## Case 443 : Narrative

Case Vehicle (A): 2002 Buick	Vehicle (B): 2003 Pontiac
Type: Century Custom, 4-door sedan	Type: Grand Am SE, 4-door sedan
Driver: 34-year-old male	Driver: 82-year-old female
CDC: 11-FYEW-2	CDC: 01-FDEW-2

## SITUATION

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<u>123</u> On a cloudy day, case vehicle (A) was traveling north on a two-lane, north-south road in a rural area, and was approaching a four-way, stop-sign controlled intersection with a two-lane east-west road. The asphalt road surface was dry and the speed limit was 55 mph (89 kph), but case vehicle (A) was being pursued by the police and the EDR-recorded vehicle speed was 68 mph (109 kph). <u>45</u> Vehicle (B) was stopped in the southbound lane of the same road while the driver was waiting to make a left turn. <u>6</u> As case vehicle (A) approached the intersection with the police car following, <u>7</u> the driver of vehicle (B) began to make a left turn and vehicle (B) entered the intersection into the path of case vehicle (A), which entered the intersection without stopping. According to the EDR-reports, the drivers of both case vehicle (A) and vehicle (B) applied the brakes but the two vehicles collided in the northbound lane in an offset-frontal impact. Both vehicles were towed from the scene.

The police accident report (PAR) indicates B-level injuries for the male driver of case vehicle (A) and he was transported to a local hospital. The driver of case vehicle (A) tested positive for THC and cocaine, and he reportedly had used crack cocaine two hours prior to the collision. The PAR indicates A-level injuries for the driver of vehicle (B), who was transported to a local hospital and hospitalized for two days.

## GENERAL VEHICLE DAMAGE AND ESTIMATED CRASH SEVERITIES

<u>8</u> Damage to the front of case vehicle (A) was moderate. Direct damage began at the left-front bumper corner and extended 72-cm across the front, resulting in 44-percent vehicle overlap (%VOL). <u>9</u> The maximum crush was 38 cm and it occurred at the left-front bumper corner.

<u>10</u> Damage to the front of vehicle (B) was moderate. Direct damage began at the right-front bumper corner and extended 120-cm across the front, resulting in 72% VOL. <u>11</u> The maximum frontal crush was 51 cm and it occurred 21 cm to the left of the right-front bumper corner. The entire front bumper was damaged and the bumper cover was partially separated from its attachments. The right and the center sections of the bumper and the grille were crushed rearward into the engine compartment. Both headlight assemblies were broken, and the hood was crushed up and to the rear. The left wheelbase was reduced by 8 cm but there was no change in the right wheelbase.

<u>12 13 14 15 16 17 18 19 20 21</u> Using the WinSMASH crash-reconstruction program and crush profiles measured for both vehicles, the following impact severities were estimated for the offset-frontal collision between case vehicle (A) and vehicle (B):

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		Estimated Velocity Change - kph (mph)			
Vehicle	Variable	Total	Longitudinal	Latitudinal	
Case Vehicle (A)	delta V	37 (23)	-35 (-22)	13 (8)	
Vehicle (B)	delta V	42 (26)	-39 (-24)	-14 (-9)	

Case vehicle (A) was equipped with an Event Data Recorder (EDR) that recorded a deployment event with a maximum longitudinal velocity change of ?27.1 mph at 107.5 ms into the event. The EDR data also indicate that the driver seatbelt was buckled and that the airbags were not suppressed. The vehicle speed was 68 mph with the brakes applied at five seconds before the collision and case vehicle (A) had slowed down to 37 mph at one second before impact.

Vehicle (B) was also equipped with an Event Data Recorder (EDR) and it recorded a maximum longitudinal velocity change of ?24.5 mph at 117.5 ms into the event. The EDR data also indicate that the driver seatbelt was buckled, that the airbags were not suppressed, and that the brakes were applied at five seconds before the collision at a vehicle speed of 7 mph. Three seconds prior to the impact, the brakes were off and the vehicle speed was up to 11 mph when the impact occurred.

## **DESCRIPTION OF DAMAGE TO CASE VEHICLE (A)**

#### Exterior

22 In the front, the majority of the damage was to the left and center sections of the front bumper and grille, which were crushed rearward. 23 The left section of the bumper cover was separated from its attachment and the left headlight assembly was damaged and the headlamp was broken. 24 The right side of the grille was not damaged but the right headlight assembly was misaligned although the headlamp was not broken. 25 The hood latch was bent 26 27 but the hood hinges were not damaged and the hood was operational. 23 The left and center sections of the hood were displaced up and to the rear, and the left-rear edge of the hood was slightly elevated, but it did not contact the windshield. 28 The lower-left section of the windshield was cracked due to cowl deformation, and the 29 right side of the windshield was cracked due to cowl deformation, and the 29 right side of the windshield was cracked due to cowl data.

<u>30</u> On the left side, the fender was displaced to the right and crushed rearward. <u>31</u> The left-front wheel was damaged and pushed into the back of the wheel well, resulting in a 13-cm reduction in the left wheelbase, and the <u>32</u> left-rear wheel was undamaged, <u>33 34</u> Both left-side doors were undamaged and operational, all left-side glazing was intact, and the <u>35</u> left quarter panel was not damaged.

<u>36 37</u> On the right side, the fender was buckled and shifted to the right. <u>38</u> There was no damage to the right-front wheel and there was no change in the right wheelbase. <u>39 40</u> The right-rear wheel was damaged and the tire rubber was completely shredded from the wheel but this damage probably occurred during the police pursuit and is not related to the crash. <u>41 42</u> Both right-side doors were undamaged and operational and all right-side glass was intact. <u>43</u> There was no other damage to the right side <u>44 45</u> and there was no damage to the rear of case vehicle (A).

#### Interior

 $\underline{46}$  This vehicle was equipped with steering-wheel and dash-mounted frontal-impact airbags, and both deployed during the frontal impact.  $\underline{47}$  In the driver seating area, there was no damage to, or contact marks on, the steering-wheel airbag.  $\underline{52}$  There was no damage to the upper section of the instrument

panel but 53 the mid section was slightly misaligned and 54 the knob for the interior light was bent. The knee bolster was slightly misaligned 55 and there was a scuffmark on the center section of the knee bolster cover. 56 57 The floor in the driver area was displaced up 9 cm 58 but there was no damage to the pedals. 59 There was no damage to the interior of the driver door but  $60 \ 61 \ 62$  there was a 13-cm horizontal scuffmark on the forward section of the door armrest. 63 The driver-door window was not broken 64 65 but there was a smudge mark on the glass. 48 49 50 51 There was no other damage in the driver area.

In the center-front area,  $\underline{67}$  the plastic cover across the center of the dashboard was misaligned  $\underline{66}$   $\underline{68}$  but there was no other damage. In the right-front seating area,  $\underline{75}$  there was no damage to the deployed dash-mounted airbag, but  $\underline{70}$   $\underline{71}$  there were gouges in the airbag module cover from contacting and cracking the windshield during deployment.  $\underline{69}$   $\underline{72}$   $\underline{73}$   $\underline{74}$  There was no other damage in the right-front seating area.

## **OCCUPANT KINEMATICS AND INJURIES**

<u>76</u> The 191-cm, 109-kg (6-ft 3-in, 240-lb) 34-year-old male driver was using the three-point belt with the <u>82</u> shoulder-belt anchor point on the B-pillar adjusted to a mid-height position, and the <u>47</u> steering-wheel airbag deployed. <u>77</u> <u>78</u> D-ring marks on the shoulder-belt webbing, <u>79</u> <u>80</u> loading marks on the D-ring, and <u>81</u> EDR data confirm that the driver was using the belt restraint.

During the frontal impact, the driver moved forward and slightly to the left relative to the vehicle interior, into the belt restraint and airbag. He reportedly lost consciousness for 3-to-5 minutes from an unknown cause. He sustained contusions to the left side of the neck, to the left shoulder, and to an unspecified area of the chest, <u>77 78 79 80 81 82</u> probably from loading by the shoulder belt.

The following table <u>83</u> and attached drawing summarize the injuries and injury sources for the belt-and airbag-restrained driver.

Occupant: Driver	Age: 34 years Gender: Male			
Restraints: 3-point belt; steering-wheel airbag	Stature: 191 cm (6 ft, 3 in) Mass: 109 kg (240 1		(240 lb)	
Injury Description	A.I.S.		Injury Source	
		Definite	Probable	Possible
Loss of consciousness, 3-to-5 minutes	2	Unknown		
Concussion	2	Unknown		
Contusion, left shoulder	1		Shoulder belt	
Contusion, left neck	1		Shoulder belt	
Contusion, chest ? unknown aspect	1		Shoulder belt	
Maximum A.I.S. Level	2			
Injury Severity Score	5			
Positive for THC and cocaine. Reportedly used crack cocaine 2 hours prior to the crash. Experienced drug-related convulsions at the hospital.				_

CASE NO.: 443

OCCUPANT: (Driver) 34-year-old male

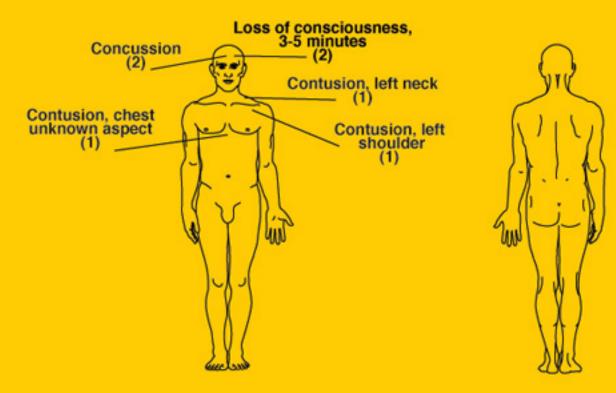
CASE VEHICLE: 2002 Buick

STATURE: 191 cm (6 ft, 3 in) MASS: 109 kg (240 lb)

TYPE: Century Custom, 4-door sedan RESTRAINTS: 3-point belt, steering-wheel airbag

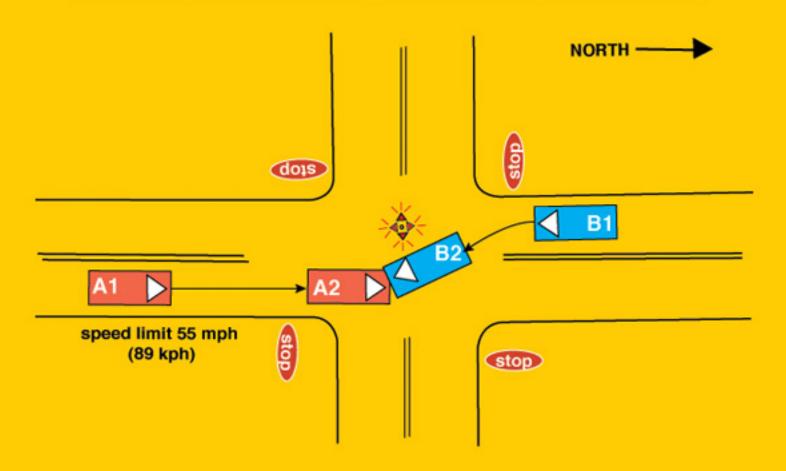
SEVERITY: MAIS - 2 ISS - 5

positive for THC and crack cocaine with drug-related convulsions at hospital



Case No.: 443 Case Veh. (A): 2002 Buick Type: Century Custom, 4-door sedan Driver: 34-year-old male Vehicle (B): 2003 Pontiac Grand Am SE, 4-door sedan

Weather: Cloudy Road Surface: Dry Road Construction: Asphalt Light Condition: Daylight



## **UM-4254: Vehicle Report**

#### Click on Section Name to jump directly to that Section —

- General Information
- Other Vehicle
- Case Vehicle General
- Case Vehicle Damage Description
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- Case Vehicle Fire
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- Case Vehicle Steering Column/Rim
- <u>Case Vehicle Intrusion</u>
- <u>Case Vehicle Airbag(s)</u>
- <u>Case Vehicle Interior</u>
- Case Vehicle Seats
- <u>Case Vehicle Side Airbag(s)</u>
- EDR -- Event Data Recorder

#### **General Information**

Variable Number	Variable Name	Code Value	Code Description	Other Options
V0204	Collision Hour	1311	Time of day (24 hour clock)	more
V0205	State Fips Code	26	Michigan	more
V0206	Urban/rural Area	2	Rural	more
V0207	Limited Access Highway	0	No	more
V0208	Road Total Lanes	2	2 lanes	more
V0209	Intersect Road Total Lanes	2	2 lanes	more
V0210	Trafficway Flow	0	Not physically divided - two way traffic	more
V0211	Road Surface Type	1	Asphalt	more
V0212	Road Defects	0	No	more
V0213	Construction Zone	0	No	more
	Road Alignment Vertical			

V0214	Plane	1	Level	more
V0215	Road Alignment Horzontal Plane	1	Straight	more
V0216	Surface Covering	10	Dry	more
V0217	Visibility Limitation	0	None	more
V0218	Visibility Obstruction	0	None	more
V0219	Speed Limit	6	86-90 km/h 55 mph	more
V0220	Precipitation Type	0	None	more
V0221	Precipitation Rate	8	Not applicable	more
V0222	Temperature	9	Unknown	more
V0223	Crosswind	9	Unknown	more
V0224	Light Conditions	1	Daylight	more
V0225	Mechanical Malfunction Mention	0	No	more
V0226	Case Vehicle And Object	0	No	more
V0227	Case Vehicle Rollover	0	No	more
V0228	Rollover Location	0	No rollover	more
V0229	Roll Direction	0	No rollover	more
V0230	Rollover Initation Type	0	No rollover	more
V0231	Rollover Number Of Turns	0	No rollover	more
V0232	Case Vehicle Preimpact Braking	1	Yes	more
V0233	Case Vehicle Preimpact Stability	1	Case vehicle tracking before impact	more
V0234	Case Vehicle Ran Off Roadway	0	No	more
V0235	Moving Case Vehicle Contacted Moving Vehicle	1	Yes	more
V0236	Case Vehicle Contacted Stopped Vehicle	0	No	more
V0237	Stopped Case Vehicle Contacted Vehicle	0	No	more
V0238	Total Vehicles Hit By Case Vehicle	1	1 vehicle	more
V0239	Any Fire In Crash?	0	No	more
V0240	Maximum Police Severity- acc	3	A - Incapacitating Injury	more
V0241	Driver Alcohol Involvmnt	0	Had not been drinking	more
V0242	Driver Alcohol BAC (Case Vehicle)	80	No test	more
V0243	Driver Impairment Mention	0	No	more

<u>.                                    </u>			1	
V0244	Driver Distraction	98	Other distraction	more
V0245	Driver Drug Involvement	1	Yes, drug use mentioned	more
V0246	Driver Drug Type	4	Illegal / illicit drugs	more
V0247	Driven/towed From Scene	2	Towed Due to Damage	more

#### **Other Vehicle**

Variable Number	Variable Name	Code Value	Code Description	Other Options
V0301	Other Vehicle VIN	1G2NE52FX3XXXXXX	Click for Contacted Vehicle figure	more
V0302	Other Vehicle Manufacturer/Body Code	11528		
V0303	Other Vehicle Manufacturer	115	Pontiac	more
V0304	Other Vehicle Body Code	28	Intermediate 105-109.9 in. wb.	more
V0305	Other Vehicle Make/model	0331	Grand Am	more
V0306	Other Vehicle Model Year	2003	Year	more
V0307	Other Vehicle Mass	001413 kg	Mass (Kg.)	more
V0308	Other Vehicle Number	1	Vehicle #1	more
V0309	Other Vehicle Number of Occupants	01	number of occupants	more
V0310	Other Vehicle Traveling Speed	018 kph	Speed (km/h)	more
V0311	Highest Police Injury Severity	3	A - Incapacitating Injury	more
V0312	Other Vehicle Type	28	Intermediate 105-109.9 in. wb.	more
V0313	Other Vehicle Wheelbase in Centimeters	272 cm	Actual Wheelbase (cm)	more
V0314	Other Vehicle Average Track Width	150 cm	actual measurement (cm)	more
V0315	Other Vehicle Overall Length	475 cm	actual measurement (cm)	more
V0316	Other Vehicle Overall Width (OAW)	179 cm	actual measurement (cm)	more
V0317	Other Vehicle Front Overhang	101 cm	actual measurement (cm)	more

V0318	Other Vehicle Rear Overhang	102 cm	actual measurement (cm)	more
V0319	Other Vehicle Undeformed End Width (UEW)	162 cm	actual measurement (cm)	more
V0320	Other Vehicle Engine Displacement	2.2 <i>l</i>	Liters	more
V0321	Other Vehicle Engine: Number of Cylinders	04	number of cylinders	more
V0322	Other Vehicle Direct Damage Length (DDL)	120 cm	actual measurement (cm)	more
V0323	Other Vehicle Front- End Overlap	74	percentage (%)	more
V0324	Other Vehicle - Vehicle Overlap	72	percentage (%)	more

**Case Vehicle General** 

Variable Number	Variable Name	Code Value	Code Description	Other Options
V0401	VIN	2G4WS52JX2XXXXXX	Click for Case Vehicle figure	more
V0402	Manufacturer/Body Code	21128		
V0403	Vehicle Manufacturer	211	Buick	more
V0404	Vehicle Body Code	28	Intermediate 105-109.9 in. wb.	more
V0405	Make/model Code	0422	Century	more
V0406	Model Year	2002	Model year	more
V0407	Vehicle Mass	001528 kg	Mass (Kg)	more
V0408	Odometer Reading	888888		
V0409	Number of Occupants	01	1 occupant	more
V0410	Traveling Speed	060 kph	Speed (km/h)	more
V0411	Body Type	14	4-door sedan	more
V0412	Stolen Vehicle	8	Not currently collected	more
V0413	Body Structure	2	Unitized	more
V0414	Transmission Type	1	Automatic	more
V0415	Transmission Lever Location	3	Column	more
V0416	Steering	1	Power	more
V0417	Brakes	1	Power	more
V0418	Brake Type	2	Disc - front wheels	more

V0419	Adjustable Pedals?	0	No	more
V0420	Brake Anti-lock Device	1	Two-wheel	more
V0421	Air Conditioning in Vehicle	8	Not currently collected	more
V0422	Drive Type	2	Front wheel	more
V0423	Dual Rear Wheels	0	No	more
V0424	Original Restraint System Type	3	Air bag	more
V0425	Equipped With Roll Bar	0	No	more
V0426	Roof Type	1	Solid	more
V0427	Case Vehicle Wheelbase in Centimeters	277 cm	Actual Wheelbase	more
V0428	Anti-lacerative Glass	8	Not Collected	more
V0429	Case Vehicle average track Width	156 cm	actual measurement (cm)	more
V0430	Case Vehicle Overall Length	495 cm	actual measurement (cm)	more
V0431	Case Vehicle Overall Width (OAW)	185	actual measurement (cm)	more
V0432	Case Vehicle Front Overhang	106 cm	actual measurement (cm)	more
V0433	Case Vehicle Rear Overhang	112 cm	actual measurement (cm)	more
V0434	Case Vehicle Undeformed End Width (UEW)	165 cm	actual measurement (cm)	more
V0435	Case Vehicle Engine Displacement	3.1 <i>l</i>	Liters	more
V0436	Case Vehicle Engine: Number of Cylinders	06	number of cylinders	more
V0437	Case Vehicle Direct Damage Length (DDL)	072 cm	actual measurement (cm)	more
V0438	Case Vehicle Front- end Overlap	44	percentage (%)	more
V0439	Case Vehicle - Vehicle Overlap	44	percentage (%)	more

Case Vehicle Damage Description

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Variable Number	Variable Name	Code Value	Code Description	Other Options
V0501	Maximum Sheet Metal Crush - Front	038 cm	Depth of Crush (cm)	more
V0502	Maximum Sheet Metal Crush - Rear	000 cm	No Crush (or less than 1 cm.)	more
V0503	Maximum Sheet Metal Crush - Roof	000 cm	No Crush (or less than 1 cm.)	more
V0504	Maximum Sheet Metal Crush - Right Side	000 cm	No Crush (or less than 1 cm.)	more
V0505	Maximum Sheet Metal Crush - Left Side	000 cm	No Crush (or less than 1 cm.)	more
V0506	Maximum Sheet Metal Crush - Other	000 cm	No Crush (or less than 1 cm.)	more
V0507	Seq In Chronologicl Ordr	1	Yes	more
V0508	Event 1 -impact Location	1	On Roadway	more
V0509	Event 1 -Impact Configuration	11	FRONT of case veh - FRONT of contacted veh	more
V0510	Event 1 -Object/Vehicle Contactd	28	Intermediate 105-109.9 in. wb.	more
V0511	Event 2 -impact Location	8	No 2nd event	more
V0512	Event 2 -Impact Configuration	88	No 2nd event	more
V0513	Event 2 -Object/Vehicle Contactd	00	No object/vehicle contacted	more
V0514	Event 3 -impact Location	8	No 3rd event	more
V0515	Event 3 -Impact Configuration	88	No 3rd event	more
V0516	Event 3 -Object/Vehicle Contactd	00	No object/vehicle contacted	more
V0517	Event 4 -impact Location	8	No 4th event	more
V0518	Event 4 -Impact Configuration	88	No 4th event	more
V0519	Event 4 -Object/Vehicle Contactd	00	No object/vehicle contacted	more
V0520	Event 5 -impact Location	8	No 5th event	more
V0521	Event 5 -Impact Configuration	88	No 5th event	more
V0522	Event 5 -Object/Vehicle Contactd	00	No object/vehicle contacted	more
V0523	Event 6 -impact Location	8	No 6th event	more
	Event 6 -Impact			

V0524	Configuration	88	No 6th event	more
V0525	Event 6 -Object/Vehicle Contactd	00	No object/vehicle contacted	more
V0526	Event 7 -impact Location	8	No 7th event	more
V0527	Event 7 -Impact Configuration	88	No 7th event	more
V0528	Event 7 -Object/Vehicle Contactd	0.0	No object/vehicle contacted	more
V0529	Primary CDC Case Vehicle - event Number	1	Event 1	more
V0530	Primary CDC Case Vehicle - Impact Speed (kph)	060	Impact speed (kph)	more
V0531	Primary CDC Case Vehicle- estimatr	6	EDR data	more
V0532	Primary CDC Case Vehicle - Crush (CM)	038	Crush measurements in cm	more
V0533	Primary CDC Case Vehicle- clock #1	11	11 o'clock	more
V0534	Primary CDC Case Vehicle- Letter 1 #1	06	F - Front	more
V0535	Primary CDC Case Vehicle- Letter 2 #1	25	Y - Side or end $(F + P \text{ or } L + C)$	more
V0536	Primary CDC Case Vehicle- Letter 3 #1	05	E - Everything below belt line	more
V0537	Primary CDC Case Vehicle- Letter 4 #1	23	W - Wide impact area	more
V0538	Primary CDC Case Vehicle - Extent #1	2		
V0539	Primary CDC - Contacted Vehicles Assoc CDC - CDC #1	11FYEW2		
V0540	Primary CDC Case Vehicle- clock #2	98	Not Applicable	more
V0541	Primary CDC Case Vehicle- Letter 1 #2	00	Missing Data/Not applicable	more
V0542	Primary CDC Case Vehicle- Letter 2 #2	00	Missing Data/Not applicable	more
V0543	Primary CDC Case Vehicle- Letter 3 #2	00	Missing Data/Not applicable	more
V0544	Primary CDC Case Vehicle- Letter 4 #2	00	Missing Data/Not applicable	more
V0545	Primary CDC Case Vehicle - Extent #2	0		

V0546	Primary CDC - Case Vehicle Assoc CDC - CDC #2	9800000		
V0547	Primary CDC Contacted Vehicle - Impact Speed (kph)	018	Impact speed (kph)	more
V0548	Primary CDC Contacted Vehicle-estimater	6	EDR data	more
V0549	Primary CDC Contacted Vehicle - Crush (CM)	051	Crush measurements in cm	more
V0550	Primary CDC Contacted Vehicle-clock #1	01	1 o'clock	more
V0551	Primary CDC Contacted Vehicle-Letter 1 #1	06	F - Front	more
V0552	Primary CDC Contacted Vehicle-Letter 2 #1	04	D - Distributed (Side or End) or (F + P + B)	more
V0553	Primary CDC Contacted Vehicle-Letter 3 #1	05	E - Everything below belt line	more
V0554	Primary CDC Contacted Vehicle-Letter 4 #1	23	W - Wide impact area	more
V0555	Primary CDC Contacted Vehicle - Extent #1	2		
V0556	primary CDC - Contacted Vehicles Assoc CDC - CDC #1	01FDEW2		
V0557	Primary CDC Contacted Vehicle-clock #2	98	Not Applicable	more
V0558	Primary CDC Contacted Vehicle-Letter 1 #2	00	Missing Data/Not applicable	more
V0559	Primary CDC Contacted Vehicle-Letter 2 #2	00	Missing Data/Not applicable	more
V0560	Primary CDC Contacted Vehicle-Letter 3 #2	00	Missing Data/Not applicable	more
V0561	Primary CDC Contacted Vehicle-Letter 4 #2	00	Missing Data/Not applicable	more
V0562	Primary CDC Contacted Vehicle - Extent #2	0		
V0563	Primary CDC - Contacted Vehicles Assoc CDC - CDC #2	9800000		
V0564	Secondary CDC Case Vehicle-event No	8	Not applicable	more
V0565	Secondary CDC Case Vehicle - Impact Speed (kph)	998	Not Applicable	more

V0566	Secondary CDC Case Vehicle-estimater	8	Not applicable (no vehicle/no impact)	more
V0567	Secondary CDC Case Vehicle - Crush (CM)	998	Not Applicable	more
V0568	Secondary CDC Case Vehicle-clock #1	98	Not Applicable	more
V0569	Secondary CDC Case Vehicle-Letter 1 #1	00	Missing Data/Not applicable	more
V0570	Secondary CDC Case Vehicle-Letter 2 #1	00	Missing Data/Not applicable	more
V0571	Secondary CDC Case Vehicle-Letter 3 #1	00	Missing Data/Not applicable	more
V0572	Secondary CDC Case Vehicle-Letter 4 #1	00	Missing Data/Not applicable	more
V0573	SECONDARY CDC CASE VEHICLE - EXTENT #1	0		
V0574	Secondary CDC - Case Vehicle Assoc CDC - CDC #1	9800000		
V0575	Secondary CDC Case Vehicle-clock #2	98	Not Applicable	more
V0576	Secondary CDC Case Vehicle-Letter 1 #2	00	Missing Data/Not applicable	more
V0577	Secondary CDC Case Vehicle-Letter 2 #2	00	Missing Data/Not applicable	more
V0578	Secondary CDC Case Vehicle-Letter 3 #2	0 0	Missing Data/Not applicable	more
V0579	Secondary CDC Case Vehicle-Letter 4 #2	00	Missing Data/Not applicable	more
V0580	SECONDARY CDC CASE VEHICLE - EXTENT #2	0		
V0581	Secondary CDC - Case Vehicle Assoc CDC - CDC #2	9800000		
V0582	Secondary CDC Contacted Vehicle - Impact Speed (kph)	998	Not Applicable	more
V0583	Secondary CDC Contacted Vehicle-estimater	8	Not applicable (no vehicle/no impact)	more
V0584	Secondary CDC Contacted Vehicle - Crush (CM)	998	Not Applicable	more
V0585	Secondary CDC Contacted Vehicle-clock #1	98	Not Applicable	more
	Secondary CDC Contacted			

V0586	Vehicle-Letter 1 #1	00	Missing Data/Not applicable	more
V0587	Secondary CDC Contacted Vehicle-Letter 2 #1	00	Missing Data/Not applicable	more
V0588	Secondary CDC Contacted Vehicle-Letter 3 #1	00	Missing Data/Not applicable	more
V0589	Secondary CDC Contacted Vehicle-Letter 4 #1	00	Missing Data/Not applicable	more
V0590	Secondary CDC Contacted Vehicle - Extent #1	0		
V0591	Secondary CDC - Contacted Vehicle Assoc CDC - CDC #1	9800000		
V0592	Secondary CDC Contacted Vehicle-clock #2	98	Not Applicable	more
V0593	Secondary CDC Contacted Vehicle-Letter 1 #2	00	Missing Data/Not applicable	more
V0594	Secondary CDC Contacted Vehicle-Letter 2 #2	00	Missing Data/Not applicable	more
V0595	Secondary CDC Contacted Vehicle-Letter 3 #2	00	Missing Data/Not applicable	more
V0596	Secondary CDC Contacted Vehicle-Letter 4 #2	00	Missing Data/Not applicable	more
V0597	Secondary CDC Contacted Vehicle - Extent #2	0		
V0598	Secondary CDC - Contacted Vehicle Assoc CDC - CDC #2	9800000		

Crash Reconstruction

Variable Number	Variable Name	Code Value	Code Description	Other Options
	Primary Delta-V Case Vehicle-event #	1	Event number 1	more
	Primary Delta V Case Vehicle - Total Delta V	037 kph	kph	more
	Primary delta-V Case Vehicle -LONGITUD	-035		
	Primary delta-V Case Vehicle-Lateral	0013		_
V0605	Primary Delta V Case Vehicle - Energy Dissipated	0082		_

	by Crush (k			
V0606	Primary Delta-V Case Vehicle-Reconstruction	22	Reconstructed, moderate confidence level	more
V0607	Primary Delta-V Case Vehicle- Mode	2	CDC & detailed damage	more
V0608	Primary Delta V Contacted Vehicle - Total Delta V	042 kph	kph	more
V0609	Primary delta-V Contacted Vehicle-LONGITUD	-039		
V0610	Primary delta-V Contacted Vehicle-Lateral	-014		
V0611	Primary delta-V Contacted Vehicle - Energy Dissipated by Cru	0116		
V0612	Secondary Delta-V Case Vehicle-event #	8	Not applicable	more
V0613	Secondary Delta V Case Vehicle - Total Delta V	888	Not applicable	more
V0614	Secondarydelta-V Case Vehicle -LONGITUD	8888		
V0615	Secondary delta-V Case Vehicle-Lateral	8888		
V0616	Secondary delta-V Case Vehicle - Energy Dissipated by Crush	8888		
V0617	Secondary Delta-V Case Vehicle-Reconstruction	88	Not applicable	more
V0618	Secondary Delta-V Case Vehicle- Mode	8	Not applicable	more
V0619	Secondary Delta V Contacted Vehicle - Total Delta V	888	Not applicable	more
V0620	Secondary delta-V Contacted Vehicle-LONGITUD	8888		
V0621	Secondary delta-V Contacted Vehicle-Lateral	8888		
V0622	Secondary delta-V Contacted Vehicle - Energy Dissipated By C	8888		
V0623	Primary EBS Case Vehicle- event #	1	Event number 1	more
	Primary EBS Case Vehicle -			

V0624	Total EBS	037 kph	kph	more
V0625	Primary EBS Case Vehicle - LONGITUD	-035		
V0626	Primary EBS Case Vehicle- Lateral	0013		
V0627	Primary EBS Case Vehicle - Energy Dissipated by Crush (kj)	0082		
V0628	Primary EBS Case Vehicle- Reconstruction	22	Reconstructed, moderate confidence level	more
V0629	Primary EBS Case Vehicle- Mode	2	CDC & detailed damage	more
V0630	Primary EBS Contacted Vehicle - Total EBS	042 kph	kph	more
V0631	Primary EBS Contacted Vehicle-LONGITUD	-039		
V0632	Primary EBS Contacted Vehicle-Lateral	-014		
V0633	Primary EBS Contact Vehicle - Energy Dissipated by Crush (kj	0116		
V0634	Secondary EBS Case Vehicle-event #	8	Not applicable	more
V0635	Secondary EBS Case Vehicle - Total EBS	888	Not Applicable	more
V0636	Secondary EBS Case Vehicle -LONGITUD	8888		
V0637	Secondary EBS Case Vehicle-Lateral	8888		
V0638	Secondary EBS Case Vehicle - Energy Dissipated by Crush (kj)	8888		
V0639	Secondary EBS Case Vehicle-Reconstruction	88	Not applicable	more
V0640	Secondary EBS Case Vehicle- Mode	8	Not applicable	more
V0641	Secondary EBS Contacted Vehicle - Total EBS	888	Not Applicable	more
V0642	Secondary EBS Contacted Vehicle-LONGITUD	8888		
V0643	Secondary EBS Contacted Vehicle-Lateral	8888		

V0644	Secondary EBS Contact Vehicle - Energy Dissipated by Crush (	8888		
V0645	Specific Event # Case(1)	1	Event number 1	more
V0646	Plane of Impact Case Vehicle (1)	1	Bumper	more
V0647	Direct Damage Length (DDL) - Case Vehicle (1)	072 cm	cm	more
V0648	Direct Damage Maximum Crush - Case Vehicle (1)	038 cm	cm	more
V0649	Direct and Induced Damage Length in CM	127 cm	cm	more
V0650	Field C1 - Case Vehicle (1)	038 cm	cm	more
V0651	Field C2 - Case Vehicle (1)	036 cm	cm	more
V0652	Field C3 - Case Vehicle (1)	032 cm	cm	more
V0653	Field C4 - Case Vehicle (1)	024 cm	cm	more
V0654	Field C5 - Case Vehicle (1)	006 cm	cm	more
V0655	Field C6 - Case Vehicle (1)	000 cm	No Crush	more
V0656	Direct Damage D Value = The Center of Direct Damage Offset t	-047 cm	Offset (cm)	more
V0657	Specific Event # Case(2)	1	Event number 1	more
V0658	Plane of Impact Case Vehicle(2)	1	Bumper	more
V0659	Direct Damage Length (DDL) - Case Vehicle (2)	072 cm	cm	more
V0660	Direct Damage MaximumCrush - Case Vehicle (2)	038 cm	cm	more
V0661	Direct and Induced Damage Length in CM	127 cm	cm	more
V0662	Field C1 - Case Vehicle (2)	038 cm	cm	more
V0663	Field C2 - Case Vehicle (2)	036 cm	cm	more
V0664	Field C3 - Case Vehicle (2)	032 cm	cm	more
V0665	Field C4 - Case Vehicle (2)	024 cm	cm	more
V0666	Field C5 - Case Vehicle (2)	006 cm	cm	more
V0667	Field C6 - Case Vehicle (2)	000 cm	No Crush	more
V0668	Direct Damage D Value = The Center of Direct Damage Offset t	-047 cm	cm	more
V0669	Specific Event # Cont(1)	1	Event number 1	more

V0670	Plane of Impact Contacted Vehicle(1)	1	Bumper	more
V0671	Direct Damage Length (DDL) - Contacted Vehicle (1)	120 cm	cm	more
V0672	Direct Damage Maximum Crush - Contacted Vehicle (1)	051 cm	cm	more
V0673	Field L - Contacted Vehicle (1)	105 cm	cm	more
V0674	Field C1 - Contacted Vehicle (1)	017 cm	cm	more
V0675	Field C2 - Contacted Vehicle (1)	015 cm	cm	more
V0676	Field C3 - Contacted Vehicle (1)	028 cm	cm	more
V0677	Field C4 - Contacted Vehicle (1)	042 cm	cm	more
V0678	Field C5 - Contacted Vehicle (1)	051 cm	cm	more
V0679	Field C6 - Contacted Vehicle (1)	020 cm	cm	more
V0680	Direct Damage D Value = The Center of Direct Damage Offset t	+035 cm	offset (cm)	more
V0681	Specific Event # Contacted Vehicle (2)	1	Event number	more
V0682	Plane of Impact Contacted Vehicle(2)	1	Bumper	more
V0683	Direct Damage Length (DDL) - Contacted Vehicle (2)	120 cm	cm	more
V0684	Direct Damage Maximum Crush - Contacted Vehicle (2)	051 cm	cm	more
V0685	Direct and Induced Damage Length in CM	105 cm	cm	more
V0686	Field C1 - Contacted Vehicle (2)	017 cm	cm	more
V0687	Field C2 - Contacted Vehicle (2)	015 cm	cm	more
V0688	Field C3 - Contacted Vehicle (2)	028 cm	cm	more
	Field C4 - Contacted Vehicle	042 cm		

	(2)		cm	more
V0690	Field C5 - Contacted Vehicle (2)	051 cm	cm	more
V0691	Field C6 - Contacted Vehicle (2)	020 cm	cm	more
V0692	Direct Damage D Value = The Center of Direct Damage Offset t	+035 cm	Offset (cm)	more

#### **Case Vehicle Tires & Rims**

Variable Number	Variable Name	Code Value	Code Description	Other Options
V0701	Left Front Wheel Damaged	1	Yes	more
V0702	Right Front Wheel Damaged	0	No	more
V0703	Right Rear Wheel Damaged	1	Yes	more
V0704	Left Rear Wheel Damaged	0	No	more
V0705	Left Front Tire Tread Type	4	All Weather	more
V0706	Right Front Tire Tread Type	4	All Weather	more
V0707	Right Rear Tire Tread Type	4	All Weather	more
V0708	Left Rear Tire Tread Type	4	All Weather	more
V0709	Left Front Carcass Construction	3	Radial	more
V0710	Right Front Carcass Construction	3	Radial	more
V0711	Right Rear Carcass Construction	3	Radial	more
V0712	Left Rear Carcass Construction	3	Radial	more
V0713	Left Front Tire Condition Precrash	0	Normal - no pre-crash problems	more
V0714	Right Front Tire Condition Precrash	0	Normal - no pre-crash problems	more
V0715	Right Rear Tire Condition Precrash	0	Normal - no pre-crash problems	more
V0716	Left Rear Tire Condition Precrash	0	Normal - no pre-crash problems	more
V0717	Left Front Tire Condition Postcrash	2	Completely deflated	more
	Right Front Tire Condition			

V0718	Postcrash	0	Normal - no damage to tire	more
V0719	Right Rear Tire Condition Postcrash	4	Tread separation	more
V0720	Left Rear Tire Condition Postcrash	0	Normal - no damage to tire	more
V0721	Left Front Tire Involvement	0	No	more
V0722	Right Front Tire Involvement	0	No	more
V0723	Right Rear Tire Involvement	0	No	more
V0724	Left Rear Tire Involvement	0	No	more
V0725	Left Front Tire Size	P20570R15		
V0726	Right Front Tire Size	P20570R15		
V0727	Right Rear Tire Size	P20570R15		
V0728	Left Rear Tire Size	P20570R15		
V0729	Left Front Tire Pressure (recorded in psi)	00.0 psi	Actual tire pressure in psi	more
V0730	Right Front Tire Pressure (recorded in psi)	29.5 psi	Actual tire pressure in psi	more
V0731	Right Rear Tire Pressure (recorded in psi)	99.9	Unknown	more
V0732	Left Rear Tire Pressure (recorded in psi)	29.5 psi	Actual tire pressure in psi	more
V0733	Left Front Tread Depth	06	06/32"	more
V0734	Right Front Tread Depth	07	07/32"	more
V0735	Right Rear Tread Depth	99	Unknown, missing	more
V0736	Left Rear Tread Depth	05	05/32"	more

#### **Case Vehicle Fuel Tank**

Variable Number	Variable Name	Code Value	Code Description	Other Options
V0801	Propulsive Fuel Type	1	Gasoline	more
V0802	Main Tank Location	322	Within frame/centered laterally - within vertica	more
V0803	Main Filler Cap Location	113	Left of frame laterally - above vertically	more
V0804	Main Tank Material	9	Unknown	more
V0805	Aux Tank Type	8	Not applicable (not equipped)	more
V0806	Aux Tank Location	888	Not applicable (not equipped)	more

	JL	IL	11	L
V0807	Aux Filler Cap Location	888	Not applicable (not equipped)	more
V0808	Aux Tank Material	8	Not applicable	more

## Case Vehicle Fuel Leakage

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Variable	Code	Code Description	Other
Number	Value		Options
V0901 Fuel Leakage From Crash	0	No	more

#### Case Vehicle Fire

Variable Number	Variable Name	Code Value	Code Description	Other Options
V1001	Fire In Or On Case Vehicle	0	No	more

#### **Case Vehicle Exterior**

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Variable Name	Code Value	Code Description	Other Options
Hood Latch Released	0	No	more
Hood Latch Damaged	1	Yes	more
Hood Latch Jammed	0	No	more
Left Hood Hinge Damaged	0	No	more
Left Hood Hinge Separated	8	Not applicable	more
Right Hood Hinge Damaged	0	No	more
Right Hood Hinge Separated	8	Not applicable	more
Hood Remained On Vehicle	1	Yes	more
Rear Hood Edge Elevated	1	Yes	more
Edge Contacted Windshield	0	No	more
Edge Penetrated Windshield	8	Not applicable	more
Hood Latch Location	1	Front of Vehicle	more
Eng/transmissn Mount Separated	0	No	more
Steering Column Flex Couplng	9	Unknown if equipped	more
Steering Column Coupling Dam	9	Unknown	more
Steering Column Coupling Separated	9	Unknown	more
	Hood Latch Released Hood Latch Damaged Hood Latch Jammed Left Hood Hinge Damaged Left Hood Hinge Damaged Right Hood Hinge Separated Right Hood Hinge Separated Hood Remained On Vehicle Rear Hood Edge Elevated Edge Contacted Windshield Edge Penetrated Windshield Hood Latch Location Eng/transmissn Mount Separated Steering Column Flex Couplng Steering Column Coupling Dam	Hood Latch Released0Hood Latch Damaged1Hood Latch Jammed0Left Hood Hinge Damaged0Left Hood Hinge Separated8Right Hood Hinge Separated8Right Hood Hinge Separated8Hood Remained On Vehicle1Rear Hood Edge Elevated1Edge Contacted Windshield0Edge Penetrated Windshield8Hood Latch Location1Eng/transmissn Mount Separated9Steering Column Flex Couplng9Steering Column Coupling Dam9	Hood Latch Released0NoHood Latch Damaged1YesHood Latch Jammed0NoLeft Hood Hinge Damaged0NoLeft Hood Hinge Separated8Not applicableRight Hood Hinge Damaged0NoRight Hood Hinge Separated8Not applicableHood Remained On Vehicle1YesRear Hood Edge Elevated1YesEdge Contacted Windshield0NoEdge Penetrated Windshield8Not applicableHood Latch Location1Front of VehicleEng/transmissn Mount Separated0NoSteering Column Flex Couplng9Unknown if equippedSteering Column Coupling Dam9Unknown

V1117	Eng Comp Telescopng Unit	88	Not currently collected	more
V1118	Compartment Unit's Original/telescoped Length Difference	888	Not currently collected	more
V1119	Left Side Body Mount Separated	8	Not applicable (unitized)	more
V1120	Upper Left A-pillar Sep	0	No	more
V1121	Lower Left A-pillar Sep	0	No	more
V1122	Upper Left B-pillar Sep	0	No	more
V1123	Lower Left B-pillar Sep	0	No	more
V1124	Upper Left C-pillar Sep	0	No	more
V1125	Lower Left C-pillar Sep	0	No	more
V1126	Upper Left D-pillar Sep	8	Not applicable (not equipped)	more
V1127	Lower Left D-pillar Sep	8	Not applicable (not equipped)	more
V1128	Left Front Door Opening Cause	00	Door did not open	more
V1129	Left Rear Door Opening Cause	00	Door did not open	more
V1130	Left Front Door Jammed Closed	0	No	more
V1131	Left Rear Door Jammed Closed	0	No	more
V1132	Van Left Rear Door Type	8	Not applicable (not a van)	more
V1133	Left Front Glazing Availability	2	Closed	more
V1134	Left Rear Glazing Availability	2	Closed	more
V1135	Lr2 Glazing Availability	1	Fixed	more
V1136	Left Front Glazing Damage	0	No damage	more
V1137	Left Rear Glazing Damage	0	No damage	more
V1138	Lr2 Glazing Damage	0	No damage	more
V1139	Rear Door Type	0	No door (includes pickups)	more
V1140	Rear Door Opening Cause	8	Not applicable (no rear door)	more
V1141	Rear Door Jammed Closed	8	Not applicable (no rear door)	more
V1142	Rear Glazng Availability	8	Not Applicable (No Door)	more
V1143	Rear Glazing Damage	8	Not Applicable (No Door)	more
V1144	Luggage Partition Damaged	0	No	more
V1145	Spare Tire Status	8	Not collected	more
V1146	Trailer Hitch Type	0	No hitch	more
	Trailer Type	0	No trailer	

V1148	Rght Side Body Mount Separated	8	Not applicable (unitized)	more
V1149	Upper Right A-pillar Separated	0	No	more
V1150	Lower Right A-pillar Separated	0	No	more
V1151	Upper Right B-pillar Separated	0	No	more
V1152	Lower Right B-pillar Separated	0	No	more
V1153	Upper Right C-pillar Separated	0	No	more
V1154	Lower Right C-pillar Separated	0	No	more
V1155	Upper Right D-pillar Separated	8	Not applicable (not equipped)	more
V1156	Lower Right D-pillar Separated	8	Not applicable (not equipped)	more
V1157	Right Front Door Opening Cause	00	Door did not open	more
V1158	Right Rear Door Opening Cause	00	Door did not open	more
V1159	Right Front Door Jammed Closed	0	No	more
V1160	Right Rear Door Jammed Closed	0	No	more
V1161	Van Right-rear Door Type	8	Not applicable (not a van)	more
V1162	Right Front Glazing Availability	2	Closed	more
V1163	Right Rear Glazing Availability	2	Closed	more
V1164	Rr2 Glazing Availability	1	Fixed	more
V1165	Right Front Glazing Damage	0	No damage	more
V1166	Right Rear Glazing Damage	0	No damage	more
V1167	Rr2 Glazing Damage	0	No damage	more
V1168	Windshield Cracked	1	Yes	more
V1169	Windshield Broken	0	No <u>Click for Windshield Damage</u> <u>figure</u>	more
V1170	Occupant Cracked/Broke Wndshld	0	No	more
V1171	Bond Separation Extent	0	None	more
V1172	Windshield Code	97	Click for Windshield Mark figure	more
			1	

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#### **Case Vehicle Steering Column/Rim**

Variable Number	Variable Name	Code Value	Code Description	Other Options		
V1201	Steering Wheel Rim Damage	0	None	more		
V1202	Number of Steering Wheel Spokes	4	4 spokes	more		
V1203	Steering Wheel Spoke Damage	0	None	more		
V1204	Steering Wheel Hub Damage	0	None	more		
V1205	Steering Wheel Location of Rim Damage	0	No damage	more		
V1206	Aftermarket Add-on Device	0	None	more		
V1207	Column Tilt Feature	3	Middle	more		
V1208	Column Swing-away Feature	0	Not equipped	more		
V1209	Column Telescoping Feature	0	Not equipped	more		
V1210	Wheel Energy Absorb Device	8	Not currently collected	more		
V1211	Wheel EA Device's original/damage Dimension Difference	888	Not collected	more		
V1212	Column Energy Absorb Device	88	Not collected	more		
V1213	Col EA Device's Orig/compressed (or Extruded) Length Diff	888	Not collected	more		
V1214	Shear Capsule Separation	888	Not collected	more		
V1215	Column Vertical Rotation	0	No apparent rotation	more		
V1216	Column Lateral Rotation	0	No apparent rotation	more		
Case Veh	Case Vehicle Intrusion Back to Top					

#### **Case Vehicle Intrusion**

Variable Number	Variable Name	Code Value	Code Description	Other Options
	Was Occupant Compartment Intruded	1	Yes Click for Intrusion Worksheet figure Click for Intrusion figure	more
V1302	Was Intrusn Catastrophic	0	No	more
V1303	Intrusion Number #1	01	Intrusion #1	more
V1304	Occupant Space Number(1)	11	First row, Left seat	more

more

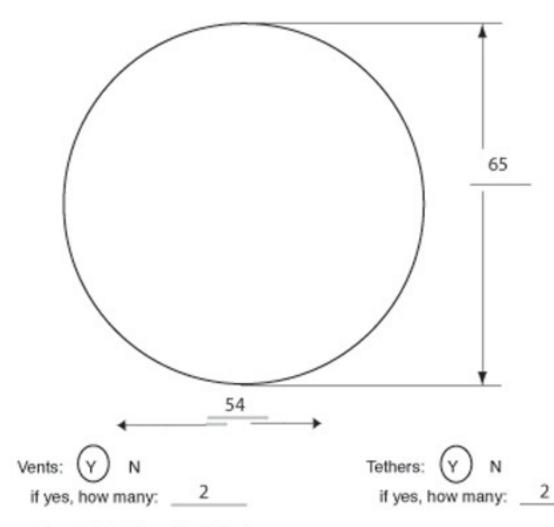
V1305	Intrud Component/obj (1)	04	Floor pan	more
V1306	Associate Event Numb (1)	1	Event #1	more
V1307	Maximum Intrusion X Axis	00 cm	0 cm or No Intrusion	more
V1308	Maximum Intrusion Y Axis	00 cm	0 cm or No Intrusion	more
V1309	Maximum Intrusion Z Axis	09 cm	Intrusion (cm)	more
V1310	Occupant Number #1 (1)	00	No contact or no intrusion	more
V1311	Injury Number #1 (1)	00	No injury or no intrusion	more
V1312	Occupant Number #2 (1)	00	No contact or no intrusion	more
V1313	Injury Number #2 (1)	00	No injury or no intrusion	more
V1314	Intrusion Number #2	99	Unknown or data not collected	more
V1315	Occupant Space Number(2)	99	Unknown or data not collected	more
V1316	Intrud Component/obj (2)	99	Unknown or data not collected	more
V1317	Associate Event Numb (2)	9	Unknown or data not collected	more
V1318	Maximum Intrusion X Axis	99	Unknown or data not collected	more
V1319	Maximum Intrusion Y Axis	99	Unknown or data not collected	more
V1320	Maximum Intrusion Z Axis	99	Unknown or data not collected	more
V1321	Occupant Number #1 (2)	99	Unknown or data not collected	more
V1322	Injury Number #1 (2)	99	Contact, injury unknown or data not collected	more
V1323	Occupant Number #2 (2)	99	Unknown or data not collected	more
V1324	Injury Number #2 (2)	99	Contact, injury unknown or data not collected	more
V1325	Intrusion Number #3	99	Unknown or data not collected	more
V1326	Occupant Space Number(3)	99	Unknown or data not collected	more
V1327	Intrud Compnent/obj (3)	99	Unknown or data not collected	more
V1328	Associate Event Numb (3)	9	Unknown or data not collected	more
V1329	Maximum Intrusion X Axis	99	Unknown or data not collected	more
V1330	Maximum Intrusion Y Axis	99	Unknown or data not collected	more
V1331	Maximum Intrusion Z Axis	99	Unknown or data not collected	more
V1332	Occupant Number #1 (3)	99	Unknown or data not collected	more
V1333	Injury Number #1 (3)	99	Contact, injury unknown or data not collected	more
V1334	Occupant Number #2 (3)	99	Unknown or data not collected	more
V1335	Injury Number #2 (3)	99	Contact, injury unknown or data not collected	more
V1336	Intrusion Number #4	99	Unknown or data not collected	more
V1337	Occupant Space Number(4)	99	Unknown or data not collected	more
V1338	Intrud Component/obj (4)	99	Unknown or data not collected	more
V1339	Associate Event Numb (4)	9	Unknown or data not collected	more

<u> </u>	۲ <u>ــــــــــــــــــــــــــــــــــــ</u>	<u></u>	۲ <u>ــــــــــــــــــــــــــــــــــــ</u>	
V1340	Maximum Intrusion X Axis	99	Unknown or data not collected	more
V1341	Maximum Intrusion Y Axis	99	Unknown or data not collected	more
V1342	Maximum Intrusion Z Axis	99	Unknown or data not collected	more
V1343	Occupant Number #1 (4)	99	Unknown or data not collected	more
V1344	Injury Number #1 (4)	99	Contact, injury unknown or data not collected	more
V1345	Occupant Number #2 (4)	99	Unknown or data not collected	more
V1346	Injury Number #2 (4)	99	Contact, injury unknown or data not collected	more
V1347	Intrusion Number #5	99	Unknown or data not collected	more
V1348	Occupant Space Number(5)	99	Unknown or data not collected	more
V1349	Intrud Component/obj (5)	99	Unknown or data not collected	more
V1350	Associate Event Numb (5)	9	Unknown or data not collected	more
V1351	Maximum Intrusion X Axis	99	Unknown or data not collected	more
V1352	Maximum Intrusion Y Axis	99	Unknown or data not collected	more
V1353	Maximum Intrusion Z Axis	99	Unknown or data not collected	more
V1354	Occupant Number #1 (5)	99	Unknown or data not collected	more
V1355	Injury Number #1 (5)	99	Contact, injury unknown or data not collected	more
V1356	Occupant Number #2 (5)	99	Unknown or data not collected	more
V1357	Injury Number #2 (5)	99	Contact, injury unknown or data not collected	more
V1358	Intrusion Number #6	99	Unknown or data not collected	more
V1359	Occupant Space Number(6)	99	Unknown or data not collected	more
V1360	Intrud Component/obj (6)	99	Unknown or data not collected	more
V1361	Associate Event Numb (6)	9	Unknown or data not collected	more
V1362	Maximum Intrusion X Axis	99	Unknown or data not collected	more
V1363	Maximum Intrusion Y Axis	99	Unknown or data not collected	more
V1364	Maximum Intrusion Z Axis	99	Unknown or data not collected	more
V1365	Occupant Number #1 (6)	99	Unknown or data not collected	more
V1366	Injury Number #1 (6)	99	Contact, injury unknown or data not collected	more
V1367	Occupant Number #2 (6)	99	Unknown or data not collected	more
V1368	Injury Number #2 (6)	99	Contact, injury unknown or data not collected	more
V1369	Intrusion Number #7	99	Unknown or data not collected	more
V1370	Occupant Space Number(7)	99	Unknown or data not collected	more
V1371	Intrud Component/obj (7)	99	Unknown or data not collected	more
V1372	Associate Event Numb (7)	9	Unknown or data not collected	more
			1	

V1373	Maximum Intrusion X Axis	99	Unknown or data not collected	more
V1374	Maximum Intrusion Y Axis	99	Unknown or data not collected	more
V1375	Maximum Intrusion Z Axis	99	Unknown or data not collected	more
V1376	Occupant Number #1 (7)	99	Unknown or data not collected	more
V1377	Injury Number #1 (7)	99	Contact, injury unknown or data not collected	more
V1378	Occupant Number #2 (7)	99	Unknown or data not collected	more
V1379	Injury Number #2 (7)	99	Contact, injury unknown or data not collected	more
V1380	Intrusion Number #8	99	Unknown or data not collected	more
V1381	Occupant Space Number(8)	99	Unknown or data not collected	more
V1382	Intrud Component/obj (8)	99	Unknown or data not collected	more
V1383	Associate Event Numb (8)	9	Unknown or data not collected	more
V1384	Maximum Intrusion X Axis	99	Unknown or data not collected	more
V1385	Maximum Intrusion Y Axis	99	Unknown or data not collected	more
V1386	Maximum Intrusion Z Axis	99	Unknown or data not collected	more
V1387	Occupant Number #1 (8)	99	Unknown or data not collected	more
V1388	Injury Number #1 (8)	99	Contact, injury unknown or data not collected	more
V1389	Occupant Number #2 (8)	99	Unknown or data not collected	more
V1390	Injury Number #2 (8)	99	Contact, injury unknown or data not collected	more
V1391	Intrusion Number #9	99	Unknown or data not collected	more
V1392	Occupant Space Number(9)	99	Unknown or data not collected	more
V1393	Intrud Component/obj (9)	99	Unknown or data not collected	more
V1394	Associate Event Numb (9)	9	Unknown or data not collected	more
V1395	Maximum Intrusion X Axis	99	Unknown or data not collected	more
V1396	Maximum Intrusion Y Axis	99	Unknown or data not collected	more
V1397	Maximum Intrusion Z Axis	99	Unknown or data not collected	more
V1398	Occupant Number #1 (9)	99	Unknown or data not collected	more
V1399	Injury Number #1 (9)	99	Contact, injury unknown or data not collected	more
V1400	Occupant Number #2 (9)	99	Unknown or data not collected	more
V1401	Injury Number #2 (9)	99	Contact, injury unknown or data not collected	more
V1402	Intrusion Number #10	99	Unknown or data not collected	more
V1403	Occupant Space Number (10)	99	Unknown or data not collected	more
V1404	Intrud Component/obj(10)	99	Unknown or data not collected	more
V1405	Associate Event Numb(10)	9	Unknown or data not collected	more

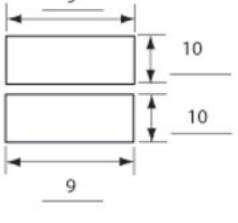
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V1406	Maximum Intrusion X Axis	99	Unknown or data not collected	more



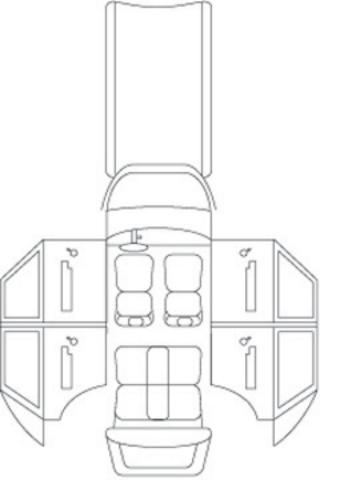


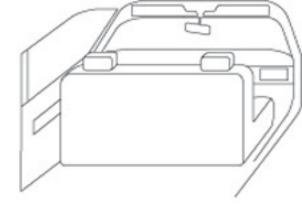
vents located at 9 and 3 o'clock





H-Pattern

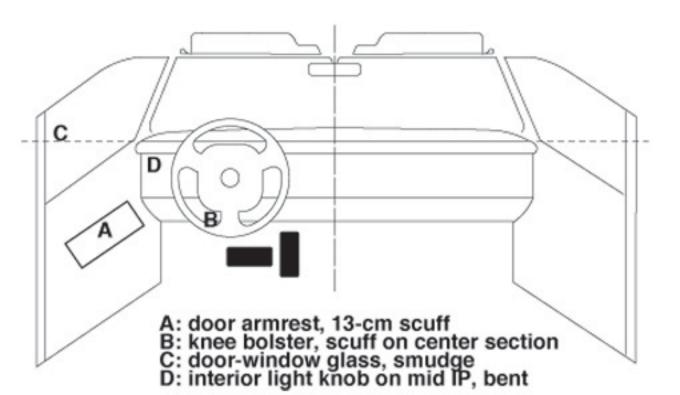




evidence of use on driver belt:

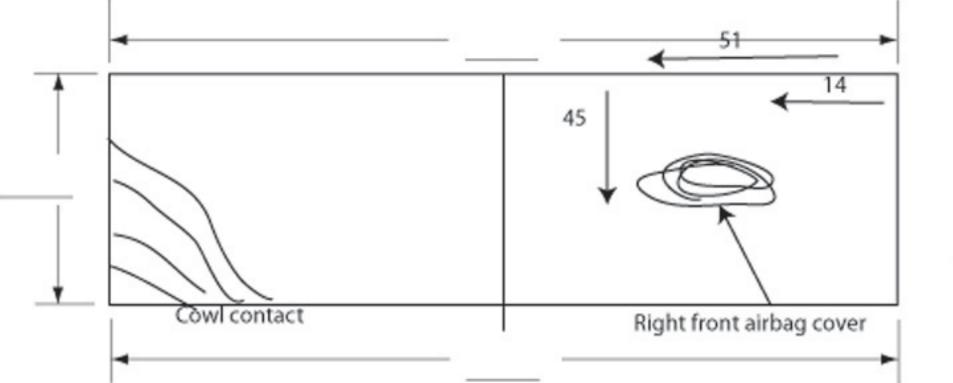
black on webbing mark on continuous loop mark on D-ring

Mid on B-pillar



## 1 = Definitely 2 = Probably 3 = Possible

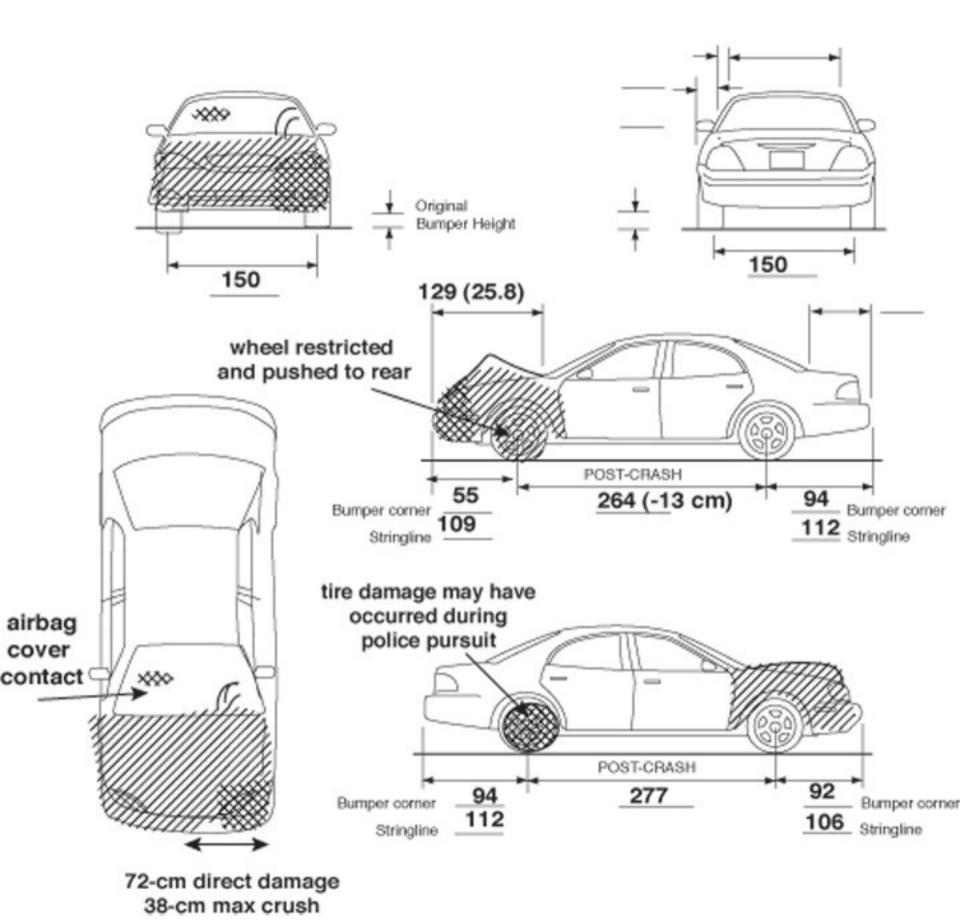
						ΙΝΤ	RUSION IT-
Location				Comparison	asurements Are in ( Intruded	=	Dominant Crush
Intrusion 11		Intruded Component Floor		Value	Value	Intrusion	Direction
11		FI	oor		_	= 9	Up
					_	=	
					_	=	
					-	=	
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			000	UPANT CONT	ACT WORKSH	EET	
		1					
Contact	Com	terior ponent ntacted	Occupant No. if Known	Region	Supporting	Physical Evidence	Level of Contact
<u>Contact</u> A	Com Cor				Supporting 13 cm	Physical Evidence	Level of
	Corr Cor Arı Cent	ponent ntacted	No. if Known	Region if Known	13 cm	Physical Evidence n scuff mark cuff mark	Level of Contact Point
А	Com Cor Arr Cent bc Wi	nponent ntacted mrest er knee	No. if Known 1	Region if Known Arm/side	13 cm	n scuff mark	Level of Contact Point 1
A B	Com Cor Arn Cent bc Wi g Inter knob	nponent ntacted mrest er knee olster ndow	No. if Known 1 1	Region if Known Arm/side Knee	13 cm	n scuff mark cuff mark	Contact Point 1 1
A B C	Com Cor Arn Cent bc Wi g Inter knob	ponent ntacted mrest er knee olster ndow lass ior light on mid	No. if Known 1 1 1	Region if Known Arm/side Knee Head	13 cm	n scuff mark cuff mark Smudge	Level of Contact Point 1 1 1
A B C D	Com Cor Arn Cent bc Wi g Inter knob	ponent ntacted mrest er knee olster ndow lass ior light on mid	No. if Known 1 1 1	Region if Known Arm/side Knee Head	13 cm	n scuff mark cuff mark Smudge	Level of Contact Point 1 1 1
A B C D E	Com Cor Arn Cent bc Wi g Inter knob	ponent ntacted mrest er knee olster ndow lass ior light on mid	No. if Known 1 1 1	Region if Known Arm/side Knee Head	13 cm	n scuff mark cuff mark Smudge	Level of Contact Point 1 1 1
A B C D E F	Com Cor Arn Cent bc Wi g Inter knob	ponent ntacted mrest er knee olster ndow lass ior light on mid	No. if Known 1 1 1	Region if Known Arm/side Knee Head	13 cm	n scuff mark cuff mark Smudge	Level of Contact Point 1 1 1
A B C D E F G	Com Cor Arn Cent bc Wi g Inter knob	ponent ntacted mrest er knee olster ndow lass ior light on mid	No. if Known 1 1 1	Region if Known Arm/side Knee Head	13 cm	n scuff mark cuff mark Smudge	Level of Contact Point 1 1 1



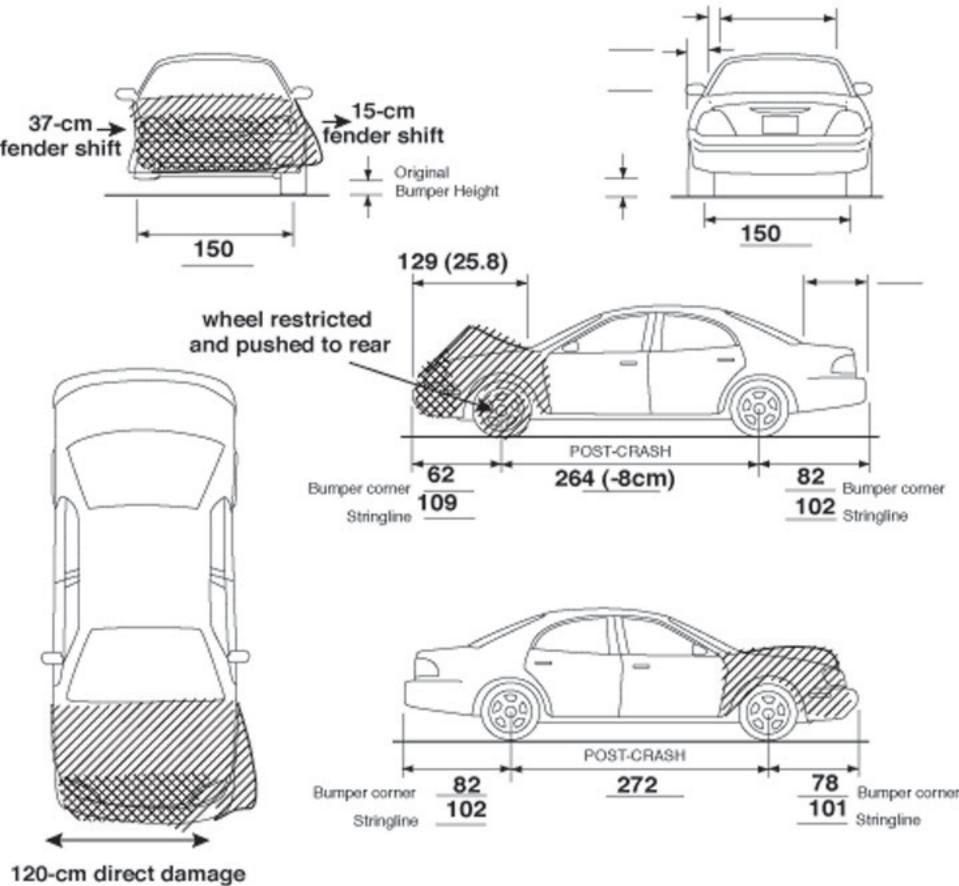
# WINDSHIELD MARK ON CASE VEHICLE:

## SHADED SOLAR-RAY SAFETY PPG FLO-LITE AS1 12 LAMINATED DOT18 M405

#### MEASUREMENTS IN CENTIMETERS

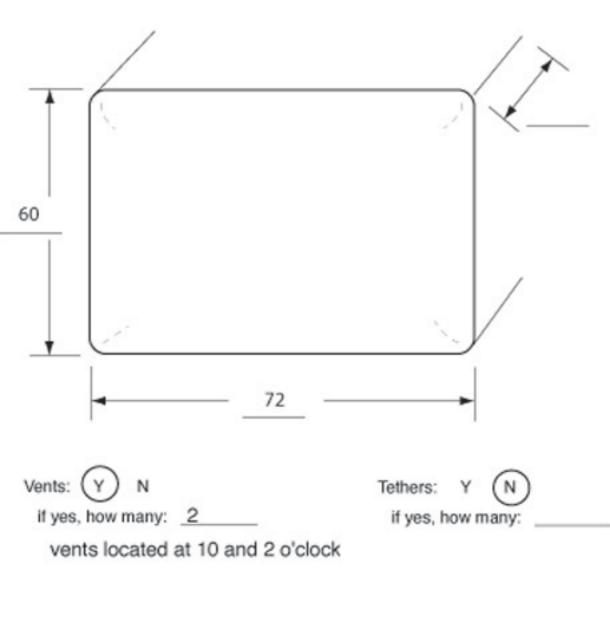


#### MEASUREMENTS IN CENTIMETERS



51-cm max crush

## **Passenger Airbag**



## Passenger Airbag Doors

Single Door

