

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

**HONDA OF CANADA MFG.
2007 ACURA MDX
5-DOOR MPV**

NHTSA NUMBER: M75302

**PREPARED BY:
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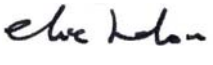
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FINAL REPORT

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RULEMAKING
OFFICE OF CRASHWORTHINESS STANDARDS
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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 MDX 5-Door MPV at Karco Engineering, LLC on 12/5/06. This test was conducted to obtain data indicant of FMVSS 208, 212, 219 (partial), 301, and footwell intrusion performance. The impact velocity is 56.52 km/h. The ambient temperature at the barrier face at the time of impact is 14.4 degrees Celcius. The vehicle's maximum post-test static crush is 574 mm to the left of 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:					
Measurement Description		Units	Threshold	Driver ATD	Passenger ATD
Head Injury Criteria (HIC)		N/A	1000	436.9	526.2
Max. Chest Accel. (3 msec Clip)		G's	60	41.3	40.7
Left Femur Force		Newtons	10008	-1948.8	-2704.4
Right Femur Force		Newtons	10008	-2036.5	-2735.3
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TABLE OF CONTENTS

Section	Description	Page
1	Purpose and Summary of Test M75302	1
2	Occupant and Vehicle Information/Data Sheets	3

Data Sheet	Description	Page
1	Crash Test Summary	4
2	General Test and Vehicle Parameter Data	5
3	Post-Test Impact Data	8
4	Test Vehicle Information	9
5	Dummy Positioning in Vehicle	11
6	Seat Belt Positioning Data	13
7	Vehicle Accelerometer Location	14
8	Seat Belt Assessment Test Data	15
9	Summary of FMVSS 212 Data	16
10	Windshield Zone Intrusion FMVSS 219 Data (Partial)	17
11	FMVSS 301 Fuel System Integrity Post-Impact Data	18
12	FMVSS 301 Static Rollover Data	19
13	Vehicle Measurements	21
14	Camera Locations	24
15	Photographic Reference Target Locations	25
16	Vehicle Intrusion Measurements	26
17	Fixed Barrier Load Cell Locations	31
18	Accident Investigation Division Data	32
19	Dummy/Vehicle Temperature Stabilization	33

Appendix	Description	Appendix
A	Photographs	A
B	Data Plots	B
C	Dummy Calibration Data	C

SECTION 1

PURPOSE AND SUMMARY OF TEST M75302

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 MDX 5-Door MPV at a velocity of 56.52 km/h. The test was performed at Karco Engineering, LLC on December 5, 2006.

Three (3) real-time and sixteen (16) 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 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 574 mm to the left of 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	436.9	41.3	-21.1	-1948.8	-2036.5
Passenger	526.2	40.7	-15.5	-2704.4	-2735.3

SECTION 2
OCCUPANT AND VEHICLE INFORMATION/DATA SHEETS

Test Vehicle: 2007 Acura MDX 5-Door MPV

NHTSA No.: M75302

Test Program: 2007 NHTSA 35 MPH NCAP

Test Date: 12/5/06

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	lb/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 MDX 5-Door MPV
Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: M75302
Test Date: 12/5/06

PRIMARY IMPACT DATA

Measured Parameter	Units	Value
Velocity at Impact	km/h	56.52
Test Weight	kg	2255
Impact Angle	degrees	0
Average Rebound	mm	528
Maximum Static Crush	mm	574

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	3
Real Time	1	2
Total	14	5

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

NHTSA No.: M75302
 Test Date: 12/5/06

TEST VEHICLE INFORMATION AND OPTIONS

NHTSA No.	M75302	Anti-Lock Brakes	Yes
Make	Acura	All Wheel Drive	Yes
Model	MDX	Power Steering	Yes
Body Style	5-Door MPV	Driver Front Airbag	Yes
Vin No.	2HNYD28257H500261	Driver Side Airbag	Yes
Color	Gray	Driver Head Airbag	No
Delivery Date	11/28/2006	Driver Curtain Airbag	Yes
Odometer (Miles)	95.0	Pass. Airbag	Yes
Dealer	Cerritos Acura	Pass. Side Airbag	Yes
Transmission	Automatic	Pass. Head Airbag	No
Final Drive	AWD	Pass. Curtain Airbag	Yes
Type/No. Cyl.	V6	Pre-Tensioners	Yes
Engine Disp. (L)	3.7	Load Limiters	Yes
Engine Placement	Transverse	Bucket Seats	Yes
Roof Rack	No	Air. Cond.	Yes
Sunroof/T-Top	Yes	AM/FM CD player	Yes
Tinted Glass	Yes	Tilt Steering	Yes
Traction Control	Yes	Automatic Door Locks	Yes
Power Brakes	Yes	Power Windows	Yes
Front Disc	Yes	Power Seats	Yes
Rear Disc	Yes	Other	None

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

Yes

DATA FROM MANUFACTURER

Manufactured By	Honda of Canada MFG.	GVWR (kg)	2700
Date of Manufacture	Sep-06	GAWR Front (kg)	1310
		GAWR Rear (kg)	1440

VEHICLE SEATING AND CAPACITY WEIGHT INFORMATION

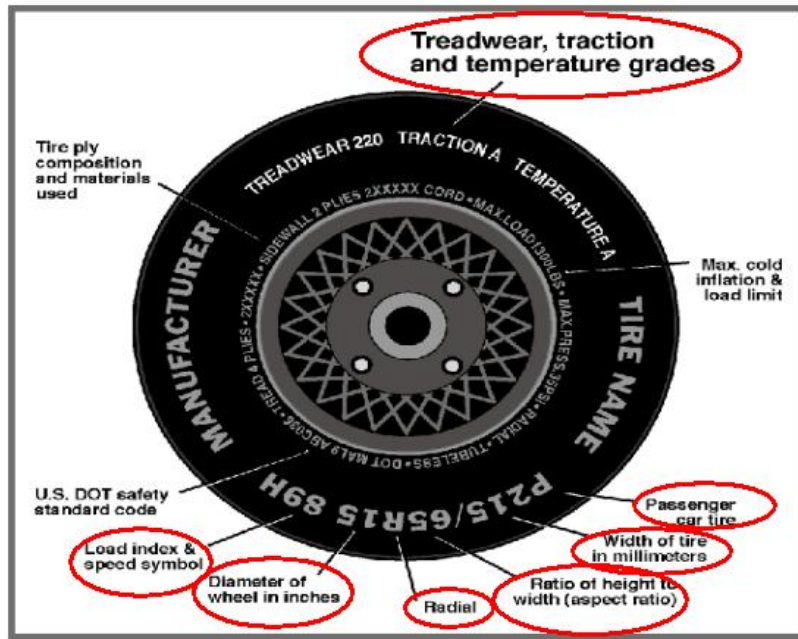
Measured Parameter	Front	Rear	Third	Total
Type of Seats	Bucket	Bucket	Bucket	
Number of Occupants	2	3	2	7
Capacity Weight (VCW) (kg)				525
Cargo Weight (RCLW) (kg)				49

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

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

NHTSA No.: M75302
 Test Date: 12/5/06

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	P255/55R18	P255/55R18
Tire Size on Vehicle	P255/55R18	P255/55R18
Tire Manufacturer	Bridgestone	Bridgestone
Treadwear	400	400
Traction	B	B
Temperature Grades	B	B
Tire Plies Sidewall	2 Polyester	2 Polyester
Tire Plies Body	2 Polyester + 2 Steel + 1 Nylon	2 Polyester + 2 Steel + 1 Nylon
Load Index/Speed Symbol	103H	103H
Tire Material	Polyester, Steel, Nylon	Polyester, Steel, Nylon
DOT Safety Code Right	OB7K 402 2506	OB7K 402 2506
DOT Safety Code Left	OB7K 402 2506	OB7K 402 2506

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

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

NHTSA No.: M75302
 Test Date: 12/5/06

TEST VEHICLE WEIGHTS

	Units	As Delivered Weights (UVW)			As Tested Weights (ATW)		
		Front Axle	Rear Axle	Total	Front Axle	Rear Axle	Total
Left	kg	580	458	1038	621	517	1138
Right	kg	573	450	1023	609	508	1117
Ratio	%	55.9	44.1	100	54.5	45.5	100
Totals	kg	1153	908	2061	1230	1025	2255

TARGET TEST WEIGHT CALCULATION

Measured Parameter	Units	Value
Total Delivered Weight (UVW)	kg	2061
Weight of 2 P572 ATD's	kg	151
Rated Cargo/Luggage Wt. (RCLW)	kg	49
Calculated Vehicle Target Wt. (TVTW)	kg	2261

TEST VEHICLE ATTITUDE AND CG

	Units	LF	RF	LR	RR	CG (aft of front axle)
As Delivered	mm	812	810	826	830	1215
As Tested	mm	804	804	816	820	1254

Vehicle Wheel Base (mm)	2755
Weight of Ballast Secured in cargo area (kg)	9
Weight of Items Removed (kg)	85
Vehicle Components Removed	3rd row seats, rear bumper, floor mats, spare tire, spare tire changing tools, carpet, side trim panels, support brace

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

FUEL SYSTEM DATA

Fuel System Capacity From Owners Manual (L)	79.49
Actual Test Volume with entire fuel System Filled (L)	73.92
Test Fluid Type:	Stoddard Solvent
Kinematic Viscosity:	as per ASTM Standard D484-71
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 MDX 5-Door MPV
Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: M75302
Test Date: 12/5/06

SPEED TRAP DATA

Measured Parameter	Units	Requirement	Value
Trap No.1 Velocity (Primary)	km/h	55.51 to 57.12	56.52
Trap No.2 Velocity (Redun.)	km/h	55.51 to 57.12	56.49

VEHICLE STATIC CRUSH

Measured Parameter	Units	Pre-Test	Post-Test	Difference
Left Side	mm	4566	3992	-574
Center	mm	4820	4256	-564
Right Side	mm	4566	4000	-566

VEHICLE REBOUND FROM BARRIER

Measured Parameter	Units	Value
Left Side	mm	520
Center	mm	500
Right Side	mm	565
Average	mm	528

DATA SHEET NO. 4 TEST VEHICLE INFORMATION

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

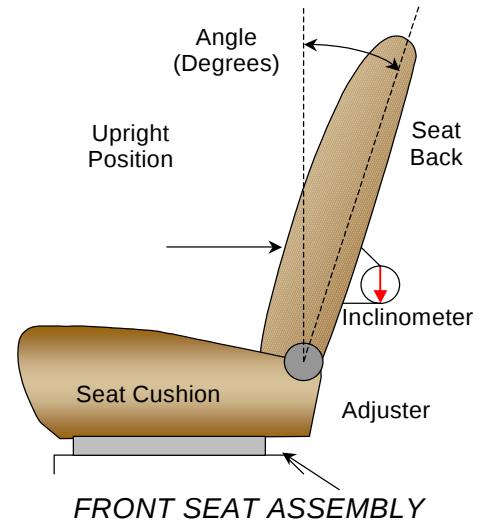
NHTSA No.: M75302
 Test Date: 12/5/06

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	13.5 @ headrest
Passenger w/seated Dummy	13.0 @ headrest

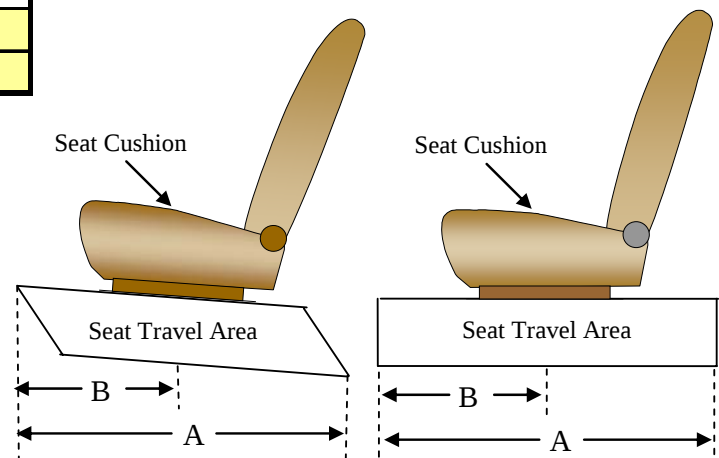


SEAT FORE/AFT POSITIONS

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	250 mm	125 mm
Passenger Seat	250 mm	125 mm



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

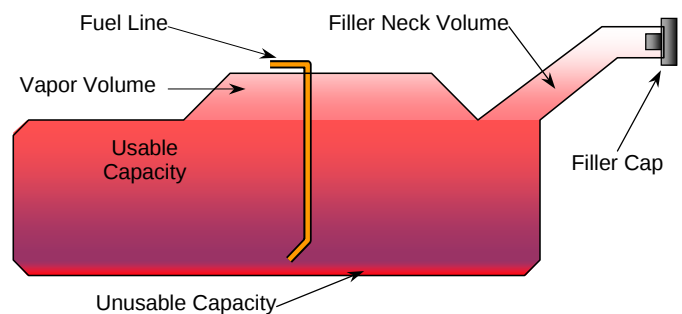
Test Vehicle: 2007 Acura MDX 5-Door MPV
 Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: M75302
 Test Date: 12/5/06

FUEL TANK CAPACITY

	Liters
Usable Capacity of "Standard Tank"	79.49
Usable Capacity of "Optional" Tank	
Usable Capacity used for FMVSS 301	73.13 to 74.72
Actual Amount of Solvent used	73.92

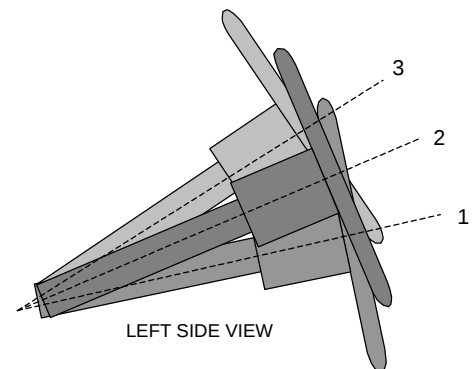
The test vehicle is equipped with an electric fuel pump. The fuel pump operates for approximately two seconds after the ignition is placed in the "ON" position, after which the fuel pump automatically shuts off. The fuel filler door is located on the left rear fender. The standard fuel tank occupies 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	20.5	0
Geometric center position No. 2	23.0	20
Uppermost position No. 3	25.7	40

DATA SHEET NO. 5
DUMMY POSITIONING IN VEHICLE

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

NHTSA No.: M75302
Test Date: 12/5/06

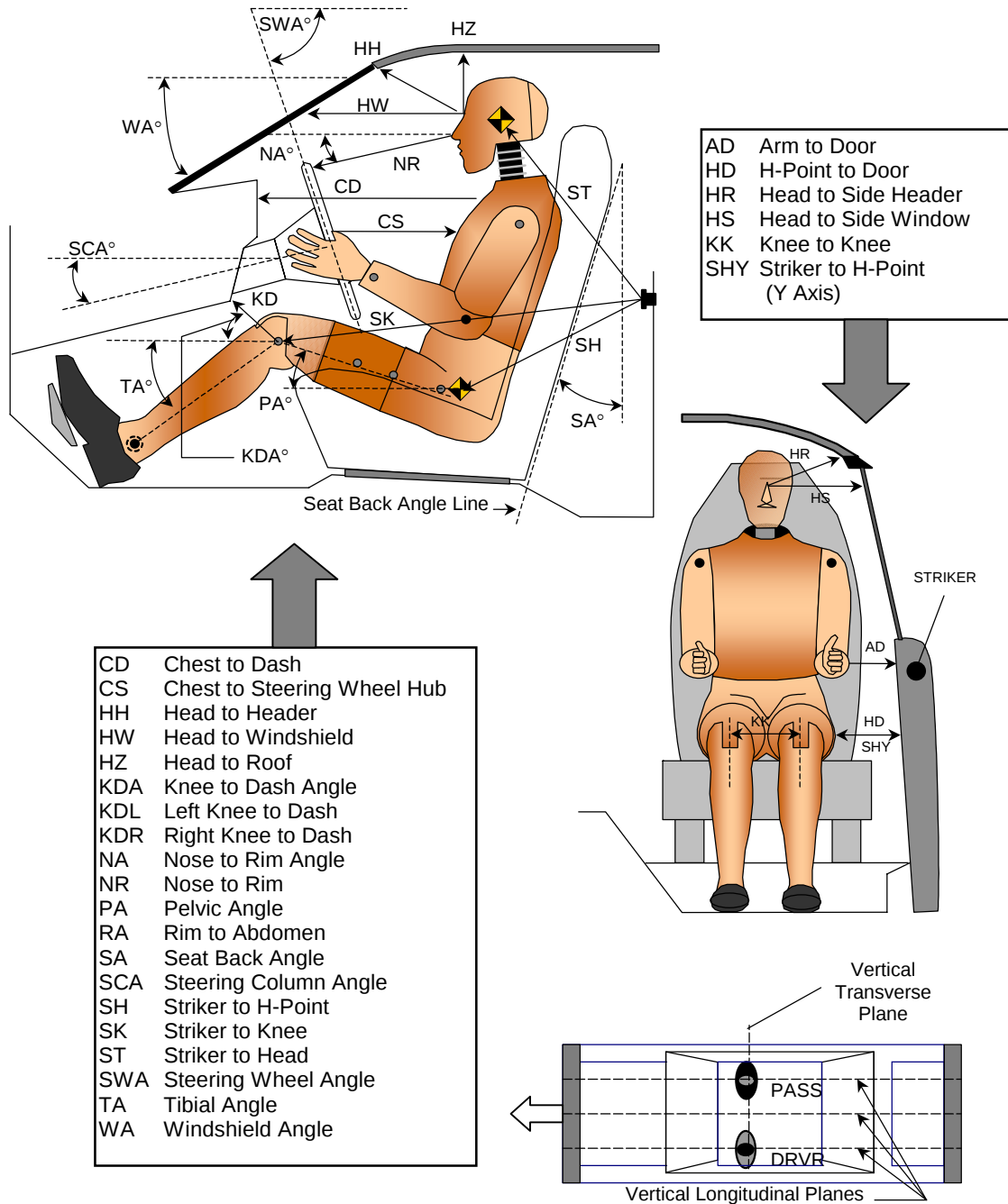
TEST DUMMY POSITION MEASUREMENTS

Code	Measurement Description	Driver		Passenger	
		Length (mm)	Angle (deg)	Length (mm)	Angle (deg)
WA	Windshield Angle		28.3		
SWA	Steering Wheel Angle		67.0		
SCA	Steering Column Angle		23.0		
SA	Seat Back Angle		13.5 @ headrest		13.0 @ headrest
HZ	Head to Roof (Z)	250	90.0	215	90.0
HH	Head to Header	400		395	
HW	Head to Windshield	690		700	
HR	Head to Side Header (Y)	310		300	
NR	Nose to Rim	410	7.3		
CD	Chest to Dash	570		600	
CS	Chest to Steering Hub	330			
RA	Rim to Abdomen	220			
KDL	Left Knee to Dash	150	28.3	140	
KDR	Right Knee to Dash	150		140	27.7
PA	Pelvic Angle		24.9		22.4
TA	Tibia Angle		50.8		35.8
KK	Knee to Knee (Y)	336		270	
SK	Striker to Knee	590	1.3	610	3.4
ST	Striker to Head	517	80.2	510	81.5
SH	Striker to H-Point	270	38.5	260	35.5
SHY	Striker to H-Point (Y)	280		300	
HS	Head to Side Window	350		380	
HD	H-Point to Door (Y)	120		200	
AD	Arm to Door (Y)	220		75	

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

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

NHTSA No.: M75302
 Test Date: 12/5/06

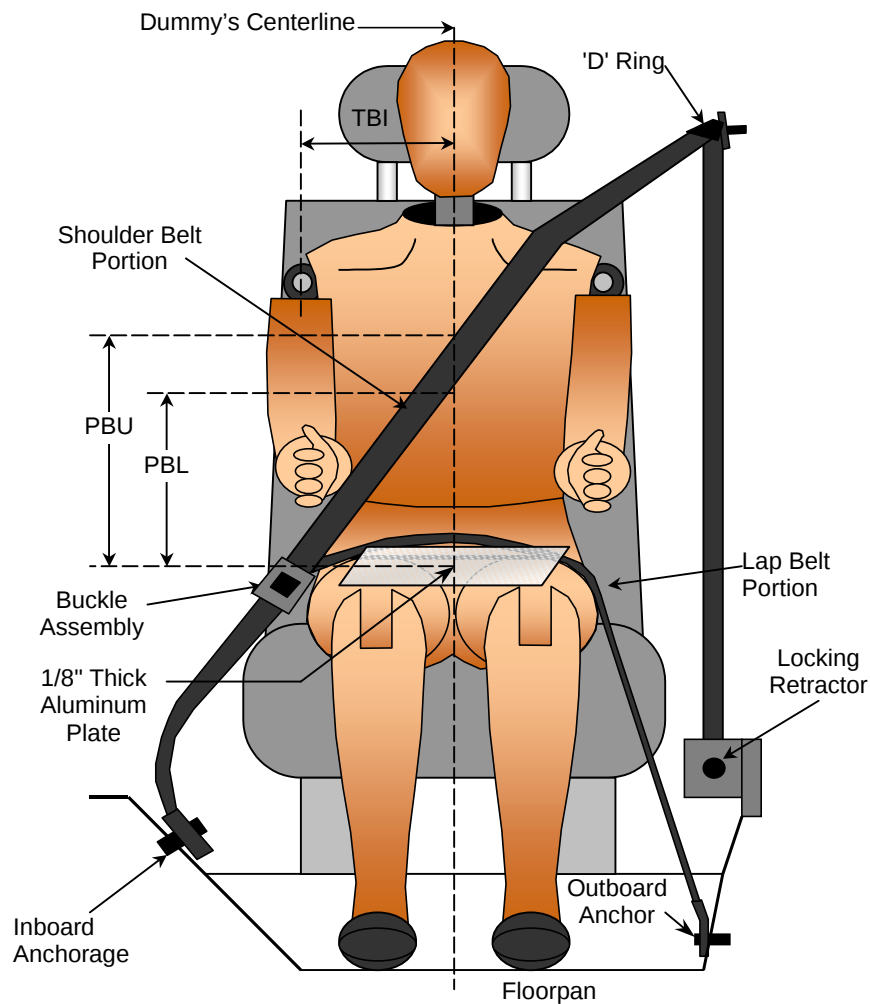


DUMMY MEASUREMENTS FOR FRONT SEAT OCCUPANTS

DATA SHEET NO. 6 **SEAT BELT POSITIONING DATA**

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

NHTSA No.: M75302
 Test Date: 12/5/06



SEAT BELT POSITIONING MEASUREMENTS

Measured Parameter	Units	Driver	Passenger
TBI - Dummy C/L to Lap/Shoulder Belt Intersect	mm	200	200
PBU - Top Surface of reference to belt upper edge	mm	300	300
PBL - Top Surface of reference to belt lower edge	mm	220	210
Lap Belt Tension	Newtons	10	10
Shoulder Belt Tension	N/A	Retractor	Retractor

DATA SHEET NO. 7
VEHICLE ACCELEROMETER LOCATION

Test Vehicle: 2007 Acura MDX 5-Door MPV

NHTSA No.: M75302

Test Program: 2007 NHTSA 35mph NCAP

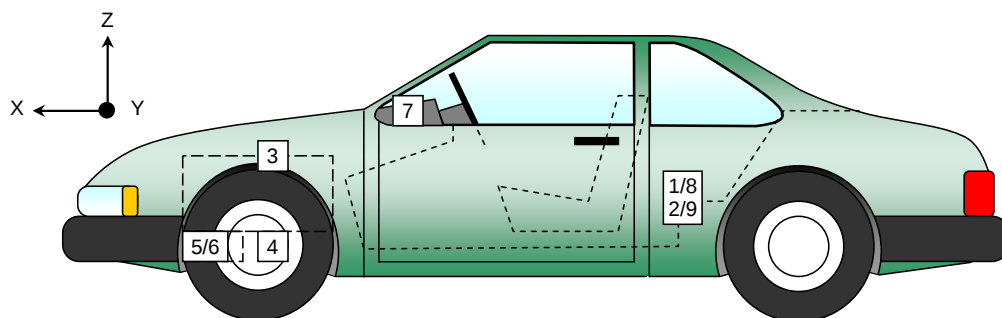
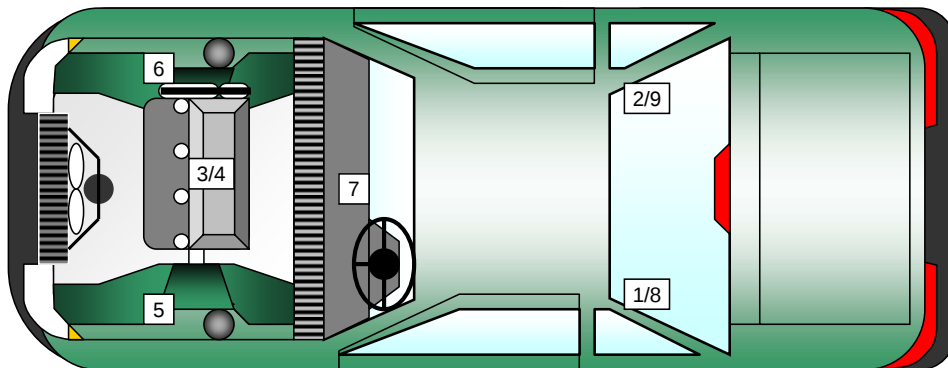
Test Date: 12/5/06

VEHICLE ACCELEROMETER PRE-TEST LOCATIONS

No.	Accelerometer Location	Measurements (mm)		
		X	Y	Z
1	Left Rear X-Member	2103	-755	492
2	Right Rear X-Member	2103	755	492
3	Engine Top	4066	0	1102
4	Engine Bottom	4182	160	250
5	Left Brake Caliper	4045	-775	400
6	Right Brake Caliper	4045	775	400
7	Instrument Panel			
8	Left Rear X-Member (Z-Axis)	2103	-755	492
9	Right Rear X-Member (Z-Axis)	2103	755	492

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

NHTSA No.: M75302
 Test Date: 12/5/06

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	900
Lap Belt length as measured on ATD	mm	600	580
Remainder of belt on reel	mm	1140	1120
Total belt length for continuous webbing systems	mm	3460	3400

SHOULDER BELT SPOOL-OFF DATA

Measurement Description	Units	Driver	Passenger
As determined mechanically	mm	120	300
As determined electronically	mm	208	*

* Channel failed, no data

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

NHTSA No.: M75302
 Test Date: 12/5/06

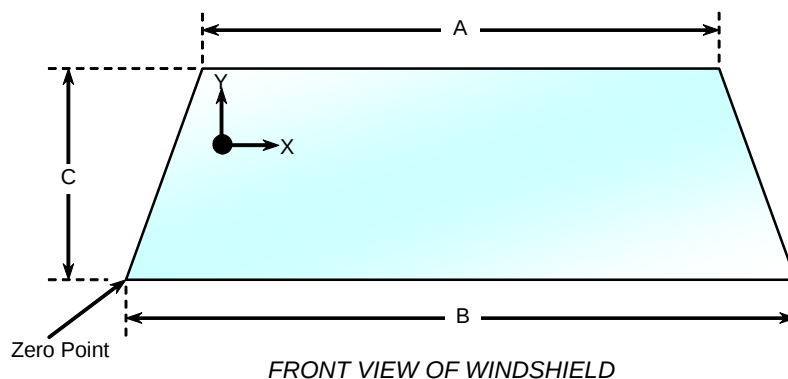
Windshield Mounting Details: Windshield glass is secured to the vehicle frame with a rubber type adhesive. No molding covers the windshield periphery at any point.

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	2246	2246	100
Right Side	2246	2246	100
Total	4492	4492	100



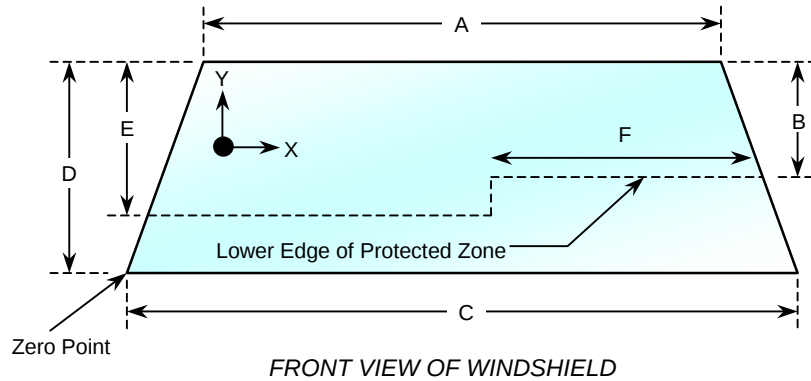
WINDSHIELD DIMENSIONS

Item	Units	Segment Length	Molding Width
A	mm	1306	15
B	mm	1575	10
C-Left	mm	805	24
C-Right	mm	805	24

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

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

NHTSA No.: M75302
 Test Date: 12/5/06



**WINDSHIELD AND
PROTECTED ZONE**

Item	Units	Value
A	mm	1306
B	mm	594
C	mm	1575
D	mm	805
E	mm	526
F	mm	502

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 MDX 5-Door MPV

NHTSA No.: M75302

Test Program: 2007 NHTSA 35 MPH NCAP

Test Date: 12/5/06

Test Time: 11:53 AM

Temperature: 14.0 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.

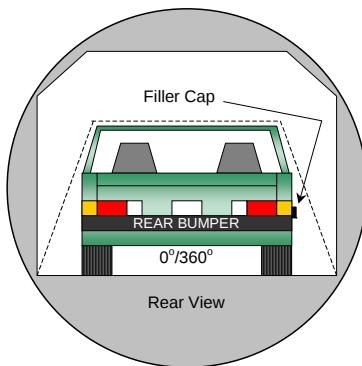
(Maximum Allowable = 1 oz./minute)

D. Spillage Location Details: No leakage occurred

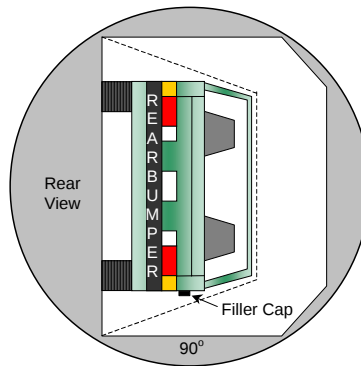
DATA SHEET NO. 12
FMVSS 301 STATIC ROLLOVER DATA

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

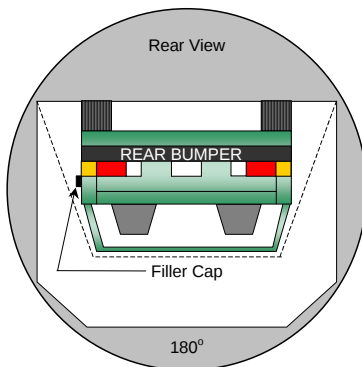
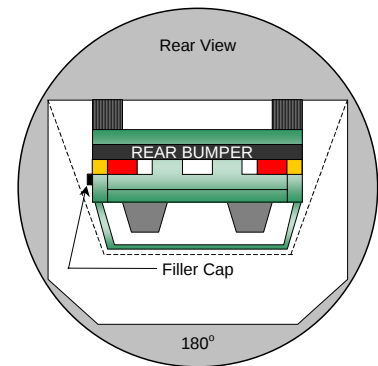
NHTSA No.: M75302
Test Date: 12/5/06



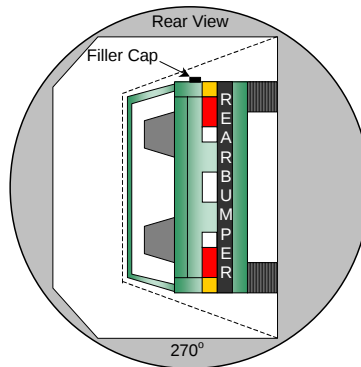
0° to 90°



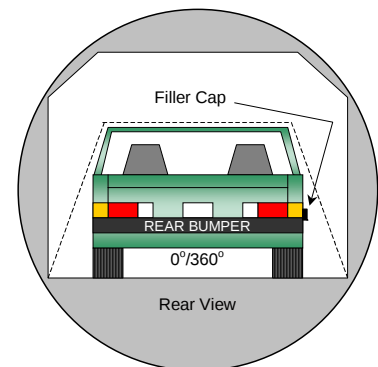
90° to 180°



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

NHTSA No.: M75302
 Test Date: 12/5/06

SOLVENT COLLECTION TIME TABLE IN SECONDS

Test Phase	Rotation Time	Hold Time	Total Time
0° to 90°	84	300	384
90° to 180°	86	300	386
180° to 270°	80	300	380
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 MDX 5-Door MPV
Test Program: 2007 NHTSA 35 MPH NCAP

NHTSA No.: M75302
Test Date: 12/5/06

VEHICLE MEASUREMENT TABLE

No.	Measurement Description	Units	Pre-Test	Post-Test	Diff.
1	Total length of vehicle at centerline	mm	4820	4256	-564
2	RSOV to front of engine	mm	4340	4008	-332
3	RSOV to firewall centerline	mm	3900	3890	-10
4	RSOV to leading edge of right door	mm	3346	3355	9
5	RSOV to leading edge of left door	mm	3360	3356	-4
6	RSOV to lower leading edge of right door	mm	3340	3334	-6
7	RSOV to lower leading edge of left door	mm	3344	3340	-4
8	RSOV to upper trailing edge of right door	mm	2296	2305	9
9	RSOV to upper trailing edge of left door	mm	2306	2308	2
10	RSOV to lower trailing edge of right door	mm	2309	2304	-5
11	RSOV to lower trailing edge of left door	mm	2314	2310	-4
12	RSOV to bottom of right 'A' pillar	mm	3311	3313	2
13	RSOV to bottom of left 'A' pillar	mm	3316	3318	2
14	RSOV to firewall on right side	mm	3912	3899	-13
15	RSOV to firewall on left side	mm	3908	3920	12
16	RSOV to steering column	mm	2946	2998	52
17	Center of steering column to left 'A' pillar	mm	437	360	-77
18	Center of steering column to headlining	mm	462	540	78
19	RSOV to right side of front bumper	mm	4564	4000	-564
20	RSOV to left side of front bumper	mm	4566	3992	-574
21	Length of engine block	mm	470	470	0
RD	RSOV to right side of dash panel	mm	3116	3120	4
CD	RSOV to center of dash panel	mm	3115	3078	-37
LD	RSOV to left side of dash panel	mm	3126	3130	4

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

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

NHTSA No.: M75302
 Test Date: 12/5/06

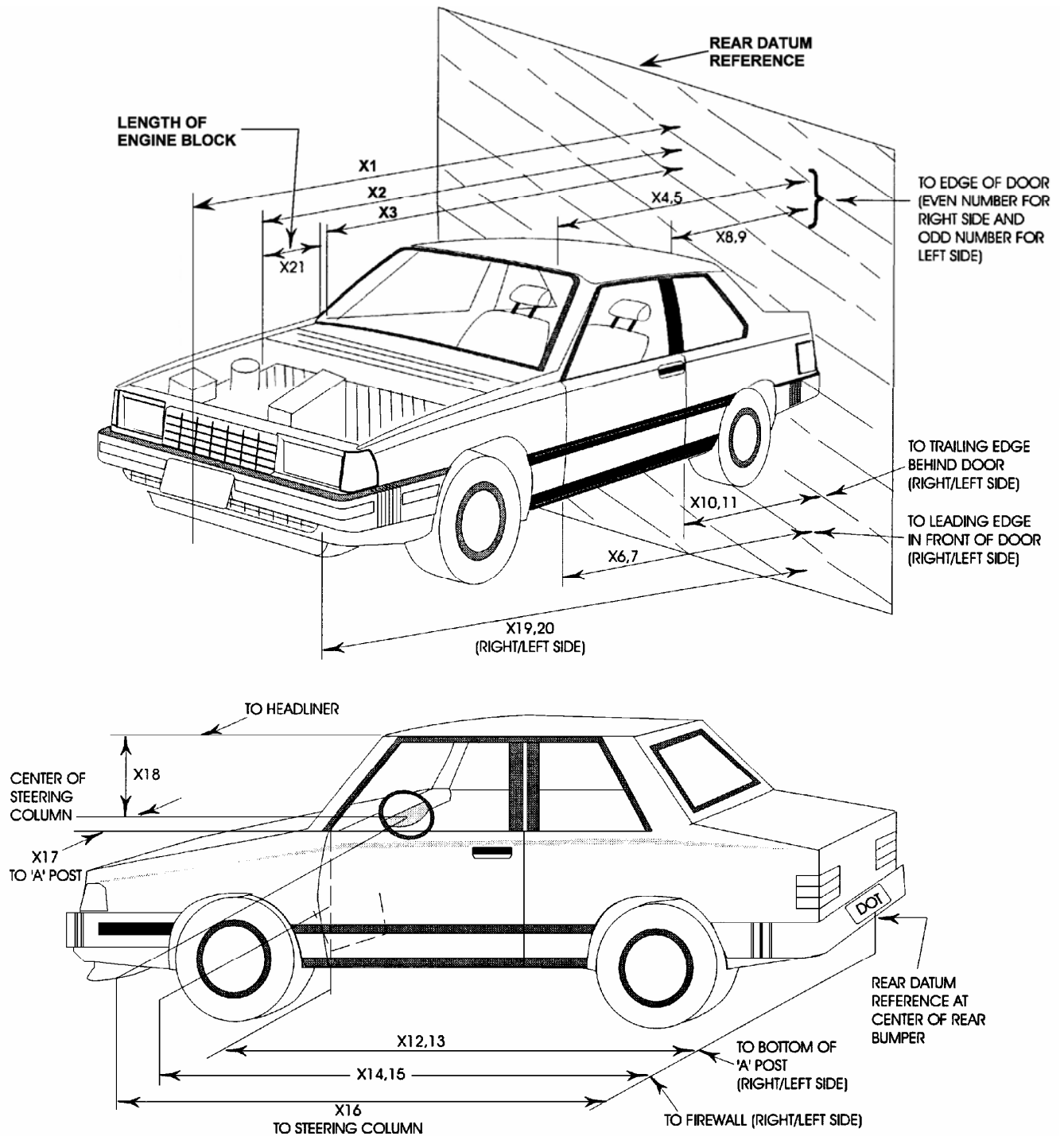
VEHICLE STRUCTURAL MEASUREMENT TABLE

No.	Measurement Description	Units	Pre-Test	Post-Test	Diff.
1	Total length	mm	4820	4256	-564
2	Total width	mm	1980	1956	-24
3	Bumper top height	mm	690	640	-50
4	Bumper bottom height	mm	455	219	-236
5	Longitudinal member top height	mm	611	623	12
6	Longitudinal member bottom height	mm	511	506	-5
7	Distance between longitudinal members	mm	1005	910	-95
8	Longitudinal member width	mm	55	48	-7
9	Engine top height	mm	947	861	-86
10	Engine bottom height	mm	231	194	-37
11	Engine and gear box width	mm	870	870	0
12	Front bumper to engine distance	mm	480	253	-227
13	Front shock absorber fixing width	mm	1000	1055	55
14	Bonnet leading edge height	mm	985	955	-30
15	Front shock absorber fixing width	mm	1260	1300	40
16	Front bumper to front axle distance	mm	1005	1070	65
17	Front axle to 'A' pillar distance	mm	520	460	-60
18	'A' pillar to 'B' pillar distance	mm	1040	1040	0
19	'B' pillar to rear axle distance	mm	1245	1244	-1
20	'B' pillar to 'C' pillar distance	mm	1020	1015	-5
21	Roof sill bottom height	mm	1550	1519	-31
22	Roof sill top height	mm	1670	1690	20
23	Floor sill bottom height	mm	330	378	48
24	Floor sill top height	mm	482	530	48

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

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

NHTSA No.: M75302
 Test Date: 12/5/06



DATA SHEET NO. 14
CAMERA LOCATIONS

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

NHTSA No.: M75302
Test Date: 12/5/06

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)	-16589	-7485	-1475	0			30
2	Overall Left Side	-2458	-7598	-1208	0	8324	20mm	1000
3	Closeup Left Side	-1682	-7487	-1247	0	8239	50mm	1000
4	Driver and Interior View	-8696	-12562	-4511	-17	15570	ZOOM	1000
5	Steering Column (Bottom)	-1631	-8234	-2682	-13	9453	35mm	1000
6	Steering Column (Top)	-1663	-8153	-3078	-13	9549	35mm	1000
7	Overall Right Side	-2985	3981	-1123	0	4391	20mm	1000
8	Closeup Right Side	-2194	6598	-1167	0	6680	50mm	1000
9	Passenger and Interior View	-5330	9365	-2407	-10	10211	ZOOM	1000
10	Right Side View	-2006	6967	-1463	-6	7134	ZOOM	1000
11	Windshield View	-589	0	-5556	-90		24mm	1000
12	Driver Front View	378	-286	-2438	-34		25mm	1000
13	Passenger Front View	375	413	-2439	-34		25mm	1000
14	Pit View of Engine	-756	0	1495	90		12mm	1000
15	Pit View of Fuel Tank	-3398	0	1495	90		8mm	1000
16	Driver Side O.B.	-2481	358	-1221	-7		12mm	1000
17	Passenger Side O.B.	-2481	-346	-1221	-7		12mm	1000
18	Real Time Driver	-2458	-7598	1301	-1			30
19	Real Time Passenger	-2985	3981	-1284	-1			30

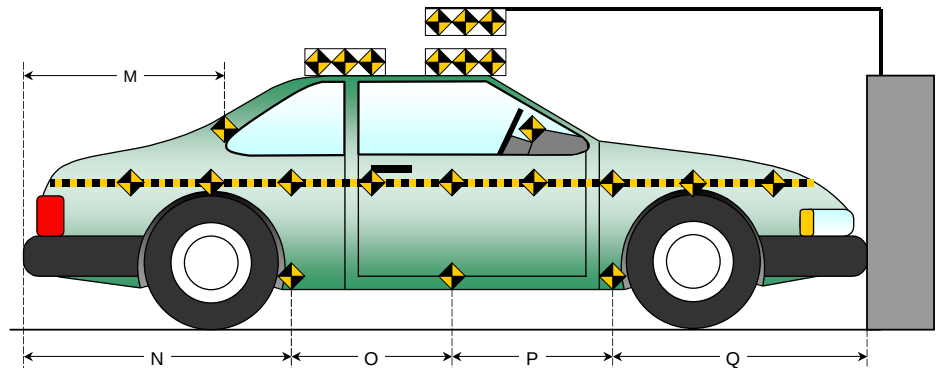
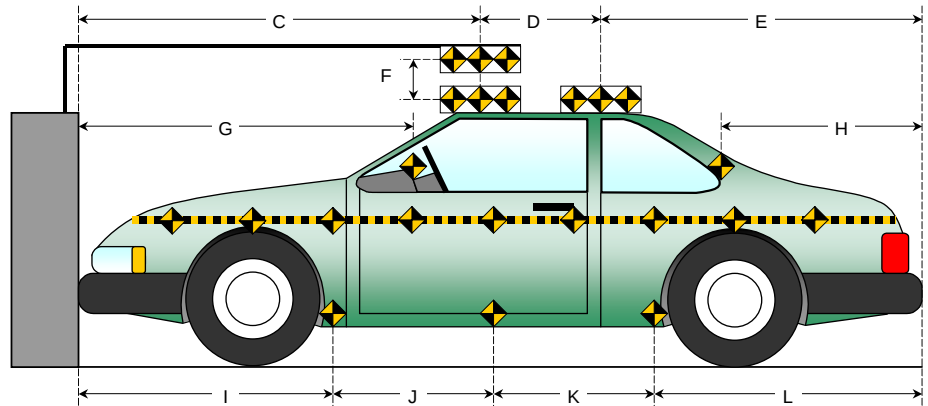
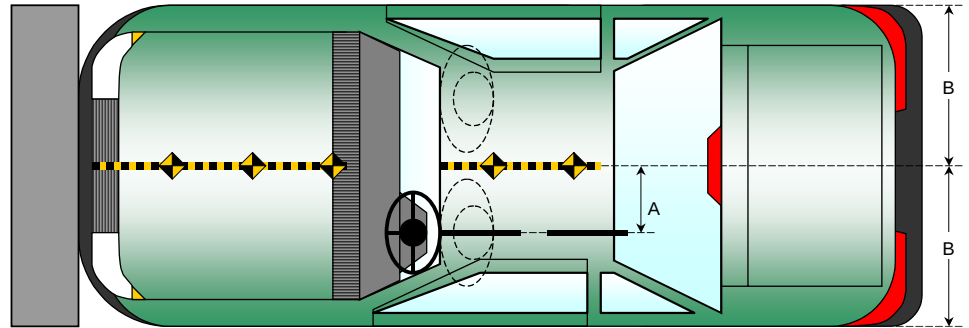
All measurements are relative to the point of impact.

DATA SHEET NO. 15
PHOTOGRAPHIC REFERENCE TARGET LOCATIONS

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

NHTSA No.: M75302
 Test Date: 12/5/06

All Dimensions in (mm)	
Item	Value
A	
B	990
C	
D	
E	
F	
G	8
H	1400
I	1541
J	820
K	821
L	1634
M	1400
N	1634
O	821
P	821
Q	1541



DATA SHEET NO. 16
VEHICLE INTRUSION MEASUREMENTS

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

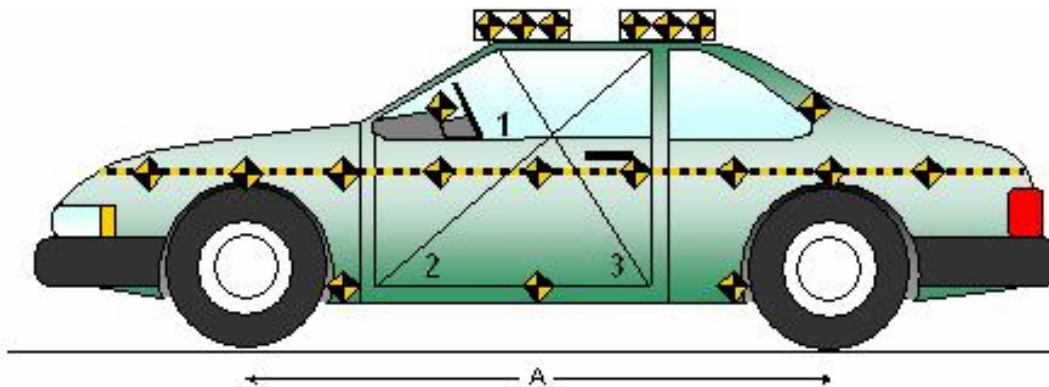
NHTSA No.: M75302
 Test Date: 12/5/06

DOOR OPENING WIDTH TABLE

Item	Description	Units	Pre-Test	Post-Test	Diff.
R1	Passenger side upper opening	mm	945	945	0
R2	Passenger side diagonal opening	mm	1461	1444	-17
R3	Passenger side diagonal opening	mm	1036	1035	-1
L1	Passenger side upper opening	mm	956	938	-18
L2	Passenger side upper opening	mm	1478	1470	-8
L3	Passenger side upper opening	mm	1021	1018	-3

WHEELBASE MEASUREMENT TABLE

Item	Description	Units	Pre-Test	Post-Test	Diff.
A	Left Side Wheel Base	mm	2755	2664	-91
A	Right Side Wheel Base	mm	2755	2669	-86



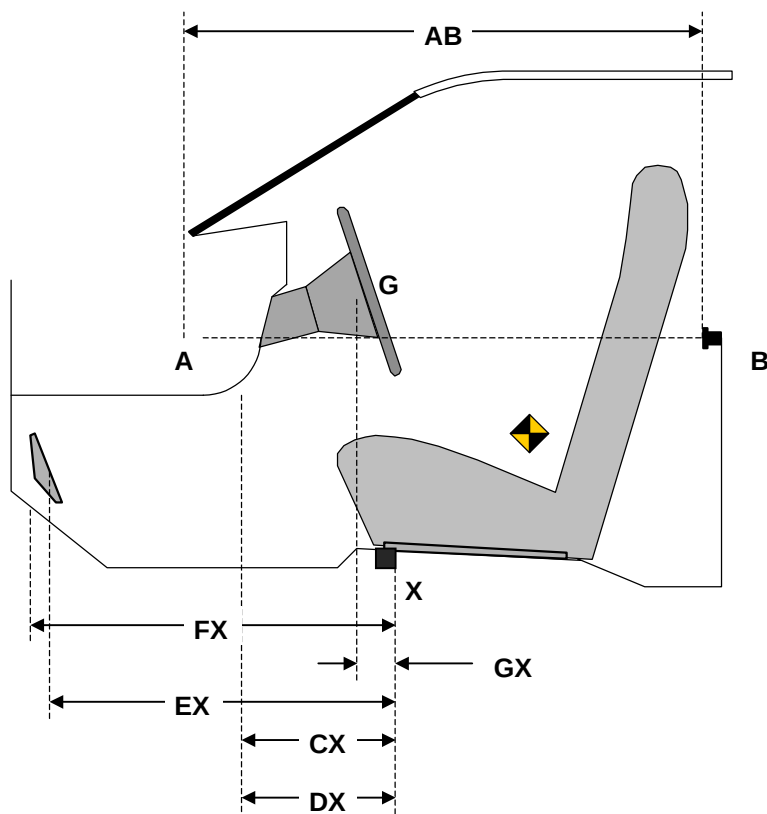
DATA SHEET NO. 16...(CONTINUED)
VEHICLE INTRUSION MEASUREMENTS

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

NHTSA No.: M75302
 Test Date: 12/5/06

DRIVER COMPARTMENT INTRUSION TABLE

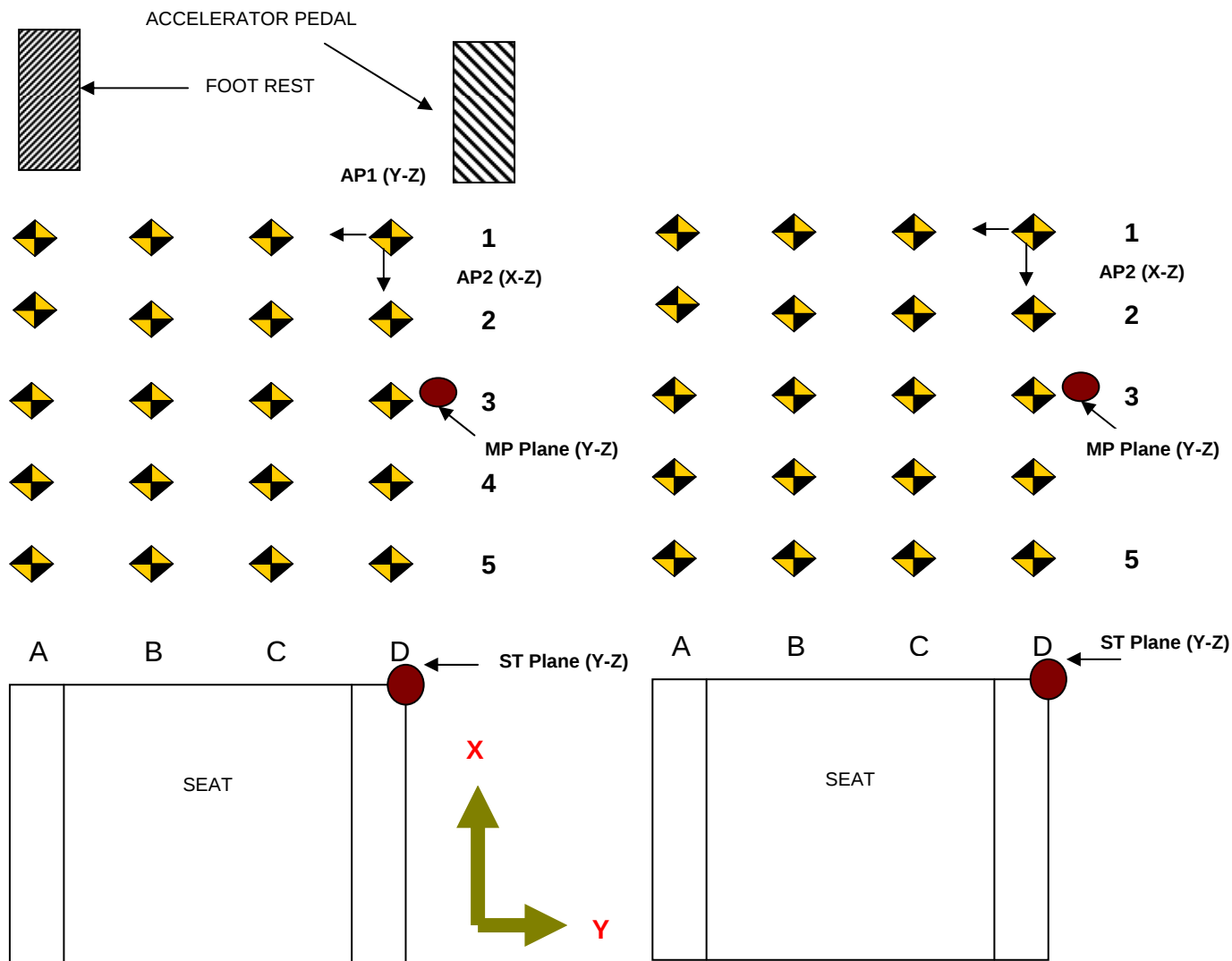
Item	Description	Units	Pre-Test	Post-Test	Diff.
AB	Door Opening (Inside window jam)	mm	946	860	-86
CX	Left Knee Bolster to X	mm	293	258	-35
DX	Right Knee Bolster to X	mm	280	280	0
EX	Brake Pedal to X	mm	531	550	19
FX	Foot Rest to X	mm	560	595	35
GX	Center of Steering Wheel Hub to X	mm	96	142	46



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

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

NHTSA No.: M75302
 Test Date: 12/5/06



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

NHTSA No.: M75302
 Test Date: 12/5/06

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	640	676	689	691	614	639	644	614	-26	-37	-45	-77
2	550	604	602	596	530	572	563	525	-20	-32	-39	-71
3	495	505	504	512	488	494	480	465	-7	-11	-24	-47
4	392	393	398	403	393	383	373	359	1	-10	-25	-44
5	292	293	307	315	291	281	285	277	-1	-12	-22	-38

DRIVER FLOOR PAN Y-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	-23	94	196	360	66	181	283	442	89	87	87	82
2	-26	89	196	381	40	166	271	442	66	77	75	61
3	-28	86	202	388	27	148	265	448	55	62	63	60
4	-20	94	206	395	34	145	258	438	54	51	52	43
5	-16	95	215	401	25	136	254	427	41	41	39	26

DRIVER FLOOR PAN Z-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	-137	-17	-4	-15	-154	-24	-4	-4	-17	-7	0	11
2	-48	39	46	35	-58	44	59	45	-10	5	13	10
3	50	68	71	75	45	73	92	109	-5	5	21	34
4	64	69	71	79	69	79	90	131	5	10	19	52
5	66	69	72	87	69	84	102	137	3	15	30	50

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

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

NHTSA No.: M75302
 Test Date: 12/5/06

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	631	653	654	628	571	636	645	604	-60	-17	-9	-24
2	542	585	592	595	520	583	585	583	-22	-2	-7	-12
3	442	452	464	489	443	467	480	502	1	15	16	13
4	344	346	357	363	351	359	365	381	7	13	8	18
5	235	247	244	258	266	266	259	266	31	19	15	8

PASSENGER FLOOR PAN Y-AXIS

	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	-471	-374	-267	-49	-463	-380	-261	-42	8	-6	6	7
2	-485	-382	-252	-24	-482	-384	-256	-29	3	-2	-4	-5
3	-483	-371	-249	-19	-495	-388	-252	-25	-12	-17	-3	-6
4	-489	-372	-243	-27	-493	-379	-245	-23	-4	-7	-2	4
5	-486	-375	-231	-10	-494	-376	-245	-16	-8	-1	-14	-6

PASSENGER FLOOR PAN Z-AXIS

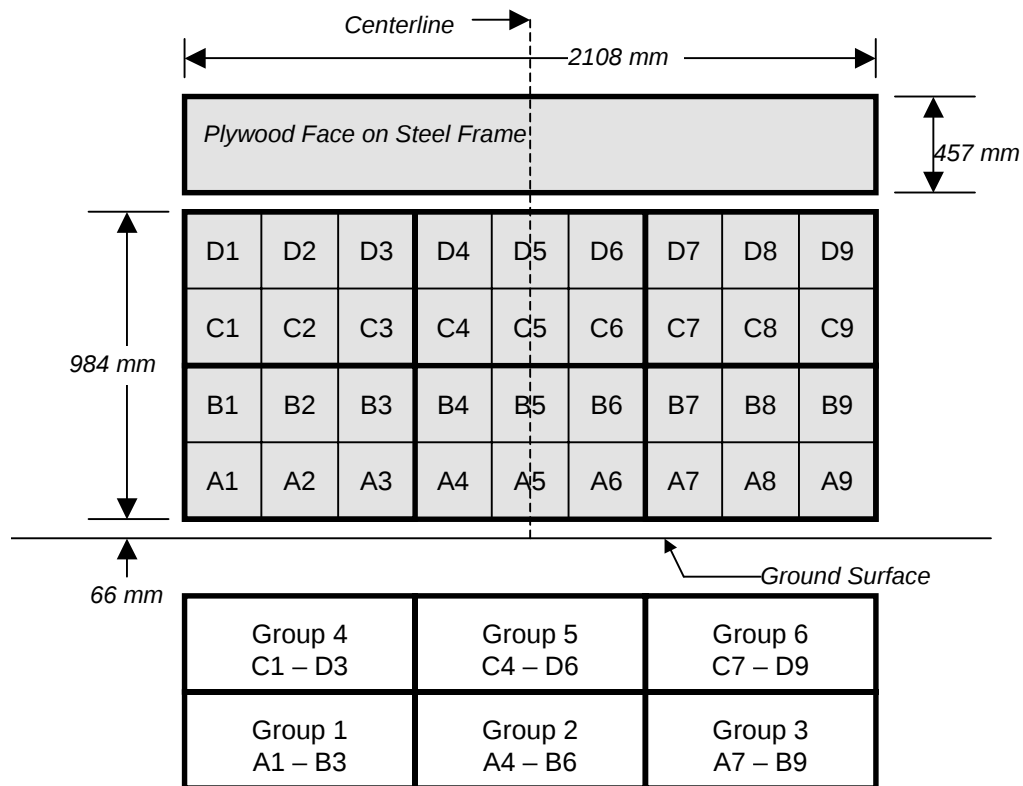
	Pre-Test				Post-Test				Difference			
	A	B	C	D	A	B	C	D	A	B	C	D
1	-46	4	-14	-73	-86	-30	-30	-90	-40	-34	-16	-17
2	15	44	40	-5	-2	25	15	-24	-17	-19	-25	-19
3	43	67	54	64	37	60	62	62	-6	-7	8	-2
4	47	74	61	61	56	77	62	56	9	3	1	-5
5	57	45	59	79	25	32	72	67	-32	-13	13	-12

DATA SHEET NO. 17
FIXED BARRIER LOAD CELL LOCATIONS

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

NHTSA No.: M75302
 Test Date: 12/5/06

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

NHTSA No.: M75302
 Test Date: 12/5/06

VEHICLE INFORMATION

VIN: 2HNYD28257H500261
 Vehicle Size Category: 5-Door

Wheel base (mm): 2755
 Test Weight (kg): 2254

ACCELEROMETER DATA

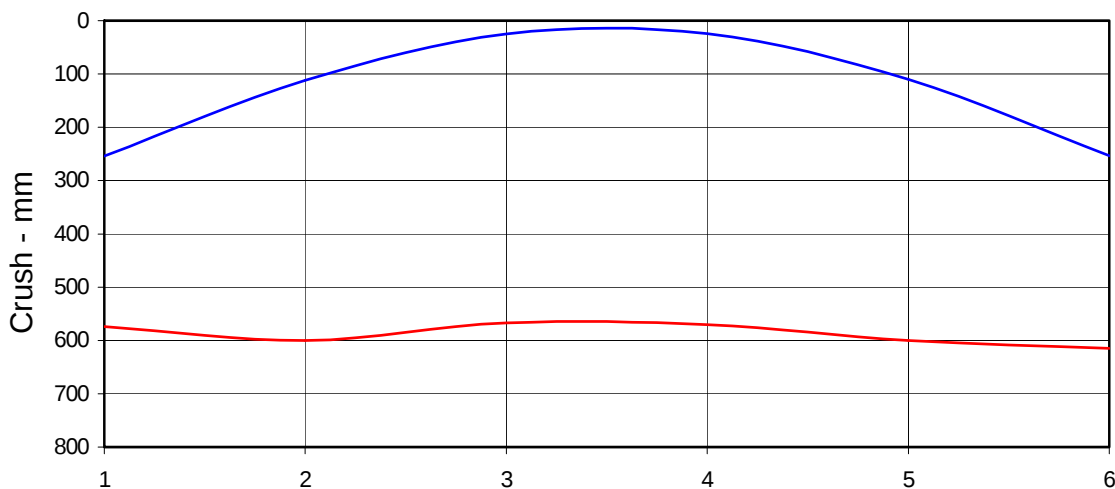
Accelerometer Location: Left rear cross member
 Cal. Procedure/Interval: 6 months / drop test
 Integration Algorithm: NHTSA Standard
 Impact Velocity (km/h): 56.52
 Velocity Change (km/h): 64.3

Linearity: Good
 Time of Separation (msec): 70.2

CRUSH PROFILE

Collision Deformation Classification: 12FDEW6 Midpoint of Damage: Vehicle Centerline
 Damage Region Length (mm): 1486 Impact Mode: Full Frontal

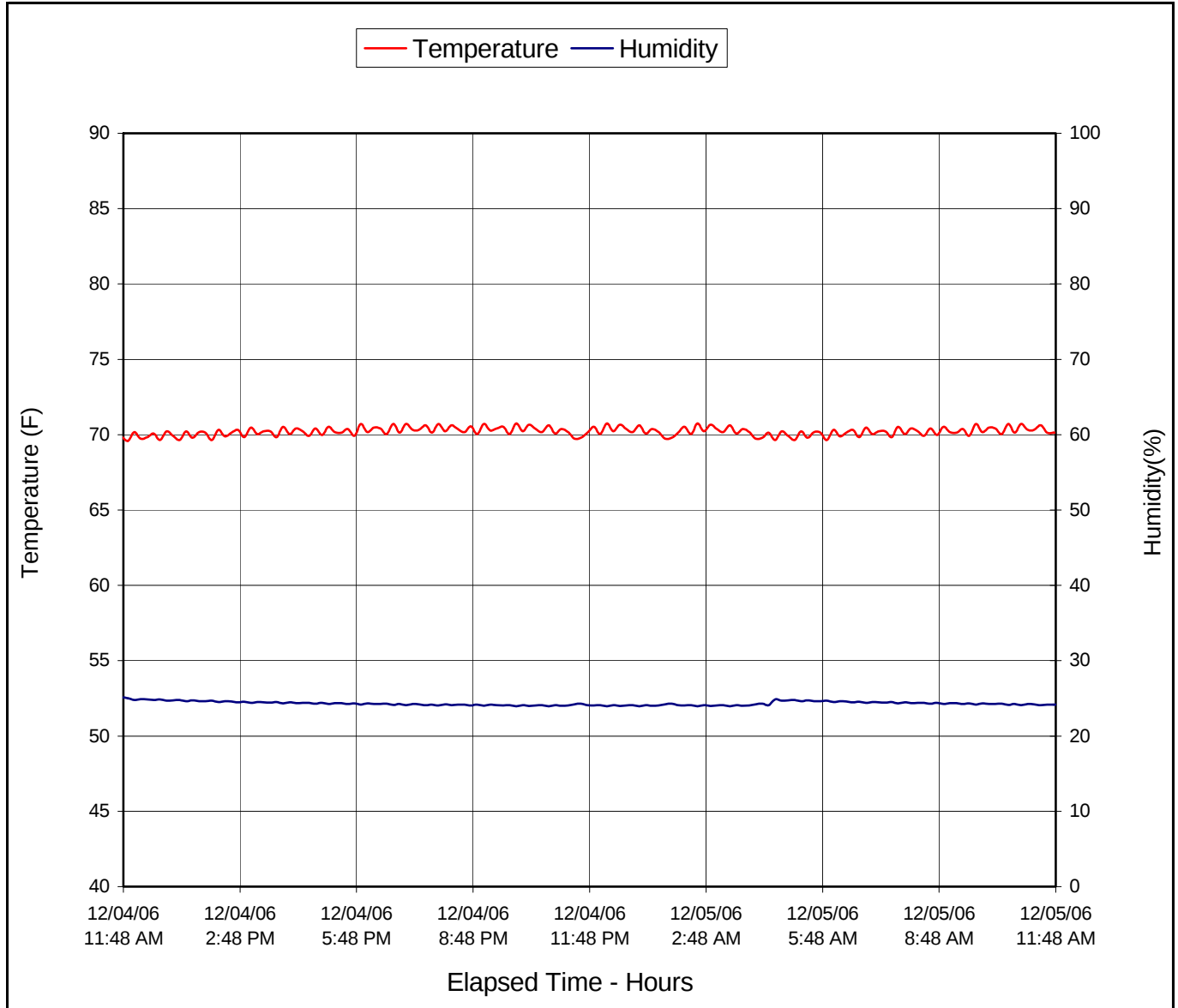
No.	Measurement Description	Units	Pre-Test	Post-Test	Difference
C1	Crush zone 1 at left side	mm	254	574	-320
C2	Crush zone 2 on left side	mm	112	600	-488
C3	Crush zone 3 on left side	mm	25	567	-542
C4	Crush zone 4 on right side	mm	24	570	-546
C5	Crush zone 5 on right side	mm	110	600	-490
C6	Crush zone 6 at right side	mm	253	615	-362



DATA SHEET NO. 19
DUMMY/VEHICLE TEMPERATURE STABILIZATION

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

NHTSA No.: M75302
Test Date: 12/5/06



APPENDIX A
PHOTOGRAPHS

LIST OF PHOTOGRAPHS

Figure		Page
A-1	Load Cell Location	A-1
A-2	Manufacturer's Label	A-2
A-3	Tire Placard	A-3
A-4	Right Front $\frac{3}{4}$ View, As Received	A-4
A-5	Left Rear $\frac{3}{4}$ View, As Received	A-5
A-6	Pre-Test Front View	A-6
A-7	Post-Test Front View	A-7
A-8	Pre-Test Left Side View	A-8
A-9	Post-Test Left Side View	A-9
A-10	Pre-Test Right Side View	A-10
A-11	Post-Test Right Side View	A-11
A-12	Pre-Test Right Front $\frac{3}{4}$ View	A-12
A-13	Post-Test Right Front $\frac{3}{4}$ View	A-13
A-14	Pre-Test Left Rear $\frac{3}{4}$ View	A-14
A-15	Post-Test Left Rear $\frac{3}{4}$ View	A-15
A-16	Post-Test Left Side $\frac{3}{4}$ View of Doors After Impact	A-16
A-17	Post-Test Right Side $\frac{3}{4}$ View of Doors After Impact	A-17
A-18	Pre-Test Windshield	A-18
A-19	Post-Test Windshield	A-19
A-20	Pre-Test Engine Compartment	A-20
A-21	Post-Test Engine Compartment (Vehicle Moved)	A-21
A-22	Pre-Test Fuel Cap	A-22
A-23	Post-Test Fuel Cap	A-23
A-24	Pre-Test Front Underbody	A-24
A-25	Post-Test Front Underbody	A-25
A-26	Pre-Test Mid Underbody	A-26
A-27	Post-Test Mid Underbody	A-27
A-28	Pre-Test Rear Underbody	A-28
A-29	Post-Test Rear Underbody	A-29
A-30	Pre-Test Driver Dummy Front View (Head Position)	A-30
A-31	Post-Test Driver Dummy Front View (Head Position)	A-31
A-32	Pre-Test Driver Dummy (Through Window)	A-32
A-33	Post-Test Driver Dummy (Through Window)	A-33
A-34	Pre-Test Driver Dummy (Door Open)	A-34
A-35	Post-Test Driver Dummy (Door Open)	A-35

LIST OF PHOTOGRAPHS...(CONTINUED)

Figure		Page
A-36	Pre-Test Driver Dummy Feet	A-36
A-37	Post-Test Driver Dummy Feet	A-37
A-38	Pre-Test Driver Side Knee Bolster	A-38
A-39	Post-Test Driver Side Knee Bolster	A-39
A-40	Pre-Test Driver Side Floor Pan	A-40
A-41	Post-Test Driver Side Floor Pan	A-41
A-42	Post-Test Driver Dummy Head	A-42
A-43	Post-Test Driver Dummy Airbag Contact	A-43
A-44	Pre-Test Passenger Dummy Front View (Head Position)	A-44
A-45	Post-Test Passenger Dummy Front View (Head Position)	A-45
A-46	Pre-Test Passenger Dummy Front (Through Window)	A-46
A-47	Post-Test Passenger Dummy Front (Through Window)	A-47
A-48	Pre-Test Passenger Dummy (Door Open)	A-48
A-49	Post-Test Passenger Dummy (Door Open)	A-49
A-50	Pre-Test Passenger Dummy Feet	A-50
A-51	Post-Test Passenger Dummy Feet	A-51
A-52	Pre-Test Passenger Side Glove Box	A-52
A-53	Post-Test Passenger Side Glove Box	A-53
A-54	Pre-Test Passenger Side Floor Pan	A-54
A-55	Post-Test Passenger Side Floor Pan	A-55
A-56	Post-Test Passenger Dummy Head	A-56
A-57	Post-Test Passenger Dummy Airbag Contact	A-57
A-58	Vehicle on Rollover Device (0°)	A-58
A-59	Vehicle on Rollover Device (90°)	A-59
A-60	Vehicle on Rollover Device (180°)	A-60
A-61	Vehicle on Rollover Device (270°)	A-61
A-62	Vehicle Impact	A-62

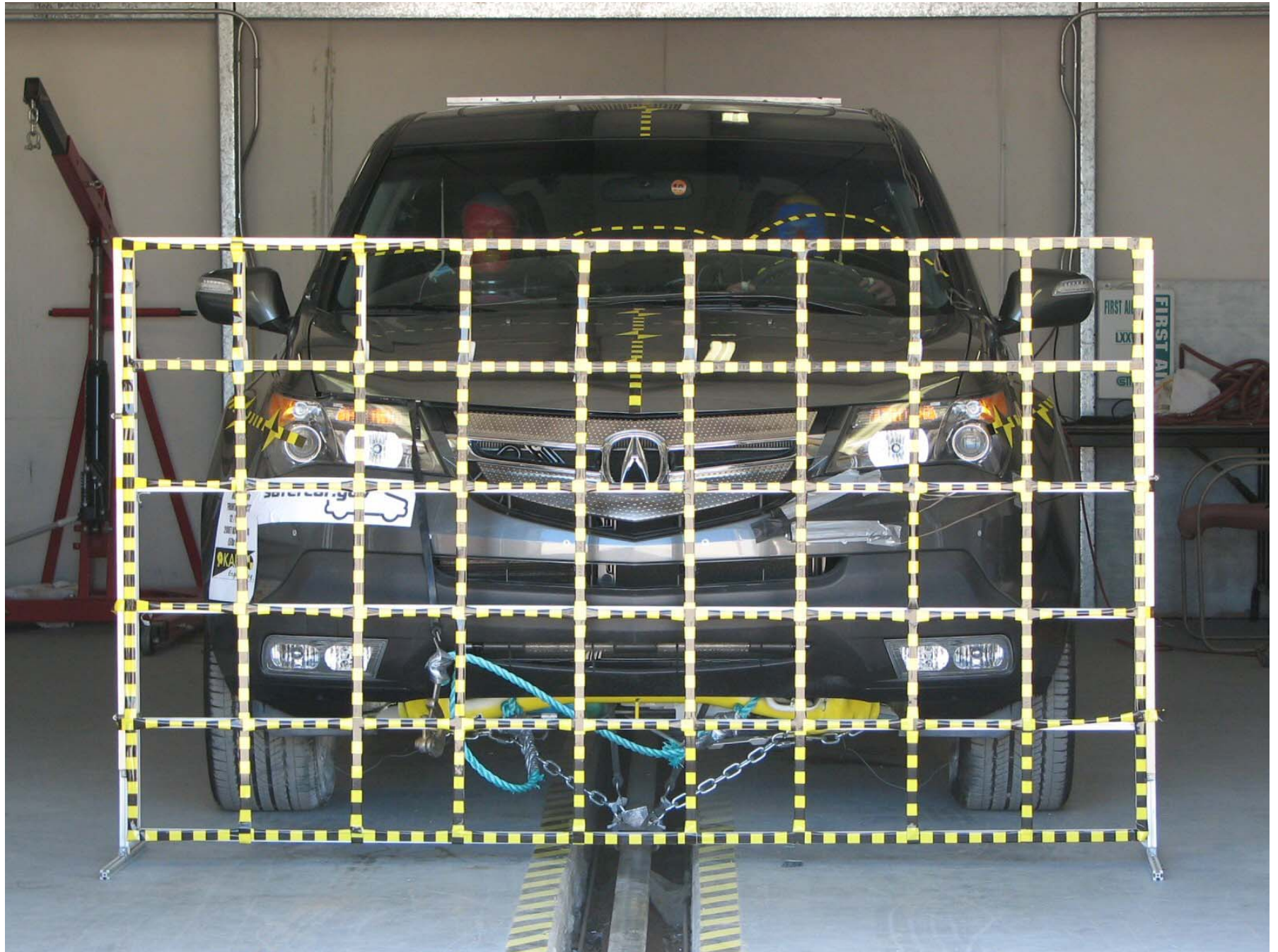


Figure A-1: Load Cell Location

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MFD. IN CANADA BY HONDA OF CANADA MFG.,
A DIVISION OF HONDA CANADA INC. 09/06
GVWR 2700KG(5952LBS) TIRE SIZE RIM SIZE
GAWR F 1310KG(2888LBS) P255/55R18 104H 18X8.0J
GAWR R 1440KG(3175LBS) P255/55R18 104H 18X8.0J
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.: 2HNYD28257H500261 TYPE: MPV



Figure A-2: Manufacturer's Label



TIRE AND LOADING INFORMATION

SEATING CAPACITY: TOTAL 7 : FRONT 2 : SECOND 3 : THIRD 2

The combined weight of occupants and cargo should never exceed 525kg or 1158lbs.

TIRE	SIZE	COLD TIRE PRESSURE	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION
FRONT	P255/55R18 104H	220KPA, 32PSI	
REAR		220KPA, 32PSI	
SPARE	T165/80D17 104M	420KPA, 60PSI	

STXA

Figure A-3: Tire Placard



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



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

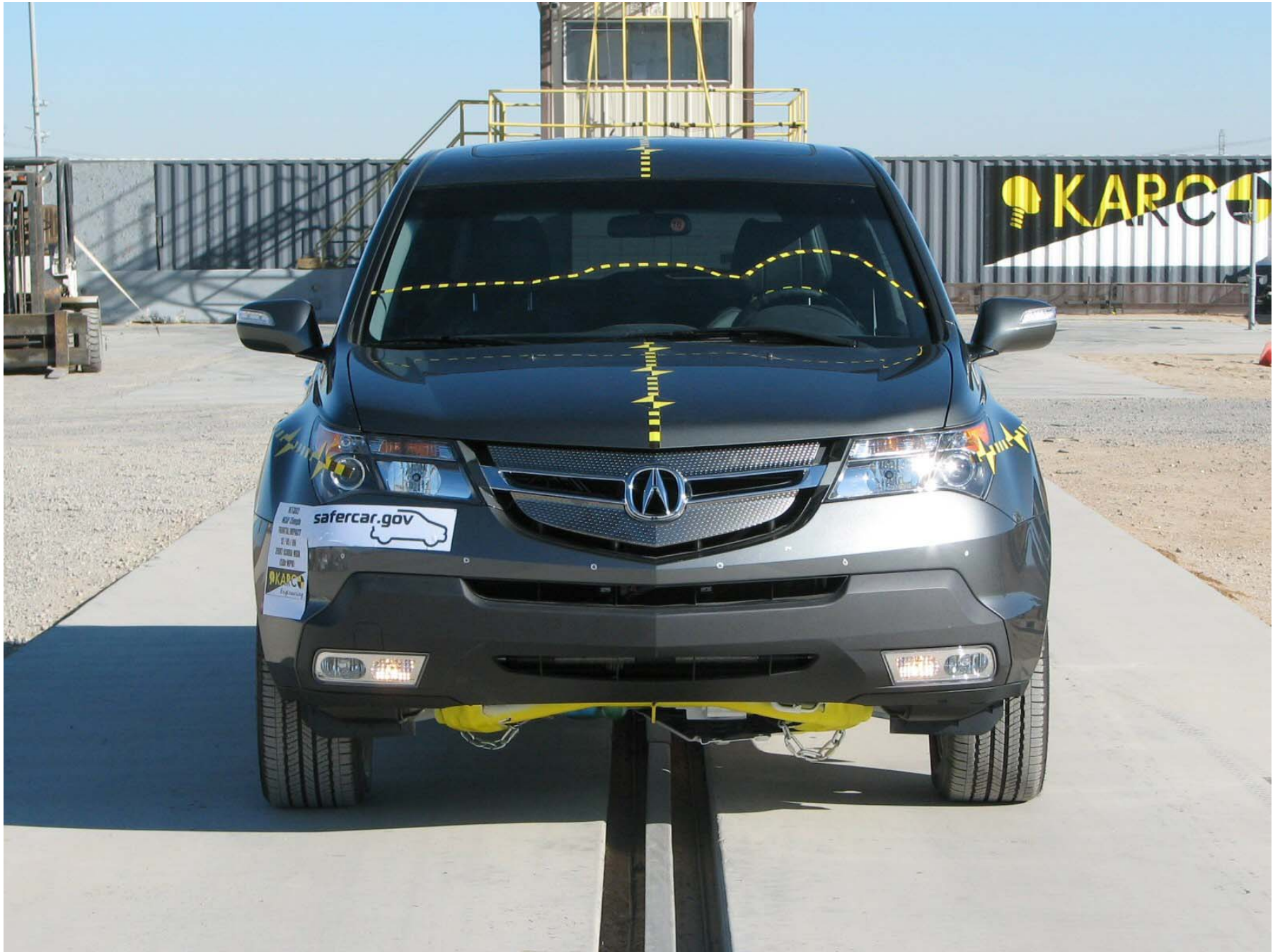


Figure A-6: Pre-Test Front View

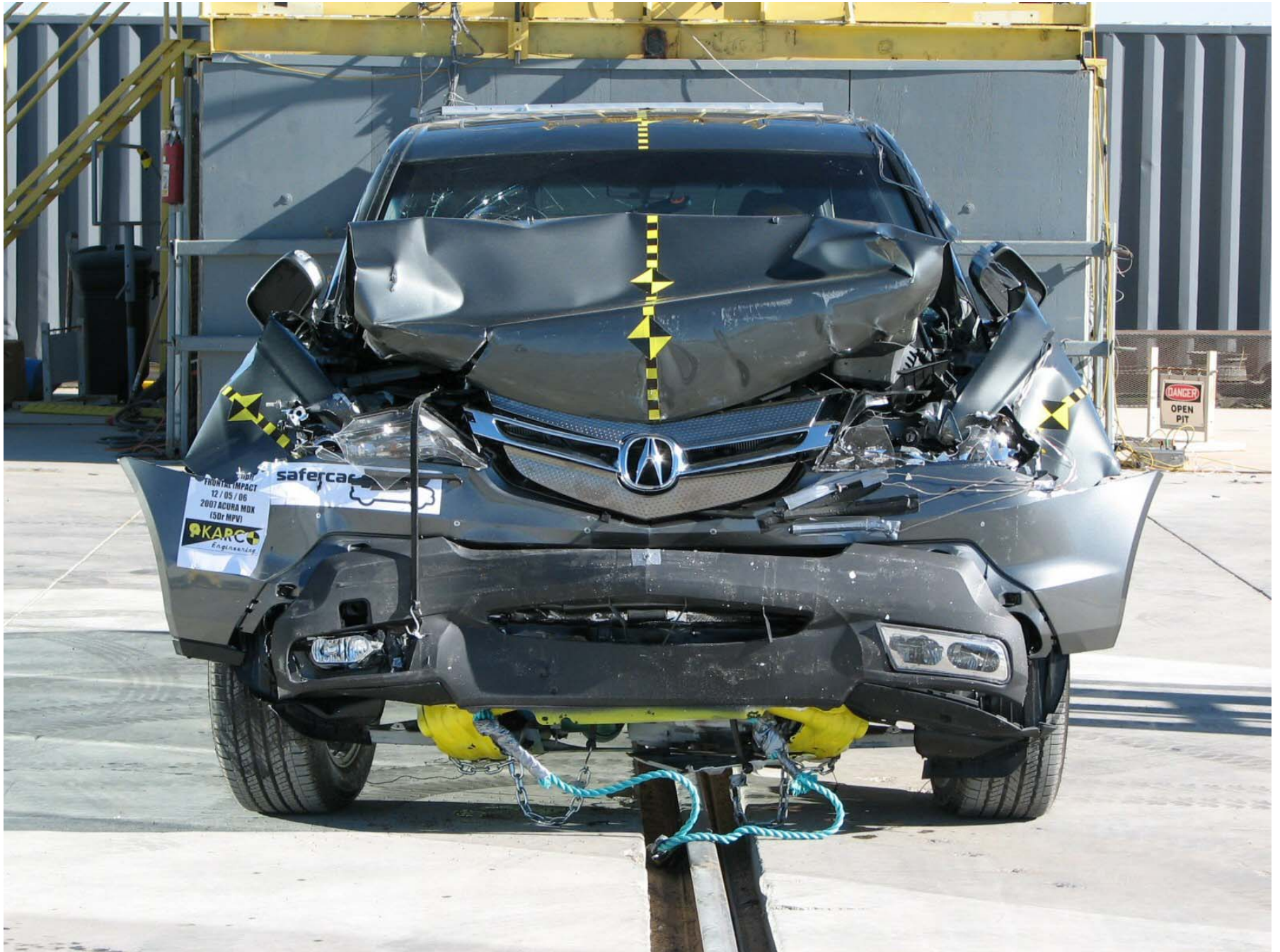


Figure A-7: Post-Test Front View (Vehicle Moved)



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 ¾ 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 $\frac{3}{4}$ View



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



Figure A-17: Post-Test Right Side $\frac{3}{4}$ View of Doors After Impact

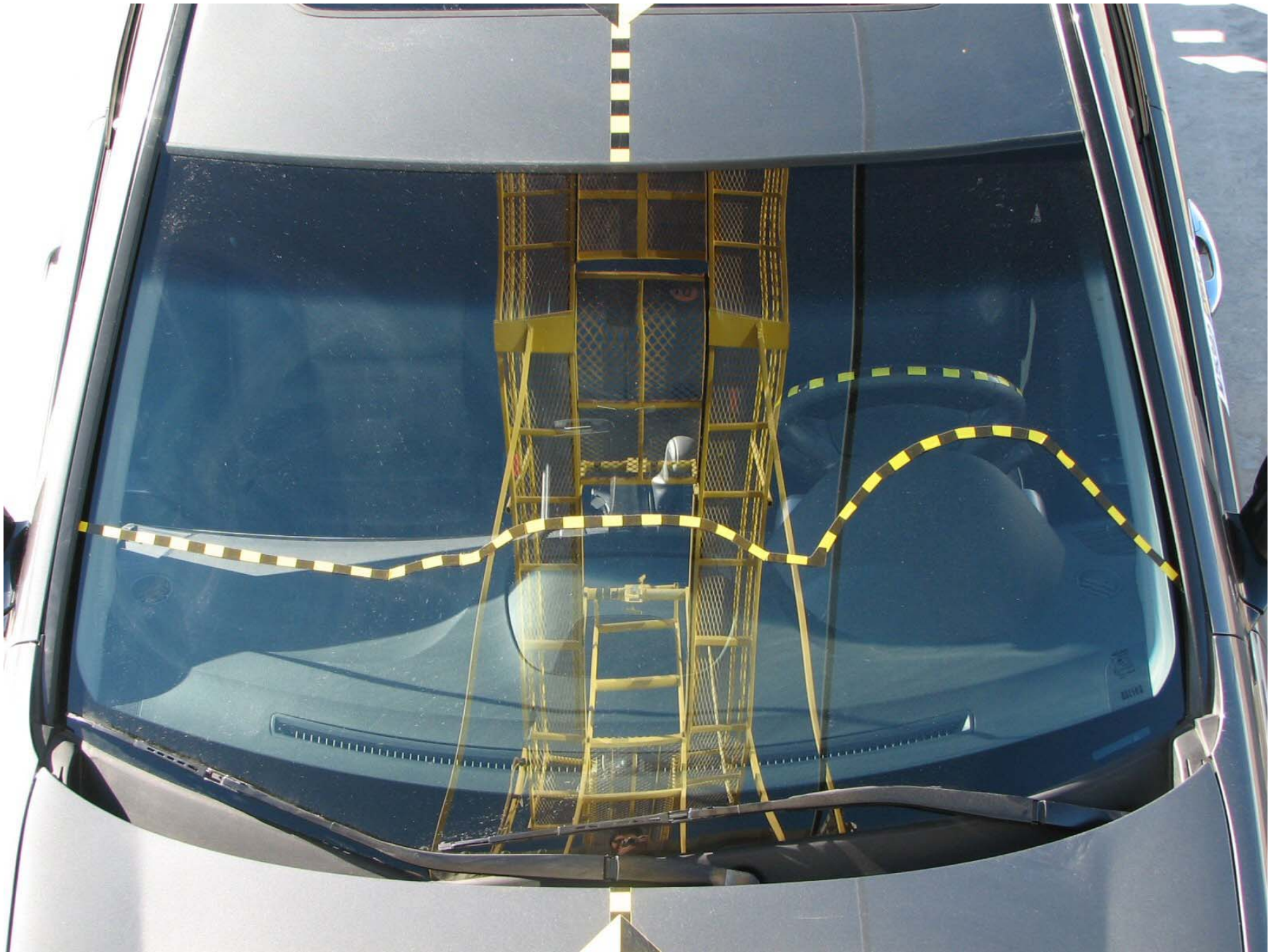


Figure A-18: Pre-Test Windshield



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

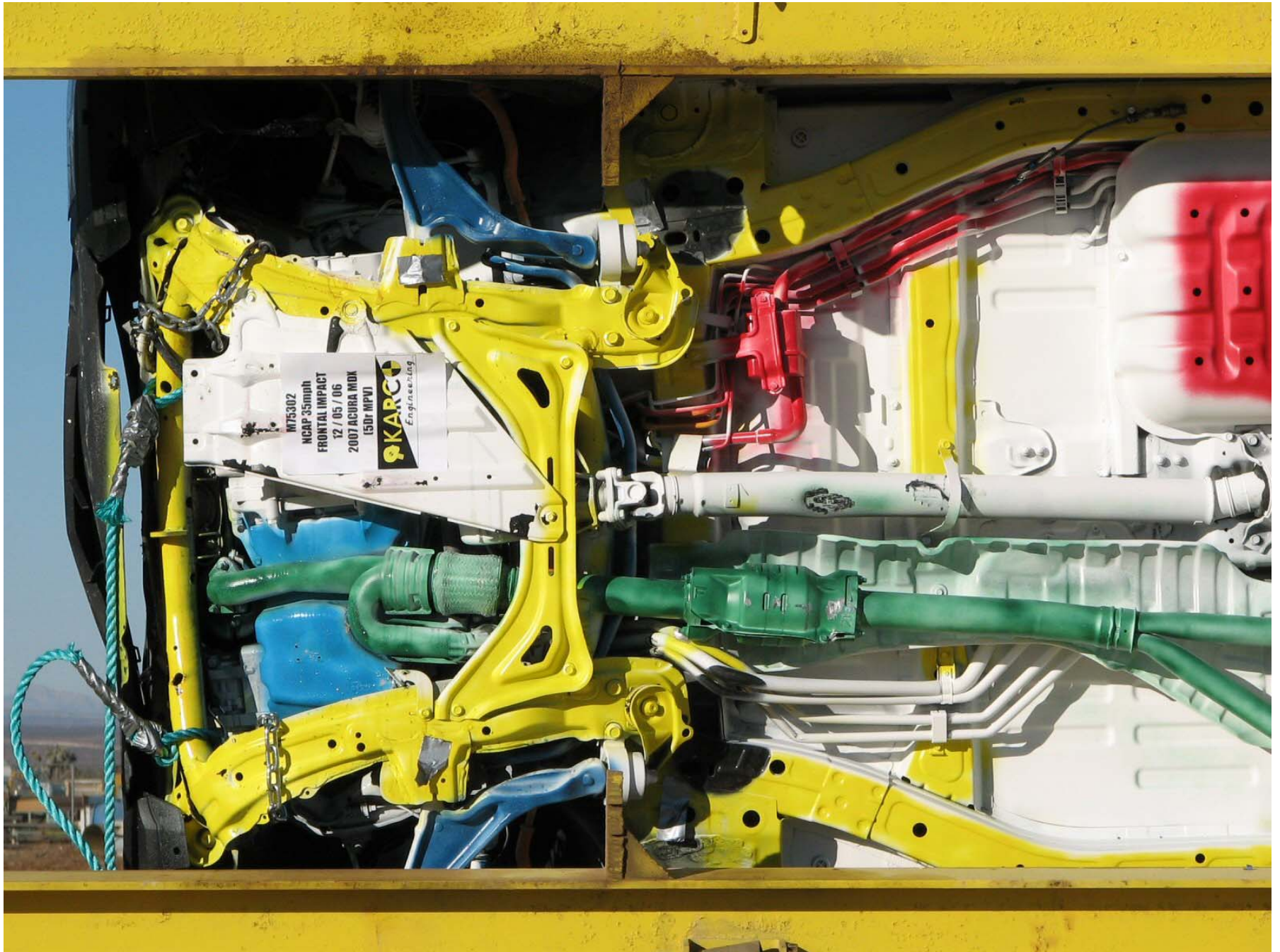


Figure A-25: Post-Test Front Underbody

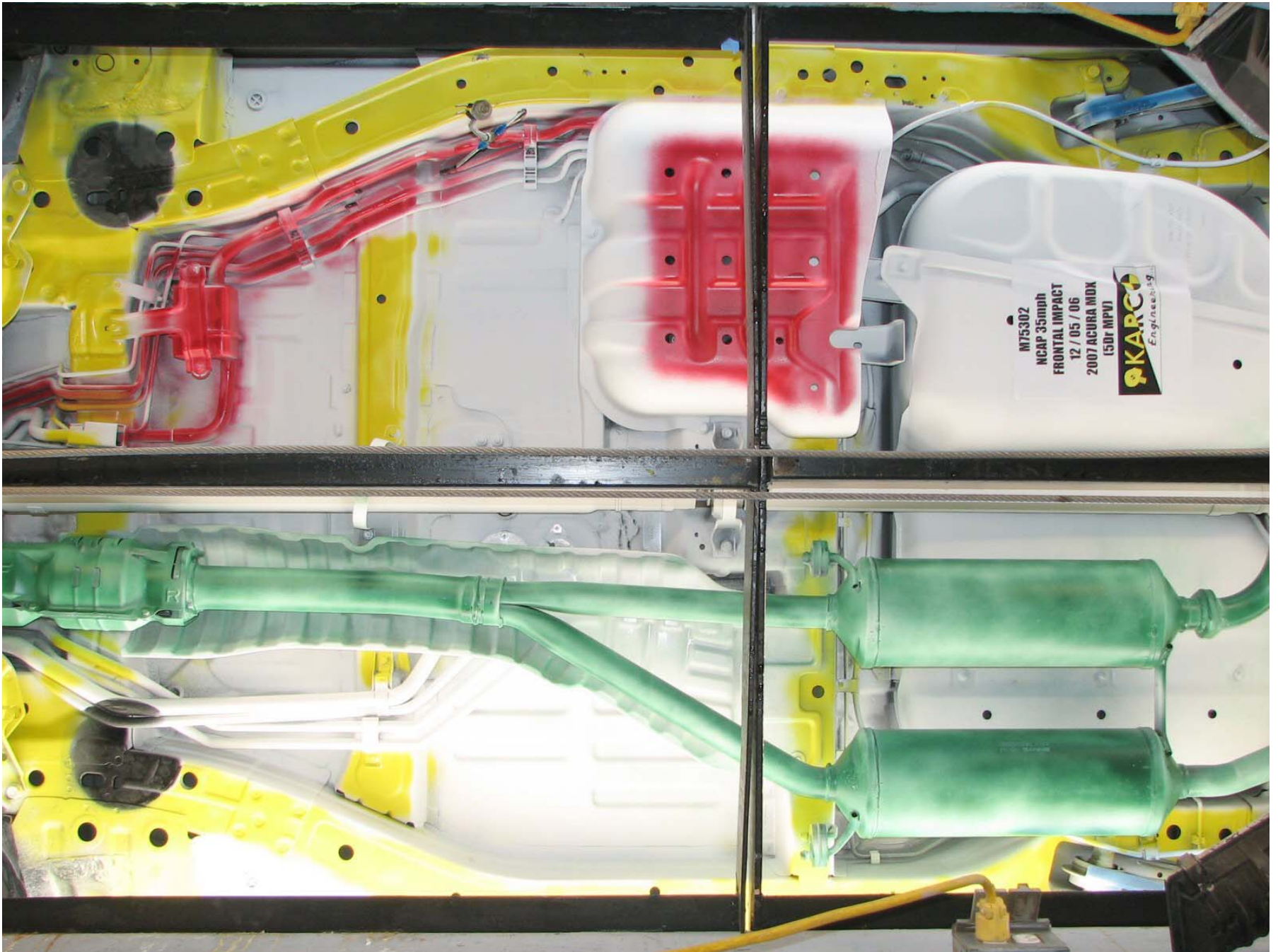


Figure A-26: Pre-Test Mid Underbody

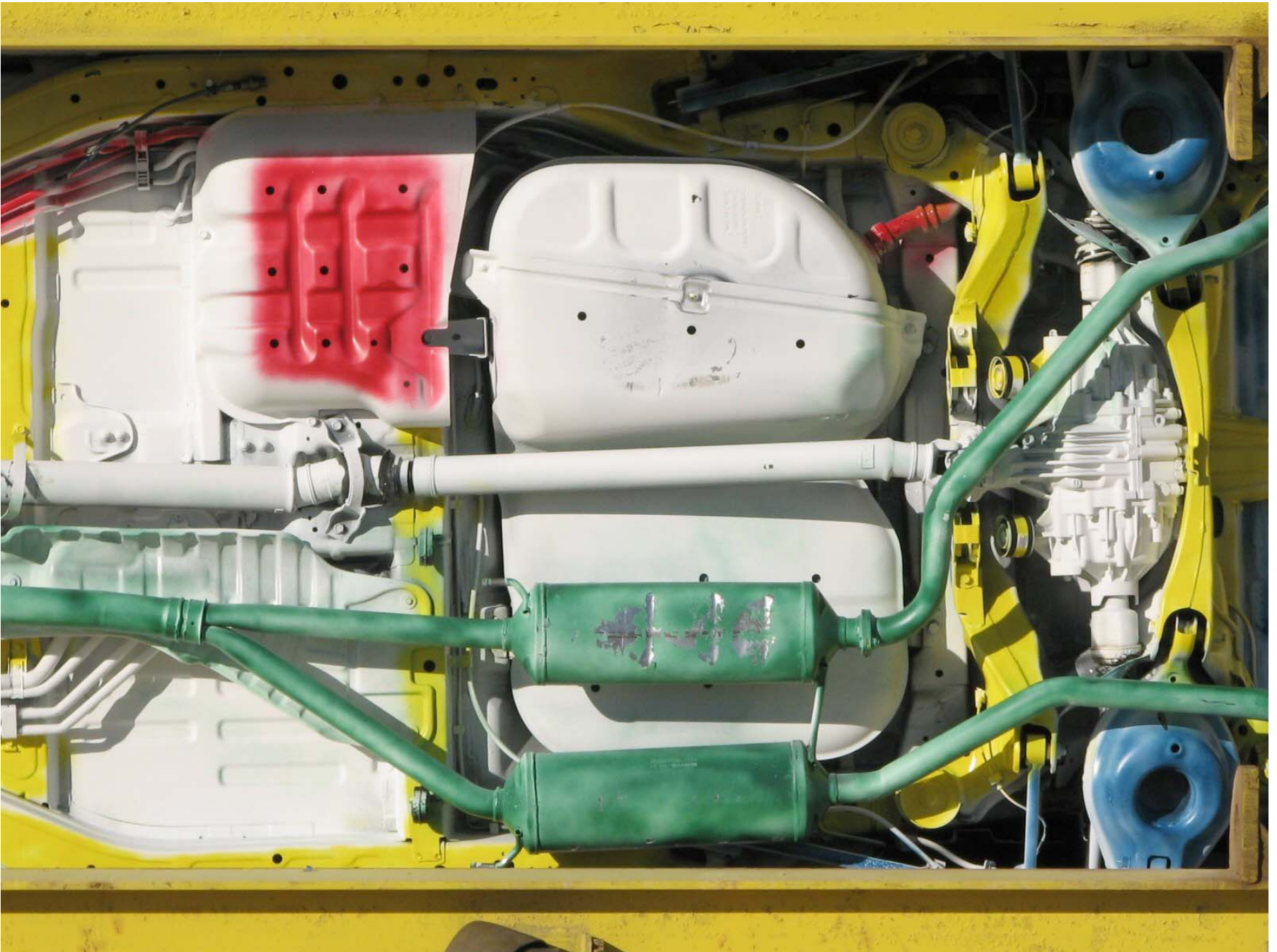


Figure A-27: Post-Test Mid Underbody

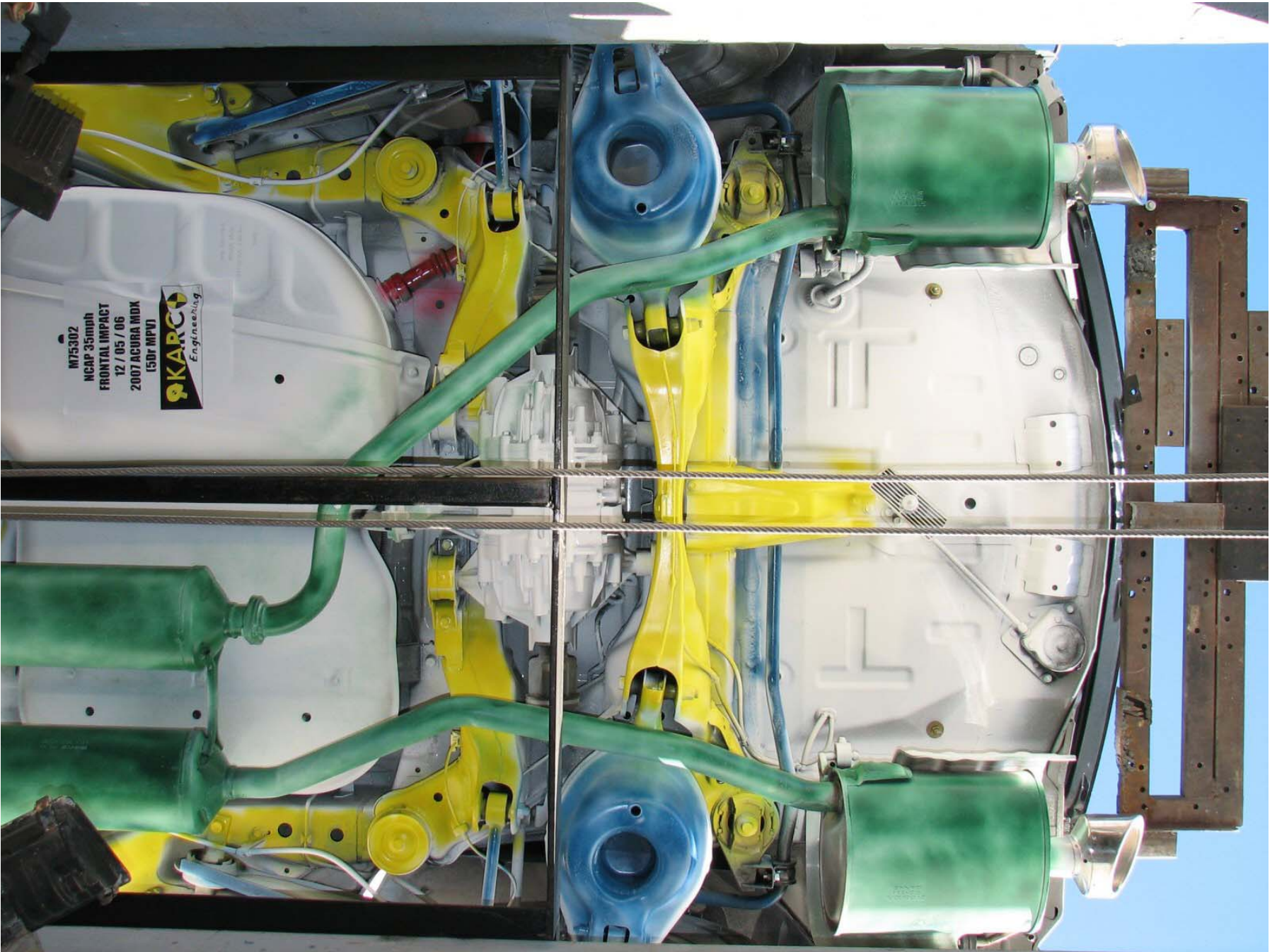


Figure A-28: Pre-Test Rear Underbody

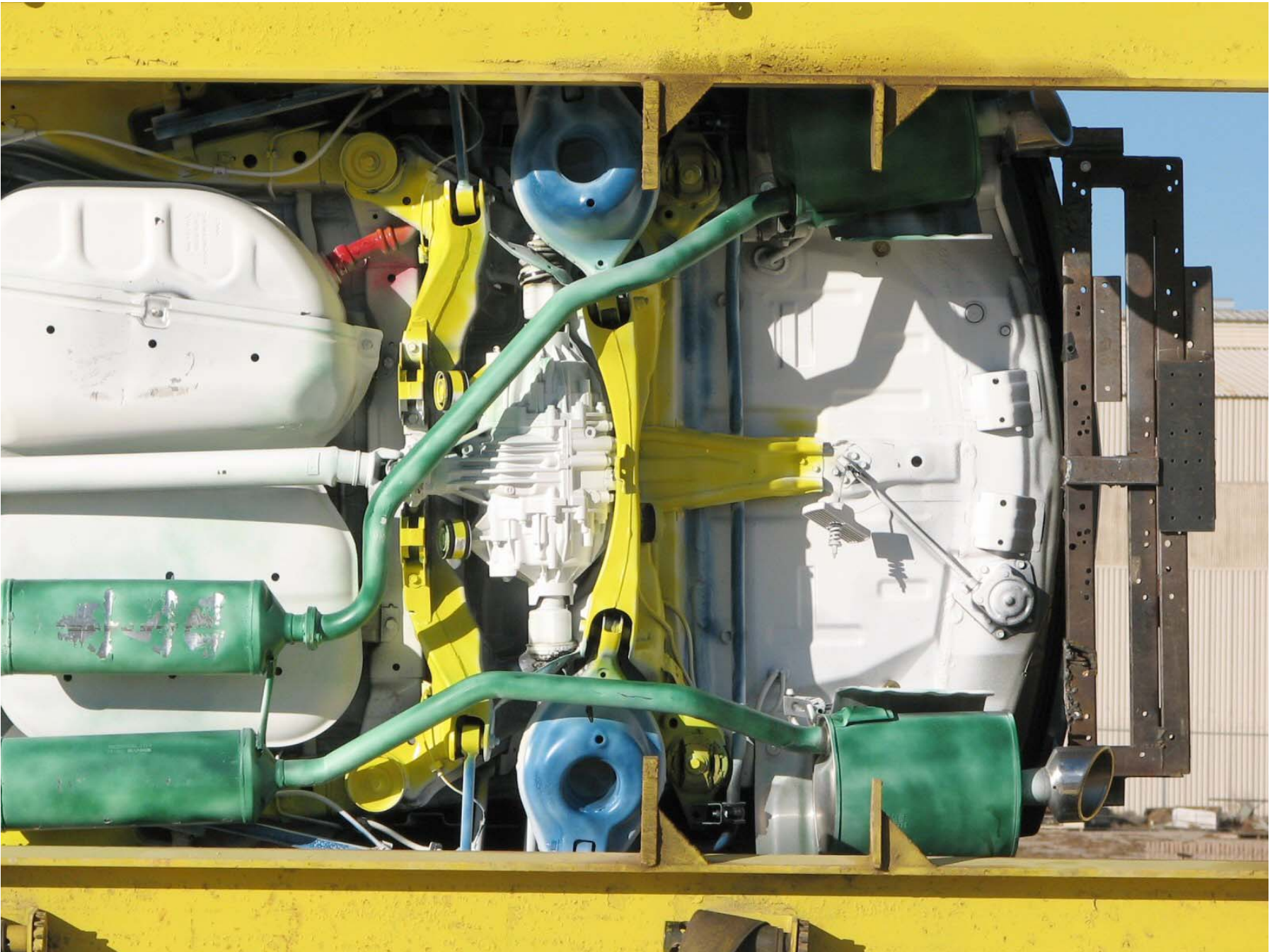


Figure A-29: Post-Test Rear Underbody



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

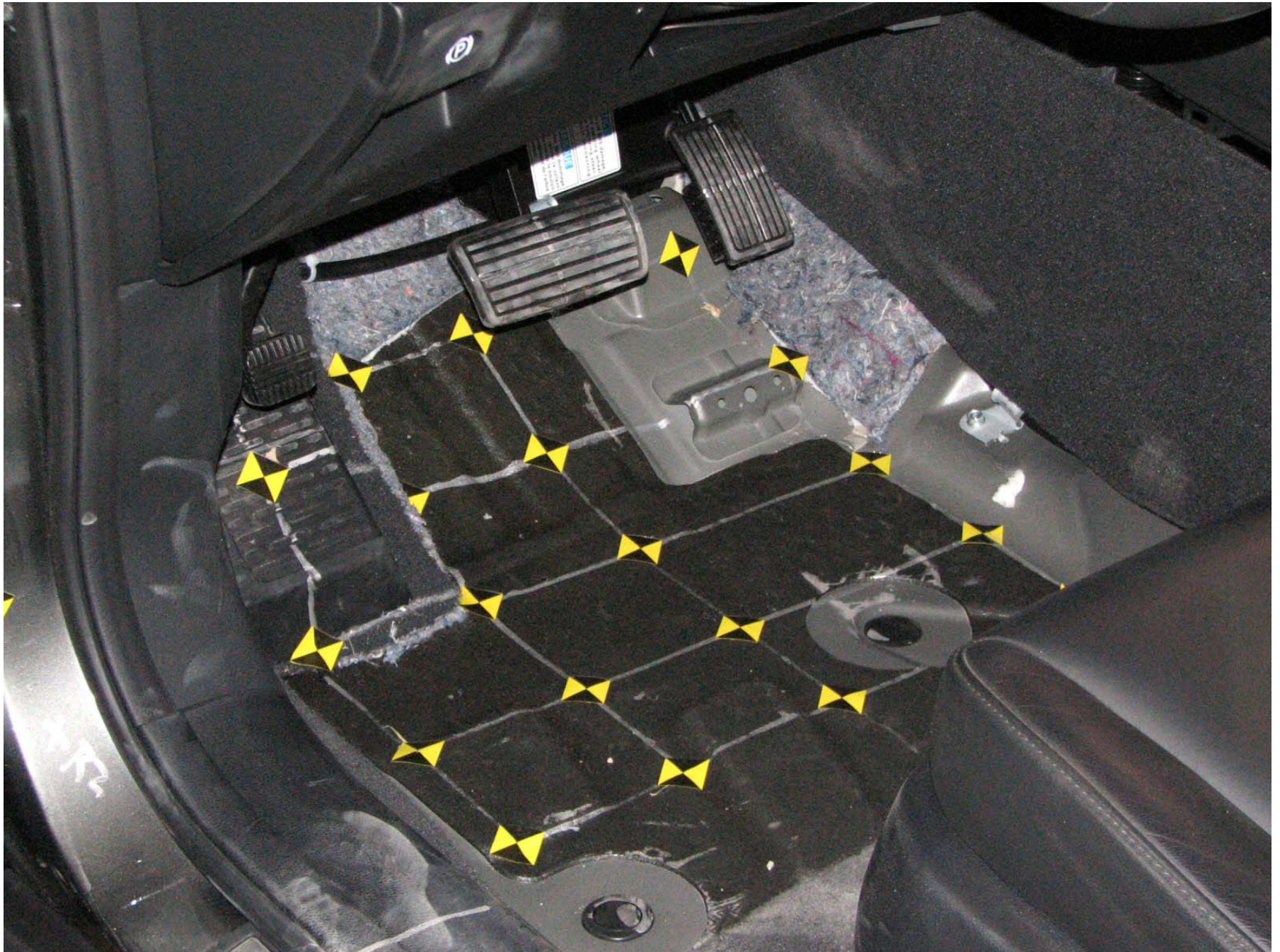


Figure A-40: Pre-Test Driver Side Floor Pan



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°)

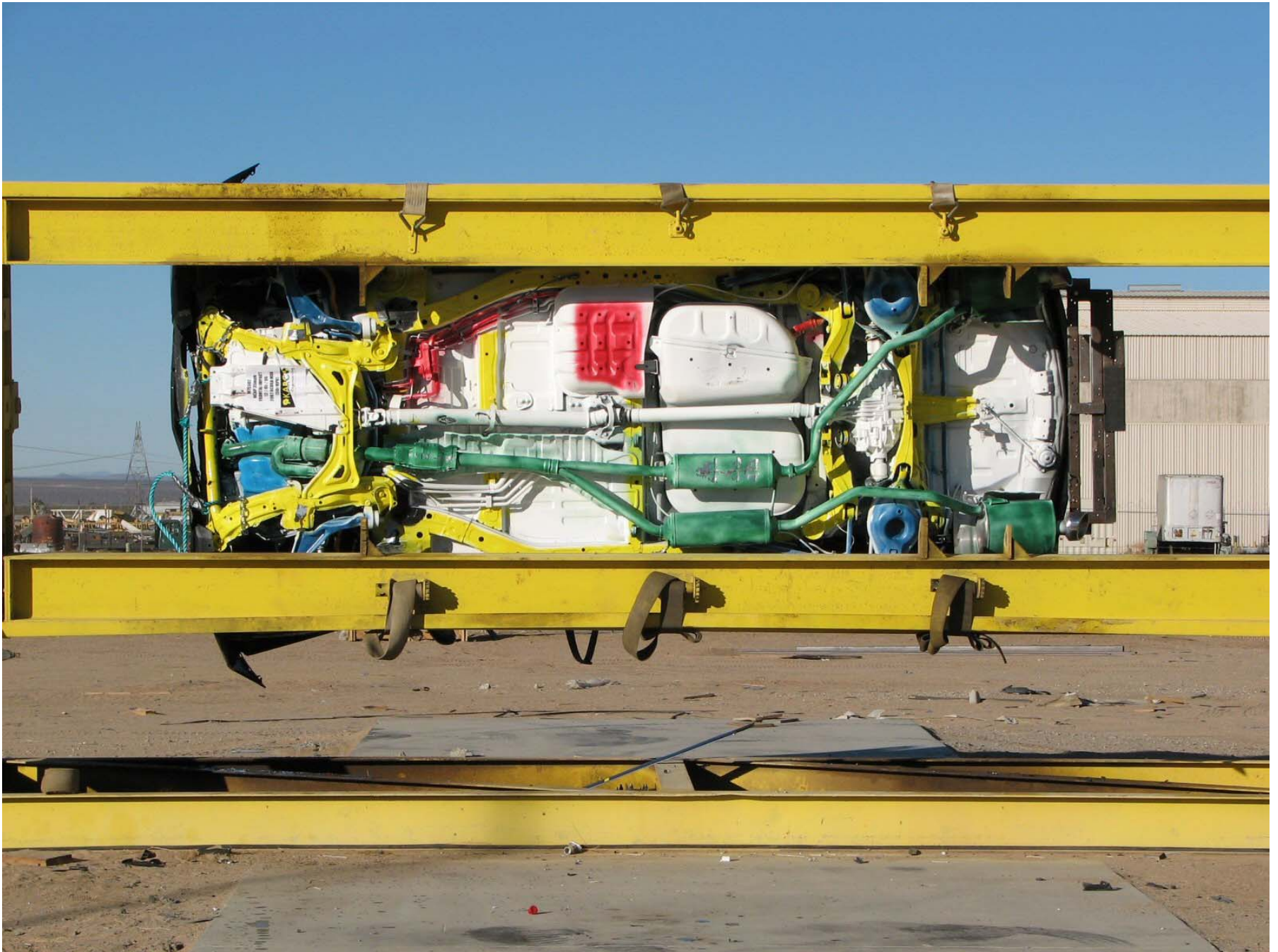


Figure A-61: Vehicle on Rollover Device (270°)

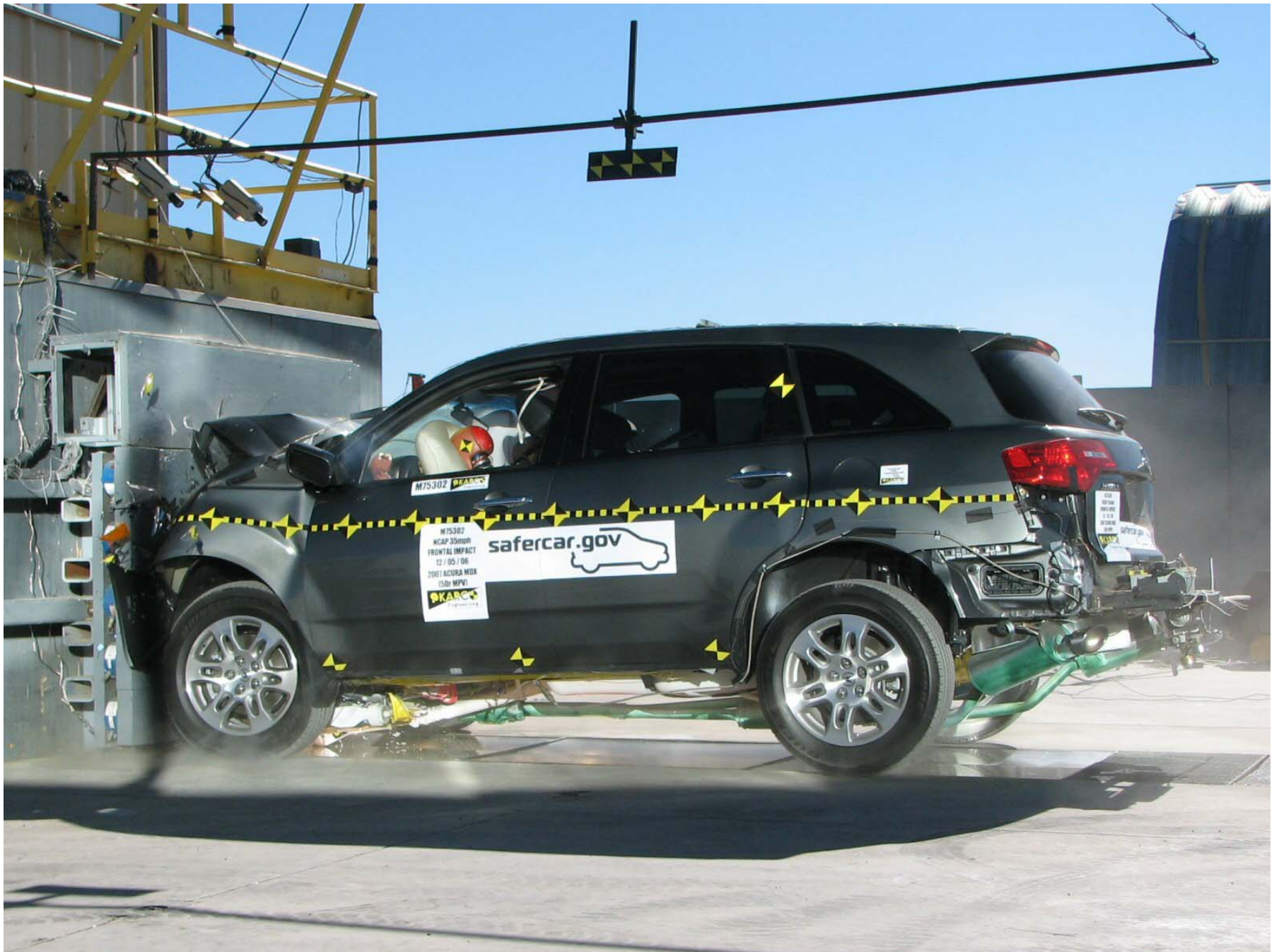


Figure A-62: Vehicle Impact

APPENDIX B
DATA PLOTS

LIST OF DATA PLOTS

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

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)

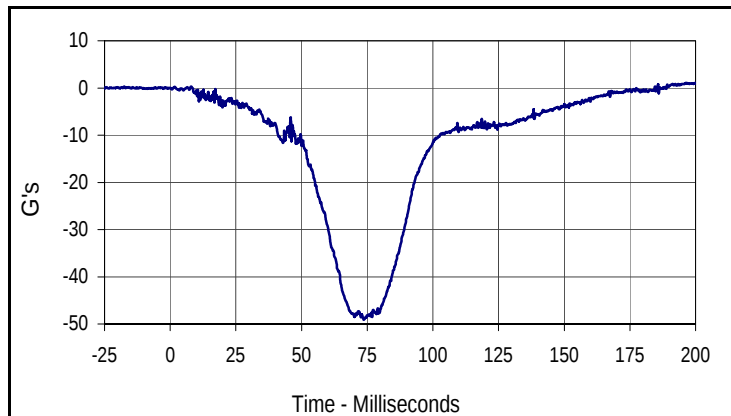
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Passenger Chest Redundant Z
Passenger Chest Resultant Redundant
Passenger Chest Redundant X Velocity
Passenger Chest Redundant X Displacement
Passenger Chest Displacement
Passenger Pelvis X
Passenger Pelvis Y
Passenger Pelvis Z
Passenger Pelvis Resultant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

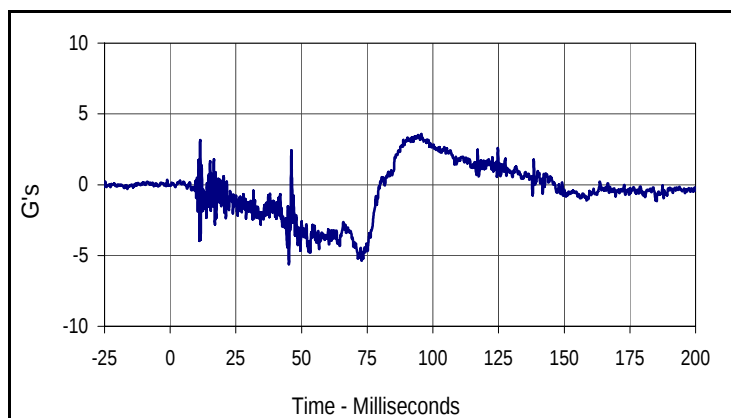
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Vehicle Right Rear X
Vehicle Right Rear X Velocity
Vehicle Right Rear X Displacement
Vehicle Engine Top
Vehicle Engine Top Velocity
Vehicle Engine Top Displacement
Vehicle Engine Bottom
Vehicle Engine Bottom Velocity
Vehicle Engine Bottom Displacement
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 MDX 5-Door MPV
 Test Program: 2007 NHTSA 35mph NCAP

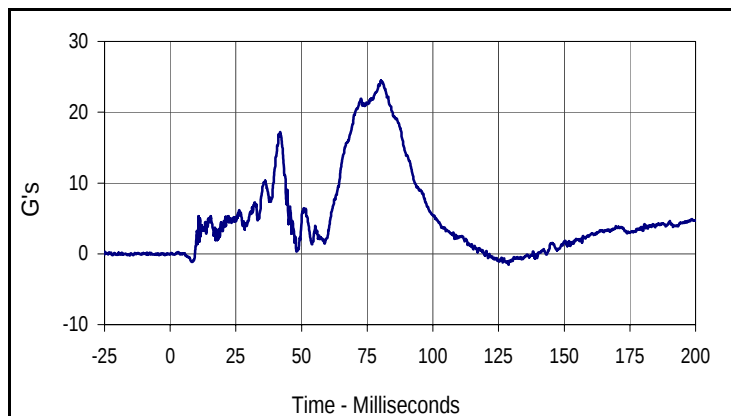
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 NHTSA No.: M75302



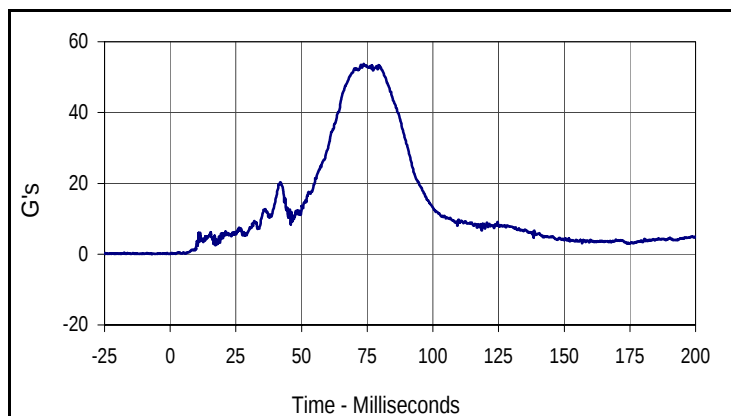
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Max	Time	Min	Time
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Curve Description			
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CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
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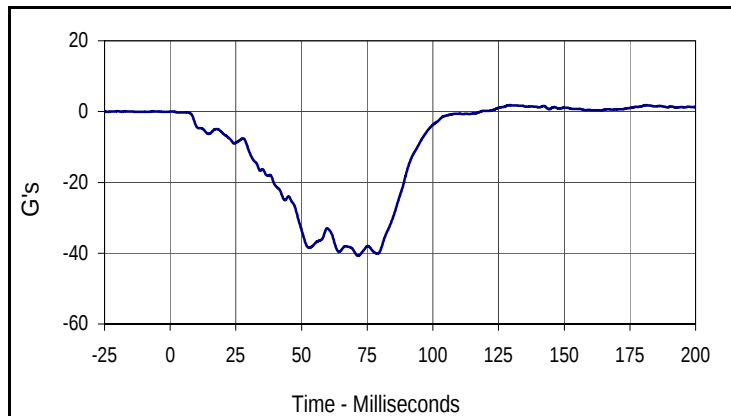
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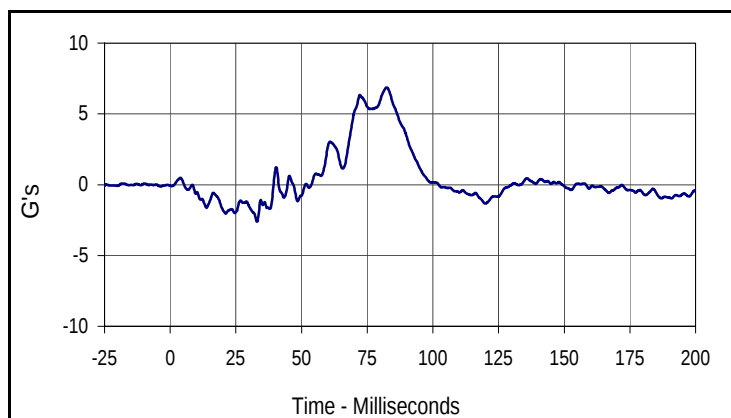
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Driver Head Resultant Primary			
CURNO	Type	SAE Class	Units
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Test Vehicle: 2007 Acura MDX 5-Door MPV
 Test Program: 2007 NHTSA 35mph NCAP

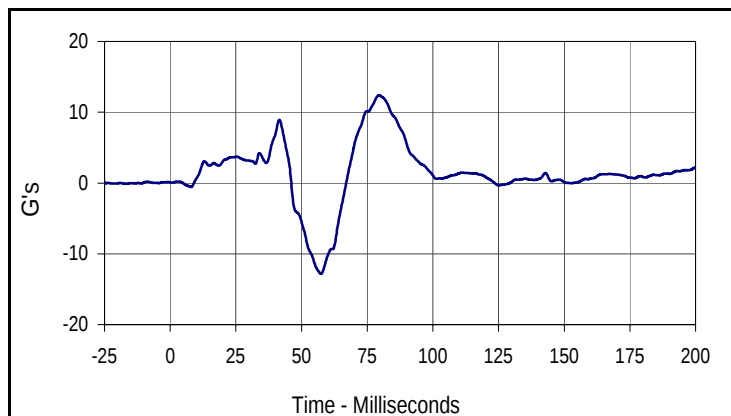
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 NHTSA No.: M75302



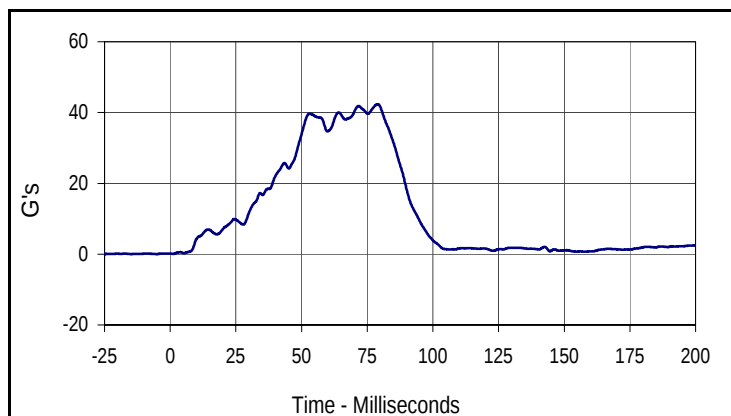
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Driver Chest Primary X			
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Max	Time	Min	Time
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005	FIL	180	G's
Max	Time	Min	Time
6.9	82.5	-2.6	33.0



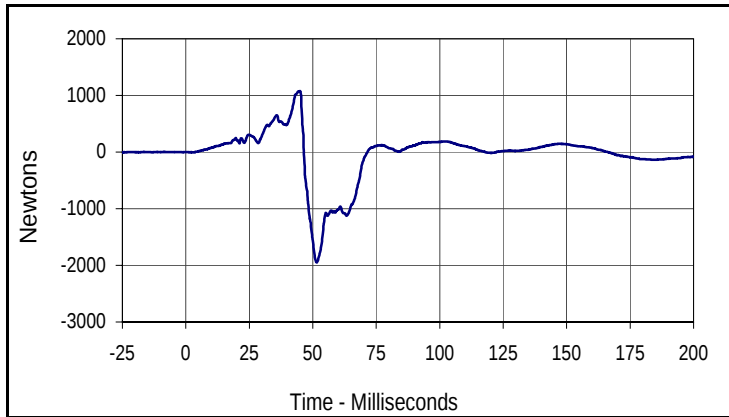
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Driver Chest Primary Z			
CURNO	Type	SAE Class	Units
006	FIL	180	G's
Max	Time	Min	Time
12.4	79.6	-12.8	57.4



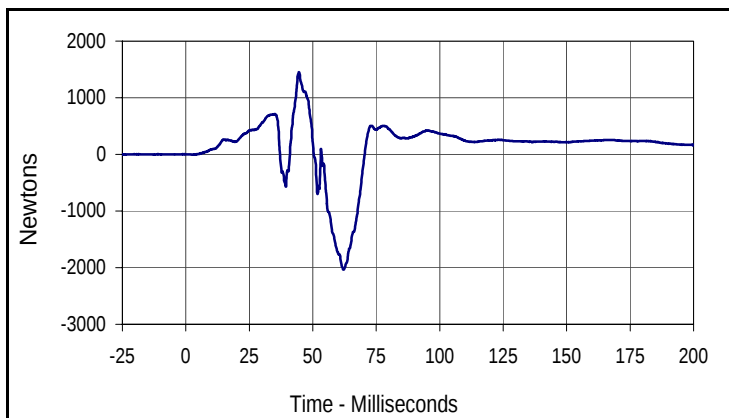
Curve Description			
Driver Chest Resultant Primary			
CURNO	Type	SAE Class	Units
004	RES	180	G's
Max	Time	Min	Time
42.3	79.0	0.1	1.3

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

Test Date: 12/5/06
 NHTSA No.: M75302



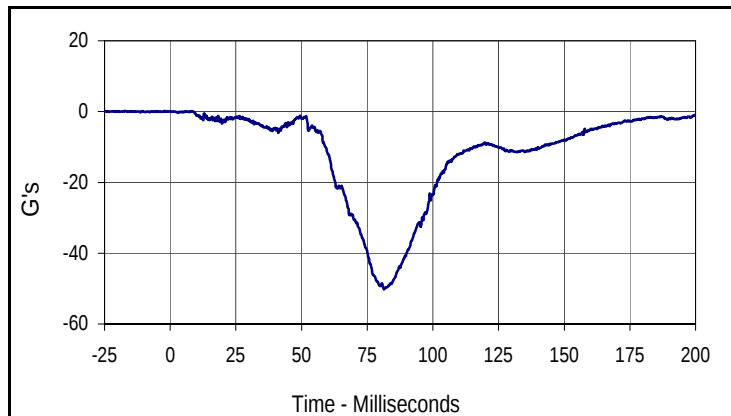
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Max	Time	Min	Time
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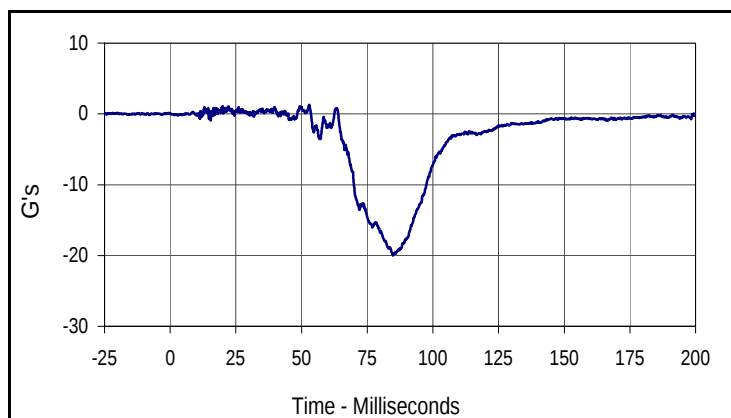
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CURNO	Type	SAE Class	Units
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Max	Time	Min	Time
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Test Vehicle: 2007 Acura MDX 5-Door MPV
 Test Program: 2007 NHTSA 35mph NCAP

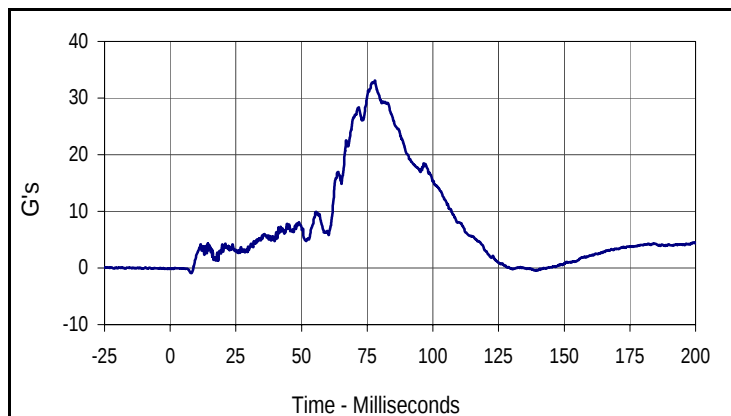
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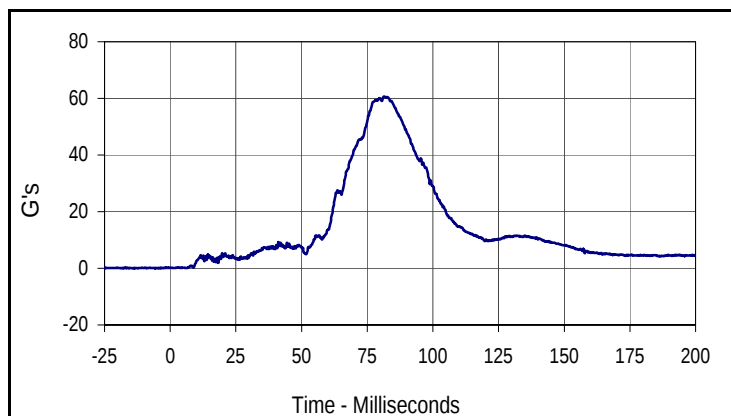
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Curve Description			
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010	FIL	1000	G's
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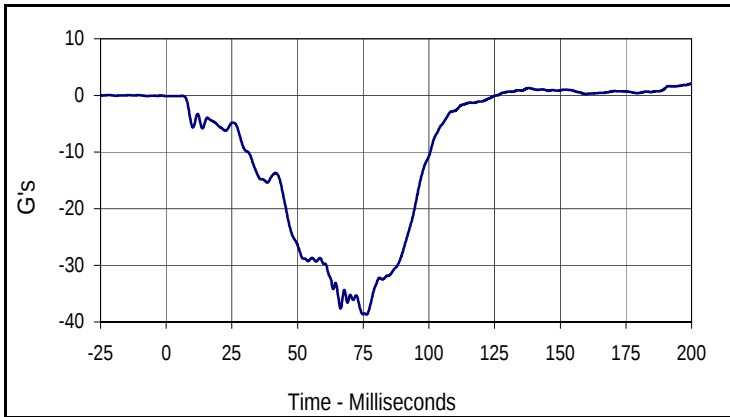
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Max	Time	Min	Time
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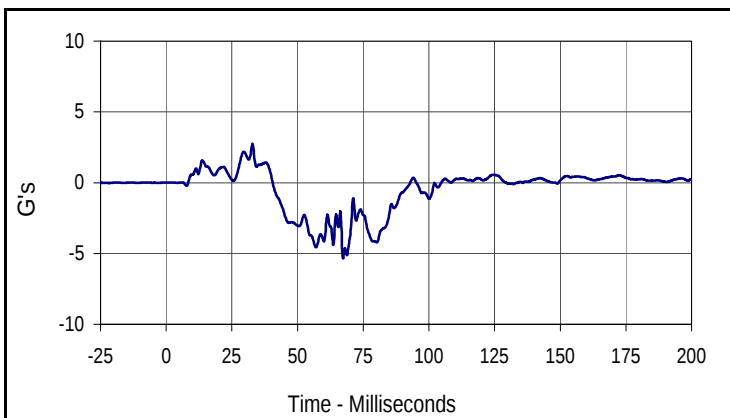
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Passenger Head Resultant Primary			
CURNO	Type	SAE Class	Units
009	RES	1000	G's
Max	Time	Min	Time
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Test Vehicle: 2007 Acura MDX 5-Door MPV
 Test Program: 2007 NHTSA 35mph NCAP

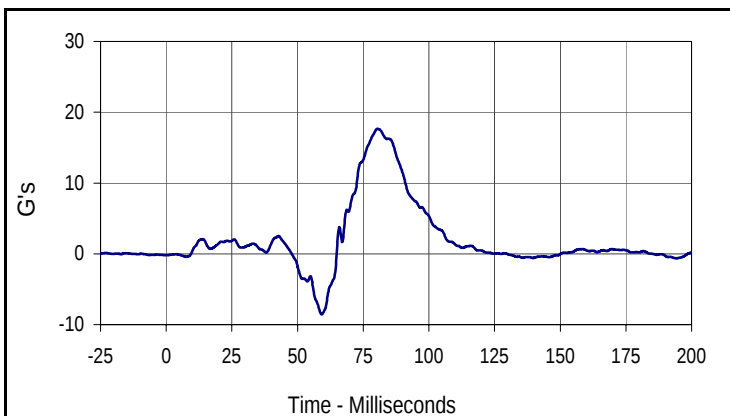
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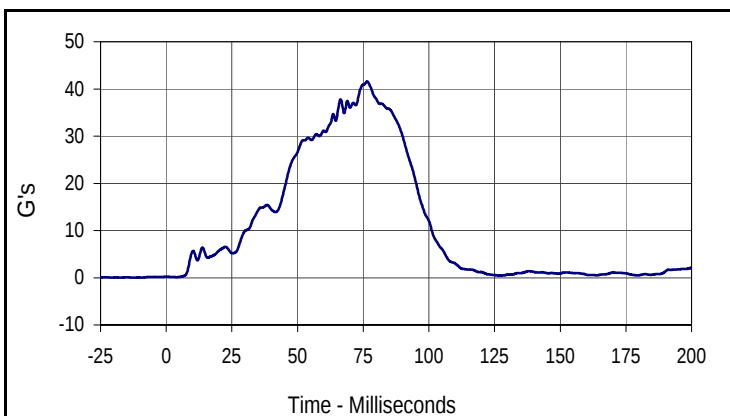
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012	FIL	180	G's
Max	Time	Min	Time
2.0	199.6	-38.7	76.3



Curve Description			
Passenger Chest Primary Y			
CURNO	Type	SAE Class	Units
013	FIL	180	G's
Max	Time	Min	Time
2.7	32.8	-5.3	67.3



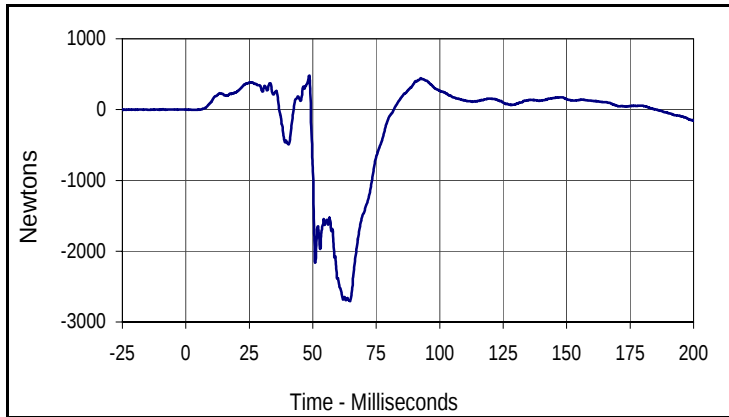
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Passenger Chest Primary Z			
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014	FIL	180	G's
Max	Time	Min	Time
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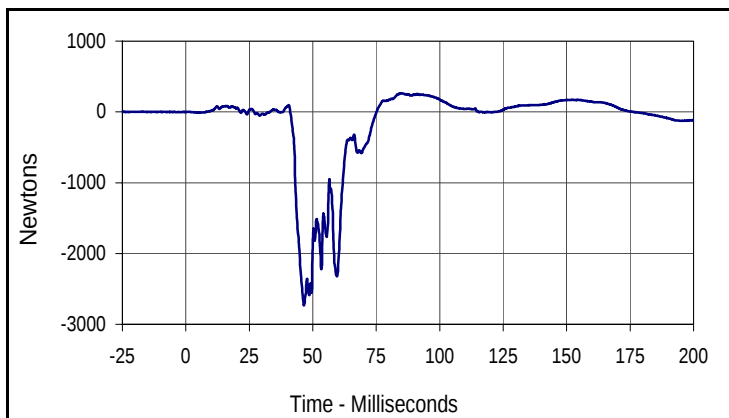
Curve Description			
Passenger Chest Resultant Primary			
CURNO	Type	SAE Class	Units
012	RES	180	G's
Max	Time	Min	Time
41.6	76.5	0.1	3.9

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

Test Date: 12/5/06
 NHTSA No.: M75302



Curve Description			
Passenger Left Femur Force Z			
CURNO	Type	SAE Class	Units
015	FIL	600	Newtons
Max	Time	Min	Time
479.8	48.6	-2704.4	64.7



Curve Description			
Passenger Right Femur Force Z			
CURNO	Type	SAE Class	Units
016	FIL	600	Newtons
Max	Time	Min	Time
263.2	84.7	-2735.3	46.5

APPENDIX C
DUMMY CALIBRATION DATA

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

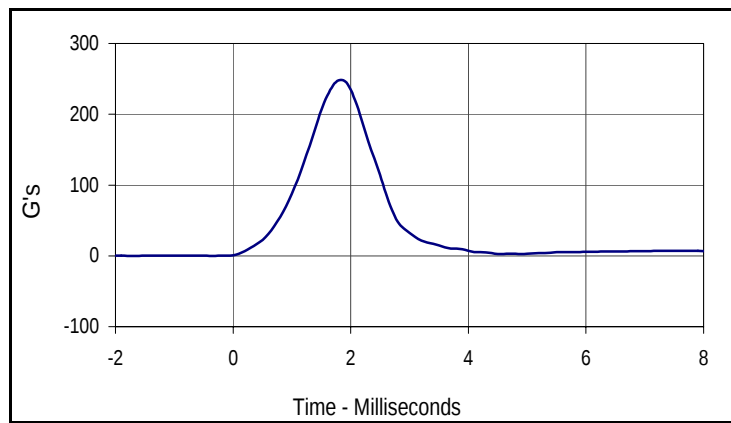
Test Date: 12/4/06

ATD Serial No.: 035

Test I.D.: HD12A



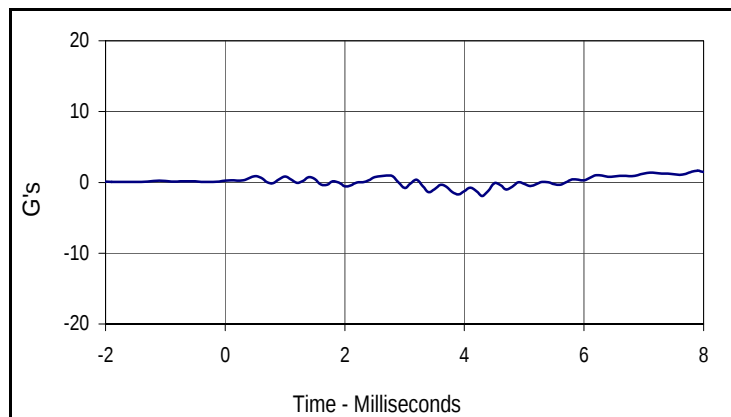
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Peak Resultant Acceleration	G's	225.0 to 275.0	248.2	Pass
Peak Lateral Acceleration	G's	≤15.0	1.9	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
Overall Test Results			Pass	



Curve Description

Head Resultant

CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
248.2	1.8	0.1	-1.8



Curve Description

Head Y

CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
1.0	2.7	-1.9	4.3

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

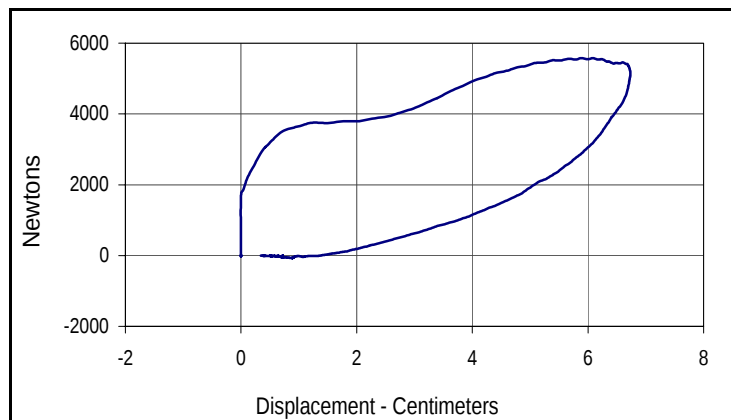
Test Date: 12/1/06

ATD Serial No.: 035

Test I.D.: CH12A



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	6.81	Pass
Peak Probe Force	Newtons	5159 to 5893	5575	Pass
Peak Sternum Deflection	CM	6.35 to 7.26	6.73	Pass
Internal Hysteresis	%	69 to 85	73.1	Pass
Overall Test Results				Pass



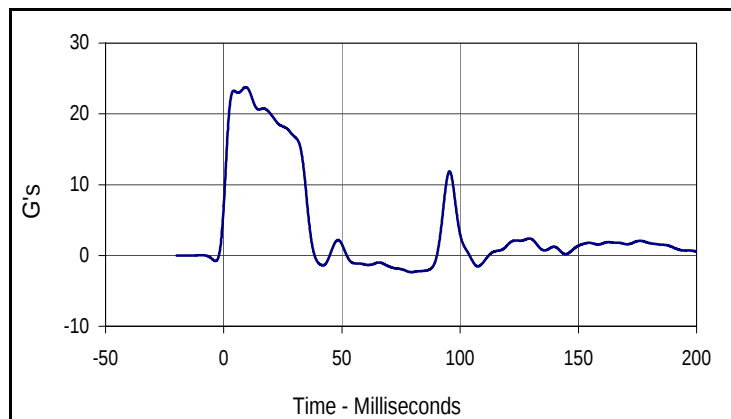
Curve Description			
Probe Force vs. Chest Deflection			
CURNO	Type	SAE Class	Hysteresis
001	FIL	180	73.1
Peak Probe Force		Peak Chest Deflection	
5575		6.73	

Test Program: Hybrid III 50th Percentile Male Neck Flexion Test
 ATD Serial No.: 035

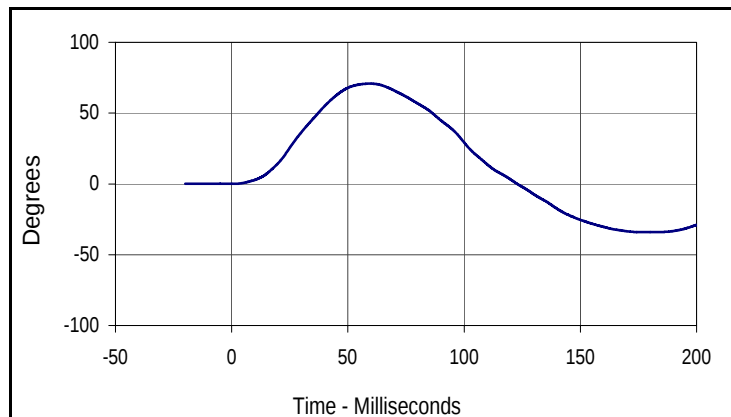
Test Date: 12/1/06
 Test I.D.: NF12A



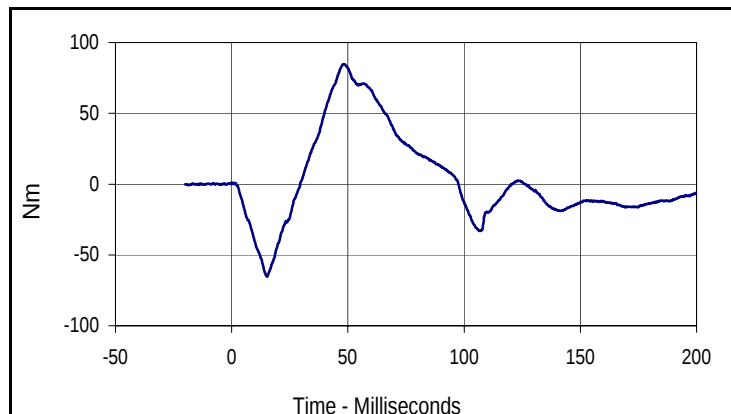
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	6.89 to 7.13	7.04	Pass
Pendulum Deceleration	10 Msec.	G's	22.5 to 27.5	23.7	Pass
	20 Msec.	G's	17.6 to 22.6	19.9	Pass
	30 Msec.	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
23.8	9.3	-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

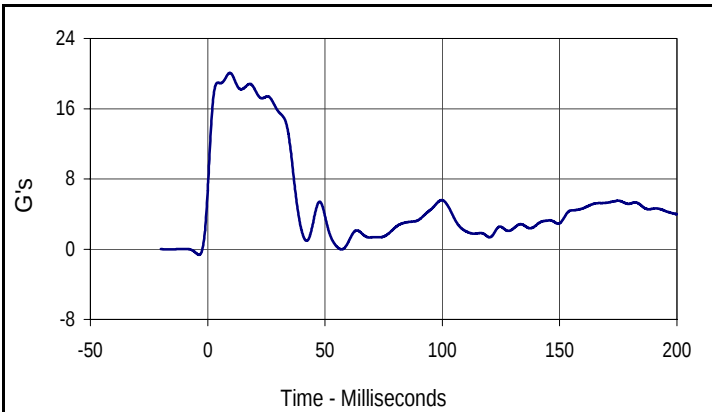
Test Date: 12/1/06

ATD Serial No.: 035

Test I.D.: NE12A



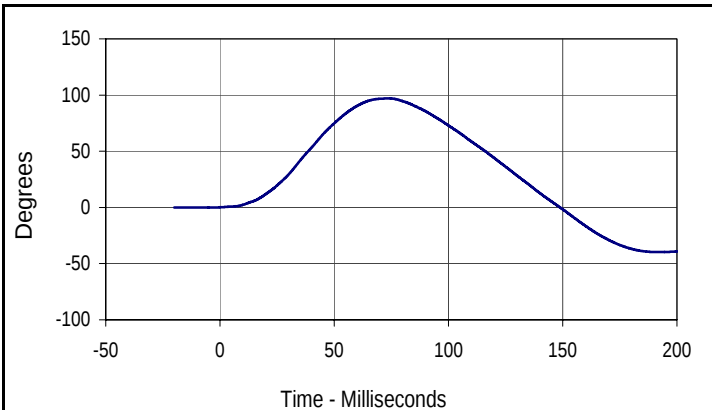
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	5.94 to 6.19	6.13	Pass
Pendulum Deceleration	10 Msec.	G's	17.2 to 21.2	20.0	Pass
	20 Msec.	G's	14.0 to 19.0	18.2	Pass
	30 Msec.	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	38.2	Pass
Maximum "D" Plane Rotation	Max	Degrees	81.0 to 106.0	97.1	Pass
	Time	Msec.	72.0 to 82.0	74.0	Pass
"D" Plane Rotation Decay, Time To Zero Crossing		Msec.	147.0 to 174.0	148.9	Pass
Moment About Occ. Condyle	Max	Nm	-52.9 to- 79.9	-77.5	Pass
	Time	Msec.	65.0 to 79.0	65.6	Pass
Positive Moment Decay, Time To Zero Crossing		Msec.	120.0 to 148.0	136.0	Pass
			Overall Test Results		Pass



Curve Description

Pendulum Deceleration

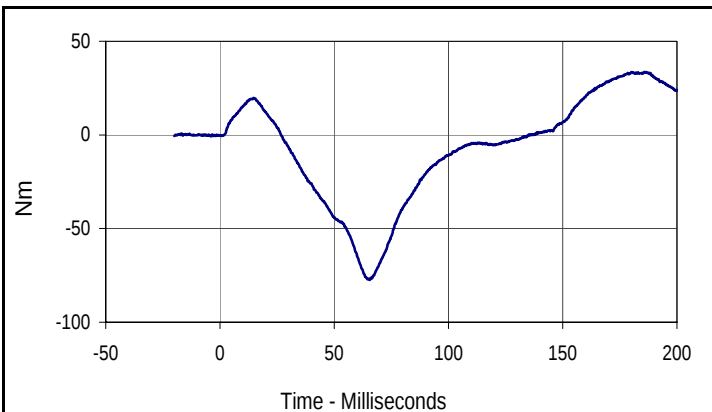
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
20.1	9.5	-0.6	-3.7



Curve Description

"D" Plane Rotation

CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
97.1	74.0	-39.7	190.9



Curve Description

Moment About Occipital Condyle

CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
33.7	185.7	-77.5	65.6

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

Test Date: 12/4/06

ATD Serial No.: 035

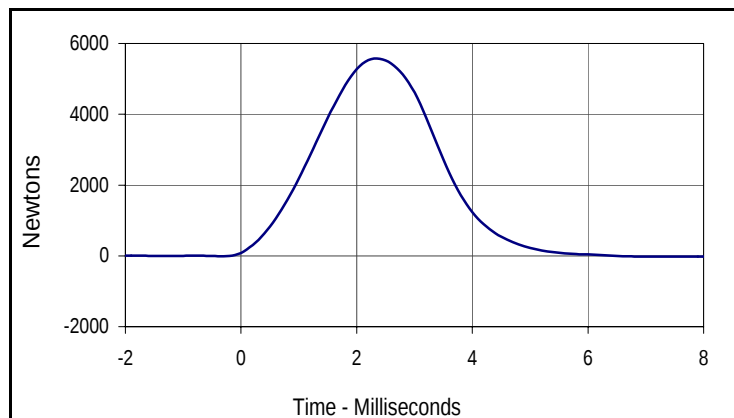
Test I.D.: LK01B , RK01B

**Left Knee**

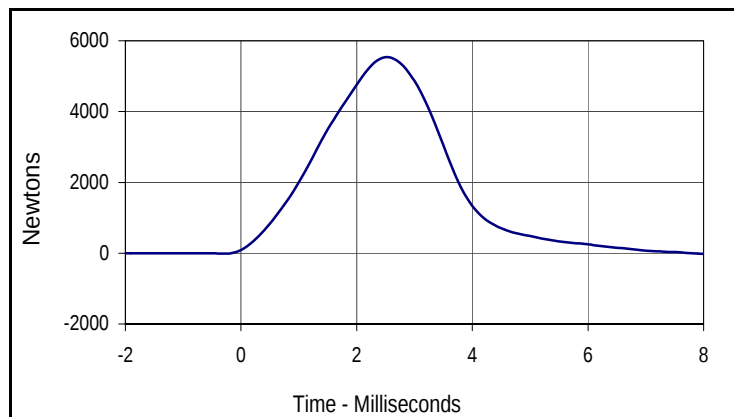
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.09	Pass
Peak Probe Force	Newtons	4715 to 5782	5574	Pass
Overall Test Results				Pass

Right Knee

Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.08	Pass
Peak Probe Force	Newtons	4715 to 5782	5536	Pass
Overall Test Results				Pass

**Curve Description****Left Knee Probe Force**

CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
5573.6	2.3	-23.7	7.1

**Curve Description****Right Knee Probe Force**

CURNO	Type	SAE Class	Units
002	FIL	600	Newtons
Max	Time	Min	Time
5536.4	2.5	-32.5	8.7

Test Program: Hybrid III 50th Percentile Male External Measurements

Test Date: 12/4/06

ATD Serial No.: 035

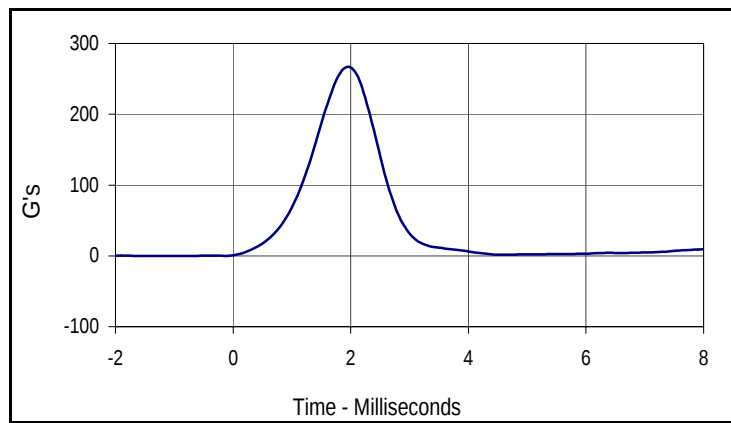
Test I.D.: N/A



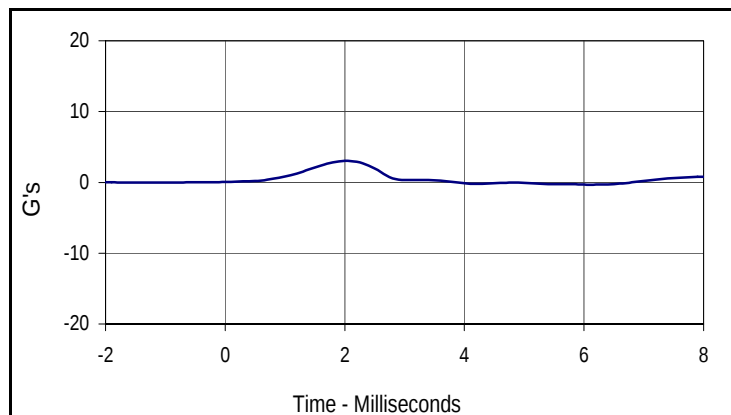
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
A - Total sitting height	mm	879 to 889	885	Pass
B - Shoulder pivot height	mm	505 to 521	512	Pass
C - "H" point height	mm	84 to 89	86	Pass
D - "H" point from seat back	mm	135 to 140	139	Pass
E - Shoulder pivot from back	mm	84 to 94	85	Pass
F - Thigh clearance	mm	140 to 155	152	Pass
G - Elbow back to wrist pivot	mm	290 to 305	299	Pass
H - Skull cap to back line	mm	41 to 46	45	Pass
I - Shoulder to elbow length	mm	330 to 345	335	Pass
J - Elbow rest height	mm	190 to 211	204	Pass
K - Buttock to knee length	mm	579 to 604	600	Pass
L - Popliteal length	mm	429 to 455	451	Pass
M - Knee pivot height	mm	485 to 500	489	Pass
N - Buttock popliteal length	mm	452 to 477	474	Pass
O - Chest depth	mm	213 to 229	226	Pass
P - Foot length	mm	251 to 267	254	Pass
V - Shoulder breadth	mm	422 to 437	436	Pass
W - Foot breadth	mm	91 to 107	105	Pass
Y - Chest circumference	mm	970 to 1001	986	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	228	Pass
Overall Test Results				Pass

Test Program: Hybrid III 50th Percentile Male Head Drop TestTest Date: 12/4/06ATD Serial No.: 034Test I.D.: HD12C

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	266.1	Pass
Peak Lateral Acceleration	G's	≤15.0	3.0	Pass
Is Acceleration Unimodal?	Yes/No	Yes	Yes	Pass
Overall Test Results			Pass	



Curve Description			
Head Resultant			
CURNO	Type	SAE Class	Units
001	RES	1000	G's
Max	Time	Min	Time
266.1	2.0	0.0	-0.7



Curve Description			
Head Y			
CURNO	Type	SAE Class	Units
002	FIL	1000	G's
Max	Time	Min	Time
3.0	2.0	-0.3	6.0

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

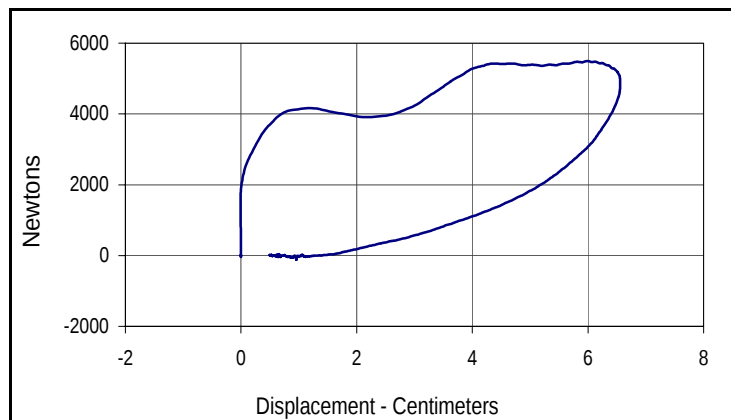
Test Date: 12/1/06

ATD Serial No.: 034

Test I.D.: CH12D



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	6.76	Pass
Peak Probe Force	Newtons	5159 to 5893	5493	Pass
Peak Sternum Deflection	CM	6.35 to 7.26	6.56	Pass
Internal Hysteresis	%	69 to 85	76.3	Pass
Overall Test Results				Pass



Curve Description			
Probe Force vs. Chest Deflection			
CURNO	Type	SAE Class	Hysteresis
001	FIL	180	76.3
Peak Probe Force		Peak Chest Deflection	
5493		6.56	

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

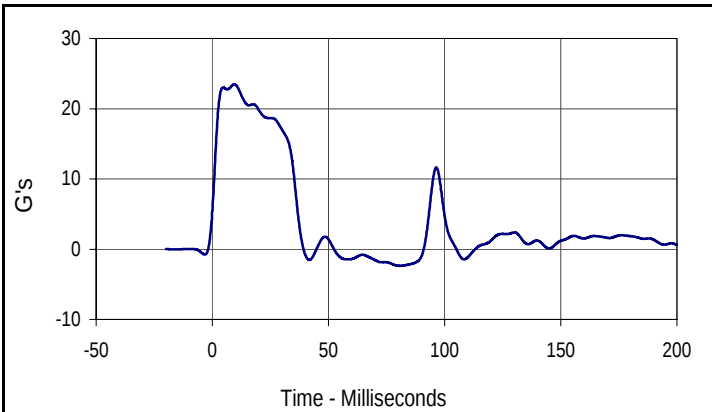
Test Date: 12/1/06

ATD Serial No.: 034

Test I.D.: NF12D



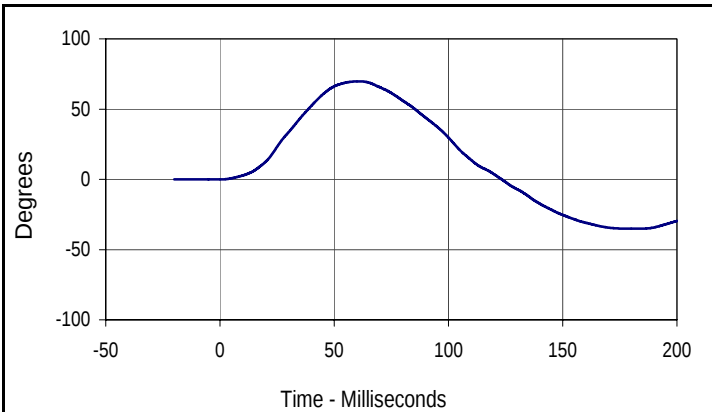
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	6.89 to 7.13	6.96	Pass
Pendulum Deceleration	10 Msec.	G's	22.5 to 27.5	23.4	Pass
	20 Msec.	G's	17.6 to 22.6	19.8	Pass
	30 Msec.	G's	12.5 to 18.5	17.0	Pass
Peak Pendulum Decel. after 30 Msec.		G's	≤ 29.0	17.0	Pass
Deceleration Decay, Time to Cross 5 G's		Msec.	34.0 to 42.0	36.9	Pass
Maximum "D" Plane Rotation	Max	Degrees	64.0 to 78.0	69.8	Pass
	Time	Msec.	57.0 to 64.0	60.9	Pass
"D" Plane Rotation Decay, Time To Zero Crossing		Msec.	113.0 to 128.0	123.3	Pass
Moment About Occ. Condyle	Max	Nm	84.1 to 108.5	90.6	Pass
	Time	Msec.	47.0 to 58.0	47.7	Pass
Positive Moment Decay, Time To Zero Crossing		Msec.	97.0 to 107.0	97.8	Pass
			Overall Test Results		Pass



Curve Description

Pendulum Deceleration

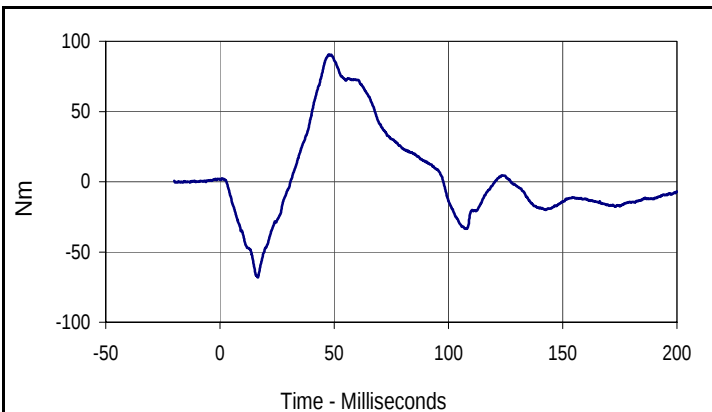
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
23.5	9.5	-2.4	80.8



Curve Description

"D" Plane Rotation

CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
69.8	60.9	-35.1	183.5



Curve Description

Moment About Occipital Condyle

CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
90.6	47.7	-68.2	16.5

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

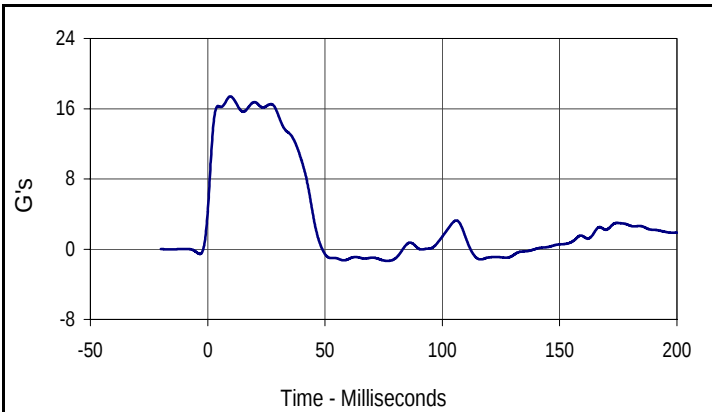
Test Date: 12/1/06

ATD Serial No.: 034

Test I.D.: NE12B



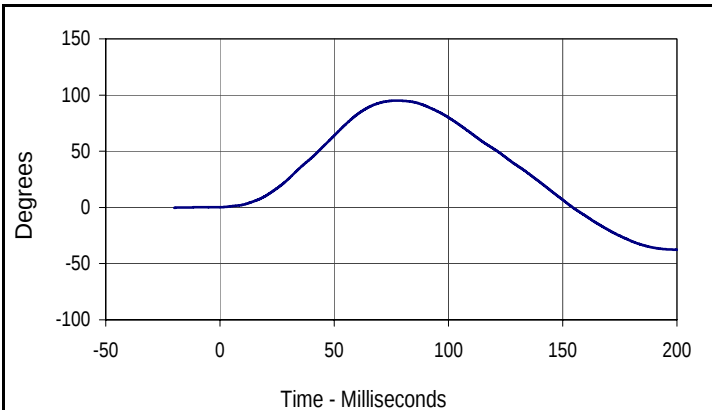
Tested Parameter		Units	Specification	Result	Pass/Fail
Laboratory Temperature		°C	20.6 to 22.2	21.1	Pass
Laboratory Relative Humidity		%	10 to 70	30	Pass
Pendulum Velocity		m/s	5.94 to 6.19	5.98	Pass
Pendulum Deceleration	10 Msec.	G's	17.2 to 21.2	17.4	Pass
	20 Msec.	G's	14.0 to 19.0	16.8	Pass
	30 Msec.	G's	11.0 to 16.0	15.3	Pass
Peak Pendulum Decel. after 30 Msec.		G's	≤ 22.0	15.3	Pass
Deceleration Decay, Time to Cross 5 G's		Msec.	38.0 to 46.0	44.2	Pass
Maximum "D" Plane Rotation	Max	Degrees	81.0 to 106.0	95.1	Pass
	Time	Msec.	72.0 to 82.0	77.4	Pass
"D" Plane Rotation Decay, Time To Zero Crossing		Msec.	147.0 to 174.0	154.4	Pass
Moment About Occ. Condyle	Max	Nm	-52.9 to- 79.9	-75.1	Pass
	Time	Msec.	65.0 to 79.0	67.9	Pass
Positive Moment Decay, Time To Zero Crossing		Msec.	120.0 to 148.0	143.7	Pass
			Overall Test Results		Pass



Curve Description

Pendulum Deceleration

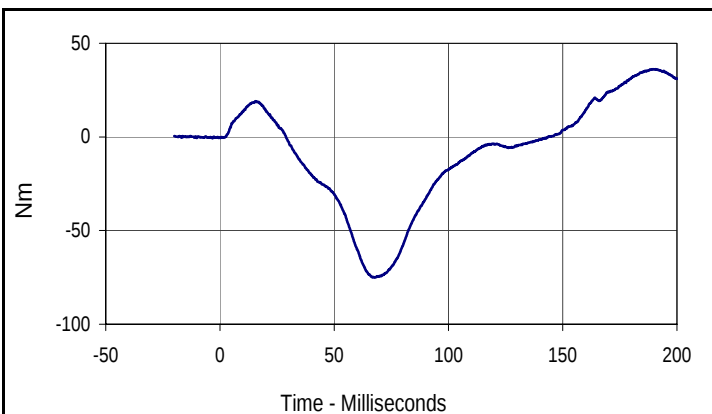
CURNO	Type	SAE Class	Units
001	FIL	60	G's
Max	Time	Min	Time
17.4	9.6	-1.3	76.6



Curve Description

"D" Plane Rotation

CURNO	Type	SAE Class	Units
003	FIL	60	Degrees
Max	Time	Min	Time
95.1	77.4	-37.6	200.0



Curve Description

Moment About Occipital Condyle

CURNO	Type	SAE Class	Units
004	FIL	600	Nm
Max	Time	Min	Time
36.2	189.5	-75.1	67.9

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

Test Date: 12/4/06

ATD Serial No.: 034

Test I.D.: LK01B , RK01B

**Left Knee**

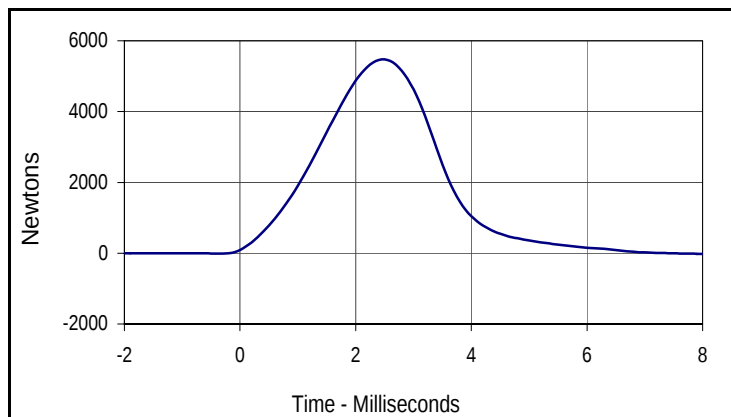
Tested Parameter	Units	Specification	Result	Pass/Fail
Laboratory Temperature	°C	18.9 to 25.6	21.1	Pass
Laboratory Relative Humidity	%	10 to 70	30	Pass
Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.09	Pass
Peak Probe Force	Newtons	4715 to 5782	5622	Pass
Overall Test Results				Pass

Right Knee

Pendulum Velocity at T=0	m/sec	2.07 to 2.13	2.08	Pass
Peak Probe Force	Newtons	4715 to 5782	5478	Pass
Overall Test Results				Pass

**Curve Description****Left Knee Probe Force**

CURNO	Type	SAE Class	Units
001	FIL	600	Newtons
Max	Time	Min	Time
5622.2	2.5	-25.5	9.5

**Curve Description****Right Knee Probe Force**

CURNO	Type	SAE Class	Units
002	FIL	600	Newtons
Max	Time	Min	Time
5478.4	2.5	-25.3	8.9

Test Program: Hybrid III 50th Percentile Male External Measurements

Test Date: 12/4/06

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	886	Pass
B - Shoulder pivot height	mm	505 to 521	513	Pass
C - "H" point height	mm	84 to 89	85	Pass
D - "H" point from seat back	mm	135 to 140	136	Pass
E - Shoulder pivot from back	mm	84 to 94	85	Pass
F - Thigh clearance	mm	140 to 155	151	Pass
G - Elbow back to wrist pivot	mm	290 to 305	301	Pass
H - Skull cap to back line	mm	41 to 46	44	Pass
I - Shoulder to elbow length	mm	330 to 345	336	Pass
J - Elbow rest height	mm	190 to 211	209	Pass
K - Buttock to knee length	mm	579 to 604	600	Pass
L - Popliteal length	mm	429 to 455	446	Pass
M - Knee pivot height	mm	485 to 500	490	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	105	Pass
Y - Chest circumference	mm	970 to 1001	985	Pass
Z - Waist circumference	mm	836 to 866	851	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: Dummy Damage Checklist
 ATD Serial No.: 035

Test Date: 12/4/06
 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: 12/4/06
 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:
