

Case 424 : Narrative

Case Vehicle (A): 2003 Saturn	Vehicle (B): 2004 International-Bluebird
Type: ION, 4-door sedan	Type: 3800 T44E, 4x2 school bus
Driver: 42-year-old female	Driver: 58-year-old female
CDC: 01-FZEW-3	TDC: 11-FYEW-1

SITUATION

[1](#) It was daylight and clear and the asphalt surface of the two-lane road was dry and in good condition. [2](#) Case vehicle (A) was traveling north in the northbound lane at an EDR-recorded speed of 42 mph (68 kph) and [3](#) vehicle (B), a school bus, was traveling at an unknown speed in the southbound lane of the same road and was following a 90-degree curve to the right. As case vehicle (A) entered the curve from the south, [4](#) the right-front wheel of case vehicle (A) went onto the unpaved shoulder. The female driver of case vehicle (A) steered to the left to reenter the road, [5](#) [6](#) she oversteered and case vehicle (A) crossed the centerline and went into the path of vehicle (B). The driver of vehicle (B) was unable to take any evasive action and the left front of vehicle (B) struck the right front of case vehicle (A). Case vehicle (A) was pushed rearward and rotated counterclockwise [7](#) before coming to rest straddling the fog line of the northbound lane facing northeast. [9](#) A fire started in the right-front engine compartment of case vehicle (A) but was extinguished by witnesses. [8](#) Vehicle (B) continued to travel south a short distance and came to rest in the southbound lane facing southeast. Both vehicles were towed due to damage.

The police accident report (PAR) indicates A-level injuries for the driver of case vehicle (A), who was transported by helicopter to a level-one trauma-center and hospitalized for three months. The PAR indicates O-level injuries for the driver and six passengers of vehicle (B) who were not injured and did not seek treatment.

GENERAL VEHICLE DAMAGE AND ESTIMATED CRASH SEVERITIES

[10](#) Damage to the front of case vehicle (A) was severe with the majority of the damage occurring above the bumper. [11](#) Direct damage began at the right-front bumper corner and extended 77-cm to the left to just past the centerline, resulting in 54% vehicle overlap (%VOL). [12](#) The maximum rearward crush was 76 cm and it occurred above the bumper at the level of the upper radiator supports.

[13](#) [14](#) [15](#) [16](#) Damage to vehicle (B) was minor. Direct damage began at the left-front bumper corner and extended about halfway across the vehicle front. The left-front tire was partially deflated.

Using the barrier algorithm of the WinSMASH crash-reconstruction program and the average of crush profiles measured for [17](#) [18](#) [19](#) case vehicle (A) at the level of the bumper and [20](#) [21](#) [22](#) the level of the upper radiator supports, the following impact severity was estimated:

Estimated Velocity Change - kph (mph)	

Vehicle	Variable	Total	Longitudinal	Latitudinal
Case vehicle (A)	EBS	47 (29)	-44 (-28)	-16 (-10)

DESCRIPTION OF DAMAGE TO CASE VEHICLE (A)

Exterior

In the front, [23](#) [24](#) the right half of the bumper was crushed rearward into the lower radiator support. The lower radiator support and the radiator were crushed further rearward into the engine compartment and the radiator was separated from the upper radiator support, which was crushed rearward and to the left over the top of the engine. The hood was crushed rearward and to the left, the right-front section of the hood was folded under the center section, and the left-front section of the hood was deflected up. [25](#) The hood latch was bent to the right and had released, [26](#) the left hood hinge was bent to the left, [27](#) and the right hood hinge was displaced up and to the left. [28](#) The rear edge of the hood was elevated and it contacted and penetrated the lower edge of the windshield, but the exact amount of crash damage to the windshield is unknown because of damage caused by rescue personnel. [29](#) Also, the bumper cover was torn off, ripped, and twisted.

[30](#) [31](#) On the right side, the upper sections of the A-, B- and C-pillars [32](#) [33](#) had been cut and the right-front door had been removed. The right fender was shattered and the right-front wheel and the right A-pillar were crushed rearward and to the left, reducing the right wheelbase by 16 cm. [34](#) The right-front wheel was tilted, the right-front door was jammed closed, and the door window was broken out. The right-rear door was closed and operational and the front section of the door window was broken out, but the rearmost glazing was intact. The rim of the right-rear wheel was scuffed but there was no other right-side damage.

[35](#) There was no damage to the rear of case vehicle (A) from this crash, but rescue personnel broke out the rear window to cut the upper sections of the right and left C-pillars.

[36](#) On the left side, the upper sections of the [37](#) A- and B-pillars had been cut completely through by rescue personnel and [38](#) the upper section of the C-pillar had been partially cut through. Also, [39](#) rescue personnel cut through the lower section of the A-pillar, causing the section of the vehicle forward of the A-pillar to sag down and the passenger area to bow up. [40](#) The forward section of the fender was displaced to the left and the fender was buckled. [41](#) The left-front wheel rim was scraped, the left-front tire was flat due to being debeaded from the wheel rim, and [42](#) the left-rear wheel hubcap and tire were scuffed. [43](#) Both left-side doors were closed and operational and the driver-door window and rear section of the back-door window were intact, but the front section of the glazing in the rear door was broken out. The left wheelbase was increased by 7 cm.

Interior

Case vehicle (A) was equipped with steering-wheel and dash-mounted frontal-impact airbags and [44](#) [45](#) [46](#) both deployed during the frontal impact. In the driver area, [47](#) there was no damage to the steering-wheel airbag but the left side of the fabric was smudged with oil and dirt, probably due to the roof being placed on it after the crash. [49](#) [50](#) [51](#) [52](#) There was no damage to the steering-wheel airbag module cover. [53](#) [54](#) [55](#) The steering wheel was rotated to the three o'clock position at the time of the inspection and the upper half of the rim was scuffed and stained with oil, probably because the cut section of the upper A-pillar was placed in contact with the steering wheel after the crash. The steering column was displaced up and to the left and [56](#) the steering-column cover was split at the seams. [57](#) [58](#) There were

black scuffmarks on the windshield header, the left sunvisor, and the roof headliner, probably from contact by salvage personnel after the crash. [59](#) The upper-front portion of the driver door was scuffed and dented due to lateral movement of the instrument panel, and the rear portion of the driver door parcel tray was cracked. [60](#) The upper instrument panel was bowed and the plastic components were separated from their attachments. [61](#) [62](#) [63](#) The driver knee-bolster cover was completely separated from the instrument panel and bent, and the left half of the cover was cracked. [64](#) The instrument panel was displaced rearward, [65](#) the toepan was buckled, and the gas and the brake pedals were displaced to the right.

[66](#) [67](#) [68](#) In the center-front area, the rearview mirror was knocked off its mount and the vertical console was displaced rearward and to the left. The plastic over the instruments located above the center stack, the upper and mid section of the instrument panel, the radio, the upper vent outlets, and the heater/ac controls were cracked, broken, scuffed, and/or separated. [69](#) The plastic around the transmission lever was displaced but there was no other crash-related damage in the center-front area.

In the right-front passenger area, [70](#) there was a small tear in the upper portion of the dash-mounted airbag fabric, but [71](#) [72](#) there was no damage to the module cover. [73](#) [74](#) The glove-box area, the lower section of the A-pillar, and the toepan were displaced rearward and to the left, and the upper section of the dashboard was loose. [75](#) The right-front door had been removed by rescue personnel, the forward section of the interior door panel was severely bent, the door hardware was damaged, and the door window was broken out.

The following intrusions were noted and measured:

Location	Component	Distance (cm)	Direction
driver	transmission tunnel 76	17	to left
	instrument panel 77	13	to rear
	steering column 78	9	to rear
center front	vertical console 79	18	to rear
right front	instrument panel 80	37	to rear
	toeapan	37	to rear

OCCUPANT KINEMATICS AND INJURIES

[81](#) The 178-cm, 84-kg (5-ft 10-in, 185-lb) 42-year-old female driver was using the available three-point belt with pretensioner, and the pretensioner fired and [82](#) the steering-wheel airbag deployed. [83](#) Belt loading marks on the plastic D-ring and [84](#) [85](#) continuous loop of the sliding latch plate indicate belt use at the time of the crash.

During the frontal impact, the driver moved forward and slightly to the right relative to the vehicle interior, into the seatbelt, airbag, and knee bolster. She sustained a concussion with amnesia to the crash event, possibly from non-contact impact forces. She sustained multiple small lacerations to the forehead from broken glass. She sustained a contusion across the abdomen from loading by the lap belt. She sustained open and displaced fractures to the right olecranon and open and displaced fractures to the distal aspects of the right radius and ulna, possibly from forearm/hand contact with upper section of the instrument panel. She sustained a fracture to the mid shaft of the left femur and a fracture to the left patella probably from knee contact with the knee bolster. She sustained open and displaced fractures to the mid shafts of the left tibia and fibula, probably from loading of the left foot on the toeapan. She

sustained an open and displaced fracture to the right patella from knee contact with the knee bolster and she sustained open and displaced fractures to the right tibia plateau and the midshafts of the right tibia and fibula, probably due to contact of the right knee with the knee bolster and the right foot with the toepan (nut-cracker effect).

The following table and attached drawing [86](#) summarize the injuries for the driver of case vehicle (A).

Occupant: Driver		Age: 42 years		Gender: Female	
Restraints: 3-point belt with pretensioner; steering-wheel airbag		Stature: 178 cm (5 ft, 10 in)		Mass: 84 kg (185 lb)	
Injury Description	A.I.S.	Injury Source			
		Definite	Probable	Possible	
—	—	—	—	—	
Concussion with post-traumatic amnesia (no recollection of crash)	2	—	—	Impact forces	
Multiple small lacerations, forehead	1	Broken glass	—	—	
Contusion, across abdomen	1	Lap belt	—	—	
Open and displaced fracture, olecranon of right ulna	3	—	—	Instrument panel	
Open and displaced fractures, distal aspects of right radius and ulna	3	—	—	Instrument panel	
Fracture, mid shaft of left femur	3	—	Knee bolster	—	
Fracture, left patella	2	—	Knee bolster	—	
Open and displaced fracture, right patella	2	—	Knee bolster	—	
Open and displaced fracture, right tibia plateau	3	—	Knee bolster/toepan	—	
Open and displaced fracture, mid shaft of right tibia	3	—	Toepan	—	
Open and displaced fracture, mid shaft of right fibula	2	—	Toepan	—	
Fractures, mid shaft of left tibia and fibula	2	—	Toepan	—	
Maximum A.I.S. Level	3	—	—	—	
Injury Severity Score	14	—	—	—	

CASE NO.: 424

CASE VEHICLE: 2003 Saturn

TYPE: ION, 4-door sedan

OCCUPANT: Driver: 42-year-old female

STATURE: 178 cm (5 ft, 10 in) MASS: 84 kg (185 lb)

RESTRAINTS: 3-point belt with pretensioner;
steering wheel airbag

SEVERITY: MAIS - 3 : ISS - 14

Concussion with post-traumatic
amnesia (no recollection of crash) (2)

Multiple small lacerations,
forehead (1)

Contusion across
abdomen (1)



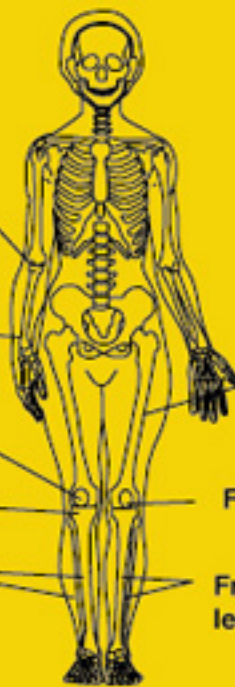
Open and displaced
fracture, right olecranon (3)

Open and displaced
fracture, distal aspects
of right radius and ulna (3)

Open and displaced
fracture, right patella (2)

Open and displaced
fracture, right tibia
plateau (3)

Open and displaced
fractures, mid shafts
of right tibia (3)
and fibula (2)



Fracture, mid shaft
of left femur (3)

Fracture, left patella (2)

Fractures, mid shafts of
left tibia and fibula (2)

Case No.: 424

Case Veh. (A): 2003 Saturn

Type: Ion, 4-door sedan

Driver: 42-year-old female

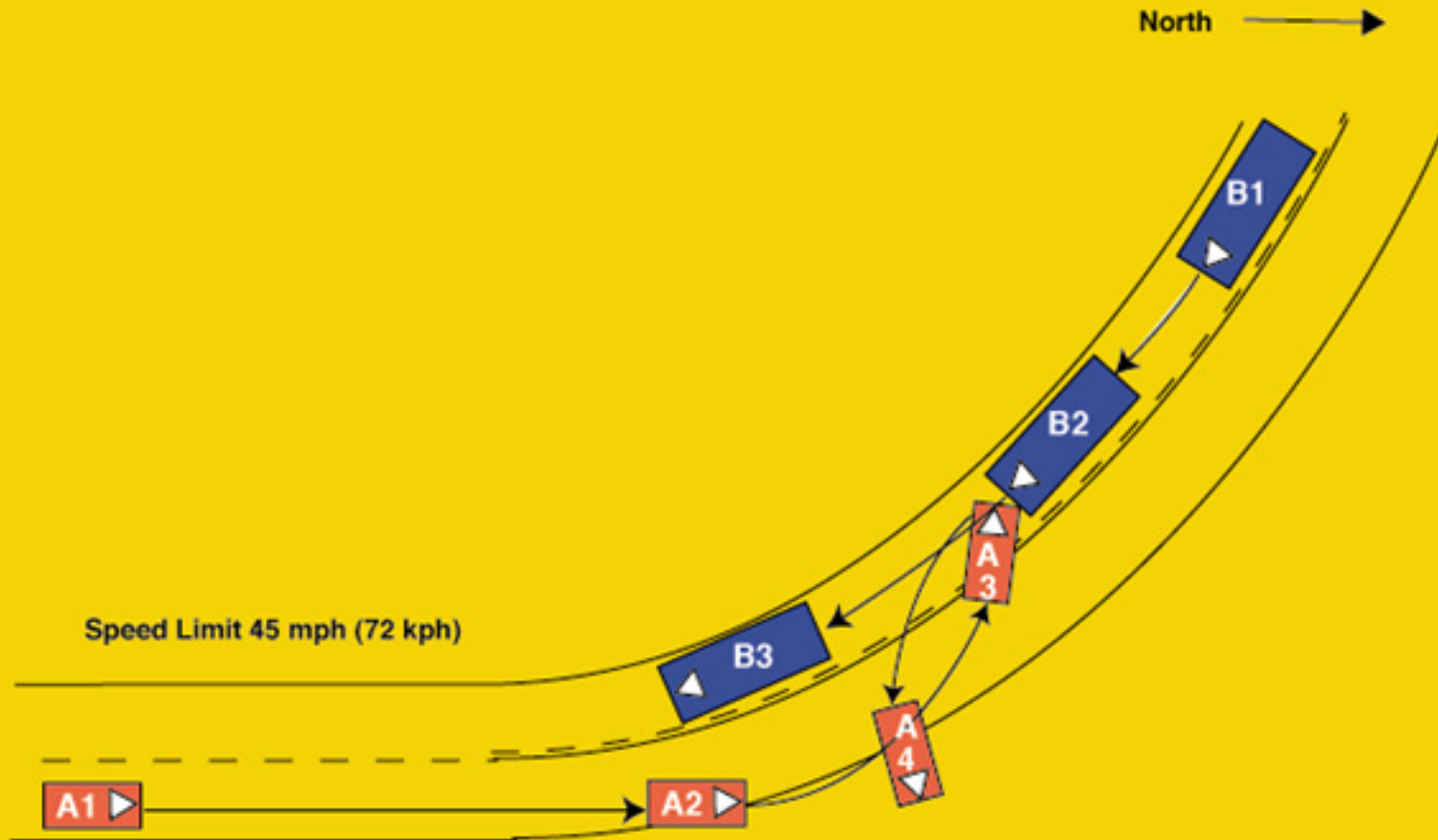
Vehicle (B): 2004 International-Bluebird 3800 4 x 2 school bus

Light conditions: Daylight

Weather: Clear

Road Surface: Dry

Road Construction: Asphalt



Vehicle Report

Click on Section Name to jump directly to that Section —

- [General Conditions](#)
- [Other Vehicle](#)
- [Case Vehicle General](#)
- [Case Vehicle Damage Description](#)
- [Crash Severity](#)
- [Case Vehicle Tires & Rims](#)
- [Case Vehicle Fuel, Tank, Fire](#)
- [Case Vehicle Exterior](#)
- [Case Vehicle Steering Column/Rim](#)
- [Case Vehicle Intrusion](#)
- [Case Vehicle Airbag\(s\)](#)
- [Case Vehicle Interior](#)
- [Case Vehicle Seats](#)

General Conditions

[Back to Top](#)

Variable Number and Name	Code Value	Code Description	Other Options
V206 — Urban/Rural Area	2	Rural	more
V207 — Limited Access Highway	0	No	more
V208 — Road Total Lanes	2	2 lanes	more
V209 — Intersecting Road Total Lanes	8	Not applicable	more
V210 — Road Surface Type	1	Asphalt	more
V211 — Road Defects	0	No	more
V212 — Construction Zone	0	No	more
V213 — Road Alignment Vertical Plane	1	Level	more
V214 — Road Alignment Horizontal Plane	2	Curve	more
V215 — Surface Covering	10	Dry	more
V216 — Visibility Limitation	0	None	more
V217 — Visibility Obstruction	0	None	more
V218 — Speed Limit	4	71-79 km/h .. 45 mph	more
V219 — Precipitation Type	0	None	more
V220 — Precipitation Rate	8	Not applicable	more
V221 — Temperature	9	Unknown	more

V222 — Crosswind	9	Unknown	more
V223 — Light Conditions	1	Daylight	more
V224 — Mechanical Malfunction Mention	0	No	more
V225 — Case Vehicle and Object	0	No	more
V226 — Case Vehicle Rollover	0	No	more
V227 — Case Vehicle Ran Off Roadway	1	Yes	more
V228 — Moving Case Vehicle/Contacted Moving Vehicle	1	Yes	more
V229 — Case Vehicle/Contacted Stopped Vehicle	0	No	more
V230 — Stopped Case Vehicle/Contactd Vehicle	0	No	more
V231 — Total Vehicles Hit By Case Vehicle	1	1 vehicle	more
V232 — Any Fire in Crash	1	Yes	more
V233 — Max Police Severity-PAR	3	A - Incapacitating Injury	more
V234 — Driver Alcohol Involvement	0	Had not been drinking	more
V235 — Driver Alcohol BAC	00	—	—
V236 — Driver Impairment Mention	0	No	more
V237 — Driven/Towed From Scene	2	Towed Due to Damage	more

Other Vehicle

[Back to Top](#)

Variable Number and Name	Code Value	Code Description	Other Options
V301 — Other Vehicle VIN	1HVBBABP34H6	—	—
V302 — Other Vehicle Manufacturer/Body Code	15341	—	—
V303 — Other Vehicle Manufacturer	153	International	more
V304 — Other Vehicle Body Code	41	School bus	more
V305 — Other Vehicle Make/Model	9005	—	—
V306 — Other Vehicle Model Year	2004	—	—
V307 — Other Vehicle Mass	999999	Unknown	more
V308 — Other Vehicle Number	0	No separate report	more
V309 — Other Vehicle Number of Occupants	07	—	—
V310 — Other Vehicle Traveling Speed	999	Unknown	more

V311 — Highest Police Injury Severity	0	0 - No Injury	more
V312 — Other Vehicle Type	41	School bus	more
V313 — Other Vehicle Wheelbase (cm)	999	Unknown wheelbase	more
V314 — Average Track Width	999	Unknown	more
V315 — Overall Length	999	Unknown	more
V316 — Overall Width (OAW)	999	Unknown	more
V317 — Front Overhang (FOH)	999	Unknown	more
V318 — Rear Overhang (ROH)	999	Unknown	more
V319 — Undeformed End Width (UEW)	999	Unknown	more
V320 — Engine Displacement	7.3 l	—	—
V321 — Engine: Number of Cylinders	08	—	—
V322 — Direct Damage Length (DDL)	999	Unknown	more
V323 — Front-End Overlap % (FEO)	99	Missing or Not applicable	more
V324 — Vehicle Overlap % (VOL)	99	Missing or Not applicable	more

Case Vehicle General



[Click for case vehicle figure](#)

[Back to Top](#)

Variable Number and Name	Code Value	Code Description	Other Options
V401 — VIN	1G8AL52F73Z2	—	—
V402 — Manufacturer/Body Code	11827	—	—
V403 — Vehicle Manufacturer	118	Saturn	more
V404 — Vehicle Body Code	27	—	—
V405 — Make/Model Code	3706	—	—
V406 — Model Year	2003	—	—
V407 — Vehicle Mass	001284 kg	—	—
V408 — Odometer Reading	888888	—	—
V409 — Number of Occupants	01	—	—
V410 — Traveling Speed	068 kph	—	—
V411 — Body Type	14	4-door sedan	more
V412 — Stolen Vehicle	8	Not currently collected	more
V413 — Body Structure	2	Unitized	more
V414 — Transmission Type	1	Automatic	more
	2		

V415 — Transmission Lever Location		Console	more
V416 — Steering	1	Power	more
V417 — Brakes	1	Power	more
V418 — Brake Type	2	Disc - front wheels	more
V419 — Brake Anti-lock Device	0	None installed	more
V420 — Air Conditioning in Vehicle	8	Not currently collected	more
V421 — Drive Type	2	Front wheel	more
V422 — Dual Rear Wheels	0	No	more
V423 — Original Restraint System Type	3	Airbag	more
V424 — Equipped With Roll Bar	0	No	more
V425 — Roof Type	4	Sun roof closed	more
V426 — Wheelbase	262 cm	—	—
V427 — Anti-lacerative Glass	0	None	more
V428 — Average Track Width	149 cm	—	—
V429 — Overall Length	469 cm	—	—
V430 — Overall Width (OAW)	171 cm	—	—
V431 — Front Overhang	108 cm	—	—
V432 — Rear Overhang	102 cm	—	—
V433 — Undeformed End Width (UEW)	140 cm	—	—
V434 — Engine Displacement	2.2 l	—	—
V435 — Engine: Number of Cylinders	04	—	—
V436 — Direct Damage Length (DDL)	077 cm	—	—
V437 — Front End Overlap % (FEO)	55	—	—
V438 — Vehicle Overlap % (VOL)	54	—	—

Case Vehicle Damage Description

[Back to Top](#)

Variable Number and Name	Code Value	Code Description	Other Options
V501 — Maximum Crush - Front	076 cm	—	—
V502 — Maximum Crush - Right Side	000 cm	No crush (or less than 1 cm.)	more
V503 — Maximum Crush - Rear	000 cm	No crush (or less than 1 cm.)	more
V504 — Maximum Crush - Left Side	000 cm	No crush (or less than 1 cm.)	more

V505 — Maximum Crush - Roof	000 cm	No crush (or less than 1 cm.)	more
V506 — Maximum Crush - Other	000 cm	No crush (or less than 1 cm.)	more
V507 — Are Events In Chronological Order	1	Yes	more
V508 — Event 1 Impact Location	1	On Roadway	more
V509 — Event 1 Impact Configuration	11	FRONT of case veh - FRONT of contacted Vehicle	more
V510 — Event 1 Object/Vehicle Contacted	41	School bus	more
V511 — Event 2 Impact Location	8	No 2nd event	more
V512 — Event 2 Impact Configuration	88	No 2nd event	more
V513 — Event 2 Object/Vehicle Contacted	00	No object/vehicle contacted	more
V514 — Event 3 Impact Location	8	No 3rd event	more
V515 — Event 3 Impact Configuration	88	No 3rd event	more
V516 — Event 3 Object/Vehicle Contacted	00	No object/vehicle contacted	more
V517 — Event 4 Impact Location	8	No 4th event	more
V518 — Event 4 Impact Configuration	88	No 4th event	more
V519 — Event 4 Object/Vehicle Contacted	00	No object/vehicle contacted	more
V520 — Event 5 Impact Location	8	No 5th event	more
V521 — Event 5 Impact Configuration	88	No 5th event	more
V522 — Event 5 Object/Vehicle Contacted	00	No object/vehicle contacted	more
V523 — Event 6 Impact Location	8	No 6th event	more
V524 — Event 6 Impact Configuration	88	No 6th event	more
V525 — Event 6 Object/Vehicle Contacted	00	No object/vehicle contacted	more
V526 — Event 7 Impact On Road	8	No 7th event	more
V527 — Event 7 Impact Configuration	88	No 7th event	more
V528 — Event 7 Object/Vehicle Contacted	00	No object/vehicle contacted	more
V529 — Primary CDC Case Vehicle -event Number	1	Event 1	more
V530 — Primary CDC Case Vehicle	024		

- impact speed		—	—
V531 — Primary CDC Case Vehicle - Estimated By	7	Other	more
V532 — Primary CDC Case Vehicle -crush	076	—	—
V533 — Primary CDC Case Vehicle -clock #1	01	1 o'clock	more
V534 — Primary CDC Case Vehicle letter 1 #1	06	F - Front	more
V535 — Primary CDC Case Vehicle letter 2 #1	26	Z - Side or end (B + P or R + C)	more
V536 — Primary CDC Case Vehicle letter 3 #1	05	E - Everything below belt line	more
V537 — Primary CDC Case Vehicle letter 4 #1	23	W - Wide impact area	more
V538 — Primary CDC Case Vehicle Extent #1	03	Extent 3	more
V539 — Primary CDC Case Vehicle -CDC #1	01FZEW3	—	—
V541 — Primary CDC Case Vehicle letter 1 #2	00	Missing Data/Not applicable	more
V542 — Primary CDC Case Vehicle letter 2 #2	00	Missing Data/Not applicable	more
V543 — Primary CDC Case Vehicle letter 3 #2	00	Missing Data/Not applicable	more
V544 — Primary CDC Case Vehicle letter 4 #2	00	Missing Data/Not applicable	more
V545 — Primary CDC Case Vehicle Extent #2	00	Missing Data/Not applicable	more
V546 — Primary CDC Case Vehicle -CDC #2	9800000	—	—
V547 — Primary CDC Contacted Vehicle - Impact Speed	999	Unknown	more
V548 — Primary CDC Contacted Vehicle - Estimated By	1	Investigator	more
V549 — Primary CDC Contacted Vehicle -crush	999	Unknown	more
V550 — Primary CDC Contacted Vehicle -clock #1	11	11 o'clock	more
V551 — Primary CDC Contacted Vehicle letter 1 #1	06	F - Front	more
V552 — Primary CDC Contacted Vehicle letter 2 #1	25	Y - Side or end (F + P or L + C)	more

V553 — Primary CDC Contacted Vehicle letter 3 #1	05	E - Everything below belt line	more
V554 — Primary CDC Contacted Vehicle letter 4 #1	23	W - Wide impact area	more
V555 — Primary CDC Contacted Vehicle Extent #1	01	Extent 1	more
V556 — Primary CDC Contacted Vehicle -CDC #1	11FYEW1	—	—
V558 — Primary CDC Contacted Vehicle letter 1 #2	00	Missing Data/Not applicable	more
V559 — Primary CDC Contacted Vehicle letter 2 #2	00	Missing Data/Not applicable	more
V560 — Primary CDC Contacted Vehicle letter 3 #2	00	Missing Data/Not applicable	more
V561 — Primary CDC Contacted Vehicle letter 4 #2	00	Missing Data/Not applicable	more
V562 — Primary CDC Contacted Vehicle Extent #2	00	Missing Data/Not applicable	more
V563 — Primary CDC Contacted Vehicle -CDC #2	9800000	—	—
V564 — Secondary CDC Case Vehicle - Event No	8	Not applicable	more
V565 — Secondary CDC Case Vehicle - Impact Speed	998	Not Applicable	more
V566 — Secondary CDC Case Vehicle - Estimated By	8	Not applicable (no vehicle/no impact)	more
V567 — Secondary CDC Case Vehicle -crush	998	Not Applicable	more
V568 — Secondary CDC Case Vehicle -clock #1	98	Not Applicable	more
V569 — Secondary CDC Case Vehicle letter 1 #1	00	Missing Data/Not applicable	more
V570 — Secondary CDC Case Vehicle letter 2 #1	00	Missing Data/Not applicable	more
V571 — Secondary CDC Case Vehicle letter 3 #1	00	Missing Data/Not applicable	more
V572 — Secondary CDC Case Vehicle letter 4 #1	00	Missing Data/Not applicable	more
V573 — Secondary CDC Case Vehicle Extent #1	00	Missing Data/Not applicable	more
V574 — Secondary CDC Case Vehicle -CDC #1	9800000	—	—
V576 — Secondary CDC Case	00	Missing Data/Not applicable	more

Vehicle letter 1 #2			
V577 — Secondary CDC Case Vehicle letter 2 #2	00	Missing Data/Not applicable	more
V578 — Secondary CDC Case Vehicle letter 3 #2	00	Missing Data/Not applicable	more
V579 — Secondary CDC Case Vehicle letter 4 #2	00	Missing Data/Not applicable	more
V580 — Secondary CDC Case Vehicle Extent #2	00	Missing Data/Not applicable	more
V581 — Secondary CDC Case Vehicle -CDC #2	9800000	—	—
V582 — Secondary CDC Contacted Vehicle - Impact Speed	998	Not Applicable	more
V583 — Secondary CDC Contacted Vehicle - Estimated By	8	Not applicable (no vehicle/no impact)	more
V584 — Secondary CDC Contacted Vehicle -crush	998	Not Applicable	more
V585 — Secondary CDC Contacted Vehicle -clock #1	98	Not Applicable	more
V586 — Secondary CDC Contacted Vehicle letter 1 #1	00	Missing Data/Not applicable	more
V587 — Secondary CDC Contacted Vehicle letter 2 #1	00	Missing Data/Not applicable	more
V588 — Secondary CDC Contacted Vehicle letter 3 #1	00	Missing Data/Not applicable	more
V589 — Secondary CDC Contacted Vehicle letter 4 #1	00	Missing Data/Not applicable	more
V590 — Secondary CDC Contacted Vehicle Extent #1	00	Missing Data/Not applicable	more
V591 — Secondary CDC Contacted Vehicle -CDC #1	9800000	—	—
V593 — Secondary CDC Contacted Vehicle letter 1 #2	00	Missing Data/Not applicable	more
V594 — Secondary CDC Contacted Vehicle letter 2 #2	00	Missing Data/Not applicable	more
V595 — Secondary CDC Contacted Vehicle letter 3 #2	00	Missing Data/Not applicable	more
V596 — Secondary CDC Contacted Vehicle letter 4 #2	00	Missing Data/Not applicable	more
V597 — Secondary CDC Contacted Vehicle Extent #2	00	Missing Data/Not applicable	more
V598 — Secondary CDC Contacted Vehicle -CDC #2	9800000	—	—

Crash Severity

[Back to Top](#)

Variable Number and Name	Code Value	Code Description	Other Options
V601 — Case Vehicle Primary Impact Number	1	—	—
V602 — Primary Impact Total Delta-V	999	Unknown	more
V603 — Primary Case Vehicle Reconstructed Longitudinal Delta-V	9999	—	—
V604 — Primary Case Vehicle Reconstructed Lateral Delta-V	9999	—	—
V605 — Primary Case Vehicle Reconstructed Crush Energy	9999	—	—
V606 — Primary Impact Case Vehicle - reconstruction	11	Beyond Scope	more
V607 — Primary Case Vehicle Reconstruction Mode	5	Not reconstructed	more
V608 — Primary Contacted Vehicle Reconstructed	888	N/A	more

Total Delta-V			
V609 — Primary Contacted Vehicle Reconstructed Longitudinal Delta-V	8888	—	—
V610 — Primary Contacted Vehicle Reconstructed Lateral Delta- V	8888	—	—
V611 — Primary Contacted Vehicle Reconstructed Crush Energy	8888	—	—
V612 — Case Vehicle Secondary Impact Number	8	—	—
V613 — Secondary Case Vehicle Reconstructed Total Delta-V	888	N/A	more
V614 — Secondary Case Vehicle Reconstructed Longitudinal Delta-V	8888	—	—
V615 — Secondary Case Vehicle Reconstructed Lateral Delta- V	8888	—	—
V616 — Secondary Case Vehicle Reconstructed Crush Energy	8888	—	—

V617 — Secondary Case Vehicle Reconstruction Note	88	—	—
V618 — Secondary Case Vehicle Reconstruction Mode	8	Not applicable	more
V619 — Secondary Contacted Vehicle Reconstructed Total Delta-V	888	N/A	more
V620 — Secondary Contacted Vehicle Reconstructed Longitudinal Delta-V	8888	—	—
V621 — Secondary Contacted Vehicle Reconstructed Lateral Delta- V	8888	—	—
V622 — Secondary Contacted Vehicle Reconstructed Crush Energy	8888	—	—
V623 — Case Vehicle Primary Impact Number	1	—	—
V624 — Primary Case Vehicle Reconstructed Total EBS	047 kph	—	—
V625 — Primary Case	-044 kph		

Vehicle Reconstructed Longitudinal EBS		—	—
V626 — Primary Case Vehicle Reconstructed Lateral EBS	-016 kph	—	—
V627 — Primary Case Vehicle Reconstructed Crush Energy	0127 kJ	—	—
V628 — Primary Case Vehicle Reconstruction Note	22	Reconstructed, moderate confidence level	more
V629 — Primary Case Vehicle Reconstruction Mode	2	CDC & detailed damage	more
V630 — Primary Contacted Vehicle Reconstruction Total EBS	888	N/A	more
V631 — Primary Contacted Vehicle Reconstruction Longitudinal EBS	8888	—	—
V632 — Primary Contacted Vehicle Reconstruction Lateral EBS	8888	—	—
V633 — Primary Contacted Vehicle Reconstruction	8888	—	—

Crush Energy			
V634 — Case Vehicle Secondary Impact Number	8	Not applicable	more
V635 — Secondary Case Vehicle Reconstruction Total EBS	888	N/A	more
V636 — Secondary Case Vehicle Reconstruction Longitudinal EBS	8888	—	—
V637 — Secondary Case Vehicle Reconstruction Lateral EBS	8888	—	—
V638 — Secondary Case Vehicle Reconstruction Crush Energy	8888	—	—
V639 — Secondary Case Vehicle Reconstruction Note	88	—	—
V640 — Secondary Case Vehicle Reconstruction Mode	8	Not applicable	more
V641 — Secondary Contacted Vehicle Reconstruction Total EBS	888	N/A	more
V642 — Secondary Contacted Vehicle	8888	—	—

Reconstruction Longitudinal EBS			
V643 — Secondary Contacted Vehicle Reconstruction Lateral EBS	8888	—	—
V644 — Secondary Contacted Vehicle Reconstruction Crush Energy	8888	—	—
V645 — Case Vehicle Reconstructed Impact Number	1	—	—
V646 — Case Vehicle Impact 1 Plane	5	Other	more
V647 — Case Vehicle Impact 1 Direct Damage Length [DDL]	077 cm	—	—
V648 — Case Vehicle Impact 1 Max Crush	076 cm	—	—
V649 — Case Vehicle Impact 1 Field-L	119 cm	—	—
V650 — Case Vehicle Impact 1 C1	006 cm	—	—
V651 — Case Vehicle Impact 1 C2	017 cm	—	—
V652 — Case Vehicle Impact 1 C3	036 cm	—	—
V653 — Case	051 cm		

Vehicle Impact 1 C4		—	—
V654 — Case Vehicle Impact 1 C5	052 cm	—	—
V655 — Case Vehicle Impact 1 C6	076 cm	—	—
V656 — Case Vehicle Impact 1 +/- D	0031 cm	—	—
V657 — Case Vehicle Reconstructed Impact Number	2	—	—
V658 — Case Vehicle Impact 2 Plane	8	Not applicable	more
V659 — Case Vehicle Impact 2 Direct Damage Length [DDL]	998	Not applicable	more
V660 — Case Vehicle Impact 2 Max Crush	998	Not applicable	more
V661 — Case Vehicle Impact 2 Field-L	998	Not applicable	more
V662 — Case Vehicle Impact 2 C1	998	Not applicable	more
V663 — Case Vehicle Impact 2 C2	998	Not applicable	more
V664 — Case Vehicle Impact 2 C3	998	Not applicable	more
V665 — Case Vehicle Impact 2 C4	998	Not applicable	more
V666 — Case	998		

Vehicle Impact 2 C5		Not applicable	more
V667 — Case Vehicle Impact 2 C6	998	Not applicable	more
V668 — Case Vehicle Impact 2 +/- D	9998	—	—
V669 — Other Vehicle Reconstructed Impact Number	1	—	—
V670 — Other Vehicle Impact 1 Plane	9	Unknown	more
V671 — Other Vehicle Impact 1 Direct Damage Length [DDL]	999	Unknown	more
V672 — Other Vehicle Impact 1 Max Crush	999	Unknown	more
V673 — Other Vehicle Impact 1 Field-L	999	Unknown	more
V674 — Other Vehicle Impact 1 C1	999	Unknown	more
V675 — Other Vehicle Impact 1 C2	999	Unknown	more
V676 — Other Vehicle Impact 1 C3	999	Unknown	more
V677 — Other Vehicle Impact 1 C4	999	Unknown	more
V678 — Other Vehicle Impact 1 C5	999	Unknown	more
V679 — Other	999		

Vehicle Impact 1 C6		Unknown	more
V680 — Other Vehicle Impact 1 +/- D	0999 cm	—	—
V681 — Other Vehicle Reconstructed Impact Number	2	—	—
V682 — Other Vehicle Impact 2 Plane	8	Not applicable	more
V683 — Other Vehicle Impact 2 Direct Damage Length [DDL]	998	Not applicable	more
V684 — Other Vehicle Impact 2 Max Crush	998	Not applicable	more
V685 — Other Vehicle Impact 2 Field-L	998	Not applicable	more
V686 — Other Vehicle Impact 2 C1	998	Not applicable	more
V687 — Other Vehicle Impact 2 C2	998	Not applicable	more
V688 — Other Vehicle Impact 2 C3	998	Not applicable	more
V689 — Other Vehicle Impact 2 C4	998	Not applicable	more
V690 — Other Vehicle Impact 2 C5	998	Not applicable	more
V691 — Other Vehicle Impact 2 C6	998	Not applicable	more
V692 — Other	9998		

Vehicle Impact 2 +/- D		—	—
---------------------------	--	---	---

Case Vehicle Tires & Rims

[Back to Top](#)

Variable Number and Name	Code Value	Code Description	Other Options
V701 — Left Front Wheel Damaged	0	No	more
V702 — Right Front Wheel Damaged	1	Yes	more
V703 — Right Rear Wheel Damaged	1	Yes	more
V704 — Left Rear Wheel Damaged	0	No	more
V705 — Left Front Tire Tread Type	4	All Weather	more
V706 — Right Front Tire Tread Type	4	All Weather	more
V707 — Right Rear Tire Tread Type	4	All Weather	more
V708 — Left Rear Tire Tread Type	4	All Weather	more
V709 — Left Front Carcass Construction	3	Radial	more
V710 — Right Front Carcass Construction	3	Radial	more
V711 — Right Rear Carcass Construction	3	Radial	more
V712 — Left Rear Carcass Construction	3	Radial	more
V717 — Left Front Tire Size	P20555R16	—	—
V718 — Right Front Tire Size	P20555R16	—	—
V719 — Right Rear Tire Size	P20555R16	—	—
V720 — Left Rear Tire Size	P20555R16	—	—

Case Vehicle Fuel, Tank, Fire

[Back to Top](#)

Variable Number and Name	Code Value	Code Description	Other Options
V801 — Propulsive Fuel Type	1	Gasoline	more
V802 — Main Tank Location	322	Within frame/centered laterally - within vertically	more



V803 — Main Filler Cap Location	133	—	—
V804 — Main Tank Material	3	Plastic	more
V805 — Aux Tank Type	8	Not applicable (not equipped)	more
V806 — Aux Tank Location	888	Not applicable (not equipped)	more
V807 — Aux Filler Cap Location	888	Not applicable (not equipped)	more
V808 — Aux Tank Material	8	Not applicable	more
V901 — Fuel Leakage From Crash	0	No	more
V1001 — Fire In Or On Case Vehicle	1	Yes	more

Case Vehicle Exterior

[Back to Top](#)

Variable Number and Name	Code Value	Code Description	Other Options
V1101 — Hood Latch Released	1	Yes	more
V1102 — Hood Latch Damaged	1	Yes	more
V1103 — Hood Latch Jammed	8	Not applicable	more
V1104 — Left Hood Hinge Damaged	1	Yes	more
V1105 — Left Hood Hinge Separated	0	No	more
V1106 — Right Hood Hinge Damaged	1	Yes	more
V1107 — Right Hood Hinge Separated	0	No	more
V1108 — Hood Remained On Vehicle	1	Yes	more
V1109 — Rear Hood Edge Elevated	1	Yes	more
V1110 — Edge Contacted Windshield	1	Yes	more
V1111 — Edge Penetrated Windshield	1	Yes	more
V1112 — Hood Latch Location	1	Front of Vehicle	more
V1113 — Eng/Transmissn Mount Separation	0	No	more
V1114 — Steerng Column Flex Coupling	9	Unknown if equipped	more
V1115 — Steerng Column Coupling Damaged	9	Unknown	more
V1116 — Steerng Column Coupling Separated	9	Unknown	more
V1117 — Eng Comp Telescopng Unit	88	Not collected	more
V1118 — Comp Orig/Telescopd Diff	888	Not collected	more
V1119 — Left Side Body Mount Separation	8	Not applicable (unitized)	more
V1120 — Upper Left A-pillar	4		

Separation		No separation, but damaged	more
V1121 — Lower Left A-pillar Separation	0	No	more
V1122 — Upper Left B-pillar Separation	0	No	more
V1123 — Lower Left B-pillar Separation	0	No	more
V1124 — Upper Left C-pillar Separation	0	No	more
V1125 — Lower Left C-pillar Separation	0	No	more
V1126 — Upper Left D-pillar Separation	8	Not applicable (not equipped)	more
V1127 — Lower Left D-pillar Separation	8	Not applicable (not equipped)	more
V1128 — Left Front Door Opening Cause	0	Door did not open	more
V1129 — Left Rear Door Opening Cause	0	Door did not open	more
V1130 — Left Front Door Jammed Closed	0	No	more
V1131 — Left Rear Door Jammed Closed	0	No	more
V1132 — Rear Door Type	0	No door (includes pickups)	more
V1133 — Rear Door Opening Cause	8	Not applicable (no rear door)	more
V1134 — Rear Door Jammed Closed	8	Not applicable (no rear door)	more
V1135 — Luggage Partition Damagd	0	No	more
V1136 — Spare Tire Status	8	Not collected	more
V1137 — Trailer Hitch Type	0	No hitch	more
V1138 — Trailer Type	0	No trailer	more
V1139 — Right Side Body Mount Separation	8	Not applicable (unitized)	more
V1140 — Upper Right A-pillar Separation	4	No separation, but damaged	more
V1141 — Lower Right A-pillar Separation	4	No separation, but damaged	more
V1142 — Upper Right B-pillar Separation	9	Unknown	more
V1143 — Lower Right B-pillar Separation	9	Unknown	more
V1144 — Upper Right C-pillar Separation	0	No	more

V1145 — Lower Right C-pillar Separation	0	No	more
V1146 — Upper Right D-pillar Separation	8	Not applicable (not equipped)	more
V1147 — Lower Right D-pillar Separation	8	Not applicable (not equipped)	more
V1148 — Right Front Door Opening Cause	00	Door did not open	more
V1149 — Right Rear Door Opening Cause	00	Door did not open	more
V1150 — Right Front Door Jammed Closed	1	Yes	more
V1151 — Right Rear Door Jammed Closed	0	No	more
V1152 — Van Rear Door Type	8	Not applicable (not a van)	more
V1153 — Windshield Cracked		Yes	more
V1154 — Windshield Broken	1	Yes	more
V1155 — Windshield Cracked or Broken by Occupant	0	No	more
V1156 — Bond Separation Extent	9	Unknown if separated	more
V1157 — Windshield Code		—	—
V1158 — Did Sun/T Roof Open	1	Yes	more

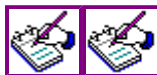
**Case Vehicle
Steering
Column/Rim**

[Back to Top](#)

Variable Number and Name	Code Value	Code Description	Other Options
V1201 — Steering Wheel Rim Damage	0	None	more
V1202 — Number of Steering Wheel Spokes	2	2 spokes	more
V1203 — Steering Wheel Spoke	0		

Damage		None	more
V1204 — Column Tilt Feature	2	Up	more
V1205 — Column Swing-away Feature	0	Not equipped	more
V1206 — Column Telescoping Feature	0	Not equipped	more
V1207 — Wheel Energy Absorb Device	8	Not collected	more
V1208 — Wheel Ea Orig/Damaged Diff	888	Not collected	more
V1209 — Column Energy Absorb Device	88	Not collected	more
V1210 — Column Ea Orig/Comprss Diff	888	Not collected	more
V1211 — Shear Capsule Separation	888	Not collected	more
V1212 — Column Vertical Rotation	1	Upward apparent rotation	more
V1213 — Column Lateral Rotation	1	Left apparent rotation	more
V1214 — Steering Wheel Hub Damage	0	None	more

Case Vehicle Intrusion



Click for intrusion figures

[Back to Top](#)

Variable Number and Name	Code Value	Code Description	Other Options
V1301 — Occupant Compartment Intrusion	1	Yes	more
V1302 — Was Intrusion Catastrophic	0	No	more
V1303 — Intrusion Number 01	01	Intrusion #1	more
V1304 — Intrusion 01 Occupant Space Number	11	First row, Left seat	more
V1305 — Intrusion 01 Intruding Object	28	Transmission tunnel (hump)	more
V1306 — Intrusion 01 Assoc Event Number	1	Event #1	more
V1307 — Intrusion 01 Max Intrusion X-axis	00 cm	0 cm or No Intrusion	more
V1308 — Intrusion 01 Max Intrusion Y-axis	17 cm	—	—
V1309 — Intrusion 01 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	more
V1310 — Intrusion 01 Occupant	00		

Number		No contact or no intrusion	more
V1311 — Intrusion 01 Injury Number	00	No injury or no intrusion	more
V1312 — Intrusion 01 Occupant Number	00	No contact or no intrusion	more
V1313 — Intrusion 01 Injury Number	00	No injury or no intrusion	more
V1314 — Intrusion Number 02	02	Intrusion #2	more
V1315 — Intrusion 02 Occupant Space Number	11	First row, Left seat	more
V1316 — Intrusion 02 Intruding Object	01	Instrument panel	more
V1317 — Intrusion 02 Assoc Event Number	1	Event #1	more
V1318 — Intrusion 02 Max Intrusion X-axis	13 cm	—	—
V1319 — Intrusion 02 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	more
V1320 — Intrusion 02 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	more
V1321 — Intrusion 02 Occupant Number	01	Occupant number 1, contact	more
V1322 — Intrusion 02 Injury Number	04	Injury #4	more
V1323 — Intrusion 02 Occupant Number	01	Occupant number 1, contact	more
V1324 — Intrusion 02 Injury Number	05	Injury #5	more
V1325 — Intrusion Number 03	03	Intrusion #3	more
V1326 — Intrusion 03 Occupant Space Number	11	First row, Left seat	more
V1327 — Intrusion 03 Intruding Object	05	Steering column	more
V1328 — Intrusion 03 Assoc Event Number	1	Event #1	more
V1329 — Intrusion 03 Max Intrusion X-axis	09 cm	—	—
V1330 — Intrusion 03 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	more
V1331 — Intrusion 03 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	more
V1332 — Intrusion 03 Occupant Number	00	No contact or no intrusion	more
V1333 — Intrusion 03 Injury Number	00	No injury or no intrusion	more
V1334 — Intrusion 03 Occupant Number	00	No contact or no intrusion	more

V1335 — Intrusion 03 Injury Number	00	No injury or no intrusion	more
V1336 — Intrusion Number 04	04	Intrusion #4	more
V1337 — Intrusion 04 Occupant Space Number	12	First row, Center seat	more
V1338 — Intrusion 04 Intruding Object	24	Console	more
V1339 — Intrusion 04 Assoc Event Number	1	Event #1	more
V1340 — Intrusion 04 Max Intrusion X-axis	18 cm	—	—
V1341 — Intrusion 04 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	more
V1342 — Intrusion 04 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	more
V1343 — Intrusion 04 Occupant Number	00	No contact or no intrusion	more
V1344 — Intrusion 04 Injury Number	00	No injury or no intrusion	more
V1345 — Intrusion 04 Occupant Number	00	No contact or no intrusion	more
V1346 — Intrusion 04 Injury Number	00	No injury or no intrusion	more
V1347 — Intrusion Number 05	05	Intrusion #5	more
V1348 — Intrusion 05 Occupant Space Number	13	First row, Right seat	more
V1349 — Intrusion 05 Intruding Object	01	Instrument panel	more
V1350 — Intrusion 05 Assoc Event Number	1	Event #1	more
V1351 — Intrusion 05 Max Intrusion X-axis	37 cm	—	—
V1352 — Intrusion 05 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	more
V1353 — Intrusion 05 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	more
V1354 — Intrusion 05 Occupant Number	00	No contact or no intrusion	more
V1355 — Intrusion 05 Injury Number	00	No injury or no intrusion	more
V1356 — Intrusion 05 Occupant Number	00	No contact or no intrusion	more
V1357 — Intrusion 05 Injury Number	00	No injury or no intrusion	more
V1358 — Intrusion Number 06	06	Intrusion #6	more
V1359 — Intrusion 06 Occupant Space Number	13	First row, Right seat	more

V1360 — Intrusion 06 Intruding Object	03	Toe pan	more
V1361 — Intrusion 06 Assoc Event Number	1	Event #1	more
V1362 — Intrusion 06 Max Intrusion X-axis	37 cm	—	—
V1363 — Intrusion 06 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	more
V1364 — Intrusion 06 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	more
V1365 — Intrusion 06 Occupant Number	00	No contact or no intrusion	more
V1366 — Intrusion 06 Injury Number	00	No injury or no intrusion	more
V1367 — Intrusion 06 Occupant Number	00	No contact or no intrusion	more
V1368 — Intrusion 06 Injury Number	00	No injury or no intrusion	more
V1369 — Intrusion Number 07	00	No Intrusion, None	more
V1370 — Intrusion 07 Occupant Space Number	00	No Intrusion, None	more
V1371 — Intrusion 07 Intruding Object	00	No Intrusion, None	more
V1372 — Intrusion 07 Assoc Event Number	0	No Intrusion, None	more
V1373 — Intrusion 07 Max Intrusion X-axis	00 cm	0 cm or No Intrusion	more
V1374 — Intrusion 07 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	more
V1375 — Intrusion 07 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	more
V1376 — Intrusion 07 Occupant Number	00	No contact or no intrusion	more
V1377 — Intrusion 07 Injury Number	00	No injury or no intrusion	more
V1378 — Intrusion 07 Occupant Number	00	No contact or no intrusion	more
V1379 — Intrusion 07 Injury Number	99	Contact, injury unknown or data not collected	more
V1380 — Intrusion Number 08	00	No Intrusion, None	more
V1381 — Intrusion 08 Occupant Space Number	00	No Intrusion, None	more
V1382 — Intrusion 08 Intruding Object	00	No Intrusion, None	more
V1383 — Intrusion 08 Assoc Event Number	0	No Intrusion, None	more

V1384 — Intrusion 08 Max Intrusion X-axis	00 cm	0 cm or No Intrusion	more
V1385 — Intrusion 08 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	more
V1386 — Intrusion 08 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	more
V1387 — Intrusion 08 Occupant Number	00	No contact or no intrusion	more
V1388 — Intrusion 08 Injury Number	00	No injury or no intrusion	more
V1389 — Intrusion 08 Occupant Number	00	No contact or no intrusion	more
V1390 — Intrusion 08 Injury Number	99	Contact, injury unknown or data not collected	more
V1391 — Intrusion Number 09	00	No Intrusion, None	more
V1392 — Intrusion 09 Occupant Space Number	00	No Intrusion, None	more
V1393 — Intrusion 09 Intruding Object	00	No Intrusion, None	more
V1394 — Intrusion 09 Assoc Event Number	0	No Intrusion, None	more
V1395 — Intrusion 09 Max Intrusion X-axis	00 cm	0 cm or No Intrusion	more
V1396 — Intrusion 09 Max Intrusion Y-axis	00 cm	0 cm or No Intrusion	more
V1397 — Intrusion 09 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	more
V1398 — Intrusion 09 Occupant Number	00	No contact or no intrusion	more
V1399 — Intrusion 09 Injury Number	00	No injury or no intrusion	more
V1400 — Intrusion 09 Occupant Number	00	No contact or no intrusion	more
V1401 — Intrusion 09 Injury Number	99	Contact, injury unknown or data not collected	more
V1402 — Intrusion Number 10	00	No Intrusion, None	more
V1403 — Intrusion 10 Occupant Space Number	00	No Intrusion, None	more
V1404 — Intrusion 10 Intruding Object	00	No Intrusion, None	more
V1405 — Intrusion 10 Assoc Event Number	0	No Intrusion, None	more
V1406 — Intrusion 10 Max Intrusion X-axis	00 cm	0 cm or No Intrusion	more
V1407 — Intrusion 10 Max Intrusion	00 cm		

Y-axis		0 cm or No Intrusion	more
V1408 — Intrusion 10 Max Intrusion Z-axis	00 cm	0 cm or No Intrusion	more
V1409 — Intrusion 10 Occupant Number	00	No contact or no intrusion	more
V1410 — Intrusion 10 Injury Number	00	No injury or no intrusion	more
V1411 — Intrusion 10 Occupant Number	00	No contact or no intrusion	more
V1412 — Intrusion 10 Injury Number	99	Contact, injury unknown or data not collected	more
V1413 — Door Intrusion Number 01	88	Not Applicable	more
V1414 — Door Intrusion Number 01 Cause	8	Not applicable	more
V1415 — Door Intrusion Number 02	88	Not Applicable	more
V1416 — Door Intrusion Number 02 Cause	8	Not applicable	more
V1417 — Door Intrusion Number 03	88	Not Applicable	more
V1418 — Door Intrusion Number 03 Cause	8	Not applicable	more
V1419 — Door Intrusion 01 Component	88	Not Applicable	more
V1420 — Door Intrusion 01 Component Damaged 1	8	Not Applicable	more
V1421 — Door Intrusion 01 Component Damaged 2	8	Not Applicable	more
V1422 — Door Intrusion 02 Component	88	Not Applicable	more
V1423 — Door Intrusion 02 Component Damaged 1	8	Not Applicable	more
V1424 — Door Intrusion 02 Component Damaged 2	8	Not Applicable	more
V1425 — Door Intrusion 03 Component	88	Not Applicable	more
V1426 — Door Intrusion 03 Component Damaged 1	8	Not Applicable	more
V1427 — Door Intrusion 03 Component Damaged 2	8	Not Applicable	more
V1428 — Door Intrusion 04 Component	88	Not Applicable	more
V1429 — Door Intrusion 04 Component Damaged 1	8	Not Applicable	more
V1430 — Door Intrusion 04 Component Damaged 2	8	Not Applicable	more

**Case Vehicle
Airbag(s)**



[Click for Driver airbag figure](#)



[Click for Passenger airbag figure](#)

[Back to Top](#)

Variable Number and Name	Code Value	Code Description	Other Options
V1501 — Driver Airbag Equipped	1	Yes	more
V1502 — Driver Airbag Deployed	1	Yes	more
V1503 — Driver Airbag Condition	0	No Damage	more
V1504 — Passenger Airbag Equip	1	Yes	more
V1505 — Passenger Airbag Deployed	1	Yes	more
V1506 — Passenger Airbag Condition	2	Split or Torn	more
V1507 — Steering Wheel Airbag Tether	1	Yes	more
V1508 — Driver Airbag Marked By Contact	1	Yes	more
V1509 — Passenger Airbag Tether	1	Yes	more
V1510 — Passenger Airbag Marked By Contact	0	No	more

**Case Vehicle
Interior**

[Back to Top](#)

Variable Number and Name	Code Value	Code Description	Other Options
V1601 — Left Front Door Damaged	1	Yes	more
V1602 — Right Front Door Damaged	1	Yes	more
V1603 — Left Front Hardware Damaged	1	Yes	more
V1604 — Right Front Hardware Damaged	1	Yes	more
V1605 — Left Front Armrest Damaged	0	No	more
V1606 — Right Front Armrest Damaged	1	Yes	more
V1607 — Left Front Glass Damaged	0	No	more
V1608 — Right Front Glass Damaged	1	Yes	more
V1609 — Left Rear Door Area Damaged	0	No	more

V1610 — Right Rear Door Area Damaged	0	No	more
V1611 — Left Rear Hardware Damaged	0	No	more
V1612 — Right Rear Hardware Damaged	0	No	more
V1613 — Left Rear Armrest Damaged	0	No	more
V1614 — Right Rear Armrest Damaged	0	No	more
V1615 — Left Rear Glass Damaged	0	No	more
V1616 — Right Rear Glass Damaged	0	No	more
V1617 — Left Roof Side Rail Damaged	0	No	more
V1618 — Right Roof Side Rail Damaged	1	Yes	more
V1619 — Left B-pillar Damaged	0	No	more
V1620 — Right B-pillar Damaged	1	Yes	more
V1621 — Left C-pillar Damaged	0	No	more
V1622 — Right C-pillar Damaged	0	No	more
V1623 — Left D-pillar Damaged	8	Not applicable	more
V1624 — Right D-pillar Damaged	8	Not applicable	more
V1625 — Left Headlining Damaged	0	No	more
V1626 — Right Headlining Damaged	1	Yes	more
V1627 — Left Roof Structure Damaged	0	No	more
V1628 — Right Roof Structure Damaged	1	Yes	more
V1629 — Left T/Sun Roof Damaged	0	No	more
V1630 — Right T/Sun Roof Damaged	1	Yes	more
V1631 — Other Left Side Item Damaged	8	Not applicable	more
V1632 — Other Right Side Item Damaged	8	Not applicable	more
V1633 — Foot Controls Damaged	1	Yes	more
V1634 — Ignition Key Damaged	0	No	more
V1635 — Rear View Mirror Damaged	1	Yes	more
V1636 — Sunvisor/Fitting Damaged	0	No	more
V1637 — Windshield Molding Damaged	1	Yes	more
V1638 — Left A-pillar Damaged	0	No	more

V1639 — Right A-pillar Damaged	1	Yes	more
V1640 — Center Console Damaged	1	Yes	more
V1641 — Transmission Lever Damaged	1	Yes	more
V1642 — Horn/Spoke Shroud Damaged	0	No	more
V1643 — Upper Panel Damaged	1	Yes	more
V1644 — Mid Panel Damaged	1	Yes	more
V1645 — Lower Panel Damaged	4	Yes, occupant contact	more
V1646 — Ashtray Damaged	1	Yes	more
V1647 — Control Knob/Lever Damaged	1	Yes	more
V1648 — Glove Compartment Area Damaged	1	Yes	more
V1649 — Instruments Damaged	1	Yes	more
V1650 — Park Brake Release Damaged	0	No	more
V1651 — Park Brake Pedal Damaged	8	Not applicable	more
V1652 — A/C Or Upper Vent Damaged	1	Yes	more
V1653 — Heater Or A/C Duct Damaged	1	Yes	more
V1654 — Radio Damaged	1	Yes	more
V1655 — Other Item Damaged	8	Not applicable	more
V1656 — Rear Window Damaged	0	No	more
V1657 — Rear Window Header Damaged	0	No	more
V1658 — Vertical Console Damaged	4	Yes, occupant contact	more
V1659 — Roof Console Damaged	8	Not applicable	more

Case Vehicle Seats

[Back to Top](#)

Variable Number and Name	Code Value	Code Description	Other Options
V1701 — Driver Front Seat Type	05	Bucket	more
V1702 — Passenger Front Seat Type	05	Bucket	more
V1703 — Driver Seat Mount Type	1	Standard	more
V1704 — Passenger Seat Mount Type	1	Standard	more
V1705 — Driver Swivel Mechanism	0		

Equipped		No	more
V1706 — Passenger Swivel Mechanism Equipped	0	No	more
V1707 — Driver Seat Original Equipment	1	Yes	more
V1708 — Passenger Seat Original Equipment	1	Yes	more
V1709 — Driver Seat/Rear Occupant Contact	8	Not applicable	more
V1710 — Passenger Seat/Rear Occupant Contact	8	Not applicable	more
V1711 — Driver Seat Damage	0	None	more
V1712 — Passenger Seat Damage	0	None	more
V1713 — Center Front Armrest Damaged	0	No	more
V1714 — Driver Seat Rotation	0	None apparent	more
V1715 — Passenger Seat Rotation	0	None apparent	more
V1716 — Driver Seat-back Type	3	Reclining	more
V1717 — Passenger Seat-back Type	3	Reclining	more
V1718 — Driver Seat-back Lock Type	1	Manual	more
V1719 — Passenger Seat-back Lock Type	1	Manual	more
V1720 — Driver Seat-back Lock Held	1	Yes	more
V1721 — Passenger Seat-back Lock Held	1	Yes	more
V1722 — Driver Recliner Mechanism Held	1	Yes	more
V1723 — Passenger Recliner Mechanism Held	1	Yes	more
V1724 — Driver Head Restraint Type	1	Adjustable	more
V1725 — Passenger Head Restraint Type	1	Adjustable	more
V1726 — Driver Head Rest Removed	0	No	more
V1727 — Passenger Head Rest Removed	0	No	more
V1728 — Driver Head Rest Adjustment	1	Up	more
V1729 — Passenger Head Rest	2	Down	more

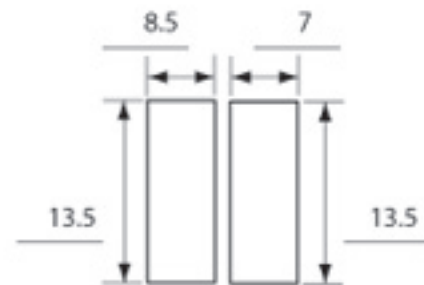
Adjustment			
V1730 — Driver Head Rest Damage	0	None	more
V1731 — Passenger Head Rest Damage	0	None	more
V1732 — Driver Seat Adjustment Type	1	Manual	more
V1733 — Passenger Seat Adjustment Type	1	Manual	more
V1734 — Driver Seat Adjustment Provided	1	2-way	more
V1735 — Passenger Seat Adjustment Provided	1	2-way	more
V1736 — Driver Seat Adjuster Damage	0	None	more
V1737 — Passenger Seat Adjuster Damage	0	None	more
V1738 — Driver Seat Adjuster Separation	8	Not applicable	more
V1739 — Passenger Seat Adjuster Separation	8	Not applicable	more
V1740 — Driver Seat Pre-crash Position	3	Rearward	more
V1741 — Passenger Seat Pre-crash Position	2	Middle	more
V1742 — Left Rear Seat Type	6	Luggage area access panel	more
V1743 — Right Rear Seat Type	6	Luggage area access panel	more
V1744 — Left Rear Seat Damaged	0	None	more
V1745 — Right Rear Seat Damaged	0	None	more
V1746 — Center Rear Armrest Damaged	8	Not applicable (No Center Armrest)	more
V1747 — Left Rear Seat-back Left Lock Equipped	1	Yes	more
V1748 — Right Rear Seat-back Left Lock Equipped	0	No	more
V1749 — Left Rear Seat-back Left Lock Held	1	Yes	more
V1750 — Right Rear Seat-back Left Lock Held	8	Not applicable	more
V1751 — Left Rear Seat-back Right Lock Equipped	0	No	more
V1752 — Right Rear Seat-back Right Lock Equipped	1	Yes	more

V1753 — Left Rear Seat-back Right Lock Held	8	Not applicable	more
V1754 — Right Rear Seat-back Right Lock Held	1	Yes	more
V1755 — Left 3rd Seat Equipped	0	No	more
V1756 — Right 3rd Seat Equipped	0	No	more
V1757 — Left 3rd Seat Backrest Damaged	8	Not applicable	more
V1758 — Right 3rd Seat Backrest Damaged	8	Not applicable	more
V1759 — Left 3rd Seat Cushion Damaged	8	Not applicable	more
V1760 — Right 3rd Seat Cushion Damaged	8	Not applicable	more
V1761 — Rear Head Restraints	1	Equipped	more

Driver Airbag



Driver Airbag Doors

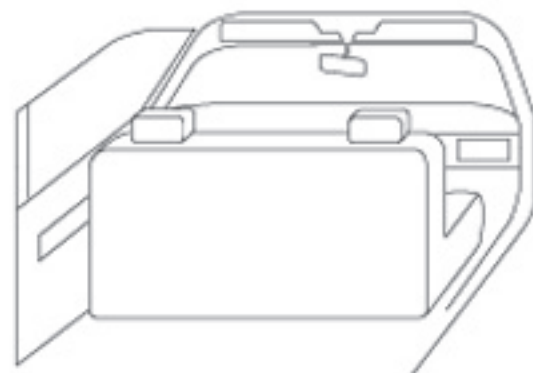
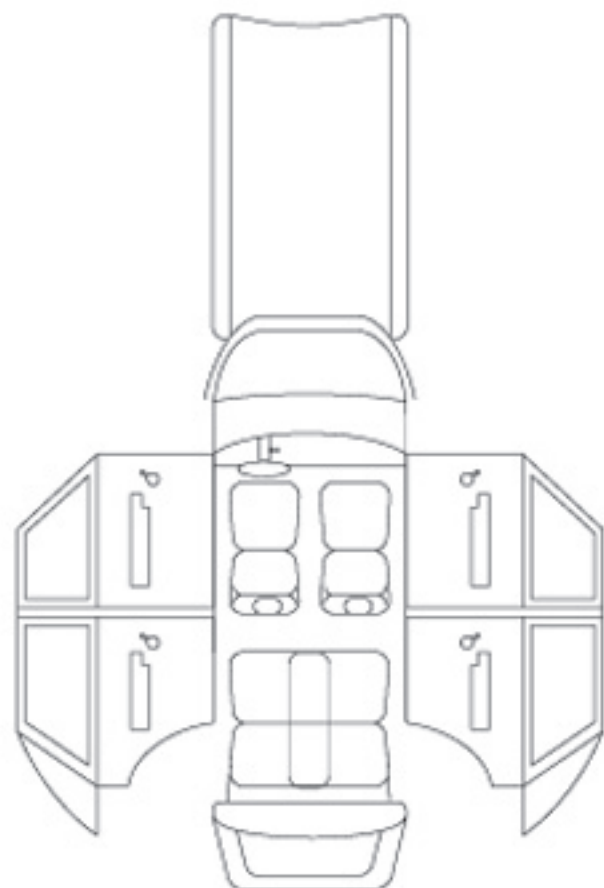


I-Pattern

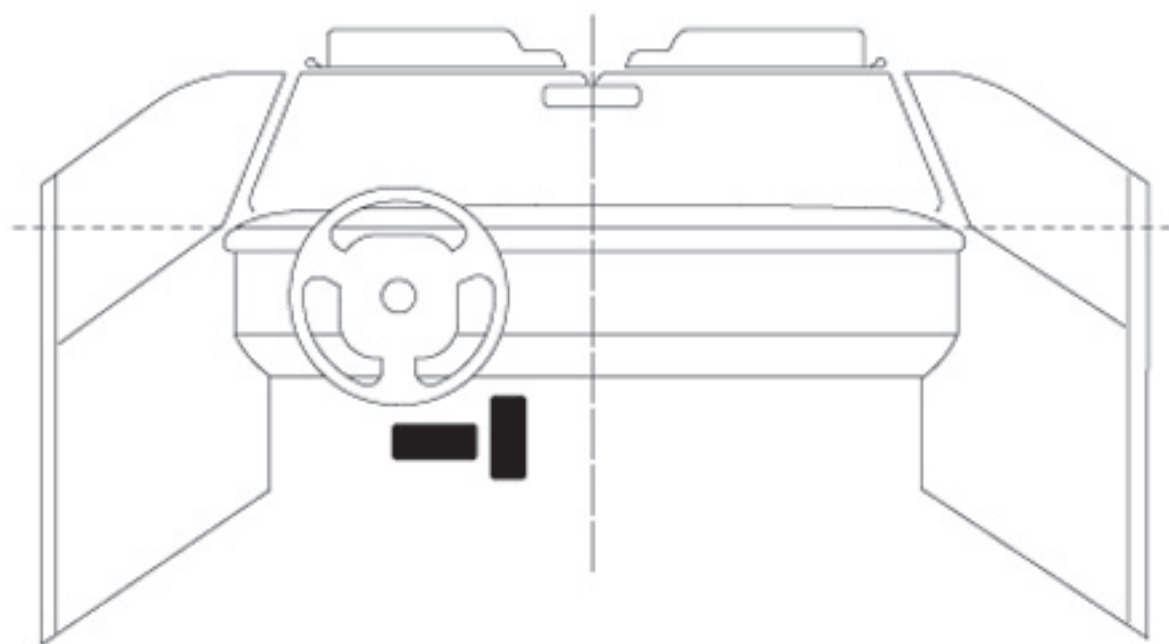
Vents: Y N
if yes, how many: 2

Tethers: Y N
if yes, how many: 2

vents located at 11 and 1 o'clock



No evidence of contact



1 = Definitely 2 = Probably 3 = Possible

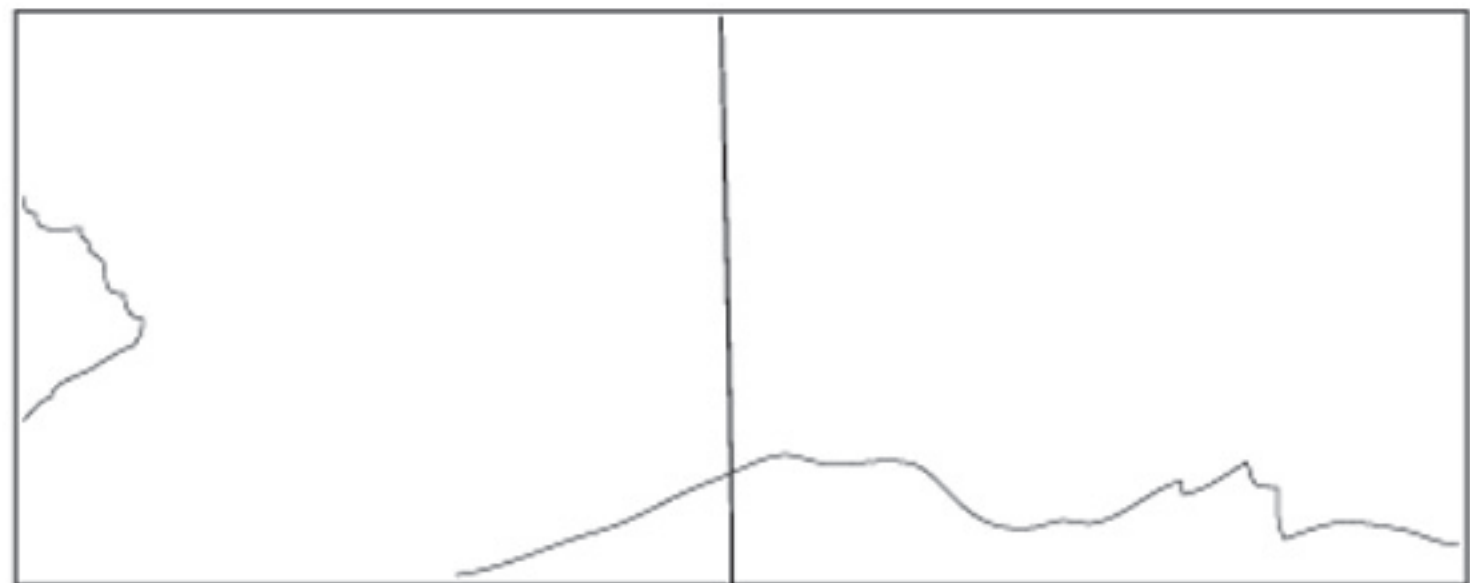
INTRUSION IT-1

Location of Intrusion	Intruded Component	(All Measurements Are in Centimeters)					Dominant Crush Direction
		Comparison Value	–	Intruded Value	=	Intrusion	
11	Instrument panel	68	–	55	=	13	rear
11	Transmission tunnel	58	–	41	=	17	left
11	Steering column	64	–	55	=	9	rear
			–		=		
12	Vertical console	80	–	62	=	18	rear
			–		=		
13	Instrument panel	70	–	33	=	37	rear
13	Toepan	115	–	78	=	37	rear
			–		=		
			–		=		
			–		=		
			–		=		

OCCUPANT CONTACT WORKSHEET

Contact	Interior Component Contacted	Occupant No. if Known	Body Region if Known	Supporting Physical Evidence	Confidence Level of Contact Point
A					
B					
C					
D					
E					
F					
G					

windshield cut by rescue and holed by hood and instrument panel



L

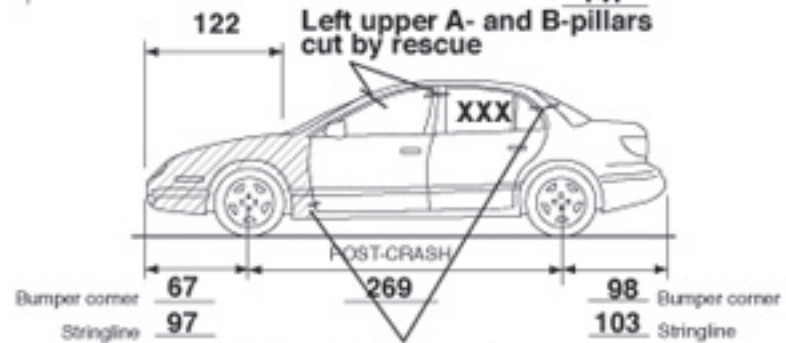
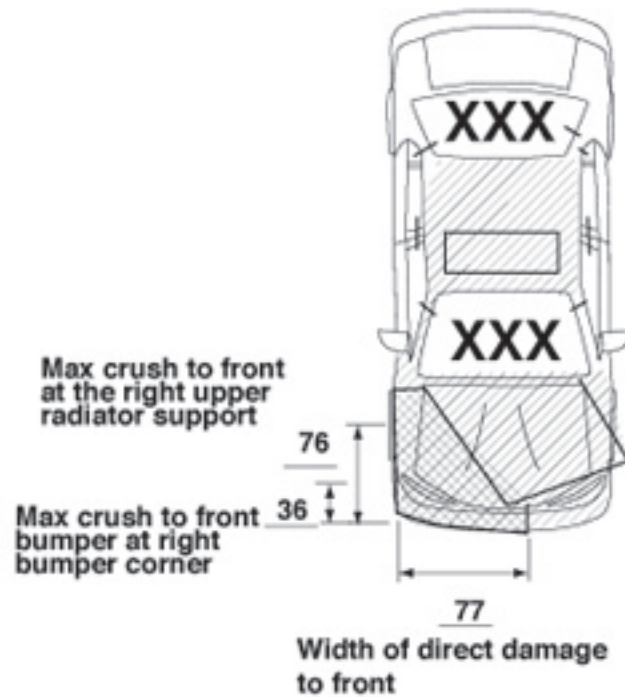
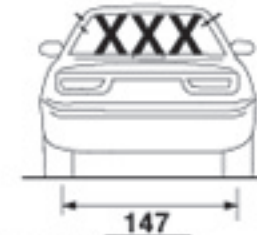
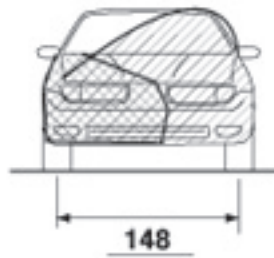
F

R

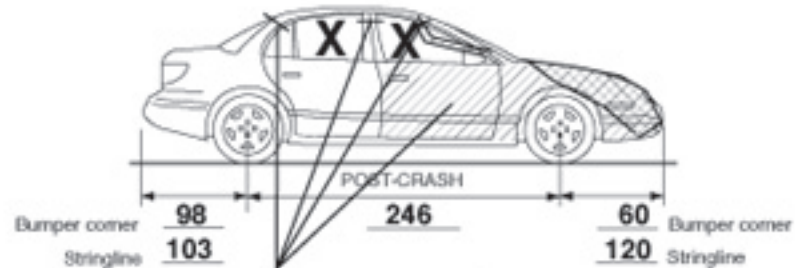
WINDSHIELD MARK ON CASE VEHICLE:



MEASUREMENTS IN CENTIMETERS



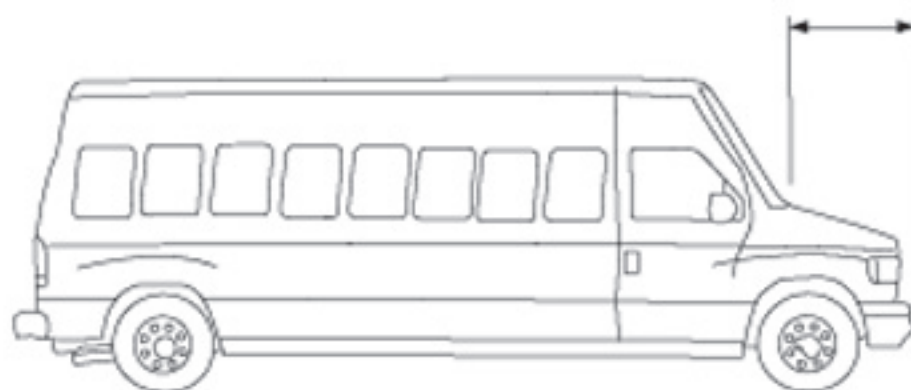
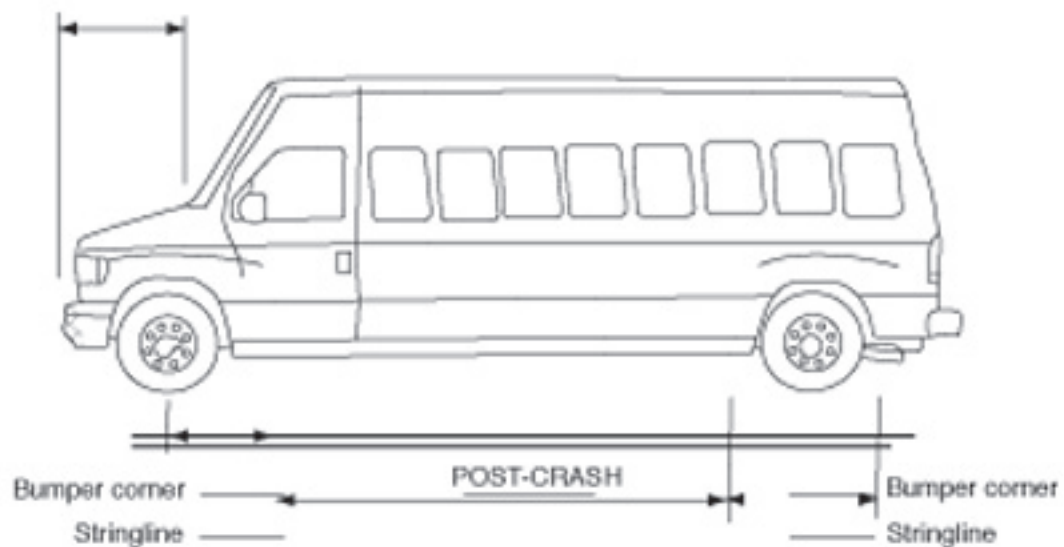
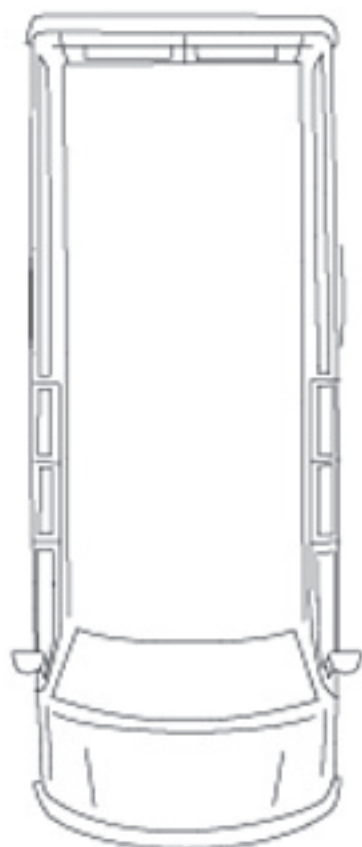
Left lower A-pillar and upper C-pillars partially cut



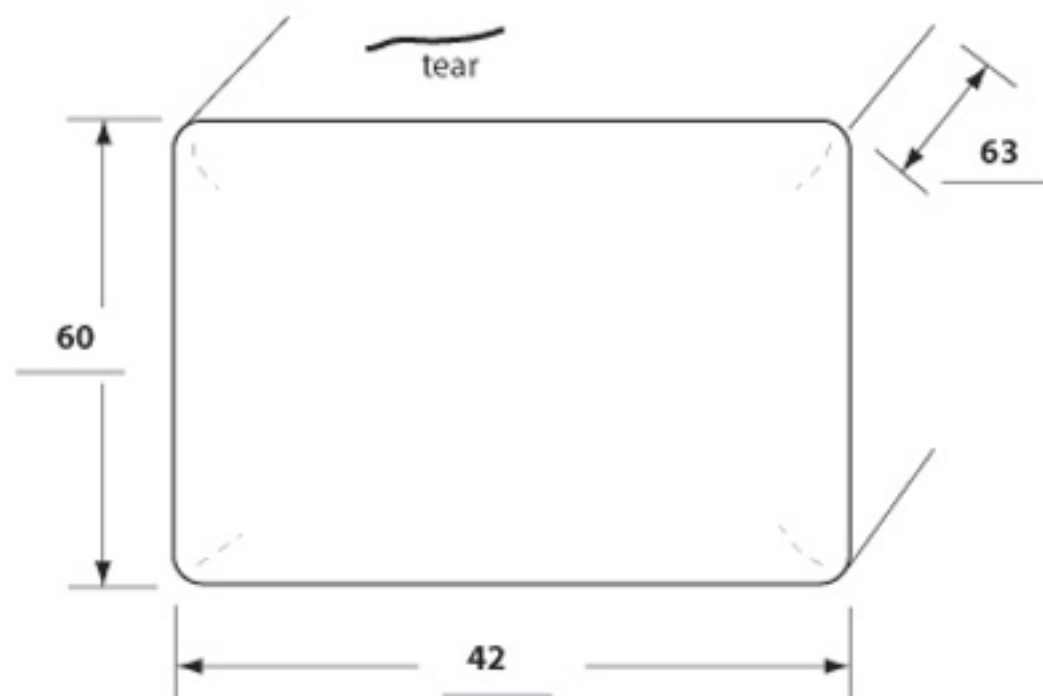
Right upper A-, B- and C-pillars cut and right-front door removed by rescue personnel

MEASUREMENTS IN CENTIMETERS

This vehicle was unavailable for inspection, damage shown is taken from on scene pictures.



Passenger Airbag



Passenger Airbag Door

Single Door



Vents: Y N
if yes, how many: 2

Tethers: Y N
if yes, how many: 2

**vents at 3 and 9 o'clock
on the side**



























1 2 3 4 5 6 7 8 9 10
in
STANLEY
Life Guards
MADE IN U.S.A.
E.E. APPS
NO. 339 3C
© 1993 THE STANLEY WORKS









































SATURN

BAG

STANLEY Life Guard

50 60 70 80 90



G

AIR

SATURN

2 3 4 5 6
STANLEY
like a gun





AIR



























1784
16 38













10-22
178401
9/10/02
XHP
Continuum
Plyte









178461





10-28
178301
grrfc
XKNP
Carrington
Plate







10-22
178401
grac
XHP
Control
Plyte







10-28
178401
gmac
XKNP
Cambridge
Plate



3800
T444E

10 20



SCHOOL BUS

SCHOOLS

4

10 20



SCHOOL BUS

10 20



SCHOOL BUS

10 20



10-28
178401
gmac
XANP
Cambridge
Play

GRAND CHEROKEE



1029
17051
3000K
XANIXA
Plate







SCHOOL BUS

4



P
W
C

5









MONROE NEWS





