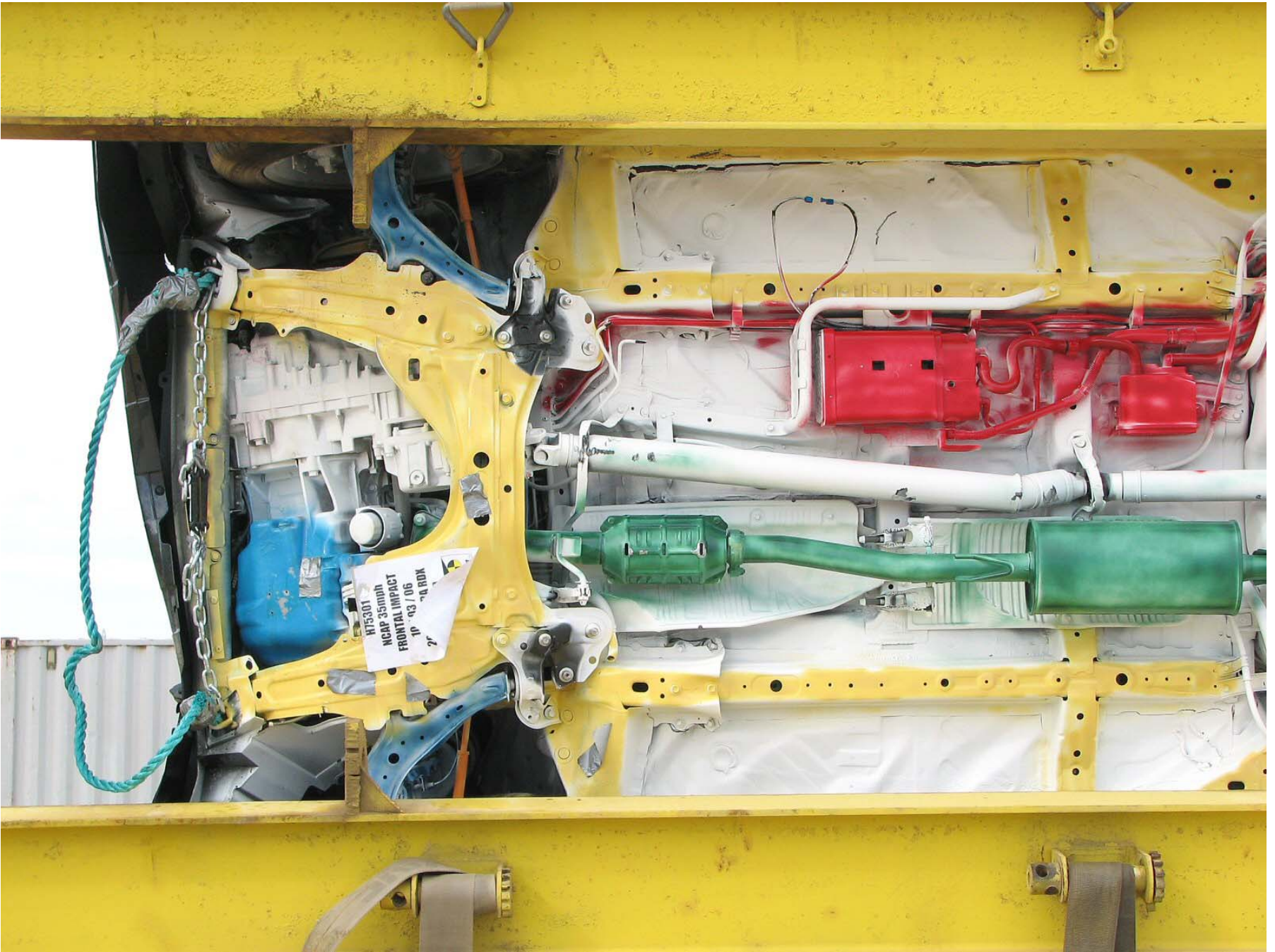


Figure A-25: Post-Test Front Underbody

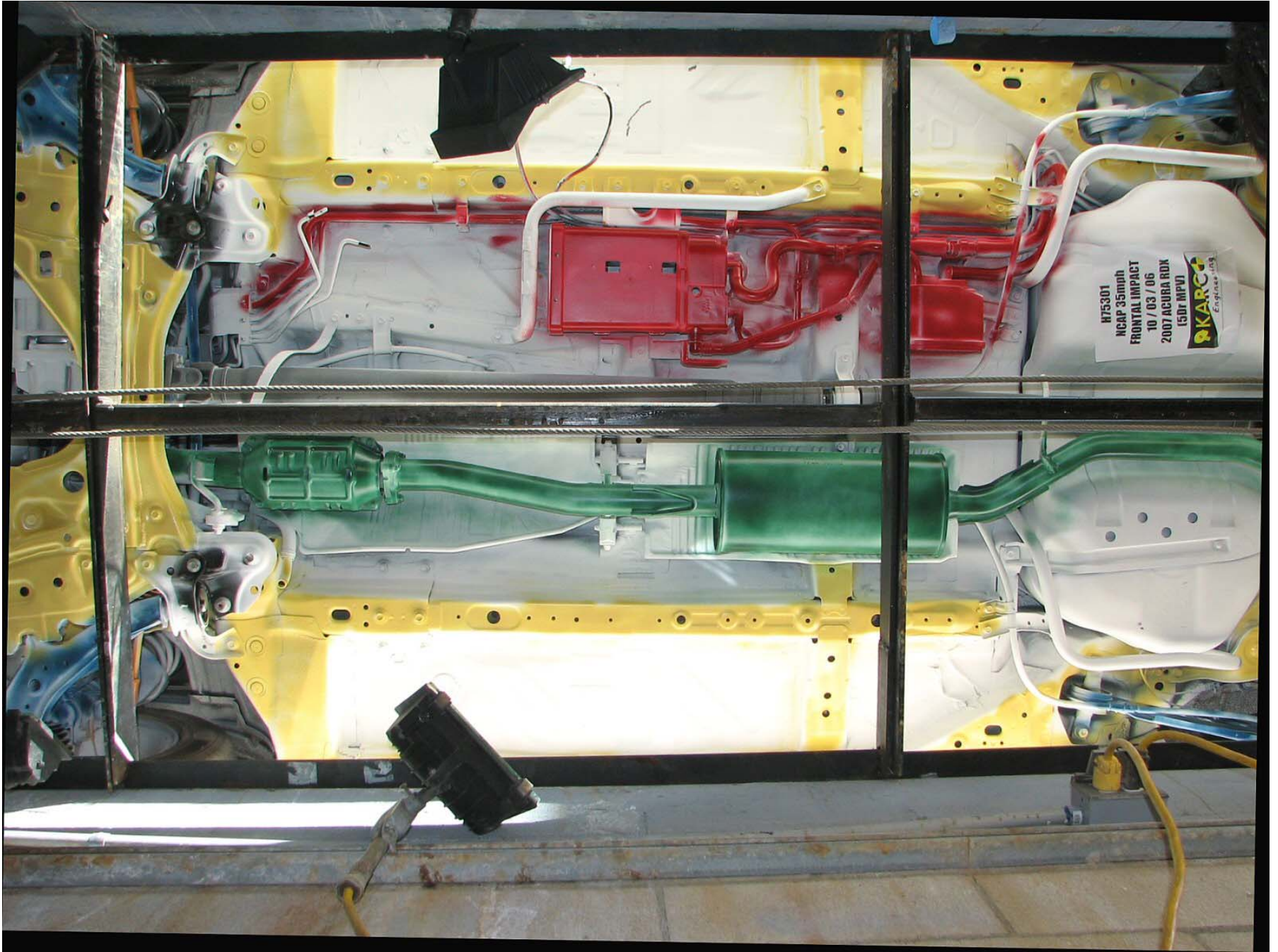


Figure A-26: Pre-Test Mid Underbody

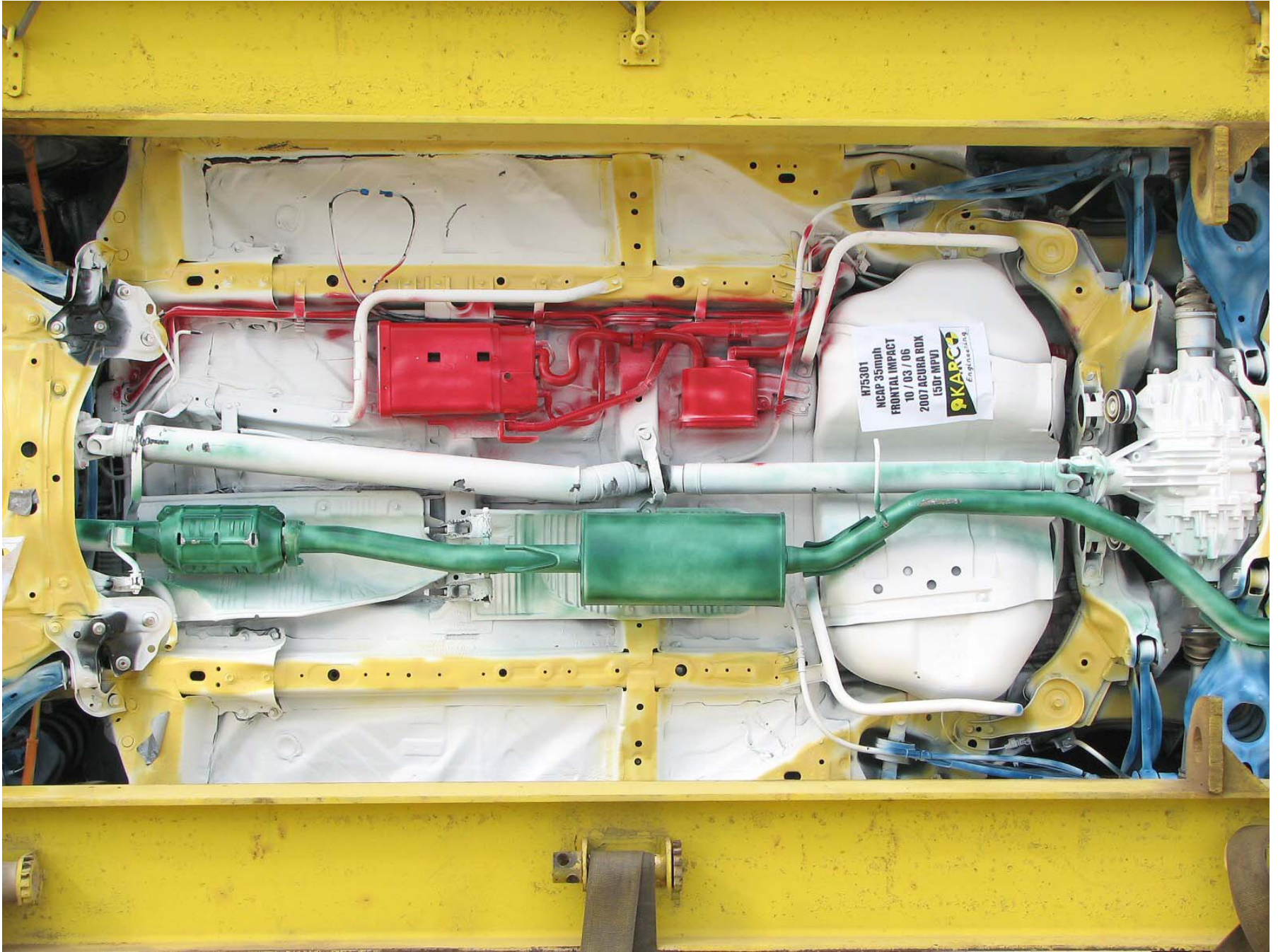


Figure A-27: Post-Test Mid Underbody

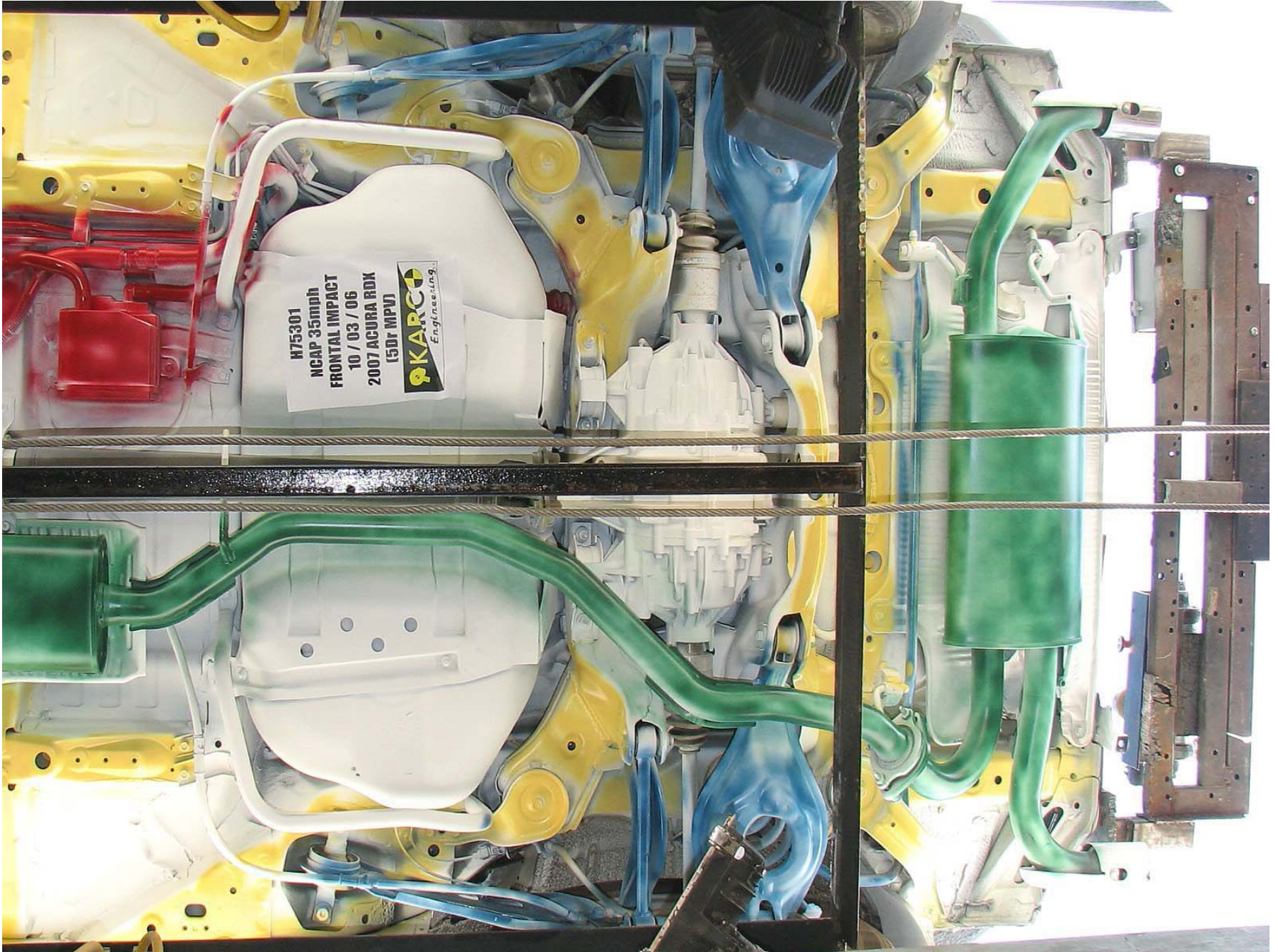


Figure A-28: Pre-Test Rear Underbody

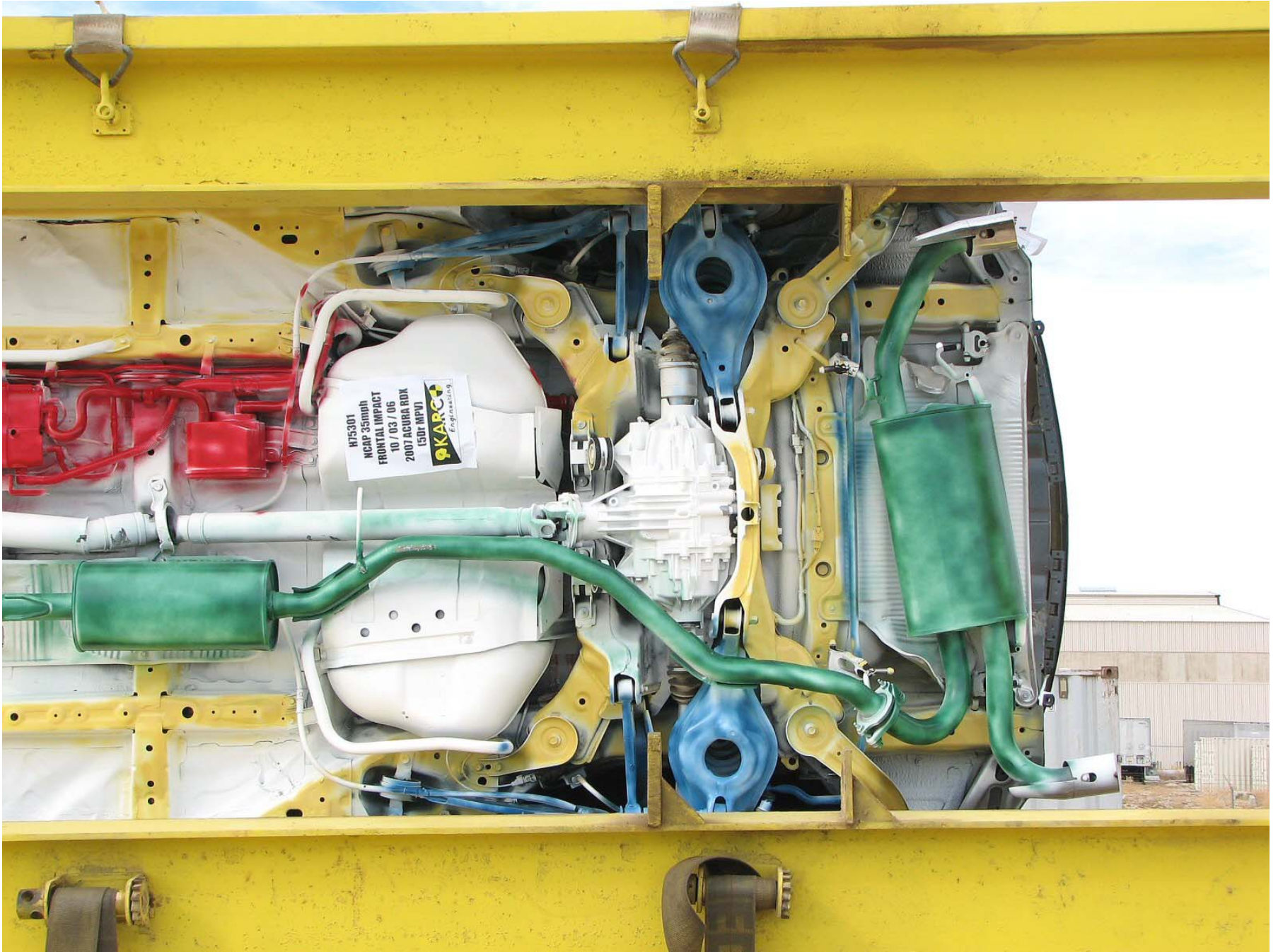


Figure A-29: Post-Test Rear Underbody



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)



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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



A-52

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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



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



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



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

**Photograph Not
Available**

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



Figure A-62: Vehicle Impact

APPENDIX B
DATA PLOTS

LIST OF DATA PLOTS

Data Plot	Page	
B-1	Driver Head Primary X	B-1
	Driver Head Primary Y	B-1
	Driver Head Primary Z	B-1
	Driver Head Resultant Primary	B-1
B-2	Driver Chest Primary X	B-2
	Driver Chest Primary Y	B-2
	Driver Chest Primary Z	B-2
	Driver Chest Resultant Primary	B-2
B-3	Driver Left Femur Force Z	B-3
	Driver Right Femur Force Z	B-3
B-4	Passenger Head Primary X	B-4
	Passenger Head Primary Y	B-4
	Passenger Head Primary Z	B-4
	Passenger Head Resultant Primary	B-4
B-5	Passenger Chest Primary X	B-5
	Passenger Chest Primary Y	B-5
	Passenger Chest Primary Z	B-5
	Passenger Chest Resultant Primary	B-5
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	Passenger Right Femur Force Z	B-6

LIST OF DATA PLOTS...(CONTINUED)

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

LIST OF DATA PLOTS...(CONTINUED)

Driver Right Upper Tibia Moment Y
Driver Left Lower Tibia Moment X
Driver Left Lower Tibia Moment Y
Driver Left Lower Tibia Force Z
Driver Right Lower Tibia Moment X
Driver Right Lower Tibia Moment Y
Driver Right Lower Tibia Force Z
Driver Left Foot Aft X
Driver Left Foot Aft Z
Driver Left Foot Fore Z
Driver Right Foot Aft X
Driver Right Foot Aft Z
Driver Right Foot Fore Z
Driver Lap Belt Force
Driver Shoulder Belt Force
Driver Shoulder Belt Pullout
Driver Shoulder Belt Elongation
Passenger Head Primary X Velocity
Passenger Head Primary X Displacement
Passenger Head Redundant X
Passenger Head Redundant Y
Passenger Head Redundant Z
Passenger Head Resultant Redundant
Passenger Head Redundant X Velocity
Passenger Head Redundant X Displacement
Passenger Upper Neck Force X
Passenger Upper Neck Force Y
Passenger Upper Neck Force Z
Passenger Upper Neck Force Resultant
Passenger Upper Neck Moment X
Passenger Upper Neck Moment Y
Passenger Upper Neck Moment Z
Passenger Upper Neck Moment Resultant
Passenger Chest Primary X Velocity
Passenger Chest Primary X Displacement
Passenger Chest Redundant X

LIST OF DATA PLOTS...(CONTINUED)

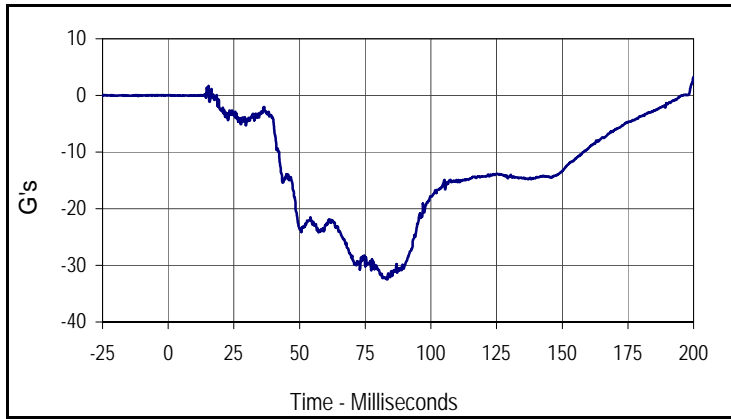
Passenger Chest Redundant Y
Passenger Chest Redundant Z
Passenger Chest Resultant Redundant
Passenger Chest Redundant X Velocity
Passenger Chest Redundant X Displacement
Passenger Chest Displacement
Passenger Pelvis X
Passenger Pelvis Y
Passenger Pelvis Z
Passenger Pelvis Resultant
Passenger Pelvis X 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

LIST OF DATA PLOTS...(CONTINUED)

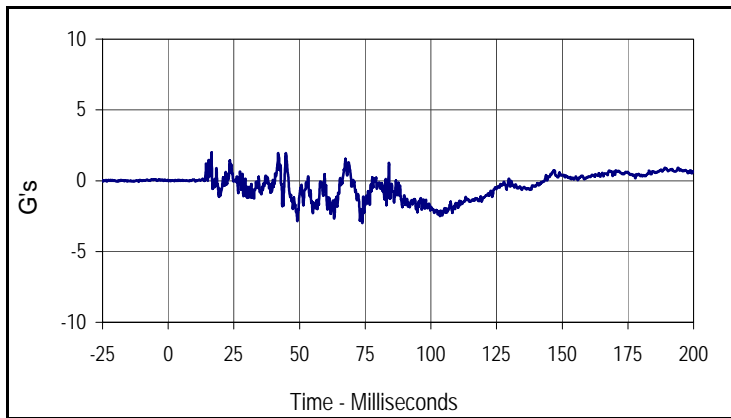
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Vehicle Right Rear X
Vehicle Right Rear X Velocity
Vehicle Right Rear X Displacement
Vehicle Engine Top
Vehicle Engine Top Velocity
Vehicle Engine Top Displacement
Vehicle Engine Bottom
Vehicle Engine Bottom Velocity
Vehicle Engine Bottom Displacement
Vehicle Left Brake Caliper
Vehicle Left Brake Caliper Velocity
Vehicle Left Brake Caliper Displacement
Vehicle Right Brake Caliper
Vehicle Right Brake Caliper Velocity
Vehicle Right Brake Caliper Displacement
Vehicle Instrument Panel
Vehicle Instrument Panel Velocity
Vehicle Instrument Panel Displacement
Vehicle Left Rear Z
Vehicle Left Rear Z Velocity
Vehicle Left Rear Z Displacement
Vehicle Right Rear Z
Vehicle Right Rear Z Velocity
Vehicle Right Rear Z Displacement

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35mph NCAP

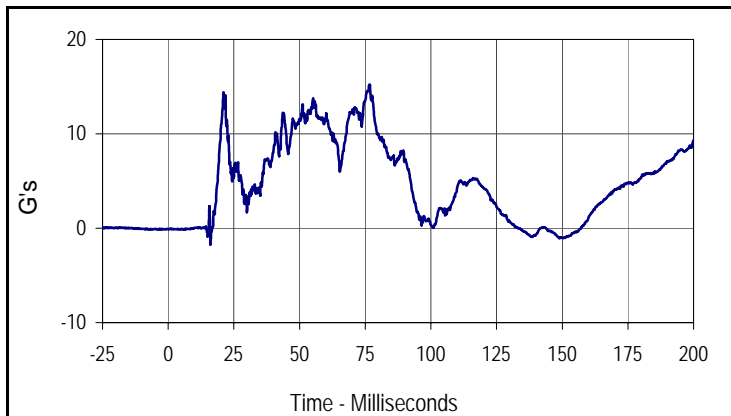
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 NHTSA No.: H75301



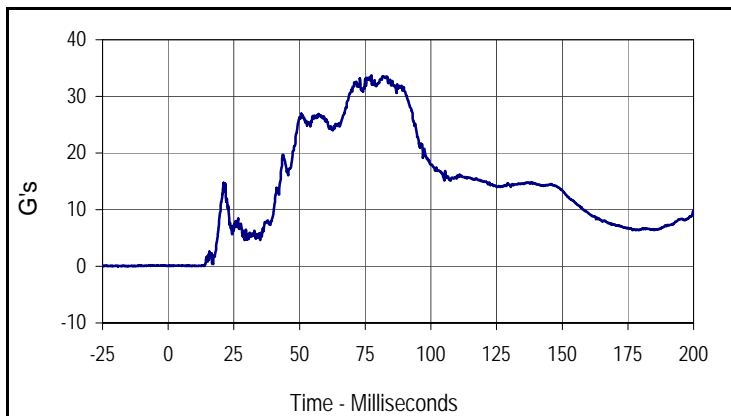
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Driver Head Primary X			
CURNO	Type	SAE Class	Units
001	FIL	1000	G's
Max	Time	Min	Time
3.3	200.0	-32.5	83.4



Curve Description			
Driver Head Primary Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
2.0	16.5	-3.0	73.9



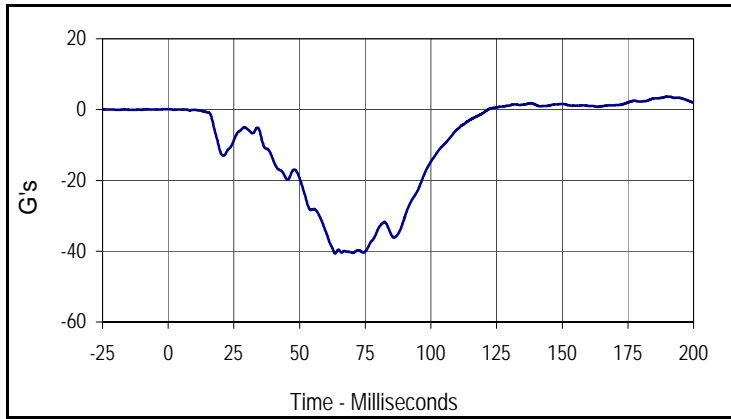
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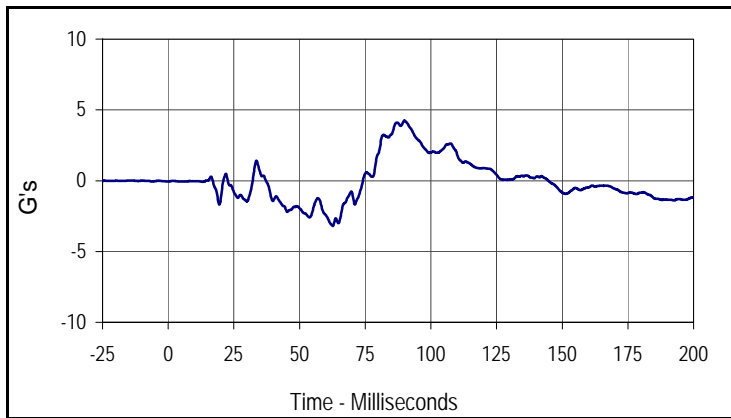
Curve Description			
Driver Head Resultant Primary			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
33.7	77.3	0.0	13.8

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35mph NCAP

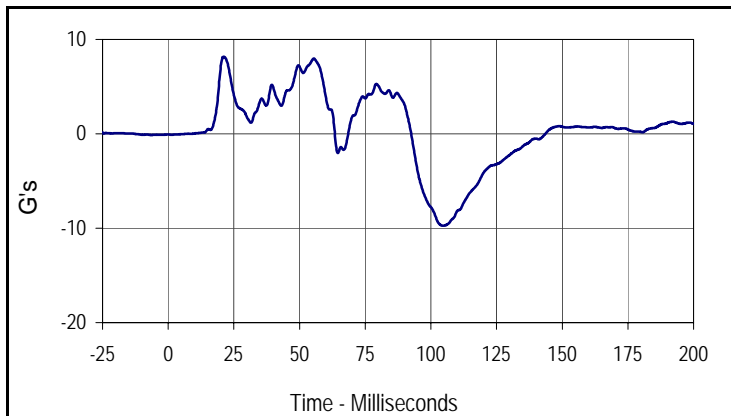
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 NHTSA No.: H75301



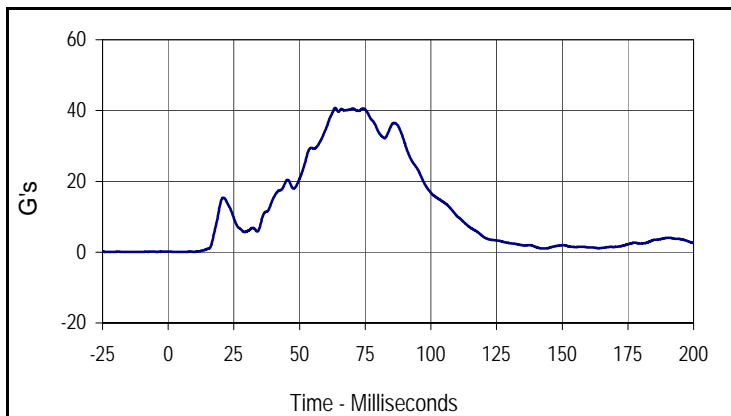
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Driver Chest Primary X			
CURNO	Type	SAE Class	Units
004	FIL	180	G's
Max	Time	Min	Time
3.7	190.6	-40.7	63.6



Curve Description			
Driver Chest Primary Y			
CURNO	Type	SAE Class	Units
005	FIL	180	G's
Max	Time	Min	Time
4.2	89.9	-3.2	62.6



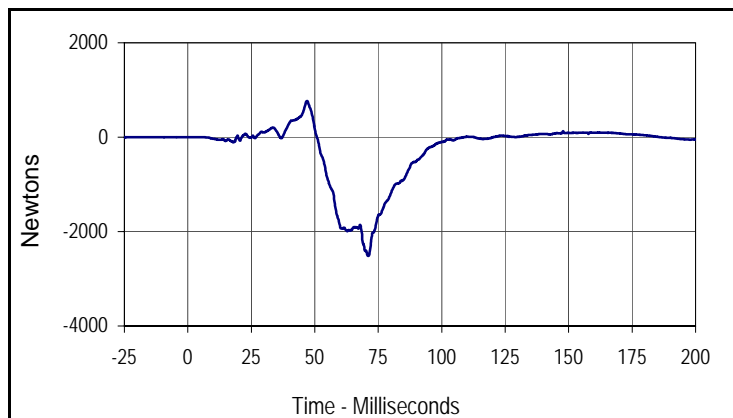
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Driver Chest Primary Z			
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006	FIL	180	G's
Max	Time	Min	Time
8.2	21.1	-9.7	104.5



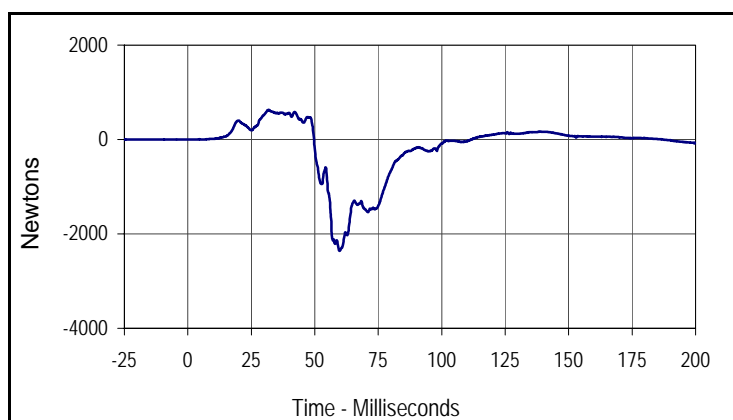
Curve Description			
Driver Chest Resultant Primary			
CURNO	Type	SAE Class	Units
004	RES	180	G's
Max	Time	Min	Time
40.8	63.6	0.1	9.7

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35mph NCAP

Test Date: 10/3/06
 NHTSA No.: H75301



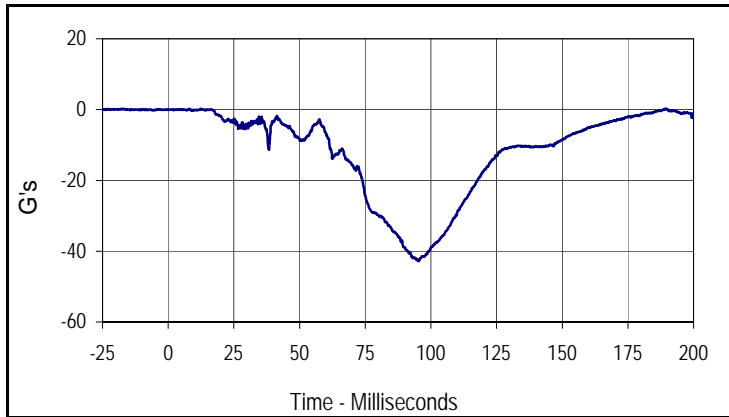
Curve Description			
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CURNO	Type	SAE Class	Units
007	FIL	600	Newtons
Max	Time	Min	Time
767.1	47.0	-2514.4	71.0



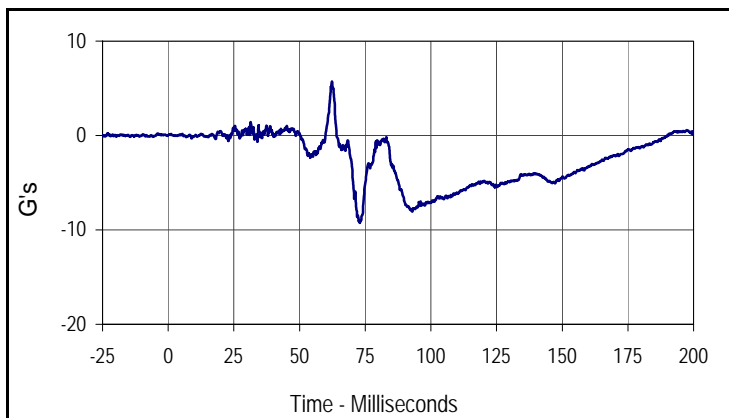
Curve Description			
Driver Right Femur Force Z			
CURNO	Type	SAE Class	Units
008	FIL	600	Newtons
Max	Time	Min	Time
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Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35mph NCAP

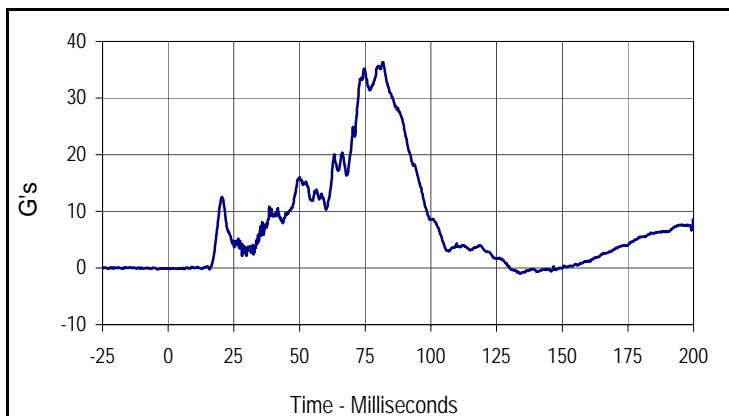
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 NHTSA No.: H75301



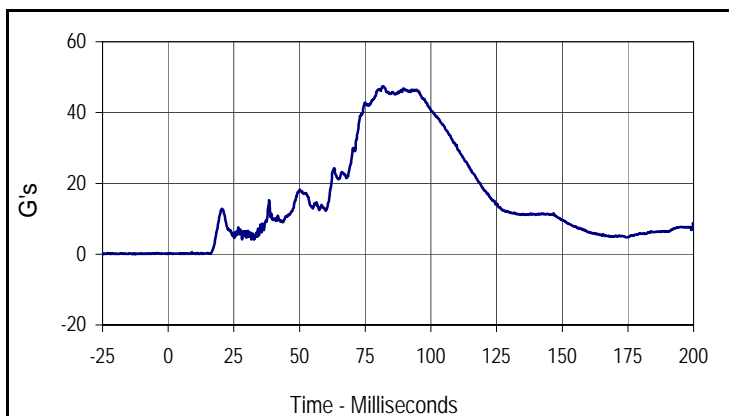
Curve Description			
Passenger Head Primary X			
CURNO	Type	SAE Class	Units
009	FIL	1000	G's
Max	Time	Min	Time
0.3	189.4	-42.8	95.4



Curve Description			
Passenger Head Primary Y			
CURNO	Type	SAE Class	Units
010	FIL	1000	G's
Max	Time	Min	Time
5.7	62.3	-9.2	73.0



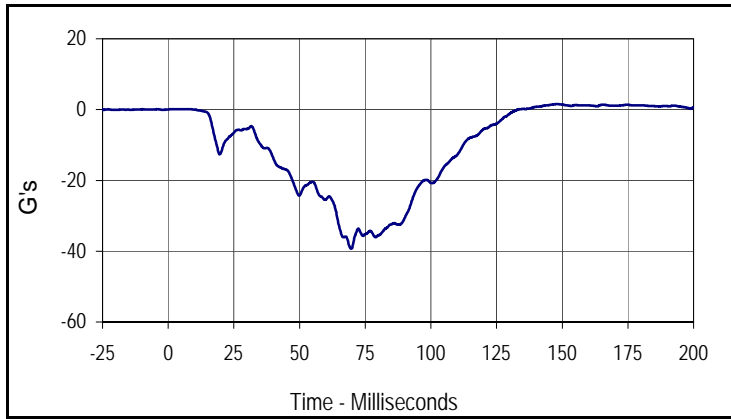
Curve Description			
Passenger Head Primary Z			
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011	FIL	1000	G's
Max	Time	Min	Time
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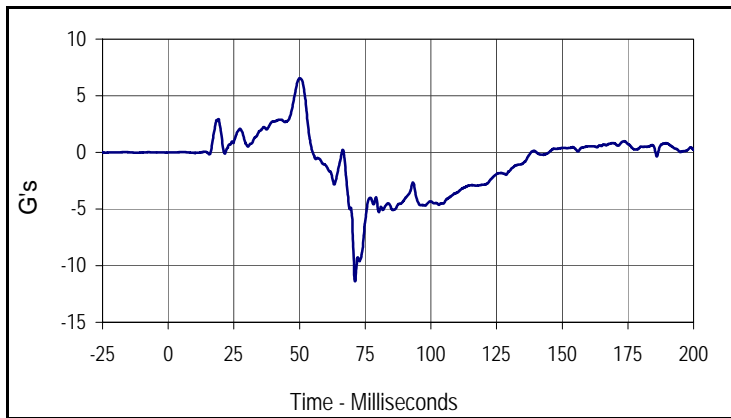
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Passenger Head Resultant Primary			
CURNO	Type	SAE Class	Units
009	RES	1000	G's
Max	Time	Min	Time
47.5	81.9	0.0	13.4

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35mph NCAP

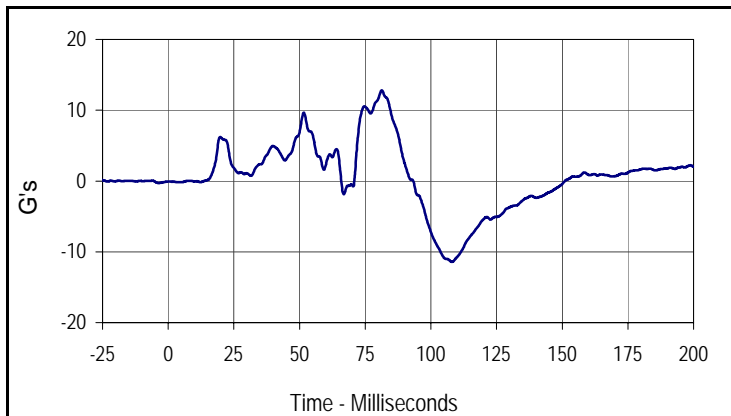
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 NHTSA No.: H75301



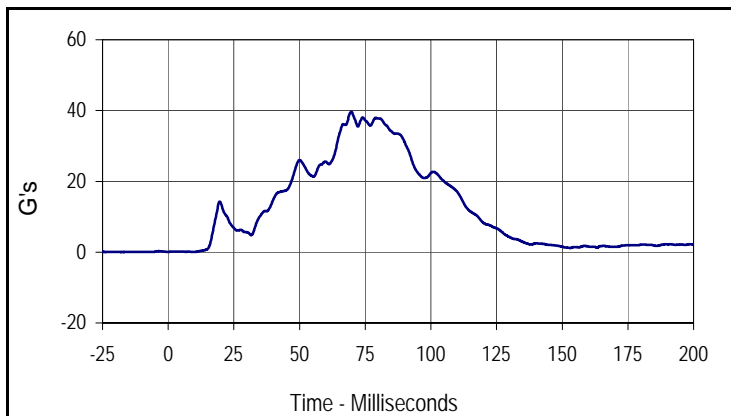
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Passenger Chest Primary X			
CURNO	Type	SAE Class	Units
012	FIL	180	G's
Max	Time	Min	Time
1.5	147.9	-39.3	69.7



Curve Description			
Passenger Chest Primary Y			
CURNO	Type	SAE Class	Units
013	FIL	180	G's
Max	Time	Min	Time
6.5	50.1	-11.4	71.1



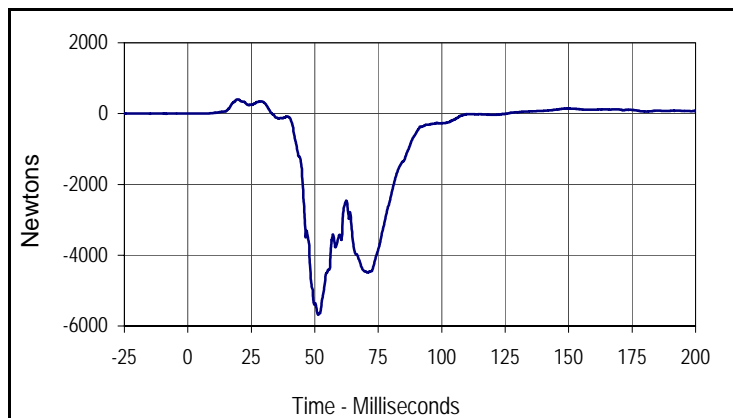
Curve Description			
Passenger Chest Primary Z			
CURNO	Type	SAE Class	Units
014	FIL	180	G's
Max	Time	Min	Time
12.8	81.3	-11.4	108.0



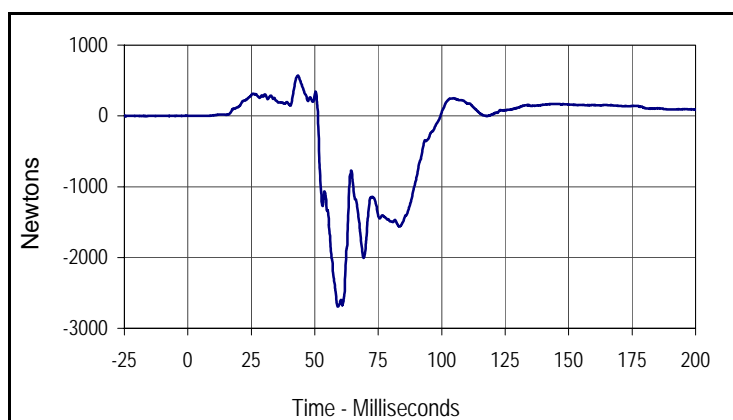
Curve Description			
Passenger Chest Resultant Primary			
CURNO	Type	SAE Class	Units
012	RES	180	G's
Max	Time	Min	Time
39.6	69.7	0.1	0.0

Test Vehicle: 2007 Acura RDX 5-Door MPV
 Test Program: 2007 NHTSA 35mph NCAP

Test Date: 10/3/06
 NHTSA No.: H75301



Curve Description			
Passenger Left Femur Force Z			
CURNO	Type	SAE Class	Units
015	FIL	600	Newtons
Max	Time	Min	Time
403.6	19.5	-5680.8	51.4



Curve Description			
Passenger Right Femur Force Z			
CURNO	Type	SAE Class	Units
016	FIL	600	Newtons
Max	Time	Min	Time
569.9	43.4	-2694.0	59.0

APPENDIX C
DUMMY CALIBRATION DATA

Test Program: Hybrid III 50th Percentile Male Head Drop Test

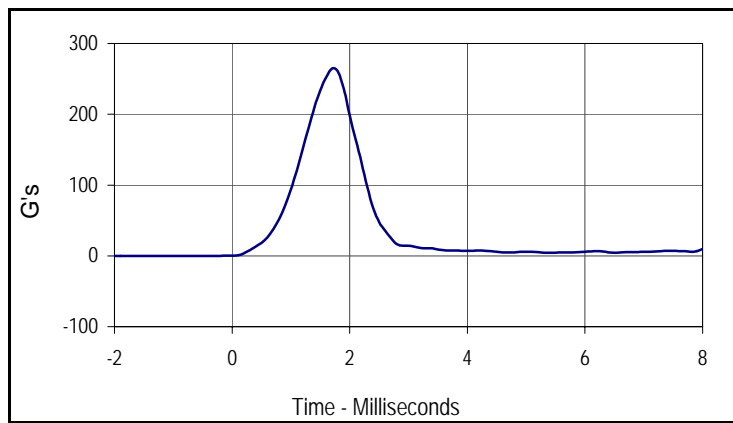
Test Date: 9/18/06

ATD Serial No.: 035

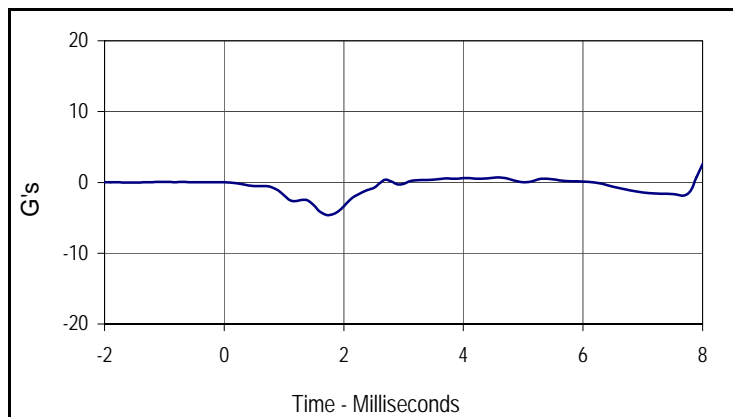
Test I.D.: HD9AA



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	4.6	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	1.7	0.0	-1.6



Curve Description			
Head Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
0.7	4.6	-4.6	1.7

Test Program: Hybrid III 50th Percentile Male Thorax Impact Test

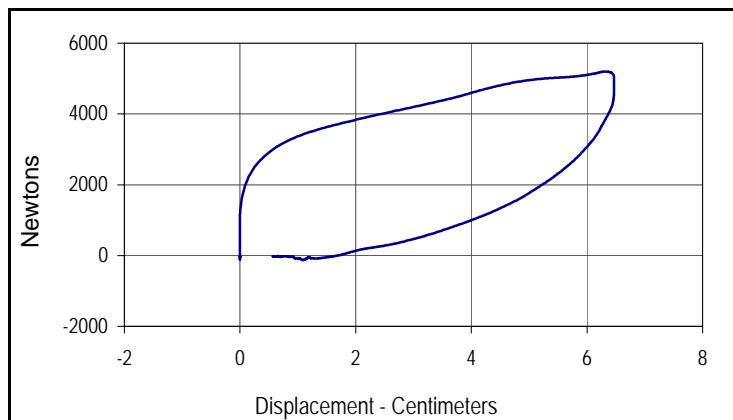
Test Date: 9/19/06

ATD Serial No.: 035

Test I.D.: CH9AB



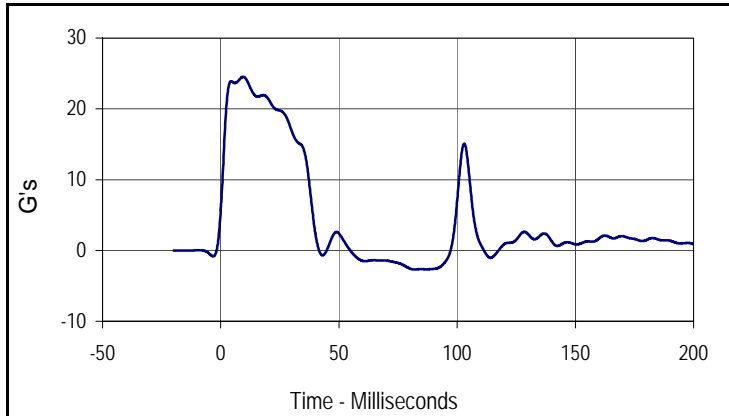
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Probe Velocity	m/s	6.58 to 6.82	6.66	Pass
Peak Probe Force	Newtons	5159 to 5893	5198	Pass
Peak Sternum Deflection	CM	6.35 to 7.26	6.47	Pass
Internal Hysteresis	%	69 to 85	76.2	Pass
Overall Test Results				Pass



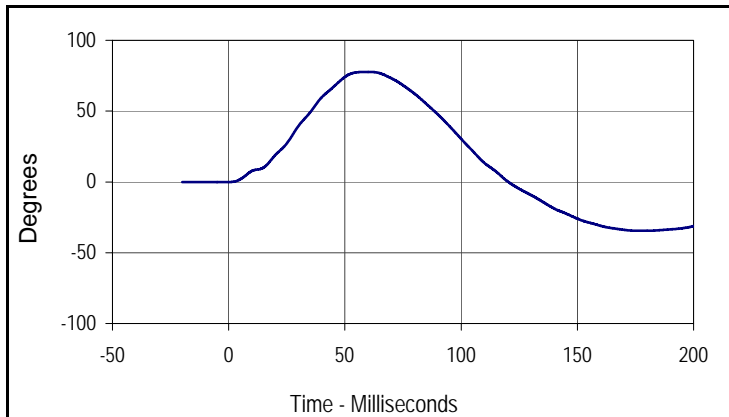
Curve Description			
Probe Force vs. Chest Deflection			
CURNO	Type	SAE Class	Hysteresis
001	FIL	180	76.2
Peak Probe Force		Peak Chest Deflection	
5198		6.47	



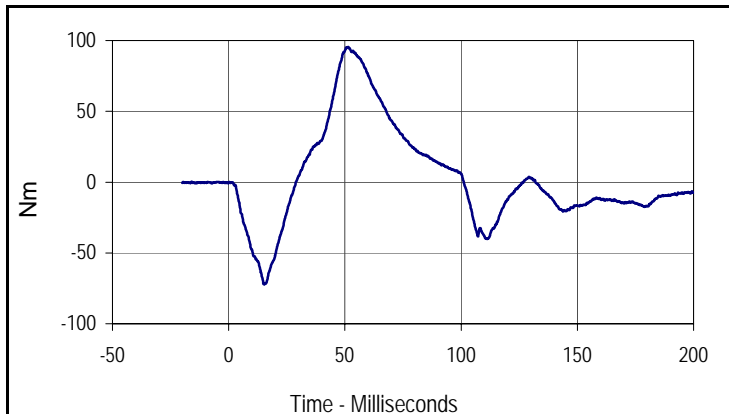
Tested Parameter	Units	Specification	Result	Pass/Fail	
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass	
Laboratory Relative Humidity	%	10 to 70	30	Pass	
Pendulum Velocity	m/s	6.89 to 7.13	7.04	Pass	
Pendulum Deceleration	10 Msec.	G's	22.5 to 27.5	24.5	Pass
	20 Msec.	G's	17.6 to 22.6	21.5	Pass
	30 Msec.	G's	12.5 to 18.5	16.9	Pass
Peak Pendulum Decel. after 30 Msec.	G's	≤ 29.0	16.9	Pass	
Deceleration Decay, Time to Cross 5 G's	Msec.	34.0 to 42.0	39	Pass	
Maximum "D" Plane Rotation	Max	Degrees	64.0 to 78.0	77.7	Pass
	Time	Msec.	57.0 to 64.0	59.3	Pass
"D" Plane Rotation Decay, Time To Zero Crossing	Msec.	113.0 to 128.0	120.3	Pass	
Moment About Occ. Condyle	Max	Nm	84.1 to 108.5	95.5	Pass
	Time	Msec.	47.0 to 58.0	51.4	Pass
Positive Moment Decay, Time To Zero Crossing	Msec.	97.0 to 107.0	101.2	Pass	
Overall Test Results				Pass	



Curve Description			
Pendulum Deceleration			
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
24.5	9.5	-2.7	82.1



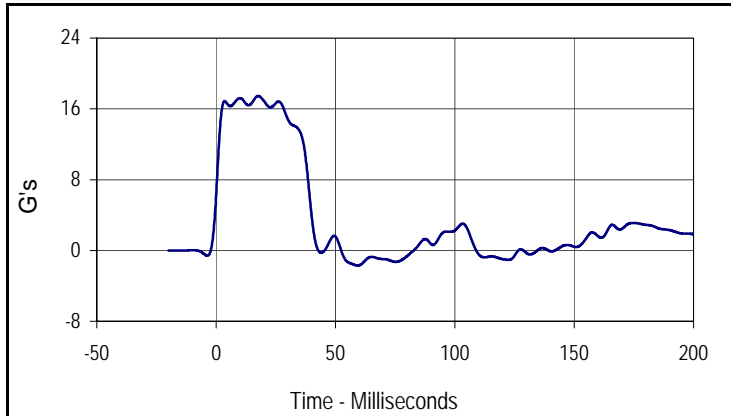
Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
77.7	59.3	-34.6	177.8



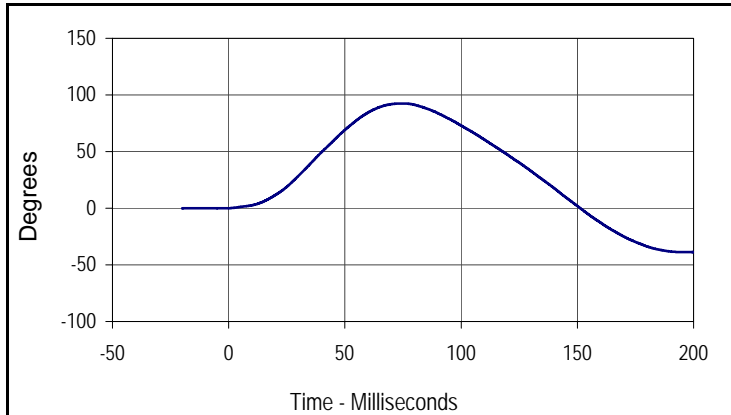
Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
95.5	51.4	-72.1	15.2



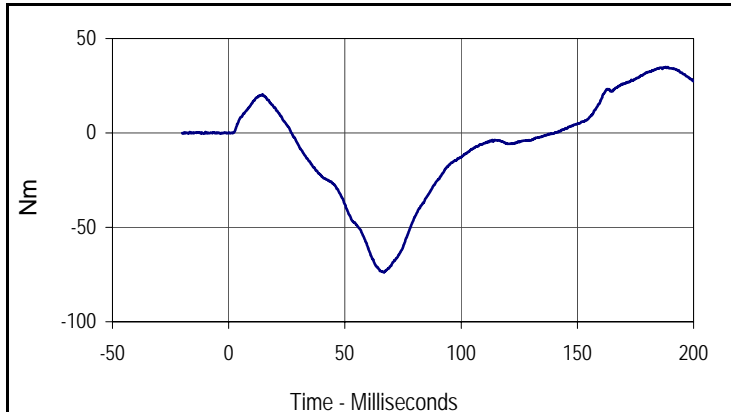
Tested Parameter	Units	Specification	Result	Pass/Fail	
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass	
Laboratory Relative Humidity	%	10 to 70	30	Pass	
Pendulum Velocity	m/s	5.94 to 6.19	6.13	Pass	
Pendulum Deceleration	10 Msec.	G's	17.2 to 21.2	17.2	Pass
	20 Msec.	G's	14.0 to 19.0	16.9	Pass
	30 Msec.	G's	11.0 to 16.0	14.8	Pass
Peak Pendulum Decel. after 30 Msec.	G's	≤ 22.0	14.8	Pass	
Deceleration Decay, Time to Cross 5 G's	Msec.	38.0 to 46.0	39.6	Pass	
Maximum "D" Plane Rotation	Max	Degrees	81.0 to 106.0	92.4	Pass
	Time	Msec.	72.0 to 82.0	74.6	Pass
"D" Plane Rotation Decay, Time To Zero Crossing	Msec.	147.0 to 174.0	151.3	Pass	
Moment About Occ. Condyle	Max	Nm	-52.9 to- 79.9	-73.8	Pass
	Time	Msec.	65.0 to 79.0	66.7	Pass
Positive Moment Decay, Time To Zero Crossing	Msec.	120.0 to 148.0	140.2	Pass	
Overall Test Results				Pass	



Curve Description			
Pendulum Deceleration			
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
17.4	17.5	-1.7	59.2



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
92.4	74.6	-38.7	197.6



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
34.9	188.1	-73.8	66.7

Test Program: Hybrid III 50th Percentile Male Knee Impact Test

Test Date: 9/19/06

ATD Serial No.: 035

Test I.D.: LK9AG , RK9AF



Left Knee

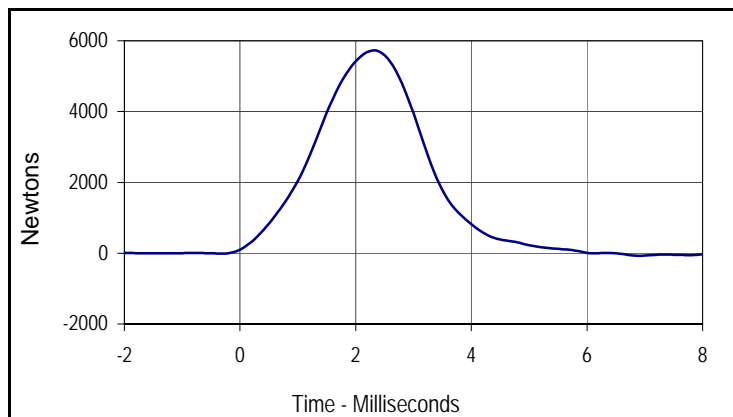
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.09	Pass
Peak Probe Force	Newtons	4715 to 5782	5691	Pass
Overall Test Results				Pass

Right Knee

Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.08	Pass
Peak Probe Force	Newtons	4715 to 5782	5724	Pass
Overall Test Results				Pass



Curve Description			
Left Knee Probe Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
5691.0	2.5	-25.0	8.8



Curve Description			
Right Knee Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	600	Newtons
Max	Time	Min	Time
5724.4	2.3	-73.3	6.9

Test Program: Hybrid III 50th Percentile Male External Measurements Test Date: 9/21/06
 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	885	Pass
B - Shoulder pivot height	mm	505 to 521	512	Pass
C - "H" point height	mm	84 to 89	86	Pass
D - "H" point from seat back	mm	135 to 140	140	Pass
E - Shoulder pivot from back	mm	84 to 94	85	Pass
F - Thigh clearance	mm	140 to 155	144	Pass
G - Elbow back to wrist pivot	mm	290 to 305	301	Pass
H - Skull cap to back line	mm	41 to 46	43	Pass
I - Shoulder to elbow length	mm	330 to 345	336	Pass
J - Elbow rest height	mm	190 to 211	204	Pass
K - Buttock to knee length	mm	579 to 604	590	Pass
L - Popliteal length	mm	429 to 455	451	Pass
M - Knee pivot height	mm	485 to 500	490	Pass
N - Buttock popliteal length	mm	452 to 477	473	Pass
O - Chest depth	mm	213 to 229	221	Pass
P - Foot length	mm	251 to 267	259	Pass
V - Shoulder breadth	mm	422 to 437	431	Pass
W - Foot breadth	mm	91 to 107	105	Pass
Y - Chest circumference	mm	970 to 1001	989	Pass
Z - Waist circumference	mm	836 to 866	851	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 50th Percentile Male Head Drop Test

Test Date: 9/18/06

ATD Serial No.: 034

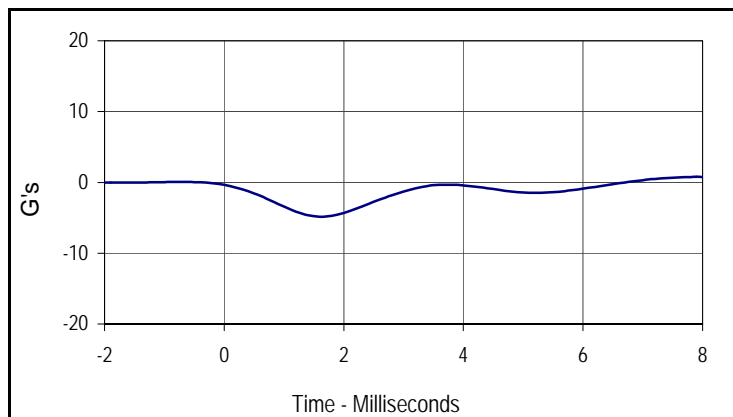
Test I.D.: HD9AH



Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.7	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Peak Resultant Acceleration	G's	225.0 to 275.0	274.4	Pass
Peak Lateral Acceleration	G's	≤15.0	4.9	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
274.4	2.1	0.5	-1.9



Curve Description			
Head Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
0.1	-0.7	-4.9	1.6

Test Program: Hybrid III 50th Percentile Male Thorax Impact Test

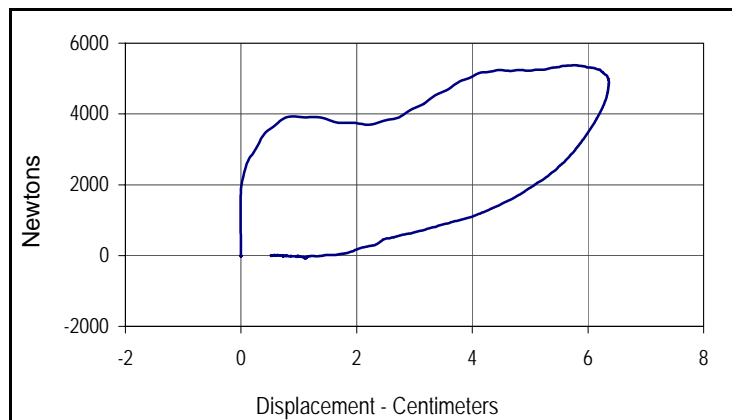
Test Date: 9/19/06

ATD Serial No.: 034

Test I.D.: CH9AI



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	5376	Pass
Peak Sternum Deflection	CM	6.35 to 7.26	6.36	Pass
Internal Hysteresis	%	69 to 85	75.8	Pass
Overall Test Results				Pass



Curve Description			
Probe Force vs. Chest Deflection			
CURNO	Type	SAE Class	Hysteresis
001	FIL	180	75.8
Peak Probe Force		Peak Chest Deflection	
5376		6.36	

Test Program: Hybrid III 50th Percentile Male Neck Flexion Test

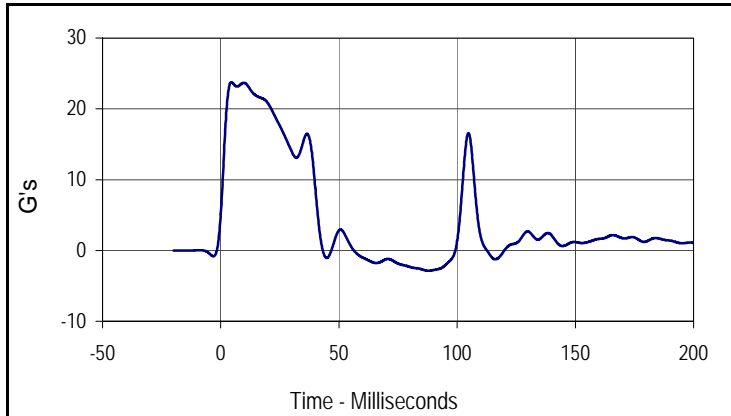
Test Date: 9/20/06

ATD Serial No.: 034

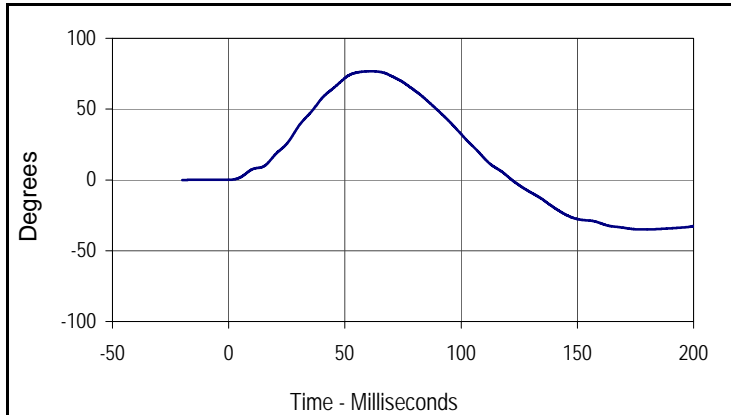
Test I.D.: NF9AJ



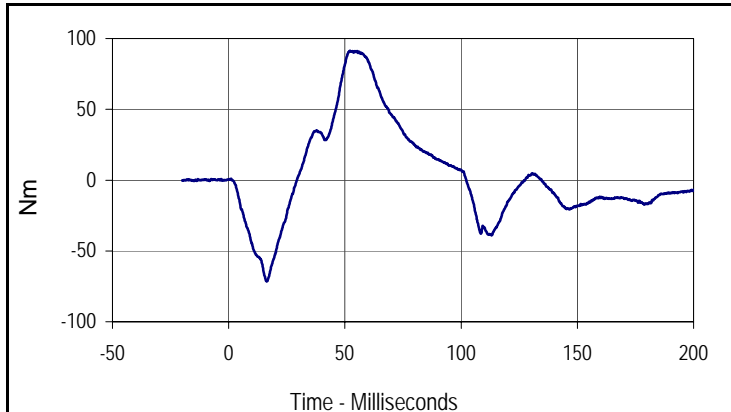
Tested Parameter	Units	Specification	Result	Pass/Fail	
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass	
Laboratory Relative Humidity	%	10 to 70	30	Pass	
Pendulum Velocity	m/s	6.89 to 7.13	7.04	Pass	
Pendulum Deceleration	10 Msec.	G's	22.5 to 27.5	23.7	Pass
	20 Msec.	G's	17.6 to 22.6	20.8	Pass
	30 Msec.	G's	12.5 to 18.5	14.0	Pass
Peak Pendulum Decel. after 30 Msec.	G's	≤ 29.0	16.6	Pass	
Deceleration Decay, Time to Cross 5 G's	Msec.	34.0 to 42.0	41.1	Pass	
Maximum "D" Plane Rotation	Max	Degrees	64.0 to 78.0	76.7	Pass
	Time	Msec.	57.0 to 64.0	60.8	Pass
"D" Plane Rotation Decay, Time To Zero Crossing	Msec.	113.0 to 128.0	121.9	Pass	
Moment About Occ. Condyle	Max	Nm	84.1 to 108.5	91.3	Pass
	Time	Msec.	47.0 to 58.0	52.1	Pass
Positive Moment Decay, Time To Zero Crossing	Msec.	97.0 to 107.0	102.2	Pass	
Overall Test Results				Pass	



Curve Description			
Pendulum Deceleration			
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
23.8	4.5	-2.9	87.9



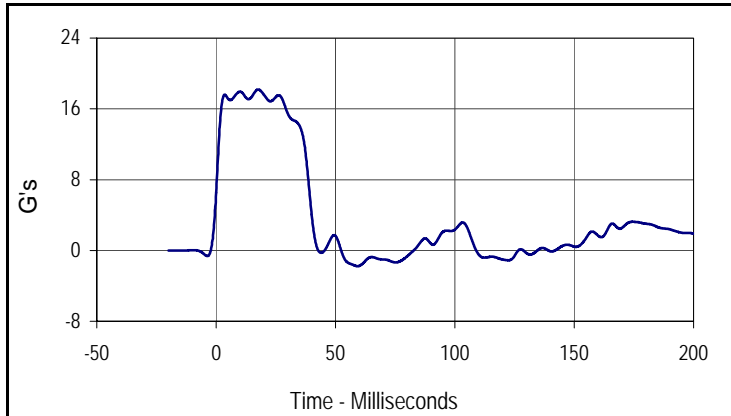
Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
76.7	60.8	-35.0	178.8



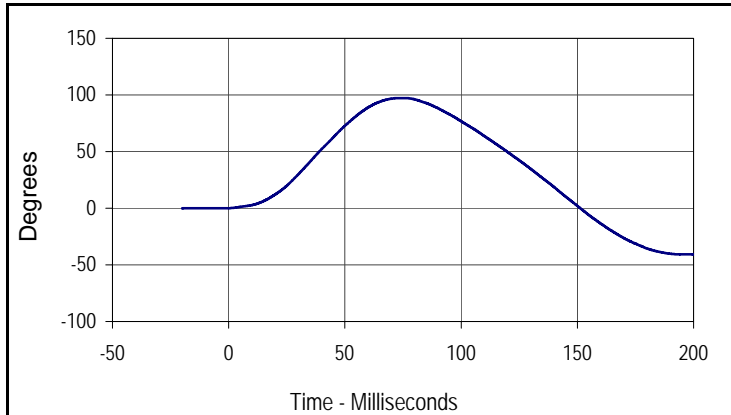
Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
91.3	52.1	-71.5	16.4



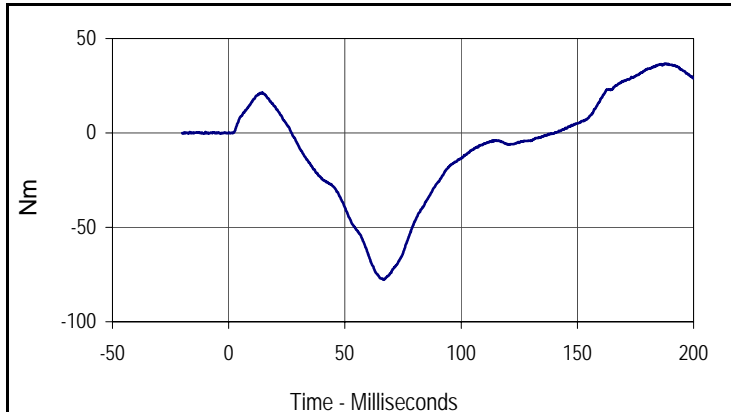
Tested Parameter	Units	Specification	Result	Pass/Fail	
Laboratory Temperature	°C	20.6 to 22.2	20.6	Pass	
Laboratory Relative Humidity	%	10 to 70	30	Pass	
Pendulum Velocity	m/s	5.94 to 6.19	6.12	Pass	
Pendulum Deceleration	10 Msec.	G's	17.2 to 21.2	17.9	Pass
	20 Msec.	G's	14.0 to 19.0	17.6	Pass
	30 Msec.	G's	11.0 to 16.0	15.5	Pass
Peak Pendulum Decel. after 30 Msec.	G's	≤ 22.0	15.5	Pass	
Deceleration Decay, Time to Cross 5 G's	Msec.	38.0 to 46.0	39.7	Pass	
Maximum "D" Plane Rotation	Max	Degrees	81.0 to 106.0	97.3	Pass
	Time	Msec.	72.0 to 82.0	74.6	Pass
"D" Plane Rotation Decay, Time To Zero Crossing	Msec.	147.0 to 174.0	151.3	Pass	
Moment About Occ. Condyle	Max	Nm	-52.9 to- 79.9	-77.7	Pass
	Time	Msec.	65.0 to 79.0	66.7	Pass
Positive Moment Decay, Time To Zero Crossing	Msec.	120.0 to 148.0	140.2	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	17.5	-1.8	59.2



Curve Description			
"D" Plane Rotation			
CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
97.3	74.6	-40.7	197.6



Curve Description			
Moment About Occipital Condyle			
CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
36.7	188.1	-77.7	66.7

Test Program: Hybrid III 50th Percentile Male Knee Impact Test

Test Date: 9/19/06

ATD Serial No.: 034

Test I.D.: LK9AL , RK9AM

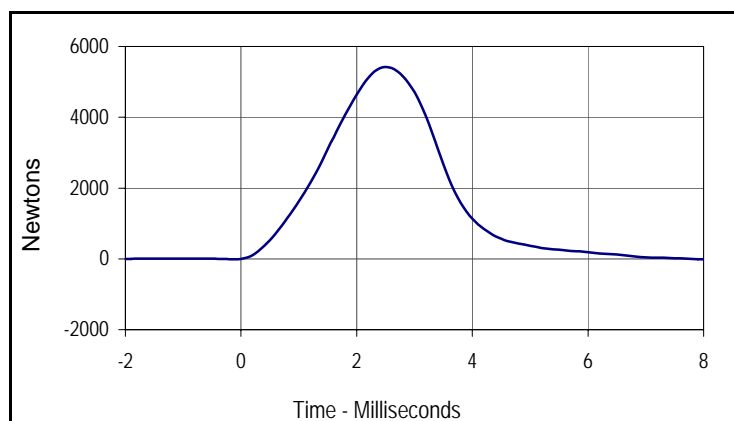


Left Knee

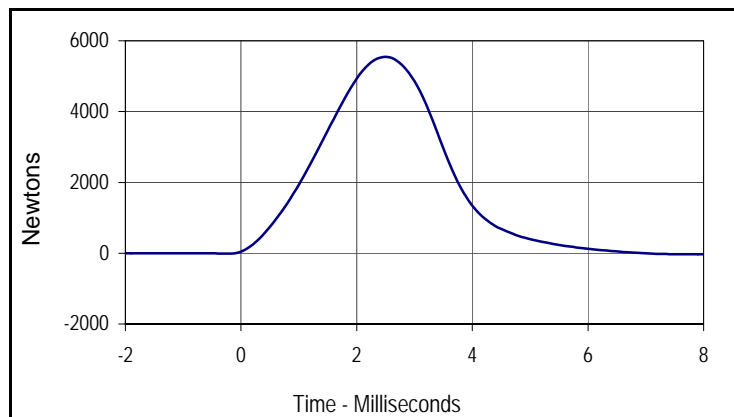
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.7	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.09	Pass
Peak Probe Force	Newtons	4715 to 5782	5425	Pass
Overall Test Results				Pass

Right Knee

Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.08	Pass
Peak Probe Force	Newtons	4715 to 5782	5546	Pass
Overall Test Results				Pass



Curve Description			
Left Knee Probe Force			
CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
5425.0	2.5	-29.6	8.6



Curve Description			
Right Knee Probe Force			
CURNO	Type	SAE Class	Units
002	FIL	600	Newtons
Max	Time	Min	Time
5546.2	2.5	-31.1	9.5

Test Program: Hybrid III 50th Percentile Male External Measurements Test Date: 9/21/06
 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	884	Pass
B - Shoulder pivot height	mm	505 to 521	511	Pass
C - "H" point height	mm	84 to 89	85	Pass
D - "H" point from seat back	mm	135 to 140	139	Pass
E - Shoulder pivot from back	mm	84 to 94	86	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	205	Pass
K - Buttock to knee length	mm	579 to 604	600	Pass
L - Popliteal length	mm	429 to 455	450	Pass
M - Knee pivot height	mm	485 to 500	489	Pass
N - Buttock popliteal length	mm	452 to 477	475	Pass
O - Chest depth	mm	213 to 229	225	Pass
P - Foot length	mm	251 to 267	255	Pass
V - Shoulder breadth	mm	422 to 437	435	Pass
W - Foot breadth	mm	91 to 107	102	Pass
Y - Chest circumference	mm	970 to 1001	985	Pass
Z - Waist circumference	mm	836 to 866	850	Pass
AA - Location for chest circumference	mm	429 to 434	431	Pass
BB - Location for waist circumference	mm	226 to 231	230	Pass
Overall Test Results				Pass

Test Program: Dummy Damage Checklist
 ATD Serial No.: 035

Test Date: 9/21/06
 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
 ATD Serial No.: 034

Test Date: 9/21/06
 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:
