#### Case 456: Narrative

Case Vehicle (A): 2003 Toyota

Type: Camry XLE, 4-door sedan

Driver: 47-year-old male

CDC: 12-FZEW-3

#### **SITUATION**

1 It was a clear but dark night, there were no streetlights, and the east-west, two-lane asphalt road was dry and in good condition. 2 Case vehicle (A) was traveling west at a driver-estimated speed of 45 mph (72 kph) in the westbound lane when 3 4 5 the driver steered to the right to avoid hitting a deer in the road ahead. Before the driver could steer back to the left, case vehicle (A) exited the north edge of the road and 6 struck a 93-cm-diameter tree with the right front. Case vehicle (A) was towed due to damage.

The police accident report (PAR) indicates B-level injuries for the driver, the 11-year-old female right-front passenger, and the 10-year-old female right-rear passenger of case vehicle (A), and all were transported by ambulance to a hospital where they were treated and released.

# GENERAL VEHICLE DAMAGE AND ESTIMATED CRASH SEVERITIES

7 Damage to the front of case vehicle (A) was severe. 8 Direct damage began at the right-front bumper corner and extended 93-cm across the front, resulting in 57% vehicle overlap (%VOL). 9 The maximum crush was 67 cm and it occurred to the left of the right-front bumper corner.

Using the WinSMASH crash-reconstruction program and a crush profile measured for <u>10 11</u> case vehicle (A) at the level of the bumper, the following impact severity was estimated:

		Estimated Velocity Change - kph (mph)				
Vehicle	Variable	Total Longitudinal Latitudina				
Case vehicle (A)	delta V	39 (24)	-39 (-24)	0 (0)		

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

#### **Exterior**

In the front, 12 the right half of the bumper and the hood were crushed rearward and the center of the hood was buckled up. 13 The right rail of the engine compartment was crushed rearward and buckled to the left. The hood latch was damaged and jammed closed, 14 the right hood hinge was damaged but 15 there was no damage to the left hood hinge, and back edge of the hood was elevated and 16 17 it had contacted and cracked the windshield. 18 There was a vertical split in the left-center section of the windshield extending from the header to the cowl.

19 On the right side, the front section of the fender and the front wheel were crushed rearward and the right wheelbase was reduced by 6 cm. 20 The right-front tire was flat, 21 the right A-pillar was displaced rearward, and 22 the roof and right roof siderail above the B-pillar 23 were buckled. 24 The exterior panel of the right-front door was bowed out, 25 but both right-side doors were closed and operational and all of the right-side glazing was intact.

26 There was no damage to the rear of the vehicle. On the left side, 27 28 the left wheelbase was increased by 3 cm, both doors remained closed and operational, and all of the left-side glazing was intact.

#### Interior

This vehicle was equipped with steering-wheel and dash-mounted frontal-impact airbags, and 29 30 both deployed during the frontal impact. 31 32 This vehicle was also equipped with side-impact airbags mounted in the outer section of the front-row seatbacks and with 33 34 curtain airbags mounted in the roof siderails, but none of the side-impact airbags deployed.

In the driver area, 29 there was no damage to the steering-wheel airbag or 35 36 37 38 to the module covers. The steering-wheel rim was not deformed 39 40 but the steering-wheel hub was split, all four of the steering-wheel spokes were broken, the steering-wheel rim and the cruise control levers were displaced forward, and the steering column was displaced up and to the right. 41 The forward portion of the roof, the roof headliner, and the sunroof were buckled up slightly. 42 43 There were scuffmarks on the driver knee bolster to the left and right of the steering column, as well as on the left side of the plastic steering-column cover. 44 The gas and the brake pedals were displaced to the right and the heater/air-conditioning duct was loose, but 45 46 there was no other damage in the driver area.

In the center-front area, <u>47 48</u> the rearview mirror was separated from its windshield mount <u>49</u> but it was not cracked or broken. <u>50</u> The left side of the vertical console and the transmission tunnel were displaced to the right, there were scuff marks on the vertical console, and the radio was loose. <u>51</u> There was no other damage in the center-front area.

In the right-front passenger area, <u>52</u> <u>53</u> there was no damage to the deployed dash-mounted airbag or <u>54</u> to the module cover, <u>55</u> but the upper-left corner of the airbag fabric was stained with blood. <u>56</u> The plastic cover on the upper section of the A-pillar was deformed. <u>57</u> The instrument panel was partially separated from the firewall and displaced rearward, the upper vent outlet was loose, <u>58</u> the glove-compartment door was scuffed, and <u>59</u> the cover below the glove compartment was displaced and loose. The toepan was buckled rearward, the transmission tunnel was buckled to the right, and the kick panel was buckled to the left. <u>60</u> Also the glove-compartment door would not close due to rearward displacement of the heater/air-conditioner fan motor. <u>61</u> <u>62</u> There was no other damage in the right-front seating area.

In the right-rear seating area, <u>63</u> the back of the right-front seatback was dented. <u>64 65 66 67</u> There was no other damage in the rear seating areas.

The following intrusions were noted and measured:

Location	Component	Distance (cm)	Direction
transmission tunnel <u>68</u>		16	right
	kick panel	15	left

right front toepan <u>69</u>		9	rear
1115111 110111	instrument panel <u>70</u>	6	rear

#### OCCUPANT KINEMATICS AND INJURIES

71 The 183-cm, 95-kg (6-ft, 210-lb) 47-year-old male driver was using the three-point belt that was equipped with a pretensioner 72 and the steering-wheel airbag deployed. 73 It could not be confirmed if the pretensioner had deployed but the shoulder belt was jammed into the forward section of plastic Dring and would not retract, 74 and there were webbing loading marks on the D-ring, indicating belt use by the driver.

During the frontal impact, the driver moved forward relative to the vehicle interior, into the belt restraints, airbag, and knee bolster. He sustained cervical strain, probably due to non-contact impact forces, and he sustained an abrasion to the left-anterior aspect of the neck from loading by the shoulder belt

75 The 147-cm, 45-kg, (4-ft 10-in, 100-lb), 11-year-old female right-front passenger was using the available three-point belt that was equipped with a pretensioner and 76 the dash-mounted airbag deployed. It could not be confirmed if the belt pretensioner had deployed 77 78 but belt loading marks on the D-ring and 79 80 on the continuous loop of the sliding latch plate indicate belt use by the right-front passenger.

During the frontal impact, the right-front passenger moved forward relative to the vehicle interior, into the belt restraints, the airbag, and the glove compartment/knee bolster. She sustained a laceration to the right side of forehead and a laceration to the dorsal aspect of the right wrist from unknown sources. She sustained an abrasion to the right-anterior aspect of the neck and a contusion across the sternum from loading by the shoulder belt. She sustained an abrasion and a contusion to the left knee and an abrasion to the right knee from contact with the knee bolster/glove compartment.

<u>81</u> The 135-cm, 36-kg, (4-ft 5-in, 80-lb) 10-year-old female right-rear passenger was using the available three-point belt as indicted by <u>82 83</u> webbing loading marks on the D-ring and on the continuous loop of the sliding latch plate. At the time of the crash she was reportedly asleep in a ?slumped? posture with her left leg crossed over her right leg and her right foot on the floor.

During the frontal impact, the right-rear passenger moved forward relative to the vehicle interior, into the belt restraints and the back of the right-front seatback. She sustained abrasions to the right side of the neck and across the upper-right chest and a contusion across the sternum due to loading by the shoulder belt. She sustained abrasions to the anterior aspects of both hips over the iliac crests and a contusion across the abdomen due to loading by the lap belt. She sustained a contusion to the right knee from contact with the back of the right-front seatback, and she sustained a sprain to the right ankle, probably from contact with the floor.

The following tables and attached drawings <u>84</u> <u>85</u> <u>86</u> summarize the injuries for the three occupants of case vehicle (A).

Occupant: Driver	Age: 47 years	Gender: Male
Restraints: 3-point belt with pretensioner;	Stature: 183 cm (6 ft, 0	Mass: 95 kg (210 lb)

steering-wheel airbag   in)				
Injury Description	A.I.S.	In	jury Sour	ce
_	_	Definite	Probable	Possible
Cervical strain	1		Non- contact impact forces	_
Abrasion, left-anterior aspect of neck	1	Shoulder belt		_
Maximum A.I.S. Level	1		_	
Injury Severity Score	2			

Occupant: Right front	Age: 11 years		Gender	r: Female	
Restraints: 3-point belt with pretensioner; dash-mounted airbag	· · · · · · · · · · · · · · · · · · ·		ft, 10 Mass: 4	45 kg (100	) lb)
Injury Description	Injury Description		Inju	ry Source	
			Definite	Probable	Possible
Laceration, right side of forehead		1	Unknown		
Abrasion, right side of neck		1	Shoulder belt	_	
Contusion, across sternum		1	Shoulder belt		
Laceration, dorsal aspect of right wrist		1	Unknown		
Abrasion, right knee		1	Knee bolster/glove compartment		
Abrasion and contusion, left knee		1	Knee bolster/glove compartment	ll l	
Maximum A.I.S. Level		1			
Injury Severity Score		1			

Occupant: Right rear Age: 10 year		ars	Gender: Female
Restraints: 3-point belt	Stature: 13:	Stature: 135 cm (4 ft, 5 Mass: 36 kg (8	
Injury Description		A.I.S.	Injury Source
_		_	Definite Probable Possible

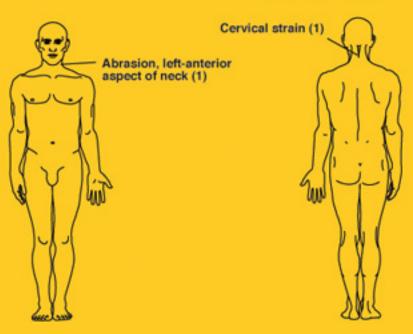
Abrasion, right side of neck	1	Shoulder belt	_	_
Abrasion, across upper-right chest	1	Shoulder belt	_	
Contusion, across sternum	1	Shoulder belt		
Contusion, across abdomen	1	Lap belt		
Abrasions, both hips over iliac crests	1	Lap belt		
Contusion, right knee	1	_	Right- front seatback	
Sprain, right ankle	1		Floor	
Maximum A.I.S. Level	1			
Injury Severity Score	2			

CASE NO.: 456 OCCUPANT: Driver: 47-year-old male

CASE VEHICLE: 2003 Toyota STATURE: 183 cm (6 ft) MASS: 95 kg (210 lb)

RESTRAINTS: 3-point belt with pretensioner; steering-wheel airbag (unable to confirm activation of belt pretensioner) TYPE: Camry XLE, 4-door sedan

SEVERITY: MAIS - 1 : ISS - 2



CASE NO .: 456

CASE VEHICLE: 2003 Toyota

TYPE: Camry XLE, 4-door sedan

OCCUPANT: Right front: 11-year-old female

STATURE: 147 cm (4 ft, 10 in) MASS: 45 kg (100 lb)

RESTRAINTS: 3-point belt with pretensioner; dash-mounted airbag (unable to confirm activation of belt pretensioner)

Laceration, right side of forehead (1) SEVER

SEVERITY: MAIS-1 : ISS-1

Abrasion, right side of neck (1)

Contusion, across sternum (1)

Laceration, dorsal aspect of the right wrist (1)

Abrasion, right knee (1)

CASE NO.: 456

CASE VEHICLE: 2003 Toyota

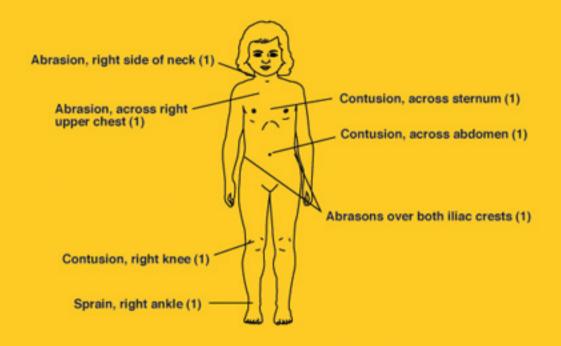
TYPE: Camry XLE, 4-door sedan

OCCUPANT: Right rear: 10-year-old female

STATURE: 135 cm (4 ft, 5 in) MASS: 36 kg (80 lb)

RESTRAINTS: 3-point belt

SEVERITY: MAIS - 1 : ISS - 2



Case No.: 456

Case Veh. (A): 2003 Toyota Type: Camry XLE, 4-door sedan

Driver: 47-year-old male

Light Conditions: Dark - unlighted

Weather: Clear Road Surface: Dry

Road Construction: Asphalt





## Case 456: Vehicle Report

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

- General Information
- Other Vehicle
- Case Vehicle General
- Case Vehicle Damage Description
- Crash Reconstruction
- Case Vehicle Tires & Rims
- Case Vehicle Fuel Tank
- Case Vehicle Fuel Leakage
- Case Vehicle Fire
- Case Vehicle Exterior
- Case Vehicle Steering Column/Rim
- Case Vehicle Intrusion
- Case Vehicle Airbag(s)
- Case Vehicle Interior
- Case Vehicle Seats
- Case Vehicle Side Airbag(s)
- EDR -- Event Data Recorder

General Information Back to Top

Variable Number	Variable Name	Code Value	Code Description	Other Options
V0204	Collision Hour	0340	Time of day (24 hour clock)	<u>more</u>
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	8	Not applicable	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
V0214	Road Alignment Vertical 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	<u>more</u>
V0219	Speed Limit	6	86-90 km/h 55 mph	more
V0220	Precipitation Type	0	None	<u>more</u>
V0221	Precipitation Rate	8	Not applicable	<u>more</u>
V0222	Temperature	9	Unknown	more
V0223	Crosswind	0	None	<u>more</u>
V0224	Light Conditions	5	Dark, unlighted	<u>more</u>
V0225	Mechanical Malfunction Mention	0	No	more
V0226	Case Vehicle And Object	4	Yes, fixed object off-road	more
V0227	Case Vehicle Rollover	0	No	more
V0228	Rollover Location	0	No rollover	more
V0229	Roll Direction	0	No rollover	<u>more</u>
V0230	Rollover Initation Type	0	No rollover	<u>more</u>
V0231	Rollover Number Of Turns	0	No rollover	more
V0232	Case Vehicle Preimpact Braking	9	Unknown	more
V0233	Case Vehicle Preimpact Stability	1	Case vehicle tracking before impact	more
V0234	Case Vehicle Ran Off Roadway	1	Yes	more
V0235	Moving Case Vehicle Contacted Moving Vehicle	0	No	<u>more</u>
V0236	Case Vehicle Contacted Stopped Vehicle	0	No	<u>more</u>
V0237	Stopped Case Vehicle Contacted Vehicle	0	No	more
V0238	Total Vehicles Hit By Case Vehicle	0	0 vehicles	more
V0239	Any Fire In Crash?	0	No	more
V0240	Maximum Police Severity-acc	2	B - Non-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
V0244	Driver Distraction	01	Attentive or not distracted	more

V0245	Driver Drug Involvement	0	None	more
V0246	Driver Drug Type	0	No drug use	more
V0247	Driven/towed From Scene	2	Towed Due to Damage	<u>more</u>

Other Vehicle Back to Top

Variable Number	Variable Name	Code Value	Code Description	Other Options
V0301	Other Vehicle VIN	0 XXXXXXX		more
V0302	Other Vehicle Manufacturer/Body Code	99898		_
V0303	Other Vehicle Manufacturer	998	Unknown Other Vehicle	more
V0304	Other Vehicle Body Code	98	No Other Vehicle	more
V0305	Other Vehicle Make/model	0000	No other vehicle	more
V0306	Other Vehicle Model Year	0.0	Year	more
V0307	Other Vehicle Mass	000000 kg	No Other Vehicle	more
V0308	Other Vehicle Number	8	No other vehicle	<u>more</u>
V0309	Other Vehicle Number of Occupants	98	No Other Vehicle	more
V0310	Other Vehicle Traveling Speed	990	No Other Vehicle	more
V0311	Highest Police Injury Severity	8	No Other Vehicle	more
V0312	Other Vehicle Type	98	No Other Vehicle	more
V0313	Other Vehicle Wheelbase in Centimeters	998	No Other Vehicle	more
V0314	Other Vehicle Average Track Width	998	No Other Vehicle	more
V0315	Other Vehicle Overall Length	998	No Other Vehicle	more
V0316	Other Vehicle Overall Width (OAW)	998	No Other Vehicle	more
V0317	Other Vehicle Front Overhang	998	No Other Vehicle	more
V0318	Other Vehicle Rear Overhang	998	No Other Vehicle	more
V0319	Other Vehicle Undeformed End Width (UEW)	998	No Other Vehicle	more
V0320	Other Vehicle Engine Displacement	0.0 l	No Other Vehicle	more
V0321	Other Vehicle Engine: Number of Cylinders	98	No Other Vehicle	more

	Other Vehicle Direct Damage Length (DDL)	998	No Other Vehicle	more
V0323	Other Vehicle Front-End Overlap	99	Missing or Not applicable	more
V0324	Other Vehicle - Vehicle Overlap	99	Missing or Not applicable	more

### Case Vehicle General

Variable Number	Variable Name	Code Value	Code Description	Other Options
V0401	VIN	4T1BE30K13XXXXXXX	Click for Case Vehicle figure	more
V0402	Manufacturer/Body Code	87128		_
V0403	Vehicle Manufacturer	871	Toyota	more
V0404	Vehicle Body Code	28	Intermediate 105-109.9 in. wb.	more
V0405	Make/model Code	1610	Camry	more
V0406	Model Year	2003	Model year	more
V0407	Vehicle Mass	001525 kg	Mass (Kg)	more
V0408	Odometer Reading	888888		_
V0409	Number of Occupants	03	3 occupants	more
V0410	Traveling Speed	072 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	2	Console	more
V0416	Steering	1	Power	more
V0417	Brakes	1	Power	more
V0418	Brake Type	3	Disc - all wheels	more
V0419	Adjustable Pedals?	0	No	more
V0420	Brake Anti-lock Device	2	Four-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
	Equipped With Roll	0		

V0425	Bar		No	<u>more</u>
V0426	Roof Type	4	Sun roof closed	more
V0427	Case Vehicle Wheelbase in Centimeters	272 cm	Actual Wheelbase	more
V0428	Anti-lacerative Glass	8	Not Collected	<u>more</u>
V0429	Case Vehicle average track Width	156 cm	actual measurement (cm)	more
V0430	Case Vehicle Overall Length	481 cm	actual measurement (cm)	<u>more</u>
V0431	Case Vehicle Overall Width (OAW)	180	actual measurement (cm)	<u>more</u>
V0432	Case Vehicle Front Overhang	094 cm	actual measurement (cm)	more
V0433	Case Vehicle Rear Overhang	115 cm	actual measurement (cm)	more
V0434	Case Vehicle Undeformed End Width (UEW)	160 cm	actual measurement (cm)	more
V0435	Case Vehicle Engine Displacement	3.0 <i>l</i>	Liters	<u>more</u>
V0436	Case Vehicle Engine: Number of Cylinders	06	number of cylinders	more
V0437	Case Vehicle Direct Damage Length (DDL)	093 cm	actual measurement (cm)	more
V0438	Case Vehicle Front-end Overlap	58	percentage (%)	more
V0439	Case Vehicle - Vehicle Overlap	57	percentage (%)	more

## **Case Vehicle Damage Description**

Variable Number	Variable Name	Code Value	Code Description	Other Options
V0501	Maximum Sheet Metal Crush - Front	067 cm	Depth of Crush (cm)	<u>more</u>
V0502	Maximum Sheet Metal Crush - Right Side	000 cm	No Crush (or less than 1 cm.)	more
V0503	Maximum Sheet Metal Crush - Rear	000 cm	No Crush (or less than 1 cm.)	more
V0504	Maximum Sheet Metal Crush - Left Side	000 cm	No Crush (or less than 1 cm.)	more
	Maximum Sheet Metal Crush			

V0505	- Roof	000 cm	No Crush (or less than 1 cm.)	<u>more</u>
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	3	On Roadside	<u>more</u>
V0509	Event 1 -Impact Configuration	17	FRONT of case veh - object	more
V0510	Event 1 -Object/Vehicle Contactd	77	Sign post, utility pole, tree	more
V0511	Event 2 -impact Location	8	No 2nd event	<u>more</u>
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
V0524	Event 6 -Impact 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	00	No object/vehicle contacted	more
V0529	Primary CDC Case Vehicle - event Number	1	Event 1	more
	Primary CDC Case Vehicle -			

V0530	Impact Speed (kph)	999	Unknown	<u>more</u>
V0531	Primary CDC Case Vehicle- estimatr	1	Investigator	more
V0532	Primary CDC Case Vehicle - Crush (CM)	067	Crush measurements in cm	more
V0533	Primary CDC Case Vehicle- clock #1	12	12 o'clock	more
V0534	Primary CDC Case Vehicle- Letter 1 #1	06	F - Front	more
V0535	Primary CDC Case Vehicle- Letter 2 #1	26	Z - Side or end $(B + P  or  R + C)$	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	3		_
V0539	Primary CDC - Contacted Vehicles Assoc CDC - CDC #1	12FZEW3		_
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)	998	Not Applicable	more
V0548	Primary CDC Contacted Vehicle-estimater	8	Not applicable (no vehicle/no impact)	more
V0549	Primary CDC Contacted Vehicle - Crush (CM)	998	Not Applicable	more
V0550	Primary CDC Contacted Vehicle-clock #1	98	Not Applicable	more
V0551	Primary CDC Contacted	0.0	Missing Data/Not applicable	more

	Vehicle-Letter 1 #1			
V0552	Primary CDC Contacted Vehicle-Letter 2 #1	00	Missing Data/Not applicable	more
V0553	Primary CDC Contacted Vehicle-Letter 3 #1	00	Missing Data/Not applicable	more
V0554	Primary CDC Contacted Vehicle-Letter 4 #1	00	Missing Data/Not applicable	more
V0555	Primary CDC Contacted Vehicle - Extent #1	0	_	_
V0556	primary CDC - Contacted Vehicles Assoc CDC - CDC #1	9800000		_
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	00	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
V0586	Secondary CDC Contacted 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		
	Secondary CDC Contacted			

V0592	Vehicle-clock #2	98	Not Applicable	<u>more</u>
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	<u>more</u>
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	<u>more</u>
V0597	Secondary CDC Contacted Vehicle - Extent #2	0		_
V0598	Secondary CDC - Contacted Vehicle Assoc CDC - CDC #2	9800000		_

### **Crash Reconstruction**

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	039 kph	kph	more
Primary delta-V Case Vehicle -LONGITUD	-039		_
Primary delta-V Case Vehicle-Lateral	0000		
Primary Delta V Case Vehicle - Energy Dissipated by Crush (k	0104		
Primary Delta-V Case Vehicle-Reconstruction	22	Reconstructed, moderate confidence level	more
Primary Delta-V Case Vehicle- Mode	2	CDC & detailed damage	more
Primary Delta V Contacted Vehicle - Total Delta V	888	Not Applicable	more
Primary delta-V Contacted Vehicle-LONGITUD	8888	_	
Primary delta-V Contacted Vehicle-Lateral	8888		
Primary delta-V Contacted Vehicle - Energy Dissipated by Cru	8888		
	Primary Delta-V Case Vehicle-event #  Primary Delta V Case Vehicle - Total Delta V  Primary delta-V Case Vehicle -LONGITUD  Primary delta-V Case Vehicle-Lateral  Primary Delta V Case Vehicle - Energy Dissipated by Crush (k  Primary Delta-V Case Vehicle-Reconstruction  Primary Delta-V Case Vehicle-Mode  Primary Delta V Contacted Vehicle - Total Delta V  Primary delta-V Contacted Vehicle-LONGITUD  Primary delta-V Contacted Vehicle-Lateral  Primary delta-V Contacted Vehicle-Lateral	Primary Delta-V Case Vehicle-event #  Primary Delta V Case Vehicle - Total Delta V  Primary delta-V Case Vehicle -LONGITUD  Primary delta-V Case Vehicle-Lateral  Primary Delta V Case Vehicle - Energy Dissipated by Crush (k  Primary Delta-V Case Vehicle-Reconstruction  Primary Delta-V Case Vehicle-Reconstruction  Primary Delta-V Case Vehicle- Mode  Primary Delta V Contacted Vehicle - Total Delta V  Primary delta-V Contacted Vehicle-LONGITUD  Primary delta-V Contacted Vehicle-Lateral  Primary delta-V Contacted Vehicle-Lateral	Primary Delta-V Case Vehicle-event #  Primary Delta V Case Vehicle - Total Delta V  Primary delta-V Case Vehicle -LONGITUD  Primary Delta V Case Vehicle-Lateral  Primary Delta V Case Vehicle - Energy Dissipated by Crush (k  Primary Delta-V Case Vehicle-Reconstruction  Primary Delta-V Case Vehicle-Mode  Primary Delta V Case Vehicle - Total Delta V  Reconstructed, moderate confidence level  Primary Delta-V Case Vehicle - Mode  Primary Delta V Contacted Vehicle - Total Delta V  Primary delta-V Contacted Vehicle-LONGITUD  Primary delta-V Contacted Vehicle-Lateral  Resonstructed, moderate confidence level  CDC & detailed damage  Primary Delta V Contacted Vehicle - Total Delta V  Resonstructed, moderate confidence level  Resonstructed, moderate confidence level Reso

V0612	Secondary Delta-V Case Vehicle-event #	8	Not applicable	<u>more</u>
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	<u>more</u>
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
V0624	Primary EBS Case Vehicle - Total EBS	039 kph	kph	more
V0625	Primary EBS Case Vehicle - LONGITUD	-039		
V0626	Primary EBS Case Vehicle- Lateral	0000		
V0627	Primary EBS Case Vehicle - Energy Dissipated by Crush (kj)	0104		
V0628	Primary EBS Case Vehicle- Reconstruction	22	Reconstructed, moderate confidence level	<u>more</u>
V0629	Primary EBS Case Vehicle- Mode	2	CDC & detailed damage	more
V0630	Primary EBS Contacted Vehicle - Total EBS	888	Not Applicable	more
V0631	Primary EBS Contacted Vehicle-LONGITUD	8888		_
	Primary EBS Contacted			

V0632	Vehicle-Lateral	8888	_	
V0633	Primary EBS Contact Vehicle - Energy Dissipated by Crush (kj	8888		
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)	093 cm	cm	<u>more</u>
V0648	Direct Damage Maximum Crush - Case Vehicle (1)	067 cm	cm	more
V0649	Direct and Induced Damage Length in CM	120 cm	cm	more
V0650	Field C1 - Case Vehicle (1)	000 cm	No Crush	more
V0651	Field C2 - Case Vehicle (1)	000 cm	No Crush	more
V0652	Field C3 - Case Vehicle (1)	018 cm	cm	more
V0653	Field C4 - Case Vehicle (1)	041 cm	cm	more
V0654	Field C5 - Case Vehicle (1)	067 cm	cm	more
V0655	Field C6 - Case Vehicle (1)	045 cm	cm	more

V0656	Direct Damage D Value = The Center of Direct Damage Offset t	+034 cm	Offset (cm)	more
V0657	Specific Event # Case(2)	1	Event number 1	<u>more</u>
V0658	Plane of Impact Case Vehicle (2)	1	Bumper	more
V0659	Direct Damage Length (DDL) - Case Vehicle (2)	093 cm	ст	more
V0660	Direct Damage MaximumCrush - Case Vehicle (2)	067 cm	cm	more
V0661	Direct and Induced Damage Length in CM	120 cm	cm	more
V0662	Field C1 - Case Vehicle (2)	000 cm	No Crush	<u>more</u>
V0663	Field C2 - Case Vehicle (2)	000 cm	No Crush	more
V0664	Field C3 - Case Vehicle (2)	018 cm	cm	<u>more</u>
V0665	Field C4 - Case Vehicle (2)	041 cm	cm	more
V0666	Field C5 - Case Vehicle (2)	067 cm	cm	<u>more</u>
V0667	Field C6 - Case Vehicle (2)	045 cm	cm	<u>more</u>
V0668	Direct Damage D Value = The Center of Direct Damage Offset t	+034 cm	cm	more
V0669	Specific Event # Cont(1)	9	Unknown	more
V0670	Plane of Impact Contacted Vehicle(1)	9	Unknown	<u>more</u>
V0671	Direct Damage Length (DDL) - Contacted Vehicle (1)	999	Unknown	more
V0672	Direct Damage Maximum Crush - Contacted Vehicle (1)	999	Unknown	more
V0673	Field L - Contacted Vehicle (1)	999	Unknown	more
V0674	Field C1 - Contacted Vehicle (1)	999	Unknown	more
V0675	Field C2 - Contacted Vehicle (1)	999	Unknown	more
V0676	Field C3 - Contacted Vehicle (1)	999	Unknown	more
V0677	Field C4 - Contacted Vehicle (1)	999	Unknown	more
V0678	Field C5 - Contacted Vehicle (1)	999	Unknown	more

V0679	Field C6 - Contacted Vehicle (1)	999	Unknown	more
V0680	Direct Damage D Value = The Center of Direct Damage Offset t	9999	offset (cm)	more
V0681	Specific Event # Contacted Vehicle (2)	9	Unknown	<u>more</u>
V0682	Plane of Impact Contacted Vehicle(2)	9	Unknown	<u>more</u>
V0683	Direct Damage Length (DDL) - Contacted Vehicle (2)	999	Unknown	more
V0684	Direct Damage Maximum Crush - Contacted Vehicle (2)	999	Unknown	more
V0685	Direct and Induced Damage Length in CM	999	Unknown	more
V0686	Field C1 - Contacted Vehicle (2)	999	Unknown	more
V0687	Field C2 - Contacted Vehicle (2)	999	Unknown	more
V0688	Field C3 - Contacted Vehicle (2)	999	Unknown	more
V0689	Field C4 - Contacted Vehicle (2)	999	Unknown	<u>more</u>
V0690	Field C5 - Contacted Vehicle (2)	999	Unknown	<u>more</u>
V0691	Field C6 - Contacted Vehicle (2)	999	Unknown	more
V0692	Direct Damage D Value = The Center of Direct Damage Offset t	9999	Offset (cm)	more

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

Variable Number	Variable Name	Code Value	Code Description	Other Options
V0701	Left Front Wheel Damaged	0	No	more
V0702	Right Front Wheel Damaged	0	No	<u>more</u>
V0703	Right Rear Wheel Damaged	0	No	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	<u>more</u>
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	0	Normal - no damage to tire	more
V0718	Right Front Tire Condition Postcrash	2	Completely deflated	<u>more</u>
V0719	Right Rear Tire Condition Postcrash	0	Normal - no damage to tire	<u>more</u>
V0720	Left Rear Tire Condition Postcrash	0	Normal - no damage to tire	more
V0721	Left Front Tire Involvement	0	No	<u>more</u>
V0722	Right Front Tire Involvement	0	No	<u>more</u>
V0723	Right Rear Tire Involvement	0	No	more
V0724	Left Rear Tire Involvement	0	No	more
V0725	Left Front Tire Size	P21560R16	_	
V0726	Right Front Tire Size	P21560R16		
V0727	Right Rear Tire Size	P21560R16	_	
V0728	Left Rear Tire Size	P21560R16		
V0729	Left Front Tire Pressure (recorded in psi)	26.0 psi	Actual tire pressure in psi	more
V0730	Right Front Tire Pressure (recorded in psi)	00.0 psi	Actual tire pressure in psi	more
V0731	Right Rear Tire Pressure (recorded in psi)	31.5 psi	Actual tire pressure in psi	more
	Left Rear Tire Pressure			

V0732	(recorded in psi)	32.5 psi	Actual tire pressure in psi	<u>more</u>
V0733	Left Front Tread Depth	08	08/32"	more
V0734	Right Front Tread Depth	07	07/32"	more
V0735	Right Rear Tread Depth	09	09/32"	more
V0736	Left Rear Tread Depth	09	09/32"	<u>more</u>

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

Back to Top

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	1	Steel	more
V0805	Aux Tank Type	8	Not applicable (not equipped)	more
V0806	Aux Tank Location	888	Not applicable (not equipped)	more
V0807	Aux Filler Cap Location	888	Not applicable (not equipped)	more
V0808	Aux Tank Material	8	Not applicable	more

### **Case Vehicle Fuel Leakage**

Back to Top

Variable Number	Variable Name	Code Value	Code Description	Other Options
V0901	Fuel Leakage From Crash	0	No	<u>more</u>

Case Vehicle Fire

Back to Top

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

#### **Case Vehicle Exterior**

Variable Number	Variable Name	Code Value	Code Description	Other Options
V1101	Hood Latch Released	0	No	more
V1102	Hood Latch Damaged	1	Yes	more
		1		

V1103	Hood Latch Jammed		Yes	<u>more</u>
V1104	Left Hood Hinge Damaged	0	No	more
V1105	Left Hood Hinge Separated	8	Not applicable	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	0	No	more
V1112	Hood Latch Location	1	Front of Vehicle	more
V1113	Eng/transmissn Mount Separated	0	No	more
V1114	Steering Column Flex Couplng	9	Unknown if equipped	more
V1115	Steering Column Coupling Dam	9	Unknown	more
V1116	Steering Column Coupling Separated	9	Unknown	more
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)	<u>more</u>
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
V1147	Trailer Type	0	No trailer	more
V1148	Rght Side Body Mount Separated	8	Not applicable (unitized)	more
V1149	Upper Right A-pillar Separated	4	No separation, but damaged	more
V1150	Lower Right A-pillar Separated	4	No separation, but damaged	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	<u>more</u>
V1163	Right Rear Glazing Availability	2	Closed	<u>more</u>
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	1	Yes Click for Windshield Damage figure	<u>more</u>
V1170	Occupant Cracked/Broke Wndshld	0	No	<u>more</u>
V1171	Bond Separation Extent	0	None	more
V1172	Windshield Code	97	Click for Windshield Mark figure	more
V1173	Did Sun Roof/T-Roof Open	0	No	more

## Case Vehicle Steering Column/Rim

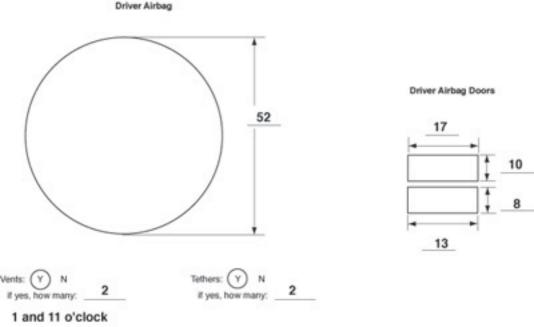
Variable Number	Variable Name	Code Value	Code Description	Other Options
V1201	Steering Wheel Rim Damage	3	Broken	more
V1202	Number of Steering Wheel Spokes	4	4 spokes	more
V1203	Steering Wheel Spoke Damage	3	Broken	more
V1204	Steering Wheel Hub Damage	1	Occupant contact	<u>more</u>
V1205	Steering Wheel Location of Rim Damage	5	Entire sterring wheel rim collapse	more
V1206	Aftermarket Add-on Device	0	None	<u>more</u>
V1207	Column Tilt Feature	2	Up	<u>more</u>
V1208	Column Swing-away Feature	0	Not equipped	more
V1209	Column Telescoping Feature	0	Not equipped	<u>more</u>
V1210	Wheel Energy Absorb Device	8	Not currently collected	more
V1211	Wheel EA Device's original/damage Dimension Difference	888	Not collected	more

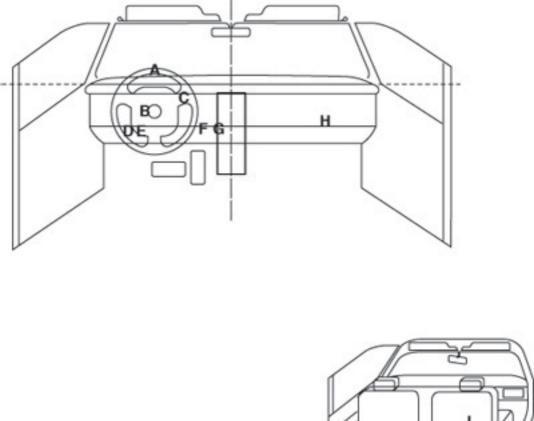
11 VI/I/	Column Energy Absorb Device	88	Not collected	<u>more</u>
	Col EA Device's Orig/compressed (or Extruded) Length Diff	888	Not collected	more
V1214	Shear Capsule Separation	888	888 Not collected	
V1215	Column Vertical Rotation	1 Upward apparent rotation		<u>more</u>
V1216	Column Lateral Rotation	2 Right apparent rotation		<u>more</u>

### **Case Vehicle Intrusion**

Variable Number	Variable Name	Code Value	Code Description	Other Options
V1301	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)	13	First row, Right seat	more
V1305	Intrud Component/obj (1)	28	Transmission tunnel (hump)	more
V1306	Associate Event Numb (1)	1	Event #1	more
V1307	Maximum Intrusion X Axis	00 cm	0 cm or No Intrusion	<u>more</u>
V1308	Maximum Intrusion Y Axis	16 cm	Intrusion (cm)	<u>more</u>
V1309	Maximum Intrusion Z Axis	00 cm	0 cm or No Intrusion	<u>more</u>
V1310	Occupant Number #1 (1)	00	No contact or no intrusion	<u>more</u>
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	<u>more</u>
V1314	Intrusion Number #2	02	Intrusion #2	<u>more</u>
V1315	Occupant Space Number(2)	13	First row, Right seat	<u>more</u>
V1316	Intrud Component/obj (2)	29	Side footwell panel (kickpanel)	more
V1317	Associate Event Numb (2)	1	Event #1	more
V1318	Maximum Intrusion X Axis	00 cm	0 cm or No Intrusion	more
V1319	Maximum Intrusion Y Axis	15 cm	Intrusion (cm)	more
V1320	Maximum Intrusion Z Axis	00 cm	0 cm or No Intrusion	more
V1321	Occupant Number #1 (2)	00	No contact or no intrusion	more
V1322	Injury Number #1 (2)	00	No injury or no intrusion	more
V1323	Occupant Number #2 (2)	00	No contact or no intrusion	more
V1324	Injury Number #2 (2)	00	No injury or no intrusion	more
V1325	Intrusion Number #3	03	Intrusion #3	more
V1326	Occupant Space Number(3)	13	First row, Right seat	more

V1327	Intrud Compnent/obj (3)	03	Toe pan			
V1328	Associate Event Numb (3)	1	1 Event #1			
V1329	Maximum Intrusion X Axis	09 cm	Intrusion (cm)	<u>more</u>		
V1330	Maximum Intrusion Y Axis	00 cm	0 cm or No Intrusion	more		
V1331	Maximum Intrusion Z Axis	00 cm	00 cm 0 cm or No Intrusion			
V1332	Occupant Number #1 (3)	00	No contact or no intrusion			
V1333	Injury Number #1 (3)	00	No injury or no intrusion			
V1334	Occupant Number #2 (3)	00	No contact or no intrusion			
V1335	Injury Number #2 (3)	00	No injury or no intrusion	more		
V1336	Intrusion Number #4	04	Intrusion #4	more		
V1337	Occupant Space Number(4)	13	First row, Right seat	<u>more</u>		
V1338	Intrud Component/obj (4)	01	Instrument panel	more		





A = upper half of steering-wheel rim, displaced forward

B = steering-wheel hub, cracked

C = steering-wheel spokes, broken

D = knee bolster left of steering column, scuffmark

E = steering column, scuffmark F = knee bolster right of steering column, scuffmark

G = vertical console, deflected forward and scuffmark

H = glove box door, scuffmark I = right-front seatback, dented

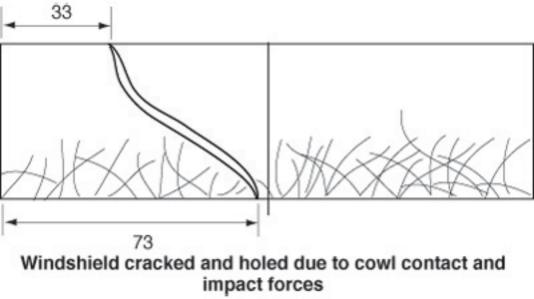
### 1 = Definitely 2 = Probably 3 = Possible

## INTRUSION IT-1

		(All Measurements Are in Centimeters)					Dominant
Location of Intrusion	Intruded Component	Comparison Value	_	Intruded Value	=	Intrusion	Crush Direction
13	Toepan	123	_	112	=	9	Rear
13	Kick panel	53	_	38	=	15	Left
13	Transmission tunnel	64	_	48	=	16	Right
13	Instrument panel	68	_	62	=	6	Rear
			_		=		
			_		=		
_			_		=		
			_		=		

#### OCCUPANT CONTACT WORKSHEET

	Interior Component	Occupant No. if	Body Region		Confidence Level of Contact
Contact	Contacted	Known	if Known	Supporting Physical Evidence	Point
Α	Steering wheel rim	DR		Displaced forward	1
В	Steering wheel hub	DR		Cracked	1
С	Steering wheel spokes	DR		Broken	1
D	Knee bolster	DR	LX	Scuffmark	1
Е	Steering column	DR	LX	Scuffmark	1
F	Knee bolster	DR	LX	Scuffmark	1
G	Vertical console	DR	Rt. LX	Deflected forward and scuffmark	1
Н	Glove box door	RF	LX	Scuffmark	1
I	Right-front seatback	RR	Rt. LX	Dented	1



## WINDSHIELD MARK ON CASE VEHICLE:

TOYOTA

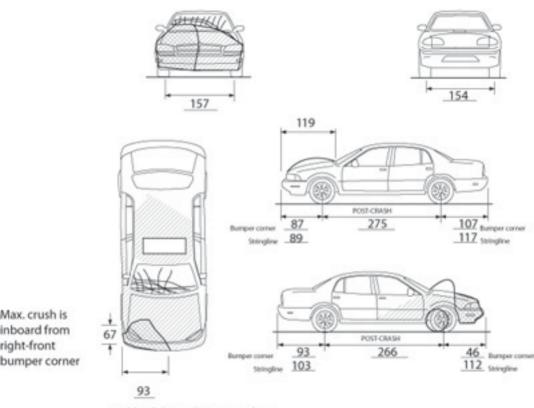
LAMISAFE

AP TECH

M334 AS1

DOT-376

#### MEASUREMENTS IN CENTIMETERS



Width of direct damage to front

