



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

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AUTO SAFETY HOTLINE
(800) 424-9393
Wash. D.C. Area 366-0123

CASE SUMMARY

PSU 75 CASE NO. 097E TYPE OF ACCIDENT Car/Car-Angle Impact.

A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES

(Provide a summary of the accident sequence as well as any particular event of the accident that is noteworthy. Injury mechanism and vehicle crashworthiness is the focus, not driver culpability. Do not include any personal identifiers.)

See Attached

B. VEHICLE PROFILE(S)

Vehicle No.	Class of Vehicle	Year/Make/Model	Most Severe Damage Based on Vehicle Inspection		Component Failure
			Damage Plane	Severity Description	

DO NOT SANITIZE THIS FORM

C. PERSON PROFILE(S)

Vehicle No.	Person Role	Seat Position	Restraint Use	Most Severe Injury (TO BE COMPLETED BY ZONE CENTER)			
				Body Region	Injury Type	AIS	Injury Source

Body Region

- Abdomen
- Ankle—foot
- Arm (upper)
- Back-thoracolumbar spine
- Brain
- Chest
- Ears
- Eye
- Elbow
- Face
- Forearm
- Head—skull
- Heart
- Kidneys
- Knee
- Leg (lower)
- Liver
- Lower limbs(s) (whole or unknown part)
- Mouth
- Neck—cervical spine
- Nose

- Pelvic—hip
- Pulmonary—lungs
- Shoulder
- Spleen
- Thigh
- Thyroid, other endocrine gland
- Upper limb(s) (whole or unknown part)
- Vertebrae
- Whole body
- Wrist—hand

Injury Type

- Abrasion
- Amputation
- Avulsion
- Burn
- Concussion
- Contusion
- Crush
- Detachment, separation
- Dislocation

- Fracture
- Fracture and dislocation
- Laceration
- Other
- Perforation, puncture
- Rupture
- Sprain
- Strain
- Total severance, transection
- Unknown

Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

DO NOT SANITIZE THIS FORM

PSU75

1996 Case Summary Form

CASE 097E

TYPE OF ACCIDENT: CAR/CAR-ANGLE IMPACT

A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES

V#1 WAS SOUTHBOUND IN THE INSIDE LEFT TURN LANE APPROACHING A FOUR-WAY INTERSECTION WITH TRAFFIC LIGHTS FOR TRAFFIC CONTROL. V#2 WAS NORTHBOUND IN THE NUMBER FOUR THROUGH LANE APPROACHING THE INTERSECTION. AS V#1 TURNED LEFT, V#2 ENTERED THE INTERSECTION AND THE FRONT OF V#2 CONTACTED THE FRONT RIGHT OF V#1. AFTER IMPACT V#1 ROTATED COUNTER CLOCKWISE AND TRAVELED NORTHBOUND THROUGH THE INTERSECTION AND CAME TO REST IN THE #2 NORTHBOUND TRAVEL LANE FACING NORTHWEST. V#2 SPUN CLOCKWISE AND BEGAN TO ROLL SIDE-OVER-SIDE LEADING WITH ITS LEFT SIDE. V#2 ROLLED TWO QUARTER TURNS AND CAME TO REST ON ITS ROOF IN THE #1 NORTHBOUND TRAVEL LANE FACING SOUTH. BOTH VEHICLES WERE TOWED FROM THE SCENE AND BOTH DRIVERS WERE TRANSPORTED FOR TREATMENT. DRIVER AIRBAGS DEPLOYED IN BOTH VEHICLES.

01

PSU75

1996 Case Summary Form

CASE 097E

TYPE OF ACCIDENT: CAR/CAR-ANGLE IMPACT

B. VEHICLE PROFILE(S)

V e h. No	Class of Vehicle	Year/Make/ Model	Most Severe Damage Based on Vehicle Inspection		
			Damage Plane	Severity Descr.	Component Failure
01	COMPACT	1994/SATURN/SL2	FRONT	SEVERE	NONE
02	LARGEST	1991/CHEVROLET/ CAPRICE	FRONT	SEVERE	NONE

01

PSU75

1996 Case Summary Form

CASE 097E

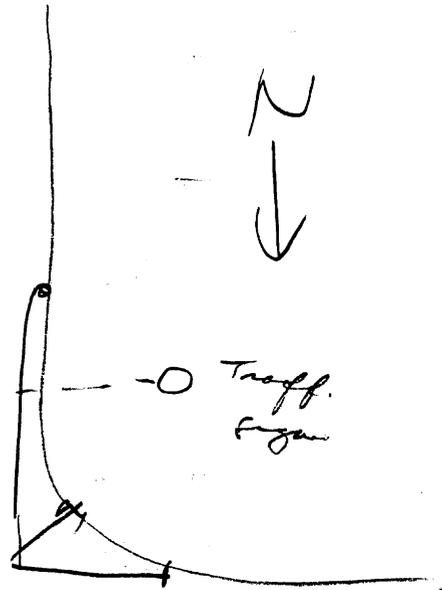
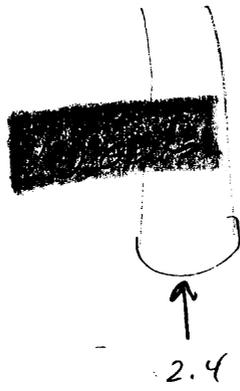
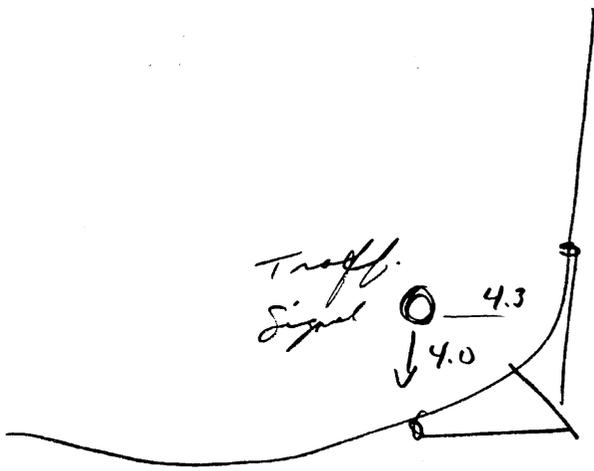
TYPE OF ACCIDENT: CAR/CAR-ANGLE IMPACT

C. PERSON PROFILE(S)

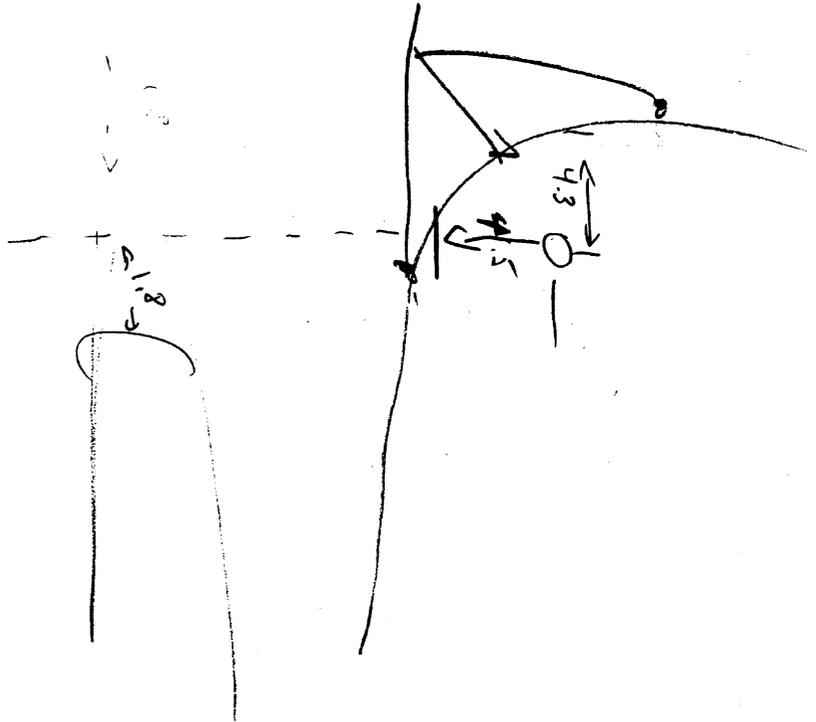
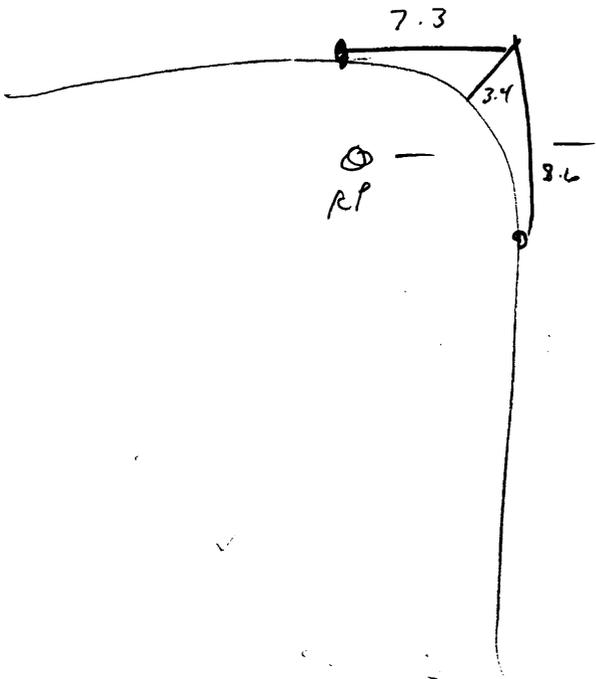
Most Severe Injury
(TO BE COMPLETED BY ZONE CENTER)

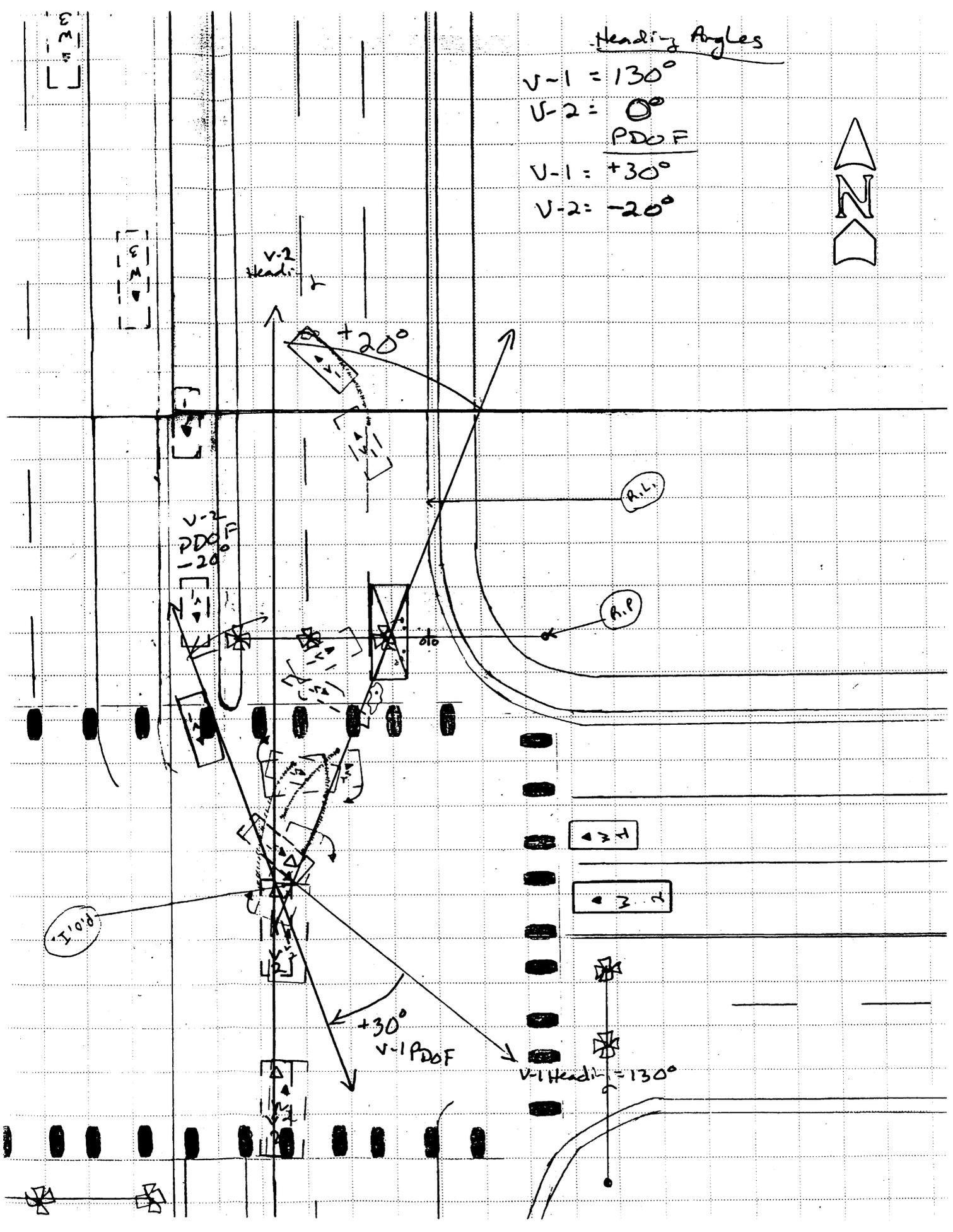
V e h. No	Person Role	Seat Positon	Restraint Use	Body Region	Most Severe Injury (TO BE COMPLETED BY ZONE CENTER)	
					Injury Type	Injury Source
01	DRIVER	LEFT FRONT	L&S/W/ AIR BAG		INJURED SEVERITY UNKNOWN	
02	DRIVER	LEFT FRONT	L&S/W/ AIR BAG		INJURED SEVERITY UNKNOWN	

0



 Ave







ACCIDENT COLLISION MEASUREMENT TABLE

~~100m~~

100m

Primary Sampling Unit Number 75

Case Number - Stratum 097E

ACCIDENT COLLISION DIAGRAM

SL = 40 mph

Document the physical plant:

- all road/roadway delineation (e.g., curbs/edge lines, lane markings, median markings, pavement markings, parked vehicles, poles, signs, etc.)
- all traffic controls (e.g., signs/signals, etc.)
- north arrow placed on diagram
- roadway surface type and condition of applicable roadways
- grade measurements for all applicable roadways and at location of rollover initiation
- roadway curvature (include measurement of precrash superelevation for each vehicle if applicable)

Document vehicle dynamics including:

- reference point and reference line relative to physical features present at the scene
- scaled documentation of all accident induced physical evidence
- scaled documentation of all roadside objects contacted
- scaled representations of the vehicle(s) at pre-impact, impact, and final rest based upon either:
 - a) physical evidence, or *me*
 - b) reconstructed accident dynamics

SL = 30 ~~mph~~

CRASH DATA

	VEH. #1	VEH. #2	VEH. #3
Heading Angle	<u>130</u>	<u>003</u>	---
Surface Type	<u>Bituminous</u>		
Surface Condition	<u>Dry</u>	<u>Dry</u>	---
Coefficient of Friction	<u>.75</u>	<u>.75</u>	---
Grade (v/h) Measurement (between impact and final rest)	<u>-4/122</u>	<u>-3/122</u>	---
Grade (v/h) Measurement (at location of rollover initiation)	<u>-5/122</u>	---	---
Grade (v/h) Measurement (at pre-crash location)	<u>+4/122</u>	<u>-2/122</u>	---
	<u>-4/122</u>	<u>-3/122</u>	---

@ PD1

Reference Point: ^{NIS} Traffic Pole on NE corner of Intersection

Reference line: ^{ELW} E. Road Edge of
NIB

Item	Distance and Direction from Reference Point	Distance and Direction from Reference Line
R.P.	5.4 N to ^{are} the ^{edge}	5.8 E ✓
Final Rest V#2 RF	.7 S	1.4 W ✓
RR	.5 N	1.4 W ✓
Fluid Spill	3.2 S	3.1 W ✓
B RF yaw V#1	12.2 N	3.3 W ✓
End " "	17.0 N	6.2 W -
Fluid Spill V#1	17.4 N	6.4 W ✓
End V#2 yaw LF	6'4 S	5'2 W ✓
End V#1 yaw	6'8 S	6'1 W ✓
End V#2 yaw LR	7'3 S	7'6 W ✓
B LF yaw V2	10'1 S	8'5 W ✓
B yaw V#1	12'1 S	7'3 W ✓
B yaw LR V2	14'3 S	9'6 W ✓



ACCIDENT FORM

1. Primary Sampling Unit Number 75
2. Case Number - Stratum 097E

IDENTIFICATION

3. Number of General Vehicle Forms Submitted 02
4. Date of Accident (Month,Day,Year) [REDACTED] 9 6
5. Time of Accident 0753

Code reported military time of accident.

NOTE: Midnight = 2400
Unknown = 9999

SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS15-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

- 6. SS15 Administrative Use 0
- 7. SS16 Pedestrian Crash Data Study 0
(Data for this special study available in a separate file.)
- 8. SS17 Impact Fires 0
- 9. SS18 Unsafe Driver Actions 1
- 10. SS19 Run Off Road 0

NUMBER OF EVENTS

11. Number of Recorded Events in This Accident 02

Code the number of events which occurred in this accident.

ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object in the right columns.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>0 1</u>	13. <u>01</u>	14. <u>02</u>	15. <u>F</u> <u>R</u>	16. <u>02</u>	17. <u>05</u>	18. <u>F</u>
19. <u>0 2</u>	20. <u>02</u>	21. <u>05</u>	22. <u>T</u>	23. <u>31</u>	24. <u>00</u>	25. <u>N</u>
26. <u>0 3</u>	27. _____	28. _____	29. _____	30. _____	31. _____	32. _____
33. <u>0 4</u>	34. _____	35. _____	36. _____	37. _____	38. _____	39. _____
40. <u>0 5</u>	41. _____	42. _____	43. _____	44. _____	45. _____	46. _____

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

CODES FOR CLASS OF VEHICLE

- | | |
|--|--|
| <ul style="list-style-type: none"> (00) Not a motor vehicle (01) Subcompact/mini (wheelbase < 254 cm) (02) Compact (wheelbase ≥ 254 but < 265 cm) (03) Intermediate (wheelbase ≥ 265 but < 278 cm) (04) Full size (wheelbase ≥ 278 but < 291 cm) (05) Largest (wheelbase ≥ 291 cm) (09) Unknown passenger car size (14) Compact utility vehicle (15) Large utility vehicle (≤ 4,536 kgs GVWR) (16) Utility station wagon (≤ 4,536 kgs GVWR) (19) Unknown utility type (20) Minivan (≤ 4,536 kgs GVWR) (21) Large van (≤ 4,536 kgs GVWR) (24) Van Based school bus (≤ 4,536 kgs GVWR) (28) Other van type (≤ 4,536 kgs GVWR) (29) Unknown van type (≤ 4,536 kgs GVWR) (30) Compact pickup truck (≤ 4,536 kgs GVWR) | <ul style="list-style-type: none"> (31) Large pickup truck (≤ 4,536 kgs GVWR) (38) Other pickup truck (≤ 4,536 kgs GVWR) (39) Unknown pickup truck type (≤ 4,536 kgs GVWR) (45) Other light truck (≤ 4,536 kgs GVWR) (48) Unknown light truck type (≤ 4,536 kgs GVWR) (49) Unknown light vehicle type (50) School bus (excludes van based)(> 4,536 kgs GVWR) (58) Other bus (> 4,536 kgs GVWR) (59) Unknown bus type (60) Truck (> 4,536 kgs GVWR) (67) Tractor without trailer (68) Tractor-trailer(s) (78) Unknown medium/heavy truck type (79) Unknown light/medium/heavy truck type (80) Motored cycle (90) Other vehicle (99) Unknown |
|--|--|

CODES FOR GENERAL AREA OF DAMAGE (GAD)

- | | | | |
|---|--|---|---|
| <p>CDS APPLICABLE AND OTHER VEHICLES</p> | <ul style="list-style-type: none"> (O) Not a motor vehicle (N) Noncollision (F) Front | <ul style="list-style-type: none"> (R) Right side (L) Left side (B) Back | <ul style="list-style-type: none"> (T) Top (U) Undercarriage (9) Unknown |
| <p>TDC APPLICABLE VEHICLES</p> | <ul style="list-style-type: none"> (O) Not a motor vehicle (N) Noncollision (F) Front (R) Right side | <ul style="list-style-type: none"> (L) Left side (B) Back of unit with cargo area (rear of trailer or straight truck) (D) Back (rear of tractor) | <ul style="list-style-type: none"> (C) Rear of cab (V) Front of cargo area (T) Top (U) Undercarriage (9) Unknown |

CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

- | | |
|--|---|
| <p>(01-30) — Vehicle Number</p> <p>Noncollision</p> <ul style="list-style-type: none"> (31) Overturn — rollover (excludes end-over-end) (32) Rollover — end-over-end (33) Fire or explosion (34) Jackknife (35) Other intraunit damage (specify): _____ (36) Noncollision injury _____ (38) Other noncollision (specify): _____ (39) Noncollision — details unknown _____ <p>Collision With Fixed Object</p> <ul style="list-style-type: none"> (41) Tree (≤ 10 cm in diameter) (42) Tree (> 10 cm in diameter) (43) Shrubbery or bush (44) Embankment (45) Breakaway pole or post (any diameter) <p>Nonbreakaway Pole or Post</p> <ul style="list-style-type: none"> (50) Pole or post (≤ 10 cm in diameter) (51) Pole or post (> 10 cm but ≤ 30 cm in diameter) (52) Pole or post (> 30 cm in diameter) (53) Pole or post (diameter unknown) <ul style="list-style-type: none"> (54) Concrete traffic barrier (55) Impact attenuator (56) Other traffic barrier (includes guardrail) (specify): _____ | <ul style="list-style-type: none"> (57) Fence (58) Wall (59) Building (60) Ditch or culvert (61) Ground (62) Fire hydrant (63) Curb (64) Bridge (68) Other fixed object (specify): _____ (69) Unknown fixed object _____ <p>Collision with Nonfixed Object</p> <ul style="list-style-type: none"> (70) Passenger car, light truck, van, or other vehicle not in-transport (71) Medium/heavy truck or bus not in-transport (72) Pedestrian (73) Cyclist or cycle (74) Other nonmotorist or conveyance <ul style="list-style-type: none"> (75) Vehicle occupant (76) Animal (77) Train (78) Trailer, disconnected in transport (79) Object fell from vehicle in-transport (88) Other nonfixed object (specify): _____ (89) Unknown nonfixed object _____ (98) Other event (specify): _____ (99) Unknown event or object _____ |
|--|---|

PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction 2
 (0) Non-interchange area and non-junction
 (1) Interchange area related

Non-Interchange junctions

- (2) Intersection related
 (3) Driveway, alley access related
 (4) Other junction (specify) _____

(5) Unknown type of junction

(9) Unknown

20. Trafficway Flow 1

- (0) Not physically divided (two way traffic)
 (1) Divided trafficway-median strip without positive barrier
 (2) Divided trafficway-median strip with positive barrier
 (3) One way traffic
 (9) Unknown

21. Number Of Travel Lanes 5

- (1) One
 (2) Two
 (3) Three
 (4) Four
 (5) Five
 (6) Six
 (7) Seven or more
 (9) Unknown

22. Roadway Alignment 1

- (1) Straight
 (2) Curve right
 (3) Curve left
 (9) Unknown

23. Roadway Profile 2

- (1) Level
 (2) Uphill grade (> 2%)
 (3) Hill crest
 (4) Downhill grade (> 2%)
 (5) Sag
 (9) Unknown

24. Roadway Surface Type 2

- (1) Concrete
 (2) Bituminous (asphalt)
 (3) Brick or block
 (4) Slag, gravel, or stone
 (5) Dirt
 (8) Other (specify): _____
 (9) Unknown

25. Roadway Surface Condition 1

- (1) Dry
 (2) Wet
 (3) Snow or slush
 (4) Ice
 (5) Sand, dirt, or oil
 (8) Other (specify): _____
 (9) Unknown

26. Light Conditions 1

- (1) Daylight
 (2) Dark
 (3) Dark, but lighted
 (4) Dawn
 (5) Dusk
 (9) Unknown

27. Atmospheric Conditions 0

- (0) No adverse atmospheric-related driving conditions
 (1) Rain
 (2) Sleet/hail
 (3) Snow
 (4) Fog
 (5) Rain and fog
 (6) Sleet and fog
 (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): _____
 (9) Unknown

28. Traffic Control Device 1

- (0) No traffic control(s)
 (1) Traffic control signal (not RR crossing)

Regulatory

- (2) Stop sign
 (3) Yield sign
 (4) School zone sign
 (5) Other regulatory sign (specify): _____

- (6) Warning sign (not RR crossing)
 (7) Unknown sign
 (8) Miscellaneous/other controls including RR controls (specify): _____

(9) Unknown

29. Traffic Control Device Functioning 2

- (0) No traffic control device
 (1) Traffic control device not functioning (specify): _____
 (2) Traffic control device functioning properly
 (9) Unknown

OCCUPANT RELATED

- 37. Driver Presence in Vehicle 1
 (0) Driver not present
 (1) Driver present
 (9) Unknown
- 38. Number of Occupants This Vehicle 01
 (00-96) Code actual number of occupants for this vehicle
 (97) 97 or more
 (99) Unknown
- 39. Number of Occupant Forms Submitted 01

AIR BAG RELATED

- 40. Is this an AOPS Vehicle? 1
 (0) No (includes unknown)
 (1) Yes - researcher determined
 (2) VIN determined air bag system
 (3) VIN determined automatic (passive) belts
 (4) VIN determined air bag and automatic (passive) belts
- 41. Air Bag(s) Deployment, First Seat Frontal 2
 (0) Not equipped or not available
 (1) No air bags deployed
Single Air Bag Vehicle
 (2) Driver air bag deployed
 (3) Driver air bag, unknown if deployed
Multiple Air Bag Vehicle
 (4) Driver side only deployed
 (5) Passenger side only deployed
 (6) Driver and passenger side deployed
 (7) Driver and passenger side unknown if deployed
 (8) Air bag(s) deployed, details unknown
 (9) Unknown
- 42. Air Bag(s) Deployment, Other Than First Seat Frontal 0
 (0) Not equipped with an "other" air bag
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown
 Specify type of "other" air bag present: _____

VEHICLE WEIGHT ITEMS

- 43. Vehicle Curb Weight 1,090
 Code weight to nearest 10 kilograms.
 (045) Less than 454 kilograms
 (612) 6,124 kilograms or more
 (999) Unknown
 $2,405 \text{ lbs} \times .4536 = 1,090.9 \text{ kgs}$
 Source: 1090.9

- 44. Vehicle Cargo Weight 0000
 Code weight to nearest 10 kilograms.
 (000) Less than 5 kilograms
 (454) 4,536 kilograms or more
 (999) Unknown
 _____ lbs X .4536 = _____ kgs
 Source: per beh. Inspector

ROLLOVER DATA

- 45. Rollover 00
 (00) No rollover (no overturning)
Rollover (primarily about the longitudinal axis)
 (01-16) Code the number of quarter turns
 (17) Rollover, 17 or more quarter turns (specify): _____
 (98) Rollover--end-over-end (i.e., primarily about the lateral axis)
 (99) Rollover (overturn), details unknown
- 46. Rollover Initiation Type 00
 (00) No rollover
 (01) Trip-over
 (02) Flip-over
 (03) Turn-over
 (04) Climb-over
 (05) Fall-over
 (06) Bounce-over
 (07) Collision with another vehicle
 (08) Other rollover initiation type specify: _____
 (98) Rollover--end-over-end
 (99) Unknown rollover initiation type
- 47. Location of Rollover Initiation A
 (0) No rollover
 (1) On roadway
 (2) On shoulder—paved
 (3) On shoulder—unpaved
 (4) On roadside or divided trafficway median
 (8) Rollover--end-over-end
 (9) Unknown
- 48. Rollover Initiation Object Contacted 00
 (Note: Applicable codes on back of page)
- 49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0
 (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify): _____
 (6) Non-contact rollover forces (specify): _____
 (8) Rollover--end-over-end
 (9) Unknown
- 50. Direction of Initial Roll 0
 (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (8) Rollover--end-over-end
 (9) Unknown roll direction

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

Noncollision

- (31) Turn-over — fall-over
- (32) No rollover impact initiation (end-over-end)
- (34) Jackknife

Collision With Fixed Object

- (41) Tree (\leq 10 cm in diameter)
- (42) Tree ($>$ 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (\leq 10 cm in diameter)
- (51) Pole or post ($>$ 10 cm but \leq 30 cm in diameter)
- (52) Pole or post ($>$ 30 cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)
(specify): _____

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify):

- (69) _____
Unknown fixed object

Collision with Nonfixed Object

- (70) Passenger car, light truck, van, or other vehicle not in-transport
- (71) Medium/heavy truck or bus not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify):

- (89) _____
Unknown nonfixed object

- (98) Other event (specify):

- (99) _____
Unknown event or object



EXTERIOR VEHICLE FORM

12 pm [REDACTED]

1. Primary Sampling Unit Number <u>75</u>	3. Vehicle Number <u>01</u>
2. Case Number - Stratum <u>097E</u>	

VEHICLE IDENTIFICATION

VIN 1G8ZK5S77RZ [REDACTED] Model Year 94
 Vehicle Make (specify): Saturn Vehicle Model (specify): Sedan SL-2

LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
01	Begins RF BC	BC to BC	C6
01	Begins RF BC	Begins RF BC	Between C5 & C6

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Impact #2 - 2 Stand Method Used

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage		Field L	C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	±D
		Width (CDC)	Max Crush								
01	Front	31	C6	113	10	5	5	9	16	45	+46
	Free space				8	3	0	0	3	8	
	Result				(2)	(2)	(5)	9	13	(37)	
01	above B.	(4)	C6		28	25	-	38	49	73	+41
	Free space				-27	-23	-20	-28	-23	-27	
	Result				-1	2	-	18	36	38	
01	Average		(177)		2	2	5	9	19.5	37	
01	R.S. side	216	Between C5 & C6	221	3	29	26	22	37	34	+97.5
		(127)	39		2	9	17	3	13	21	+117
			13/26		1	20	15	19	24	13	

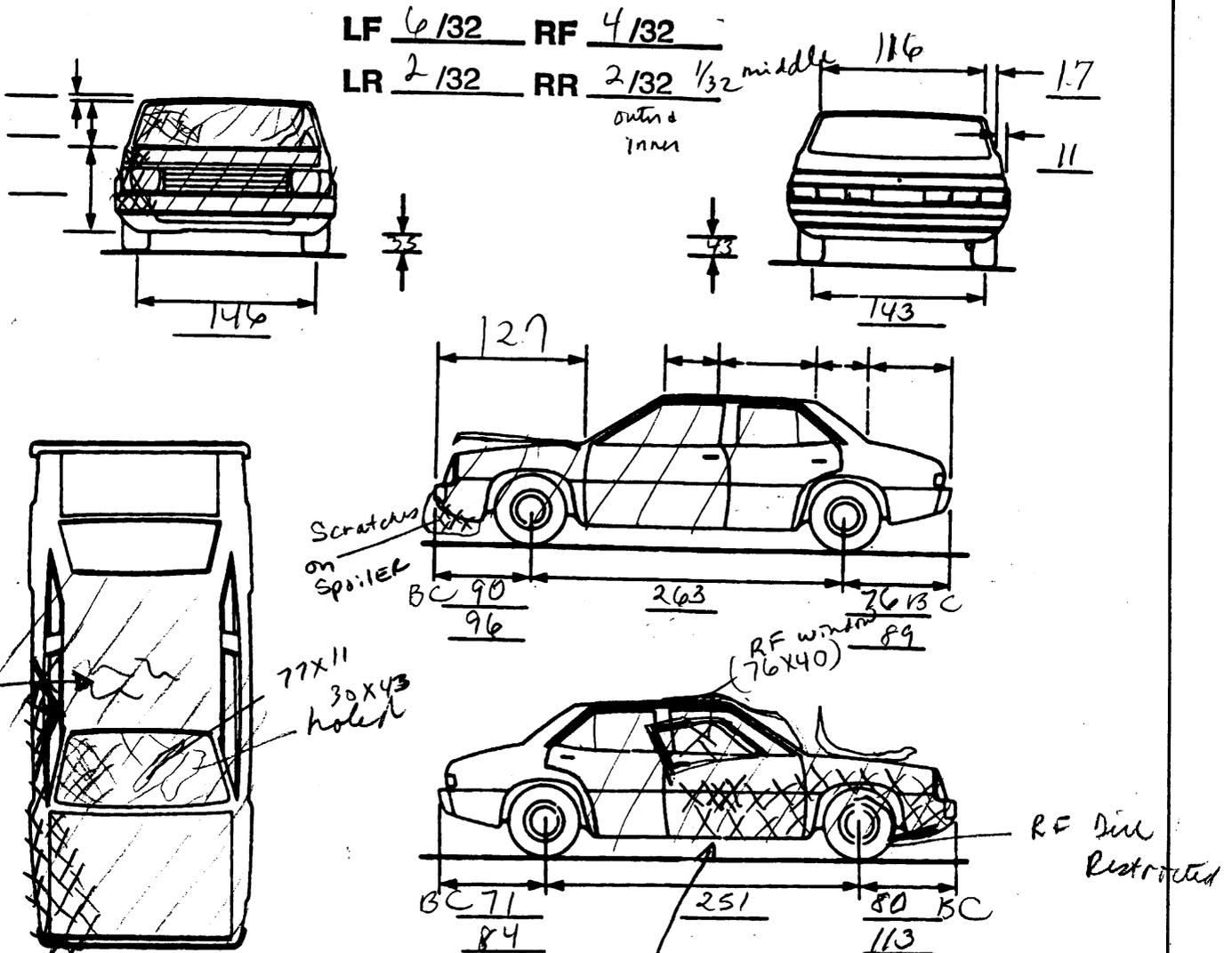
ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>102.4</u>	inches	x 2.54	=	<u>260.0</u>	cm
Overall Length	<u>176.3</u>	inches	x 2.54	=	<u>447.8</u>	cm
Maximum Width	<u>67.6</u>	inches	x 2.54	=	<u>171.7</u>	cm
Curb Weight	<u>2,405</u>	pounds	x .4536	=	<u>1,090.9</u>	kg
Average Track	<u>56.8/56</u>	inches	x 2.54	=	<u>143.2</u>	cm
Front Overhang	_____	inches	x 2.54	=	_____	cm
Rear Overhang	_____	inches	x 2.54	=	_____	cm
Undeformed End Width	_____	inches	x 2.54	=	_____	cm
Engine Size: cyl./displ.	<u>4cyl</u>	cc	x .001	=	_____	L
	<u>1,96</u>	CID	x .0164	=	_____	L

VEHICLE DAMAGE SKETCH

<p>TIRE - WHEEL DAMAGE</p> <p>a. Rotation physically restricted b. Tire deflated</p> <table style="width:100%;"> <tr> <td>RF <u>1</u></td> <td>RF <u>1</u></td> </tr> <tr> <td>LF <u>2</u></td> <td>LF <u>2</u></td> </tr> <tr> <td>RR <u>2</u></td> <td>RR <u>2</u></td> </tr> <tr> <td>LR <u>2</u></td> <td>LR <u>2</u></td> </tr> </table> <p>(1) Yes (2) No (8) NA (9) Unk.</p>	RF <u>1</u>	RF <u>1</u>	LF <u>2</u>	LF <u>2</u>	RR <u>2</u>	RR <u>2</u>	LR <u>2</u>	LR <u>2</u>	<p>ORIGINAL SPECIFICATIONS</p> <table style="width:100%;"> <tr> <td>Wheelbase</td> <td><u>260</u></td> <td>cm</td> </tr> <tr> <td>Overall Length</td> <td><u>448</u></td> <td>cm</td> </tr> <tr> <td>Maximum Width</td> <td><u>172</u></td> <td>cm</td> </tr> <tr> <td>Curb Weight</td> <td><u>1091</u></td> <td>kg</td> </tr> <tr> <td>Average Track</td> <td><u>143</u></td> <td>cm</td> </tr> <tr> <td>Front Overhang</td> <td><u>99</u></td> <td>cm</td> </tr> <tr> <td>Rear Overhang</td> <td><u>89</u></td> <td>cm</td> </tr> <tr> <td>Undeformed End Width</td> <td><u>123</u></td> <td>cm</td> </tr> <tr> <td>Engine Size: cyl./displ.</td> <td><u>4cyl 1.9L</u></td> <td>L</td> </tr> </table>	Wheelbase	<u>260</u>	cm	Overall Length	<u>448</u>	cm	Maximum Width	<u>172</u>	cm	Curb Weight	<u>1091</u>	kg	Average Track	<u>143</u>	cm	Front Overhang	<u>99</u>	cm	Rear Overhang	<u>89</u>	cm	Undeformed End Width	<u>123</u>	cm	Engine Size: cyl./displ.	<u>4cyl 1.9L</u>	L	<p>WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only)</p> <p>RF \pm <u>10</u> ° LF \pm _____ ° RR \pm _____ ° LR \pm _____ °</p> <p>Within \pm 5 degrees</p> <hr/> <p>DRIVE WHEELS</p> <p><input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD</p> <hr/> <p>Approximate Cargo Weight <u>0</u> kg</p>
RF <u>1</u>	RF <u>1</u>																																				
LF <u>2</u>	LF <u>2</u>																																				
RR <u>2</u>	RR <u>2</u>																																				
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Undeformed End Width	<u>123</u>	cm																																			
Engine Size: cyl./displ.	<u>4cyl 1.9L</u>	L																																			
<p>TYPE OF TRANSMISSION</p> <p><input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic</p> <p>END SHIFT \geq 10 CM</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>																																					

MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>02</u>	6. <u>01</u>	7. <u>R</u> <u>F</u>	8. <u>X</u> <u>R</u>	9. <u>A</u> <u>E</u>	10. <u>W</u> <u>E</u>	11. <u>02</u> <u>07</u>

Second Highest Delta "V"

12. _____	13. _____	14. _____	15. _____	16. _____	17. _____	18. _____	19. _____
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. L	21. C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	22. ±D
<u>123</u>	<u>002</u>	<u>002</u>	<u>005</u>	<u>009</u>	<u>020</u>	<u>037</u>	<u>+046</u>
<u>221</u>	<u>001</u>	<u>020</u>	<u>015</u>	<u>019</u>	<u>024</u>	<u>013</u>	<u>098</u>

Second Highest Delta "V"

23. L	24. C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	25. ±D
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

26. Undeformed End Width
(Coded when highest severity impact is an end plane impact.)
Code to the nearest centimeter
(250) 250 centimeters or more
(998) No highest severity end plane impact
(999) Unknown

998
123

27. Direct Damage Width
(For highest severity impact)
Code to the nearest centimeter
(250) 250 centimeters or more
(999) Unknown

031
221

28. Original Wheelbase
Code to the nearest centimeter
(650) 650 centimeters or more
(999) Unknown
102.4 inches X 2.54 = 260.0 centimeters

29. Original Average Track Width
Code to the nearest centimeter
(185) 185 centimeters or more
(999) Unknown
_____ inches X 2.54 = _____ centimeters

260

143
Rear Axle

FUEL SYSTEM

30. Are CDCs Documented but Not Coded on The Automated File? 0
 (0) No
 (1) Yes
31. Researcher's Assessment of Vehicle Disposition 1
 (0) Not towed due to vehicle damage
 (1) Towed due to vehicle damage
 (9) Unknown
32. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? 0
 (0) No post manufacturer modifications
 (1) Yes - post manufacturer modifications (specify): _____

 (Include photograph of CERTIFICATION PLACARD in case report)
 (9) Unknown if vehicle is modified

35. Location of Fuel Tank-1 Filler Cap 2
 36. Location of Fuel Tank-2 Filler Cap 0
 (0) No fuel tank
 (1) On back plane
 (2) Aft of center of the rear wheels (rear axle) on left side plane
 (3) Aft of center of the rear wheels (rear axle) on right side plane
 (4) Forward of center of the rear wheels (rear axle) on left side plane
 (5) Forward of center of the rear wheels (rear axle) on right side plane
 (6) Over the center of the rear wheels (rear axle) on left side plane
 (7) Over the center of the rear wheels (rear axle) on right side plane
 (8) Other (specify): _____
 (9) Unknown

37. Type of Fuel Tank-1 2
 38. Type of Fuel Tank-2 0
 (0) No fuel tank (electrical vehicle)
 (1) Metallic
 (2) Non-metallic
 (9) Unknown

FIRE OCCURRENCE

33. Fire Occurrence 0
 (0) No fire
 Yes, fire occurred
 (1) Minor
 (2) Major
 (9) Unknown
34. Origin of Fire 0
 (0) No fire
 (1) Vehicle exterior (front, side, back, top)
 (2) Exhaust system
 (3) Fuel tank (and other fuel retention system parts)
 (4) Engine compartment
 (5) Cargo/trunk compartment
 (6) Instrument panel
 (7) Passenger compartment area
 (8) Other location (specify): _____
 (9) Unknown

39. Location of Fuel Tank-1 4
 40. Location of Fuel Tank-2 0
 (0) No fuel tank
 (1) Aft of center of the rear wheels (rear axle) centered
 (2) Aft of center of the rear wheels (rear axle) left side
 (3) Aft of center of the rear wheels (rear axle) right side
 (4) Forward of center of the rear wheels (rear axle) centered
 (5) Forward of center of the rear wheels (rear axle) left side
 (6) Forward of center of the rear wheels (rear axle) right side
 (7) Over center of the rear wheels (rear axle)
 (8) Other (specify): _____
 (9) Unknown

41. Damage to Fuel Tank-1 1
 42. Damage to Fuel Tank-2 0
 (0) No fuel tank
 (1) No damage to fuel tank
 (2) Deformed, no seam failure
 (3) Deformed, with a seam failure
 (4) Punctured
 (5) Lacerated (ripped)
 (6) Abraded (scraped)
 (7) Filler neck separation from the fuel tank
 (8) Other damage (specify): _____
 (9) Unknown

<p>43. Leakage Location of Fuel System-1 1</p> <p>44. Leakage Location of Fuel System-2 0</p> <p>(0) No fuel tank (1) No fuel leakage</p> <p><i>Primary Area Of Leakage</i></p> <p>(2) Tank (3) Filler neck (4) Cap (5) Lines/pump/filter (6) Vent/emission recovery (8) Other (specify): _____ (9) Unknown</p> <p>45. Fuel Type-1 01</p> <p>46. Fuel Type-2 00</p> <p><i>Single Fuel Type</i></p> <p>(00) No fuel tank (01) Gasoline (02) Diesel (03) CNG (Compressed Natural Gas) (04) LPG (Liquid Petroleum Gas) also known as Propane (05) LNG (Liquid Natural Gas) (06) Methanol (M100 or M85) (07) Ethanol (E100 or E85) (08) Other (Hydrogen or others) (specify): _____</p> <p>_____</p> <p><i>Electric Powered or Electric/Solar Powered Vehicles</i></p> <p>(10) Lead Acid Battery (11) Nickel-Iron Battery (12) Nickel-Cadmium Battery (13) Sodium Metal Chloride Battery (14) Sodium Sulfur Battery (18) Other (Specify): _____</p> <p>(98) Other Hybrid (specify): _____</p> <p>_____</p> <p>(99) Unknown fuel type</p>	<p>47. Is This Vehicle Equipped With More Than Two Fuel Tanks? 0</p> <p>(0) No (one or two tanks only)</p> <p><i>Yes - More Than Two Tanks</i></p> <p>(1) Yes -- <u>no damage</u> to any tank or filler cap and <u>no fuel system leakage</u></p> <p>(2) Yes -- <u>no damage</u> to any tank or filler cap but <u>there is fuel system leakage</u> (specify leakage location): _____</p> <p>(3) Yes -- <u>damage</u> to an additional tank or filler cap and <u>there is fuel system leakage</u> (specify the following): Type of tank _____ Tank location _____ Filler cap location _____ Tank damage _____ Location of leakage _____ Type of fuel _____</p> <p>(9) Unknown if more than two tanks</p>
<p>COMMENTS</p> <p>_____</p>	

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED ***

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number 75

2. Case Number - Stratum 097E

3. Vehicle Number 01

INTEGRITY

4. Passenger Compartment Integrity 12

(00) No integrity loss

Yes, Integrity Was Lost Through

- (01) Windshield
- (02) Door (side)
- (03) Door/hatch (back door)
- (04) Roof
- (05) Roof glass
- (06) Side window
- (07) Rear window (backlight)
- (08) Roof and roof glass
- (09) Windshield and door (side)
- (10) Windshield and roof
- (11) Side and rear window (side window and backlight)
- (12) Windshield and side window
- (13) Door and side window
- (98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 3 7. LR 1 8. RR 3 9. TG/H 0

- (0) No door/gate/hatch
- (1) Door/gate/hatch remained closed and operational
- (2) Door/gate/hatch came open during collision
- (3) Door/gate/hatch jammed shut
- (8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code Ø

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

- (1) Door operational (no damage)
- (2) Latch/striker failure due to damage
- (3) Hinge failure due to damage
- (4) Door structure failure due to damage
- (5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
- (6) Latch/striker and hinge failure due to damage
- (8) Other failure (specify):

(9) Unknown

GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 2
20. BL 2 21. Roof 0 22. Other 2

- (0) No glazing
- (1) AS-1 - Laminated
- (2) AS-2 - Tempered
- (3) AS-3 - Tempered-tinted (original)
- (4) AS-2 - Tempered-with after market tint
- (5) AS-3 - Tempered-tinted (with additional after market tint)
- (6) AS-14 - Glass/Plastic
- (7) Glazing removed prior to accident
- (8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 2 27. RR 2
28. BL 1 29. Roof 0 30. Other 1

- (0) No glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (7) Glazing removed prior to accident
- (9) Unknown

Glazing Damage from Impact Forces

31. WS 3 32. LF 1 33. RF 6 34. LR 1 35. RR 1
36. BL 1 37. Roof 0 38. Other 1

- (0) No glazing
- (1) No glazing damage from impact forces
- (2) Glazing in place and cracked from impact forces
- (3) Glazing in place and holed from impact forces
- (4) Glazing out-of-place (cracked or not) and not holed from impact forces
- (5) Glazing out-of-place and holed from impact forces
- (6) Glazing disintegrated from impact forces
- (7) Glazing removed prior to accident
- (9) Unknown if damaged

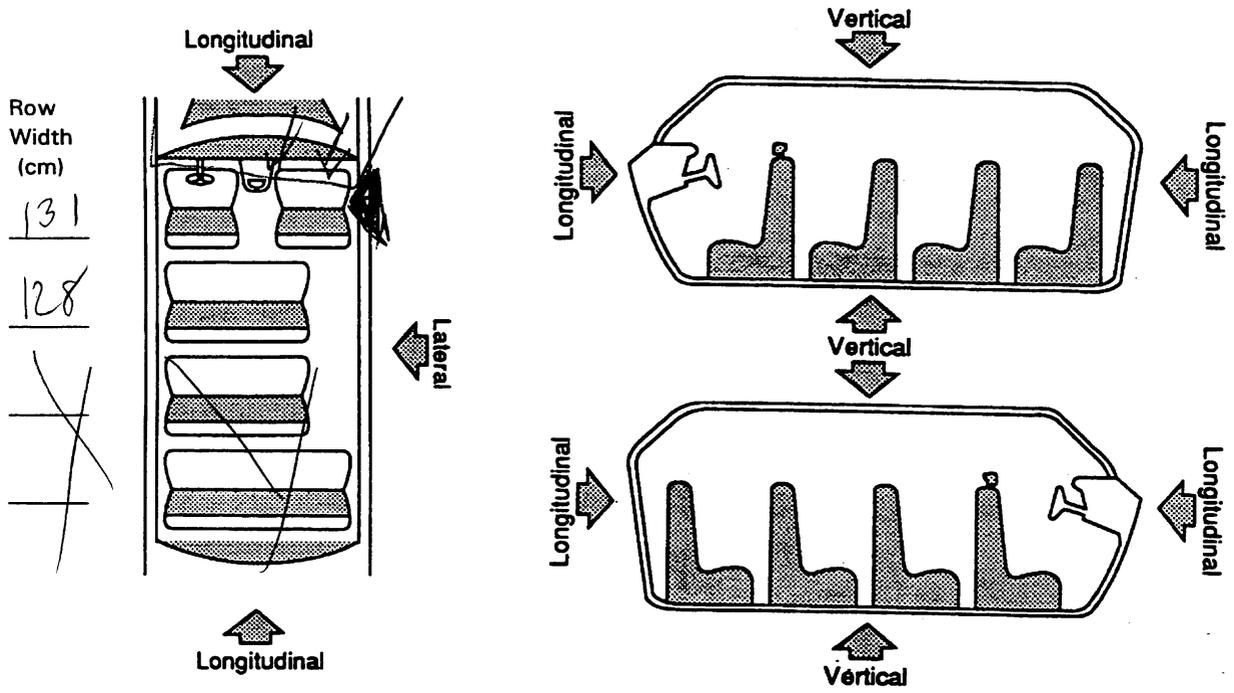
Glazing Damage from Occupant Contact

39. WS 1 40. LF 1 41. RF 1 42. LR 1 43. RR 1
44. BL 1 45. Roof 0 46. Other 1

- (0) No glazing
- (1) No occupant contact to glazing
- (2) Glazing contacted by occupant but no glazing damage
- (3) Glazing in place and cracked by occupant contact
- (4) Glazing in place and holed by occupant contact
- (5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
- (6) Glazing out-of-place by occupant contact and holed by occupant contact
- (7) Glazing removed prior to accident
- (8) Glazing disintegrated by occupant contact
- (9) Unknown if contacted by occupant

INTRUSION WORKSHEET

NOTE: SKETCH INTRUDED AREAS



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION	
12	DASH	156	141	+ rear seat back 15	Long
13	↓	156	144	= 12	Long
13	panel Fig A p 1 km	78	77	= 1	
13	A pillar	83	71	= 12	
13	Door panel	128	119	+ LF door panel top 9	Lateral
13	Window frame	132	116	+ LF door panel 16 4	
13	DASH	130	126	= 4	
11	Windshield	195	162	+ rear seat back 33	Long
12	↓	194	166	= 28	Bottom
13	↓	195	177	= 18	
13	Roof side rail	98	88	= 10	Lateral

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>11</u>	48. <u>15</u>	49. <u>4</u>	50. <u>2</u>
2nd	51. <u>12</u>	52. <u>15</u>	53. <u>3</u>	54. <u>2</u>
3rd	55. <u>13</u>	56. <u>15</u>	57. <u>3</u>	58. <u>2</u>
4th	59. <u>13</u>	60. <u>17</u>	61. <u>3</u>	62. <u>3</u>
5th	63. <u>12</u>	64. <u>03</u>	65. <u>3</u>	66. <u>2</u>
6th	67. <u>13</u>	68. <u>04</u>	69. <u>2</u>	70. <u>2</u>
7th	71. <u>13</u>	72. <u>06</u>	73. <u>2</u>	74. <u>2</u>
8th	75. <u>13</u>	76. <u>14</u>	77. <u>2</u>	78. <u>3</u>
9th	79. <u>13</u>	80. <u>11</u>	81. <u>2</u>	82. <u>3</u>
10th	83. <u> </u>	84. <u> </u>	85. <u> </u>	86. <u> </u>

INTRUDING COMPONENT

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): _____

Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

LOCATION OF INTRUSION

- | | |
|--|---|
| <p>Front Seat</p> <ul style="list-style-type: none"> (11) Left (12) Middle (13) Right <p>Second Seat</p> <ul style="list-style-type: none"> (21) Left (22) Middle (23) Right <p>Third Seat</p> <ul style="list-style-type: none"> (31) Left (32) Middle (33) Right | <p>Fourth Seat</p> <ul style="list-style-type: none"> (41) Left (42) Middle (43) Right <p>(97) Catastrophic</p> <p>(98) Other enclosed area (specify) _____</p> <p>(99) Unknown</p> |
|--|---|

MAGNITUDE OF INTRUSION

- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING COLUMN

INSTRUMENT PANEL

87. Steering Column Type 2
 (1) Fixed column
 (2) Tilt column
 (3) Telescoping column
 (4) Tilt and telescoping column
 (8) Other column type (specify):
 (9) Unknown

88. Tilt Steering Column Adjustment 1
 (0) No tilt steering column
 (1) Full up
 (2) Between full up and center
 (3) Center
 (4) Between center and full down
 (5) Full down
 (9) Unknown

89. Telescoping Steering Column Adjustment 0
 (0) No telescoping steering column
 (1) Full back
 (2) Between full back and midpoint
 (3) Midpoint
 (4) Between midpoint and full forward
 (5) Full forward
 (9) Unknown

90. Steering Rim/Spoke Deformation 00
 Code actual measured deformation to the nearest centimeter
 (00) No steering rim deformation
 (01-14) Actual measured value in centimeters
 (15) 15 centimeters or more
 (98) Observed deformation cannot be measured
 (99) Unknown

91. Location of Steering Rim/Spoke Deformation 00
 (00) No steering rim deformation

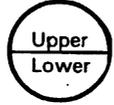
Quarter Sections

- (01) Section A
- (02) Section B
- (03) Section C
- (04) Section D



Half Sections

- (05) Upper half of rim/spoke
- (06) Lower half of rim/spoke
- (07) Left half of rim/spoke
- (08) Right half of rim/spoke



- (09) Complete steering wheel collapse
- (10) Undetermined location
- (99) Unknown

92. Odometer Reading 052,000
 kilometers
 Code to the nearest 1,000 kilometers
 (000) No odometer
 (001) Less than 1,500 kilometers
 (500) 499,500 kilometers or more
 (999) Unknown
032,328 miles X 1.6093 = 52,625 kilometers

Source: Vehicle Inspector

93. Instrument Panel Damage from Occupant Contact? 0
 (0) No
 (1) Yes
 (9) Unknown

94. Type of Knee Bolster Covering 2
 (0) No knee bolster
 (1) Padded
 (2) Rigid plastic
 (8) Other (specify):
 (9) Unknown

95. Knee Bolsters Deformed from Occupant Contact? 1
 (0) No knee bolster
 (1) No deformation
 (2) Yes - deformation
 (9) Unknown

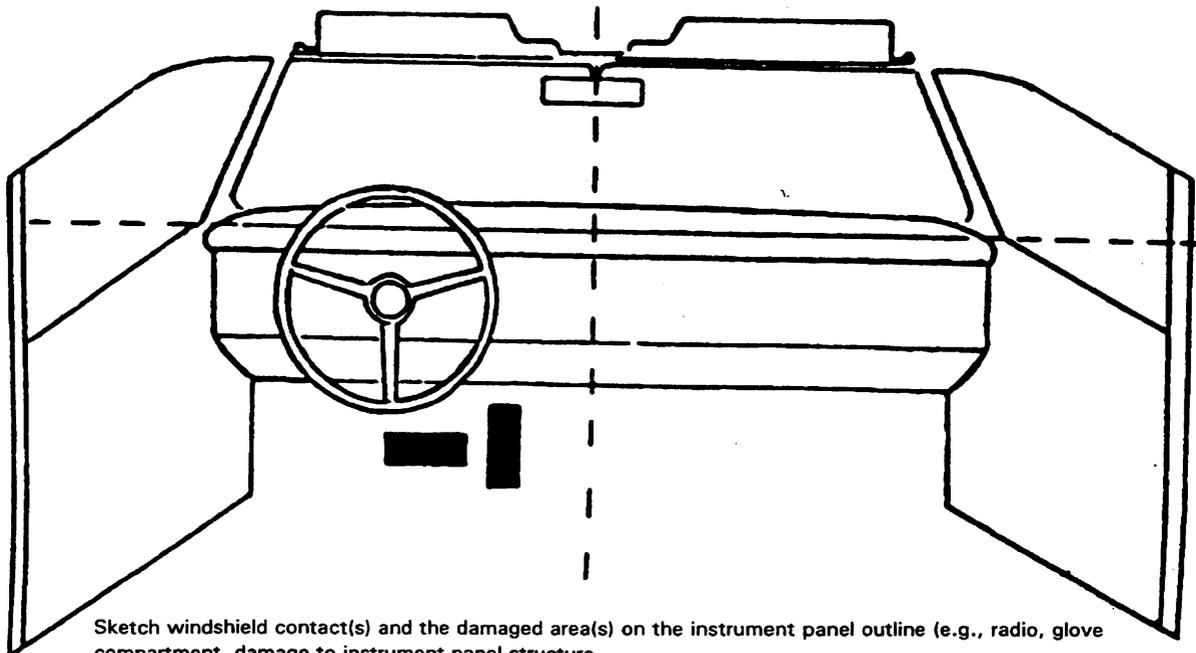
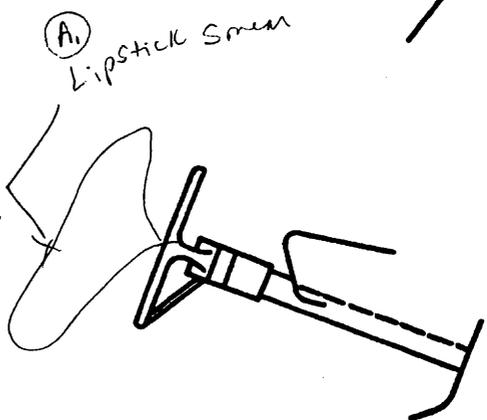
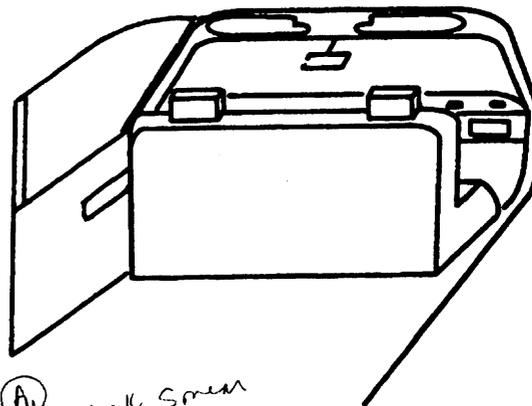
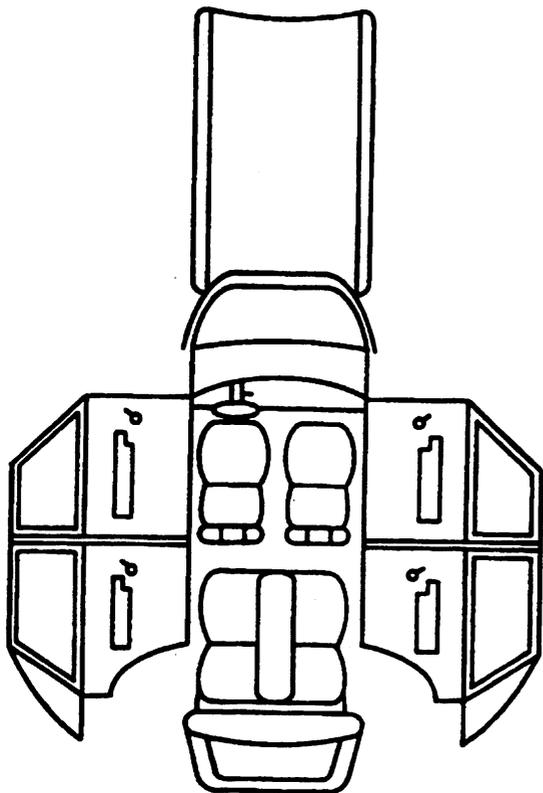
96. Did Glove Compartment Door Open During Collision(s)? 2
 (0) No glove compartment door
 (1) No - door did not open
 (2) Yes - door opened
 (9) Unknown

97. Adaptive (Assistive) Driving Equipment 0
 (0) No adaptive driving equipment
 (1) Adaptive driving equipment installed (Check all that apply.)
 Hand controls for braking/acceleration
 Steering control devices (attached to OEM steering wheel)
 Steering knob attached to steering wheel
 Low effort power steering (unit or device)
 Replacement steering wheel (i.e., reduced diameter)
 Joy-stick steering controls
 Wheelchair tie-downs
 Modification to seat belts (specify):
 Additional or relocated switches (specify):
 Raised roof
 Wall-mounted head rest (used behind wheelchair)
 Other adaptive device (specify):

(9) Unknown

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).
Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.
Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	170	01	Face	Lipstick smears	1
B					
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tapedeck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object, (specify): _____
- (019) Other front object (specify): _____

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): _____
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): _____

RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests
- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): _____
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): _____

INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): _____
- (155) Head restraint system
- (160) Other occupants (specify): _____
- (161) Interior loose objects
- (162) Child safety seat (specify): _____
- (163) Other interior object (specify): _____

AIR BAG

- (170) Air bag-driver side
- (175) Air bag compartment cover-driver side
- (180) Air bag-passenger side
- (185) Air bag compartment cover-passenger side
- (190) Other air bag (specify) _____
- (195) Other air bag compartment cover (specify) _____

ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): _____

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): _____
- (409) Additional or relocated switches, (specify): _____
- (410) Raised roof
- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): _____

CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Frontal Air Bags--Left Front	Frontal Air Bags-Right Front	Other Air Bag
F I R S T	Availability/Function	1		
	Deployment	1		
	Failure	1		

Air Bag System Availability/Function	Air Bag System Deployment (This Occupant Position)	Are There Indications of Air Bag System Failure? (This Occupant Position)
(0) Not equipped/not available (1) Air bag <i>Non-functional</i> (2) Air bag disconnected (specify): _____ (3) Air bag not reinstalled (9) Unknown	(0) Not equipped/not available (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, accident sequence undetermined (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown	(0) Not equipped/not available (1) No (2) Yes (specify): _____ (9) Unknown

AUTOMATIC BELTS

		Left	Right
F I R S T	A-Availability/Function	1	1
	B-Use	1	1
	C-Type	2	2
	D-Proper Use	1	1
	E-Failure Modes	1	1

A-Automatic (Passive) Belt System Availability/Function	D-Proper Use of Automatic (Passive) Belt System	E-Automatic (Passive) Belt Failure Modes During Accident
(0) Not equipped/not available ✓(1) 2 point automatic belts (2) 3 point automatic belts (3) Automatic belts - type unknown <i>Non-functional</i> (4) Automatic belts destroyed or rendered inoperative (9) Unknown	(0) Not equipped/not available/not used ✓(1) Automatic belt used properly (2) Automatic belt used properly with child safety seat <i>Automatic Belt Used Improperly</i> (3) Automatic shoulder belt worn under arm (4) Automatic shoulder belt worn behind back (5) Automatic belt worn around more than one person (6) Lap portion of automatic belt worn on abdomen (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____ (8) Other improper use of automatic belt system (specify): _____ (9) Unknown	(0) Not equipped/not available/not in use (1) No automatic belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): _____ (6) Broken retractor (7) Combination of above (specify): _____ (8) Other automatic belt failure (specify): _____ (9) Unknown
B-Automatic (Passive) Belt System Use (0) Not equipped/not available/destroyed or rendered inoperative ✓(1) Automatic belt in use (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (3) Automatic belt use unknown (9) Unknown		
C-Automatic (Passive) Belt System Type (0) Not equipped/not available (1) Non-motorized system ✓(2) Motorized system (9) Unknown		

FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data for the driver and first seat passenger in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
A-Type of air bag?	1	N/A
B-Flaps open at tear points?	2	
C-Flaps damaged?	1	
D-Air bag damaged?	0 1	
E-Source of air bag damage	0 1	
F-Air bag tethered?	2	
G-Air bag have vent ports?	2	
H-Other occupant contact air bag?	1	
I-Occupant wearing eyewear?	9	

A-Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

B-Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

C-Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

D-Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify): _____

- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

E-Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify): _____
- (03) Object carried by occupant, (specify): _____
- (04) Adaptive/assistive controls, (specify): _____
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify): _____
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

F-Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps): 4
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

G-Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports): 2
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

H-Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

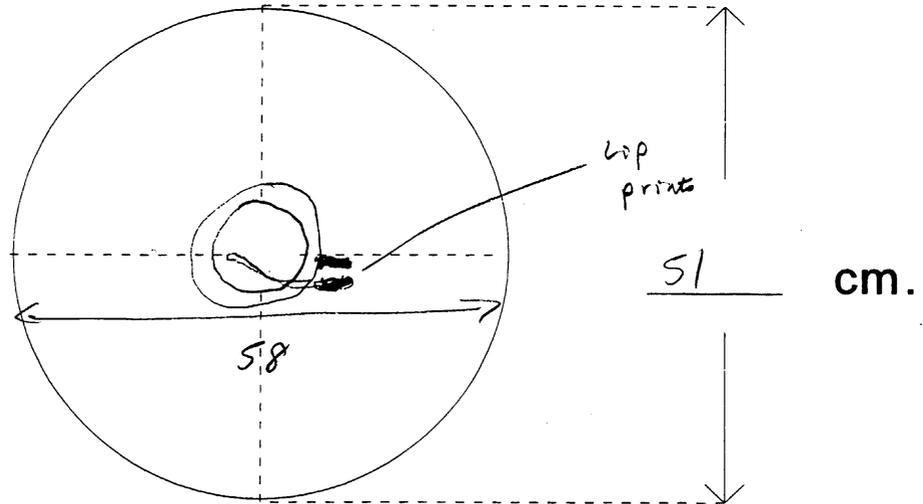
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

I-Was This Occupant Wearing Eye-wear?

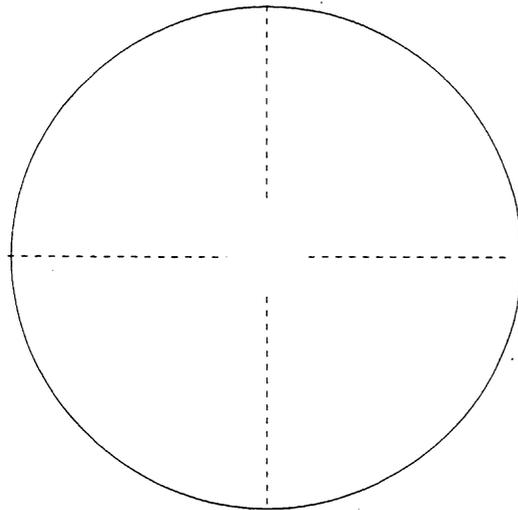
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)



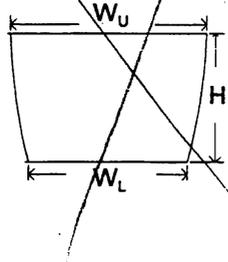
2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)



DRIVER AIR BAG SKETCHES (Cont'd)

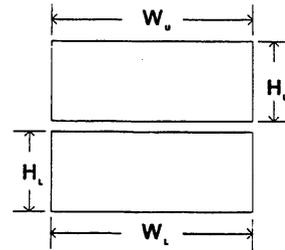
3. DRIVER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W_U) _____ width (W_L) _____
 height (H) _____



4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap	b. Lower Flap
width (W_U) <u>19.5</u>	width (W_L) <u>19</u>
height (H_U) <u>7.5</u>	height (H_L) <u>4</u>



5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

inner upper Flap

W 19

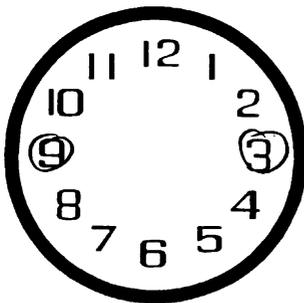
H 5.5

~~inner~~ inner Lower Flap

w. 18.5

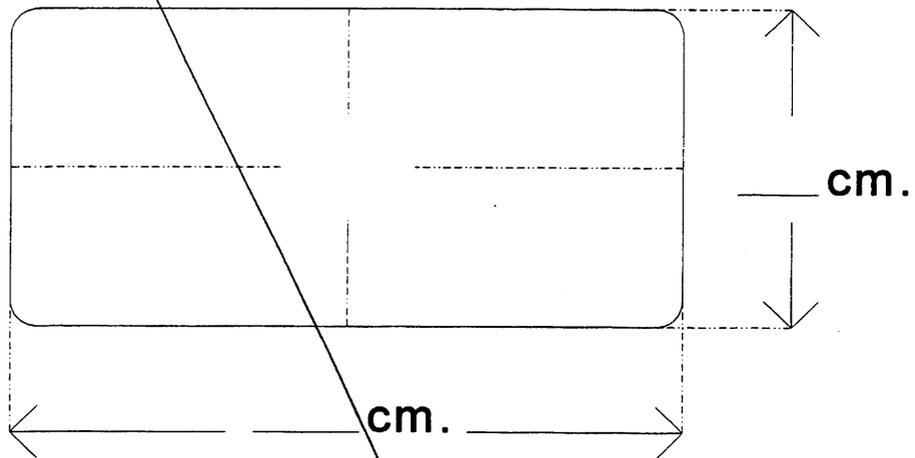
H 5

7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS



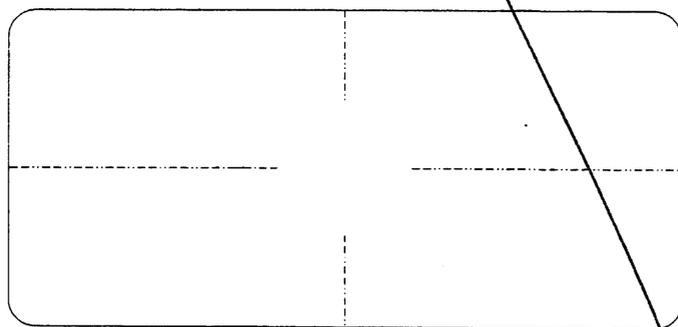
PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)



NIA

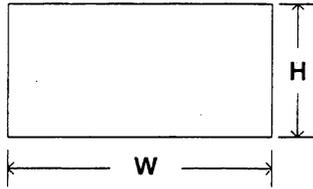
2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)



PASSENGER AIR BAG SKETCHES (Cont'd)

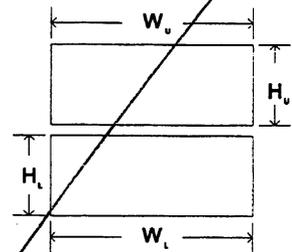
3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W) _____
height (H) _____



4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap width (W_U) _____ height (H_U) _____
b. Lower Flap width (W_L) _____ height (H_L) _____

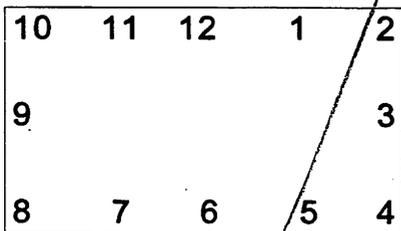


5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

N/A

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

N/A

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

"OTHER" AIR BAG SKETCHES (Cont'd)

3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG

4. SKETCH AIR BAG VENT PORTS

HEAD RESTRAINTS/SEAT EVALUATION

A-Head Restraint Type/Damage by Occupant at This Occupant Position

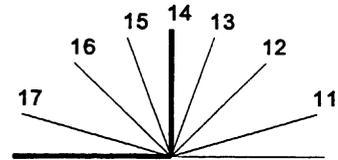
- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other
- Specify): _____
- (9) Unknown

E-Seat Back Incline Prior and Post Impact

- (00) Occupant not seated or no seat
- (01) Not adjustable

Upright prior to impact

- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

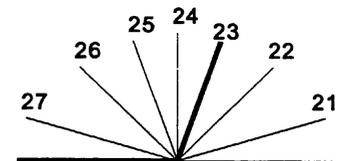


B-Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Box mounted seat (i.e., van type)
- (10) Other seat type (specify): _____
- (99) Unknown

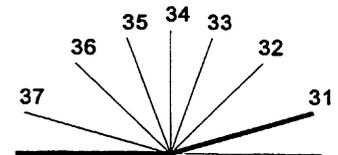
Slightly reclined prior to impact

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position



Completely reclined prior to impact

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position
- (99) Unknown



C-Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____
- (9) Unknown

D-Seat Track Adjusted Position Prior To Impact

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track
- Adjustable Seat Track*
- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

F-Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): _____
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): RF Door panel
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation
- Designed for Forward Facing for This Age/Weight
- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation
- Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation
- (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

- (00) No child safety seat
- Not Designed with Harness/Shield/Tether
- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used
- Designed With Harness/Shield/Tether
- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used
- Unknown If Designed With Harness/Shield/Tether
- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used
- (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model (Specify make/model and occupant number)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [] Yes []

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

Ejection Area

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

(7) Roof

- (8) Other area (e.g., back of pickup, etc.) (specify): _____

(9) Unknown

Ejection Medium

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____

(5) Integral structure

- (8) Other medium (specify): _____

(9) Unknown

Medium Status (Immediately Prior to Impact)

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

ENTRAPMENT No [] Yes []

Describe entrapment mechanism: _____

Component(s): _____

(Note on vehicle interior sketch)



OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number 75
 2. Case Number - Stratum 097E
 3. Vehicle Number 01
 4. Occupant Number 01

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 22
 Code actual age at time of accident.
 (00) Less than one year old (specify by month):

 (97) 97 years and older
 (99) Unknown

6. Occupant's Sex 2
 (1) Male
 (2) Female-not reported pregnant
 (3) Female-pregnant-1st trimester(1st-3rd month)
 (4) Female-pregnant-2nd trimester(4th-6th month)
 (5) Female-pregnant-3rd trimester(7th-9th month)
 (6) Female-pregnant-term unknown
 (9) Unknown

7. Occupant's Height 999
 Code actual height to the nearest
 centimeter.
 (999) Unknown
 _____ inches X 2.54 = _____ centimeters

8. Occupant's Weight 999
 Code actual weight to the nearest
 kilogram.
 (999) Unknown
 _____ pounds X .4536 = _____ kilograms

9. Occupant's Role 1
 (1) Driver
 (2) Passenger
 (9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position 11
Front Seat
 (11) Left side
 (12) Middle
 (13) Right side
 (14) Other (specify): _____
 (15) On or in the lap of another occupant

Second Seat
 (21) Left side
 (22) Middle
 (23) Right side
 (24) Other (specify): _____
 (25) On or in the lap of another occupant

Third Seat
 (31) Left side
 (32) Middle
 (33) Right side
 (34) Other (specify): _____
 (35) On or in the lap of another occupant

Fourth Seat
 (41) Left side
 (42) Middle
 (43) Right side
 (44) Other (specify): _____
 (45) On or in the lap of another occupant

(97) In or on unenclosed area
 (98) Other seat (specify): _____
 (99) Unknown

11. Occupant's Posture 9
 (0) Normal posture

Abnormal posture
 (1) Kneeling or standing on seat
 (2) Lying on or across seat
 (3) Kneeling, standing or sitting in front of seat
 (4) Sitting sideways or turned to talk with
 another occupant or to look out a rear
 window
 (5) Sitting on a console
 (6) Lying back in a reclined seat position
 (7) Bracing with feet or hands on a surface in
 front of seat
 (8) Other abnormal posture (specify): _____
 (9) Unknown

EJECTION/ENTRAPMENT

12. Ejection

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0

15. Medium Status (Immediately Prior To Impact)

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

0

13. Ejection Area

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

0

16. Entrapment

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.
(specify): _____
- (9) Unknown

0

14. Ejection Medium

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

0

17. Occupant Mobility

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons
(specify): _____
- (9) Unknown

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BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 3

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown19. Manual (Active) Belt System Use 03

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):(9) Unknown21. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor(7) Combination of above (specify):(8) Other manual belt failure (specify):(9) Unknown22. Manual Shoulder Belt Upper Anchorage Adjustment 0

- (0) No manual shoulder belt
- (1) No upper anchorage adjustment for manual shoulder belt

Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 1

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use L

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 2

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 1

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of automatic belt system (specify):(9) Unknown27. Automatic (Passive) Belt Failure Modes During Accident 1

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor(7) Combination of above (specify):(8) Other automatic belt failure (specify):(9) Unknown

POLICE REPORTED RESTRAINT USE	AIR BAG SYSTEM FUNCTION
<p>28. Police Reported Belt Use <u>5</u></p> <p>(0) None used (1) Police did not indicate belt use (2) Shoulder belt (3) Lap belt (4) Lap and shoulder belt (5) Belt used, type not specified (6) Child safety seat (7) Automatic belt (8) Other type belt, (specify): _____ (9) Police indicated "unknown"</p> <p>29. Police Reported Air Bag Availability/Function <u>1</u></p> <p>(0) No air bag available (1) Police did not indicate air bag availability/function (2) Deployed (3) Not deployed (4) Unknown if deployed (9) Police indicated "unknown"</p> <hr/> <p>Check the Primary Source Used In Determining Belt Use.</p> <p><input checked="" type="checkbox"/> Vehicle inspection <input type="checkbox"/> Official injury data <input type="checkbox"/> Driver/occupant interview <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown if belt used _____ _____ _____</p>	<p>30. Frontal Air Bag System Availability/Function <u>1</u> (This Occupant Position) (0) Not equipped/not available (1) Air bag <i>Non-functional</i> (2) Air bag disconnected (specify): _____ (3) Air bag not reinstalled (9) Unknown</p> <p>31. Frontal Air Bag System Deployment <u>1</u> (This Occupant Position) (0) Not equipped/not available (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, details unknown (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown</p> <p>32. Other Than First Seat Frontal Air Bag Availability/Function <u>0</u> (This Occupant Position) (0) Not equipped/not available (1) Air bag <i>Non-functional</i> (2) Air bag disconnected (specify): _____ (3) Air bag not reinstalled (9) Unknown <i>Specify type of "other" air bag present:</i> _____</p> <p>33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) <u>0</u> (0) Not equipped with an "other" air bag (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, details unknown (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown</p> <p>34. Are There Indications of Air Bag System Failure? <u>1</u> (This Occupant Position) (0) Not equipped/not available (1) No (2) Yes (specify): _____ (9) Unknown</p>

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 9x

- (0) Not equipped/not available
 (1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)
 (3) One previous accident with deployment
 (4) More than one previous accident with at least one deployment
 (8) Previous accidents, unknown deployment status
 (9) Unknown

36. Type of Air Bag 9x

- (0) Not equipped/not available
 (1) Original manufacturer installed system
 (2) Retrofitted air bag
 (3) Replacement air bag
 (8) Unknown type of air bag
 (9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 9x

- (0) Not equipped/not available
 (1) No prior maintenance
 (2) Yes, prior maintenance (specify): _____
 (9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01

- (00) Not equipped/not available
 _____ Code the accident event sequence number that initiated the air bag deployment
 (96) Deployed, unknown event
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown

39. CDC For Air Bag Deployment Impact 1

- (0) Not equipped/not available
 (1) Highest delta V
 (2) Second highest delta V
 (3) Other non-coded delta V (specify): _____
 (6) Deployed, unknown event
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

40. Longitudinal Component of +Delta V For Air Bag 0040Deployment Impact -037

(_000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

(_996) Deployment, unknown longitudinal Delta V

(_997) Not deployed

(_998) Unknown if deployed

(_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2

- (0) Not equipped/not available
 (1) No
 (2) Yes
 (3) Deployed, unknown if flap(s) opened at designated tear points
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 1

- (0) Not equipped/not available
 (1) No
 (2) Yes (specify): _____
 (3) Deployed, unknown if air bag module cover flap(s) damaged
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

43. Was There Damage To The Air Bag? 01

- (00) Not equipped/not available
 (01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured
 (03) Cut
 (04) Torn
 (05) Holed
 (06) Burned
 (07) Abraded
 (88) Other damage (specify): _____

- (95) Damaged, details unknown
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM
EVALUATION** *continued*
HEAD RESTRAINT AND SEAT EVALUATION

44. Source of Air Bag Damage 01
 (00) Not equipped/not available
 (01) Not damaged
 (02) Object worn by occupant, (specify):

 (03) Object carried by occupant, (specify):

 (04) Adaptive/assistive controls, (specify):

 (05) Fire in vehicle
 (06) Thermal burns
 (07) Rescue or emergency efforts
 (88) Other damage source (specify):

 (95) Damaged, unknown source
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown
45. Was The Air Bag Tethered? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of tether straps):
4
 (3) Deployed, unknown if tethered
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of vent ports):
2
 (3) Deployed, unknown if vent ports present
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify):

 (3) Deployed, unknown if other occupant contact to air bag
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 4
 (0) Not air bag equipped/air bag not available
 (1) No
 (2) Eyeglasses/sunglasses
 (3) Contact lenses
 (4) Deployed, unknown if eyewear worn
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3
 (0) No head restraints
 (1) Integral—no damage
 (2) Integral—damaged during accident
 (3) Adjustable—no damage
 (4) Adjustable—damaged during accident
 (5) Add-on—no damage
 (6) Add-on—damaged during accident
 (8) Other (specify):

 (9) Unknown 01
50. Seat Type (this Occupant Position) 02
 (00) Occupant not seated or no seat
 (01) Bucket
 (02) Bucket with folding back
 (03) Bench
 (04) Bench with separate back cushions
 (05) Bench with folding back(s)
 (06) Split bench with separate back cushions
 (07) Split bench with folding back(s)
 (08) Pedestal (i.e., column supported)
 (09) Box mounted seat (i.e., van type)
 (10) Other seat type (specify):

 (99) Unknown
51. Seat Orientation (this Occupant Position) 1
 (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):

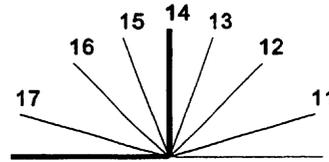
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 4
 (0) Occupant not seated or no seat
 (1) Non-adjustable seat track
Adjustable Seat Track
 (2) Seat at forward most track position
 (3) Seat between forward most and middle track positions
 (4) Seat at middle track position
 (5) Seat between middle and rear most track positions
 (6) Seat at rear most track position
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*

53. Seat Back Incline Prior and Post Impact 12
 (00) Occupant not seated or no seat
 (01) Not adjustable

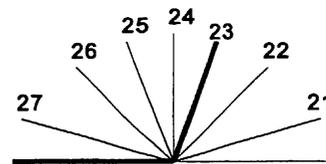
Upright prior to impact

- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position



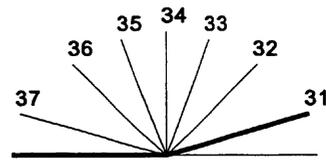
Slightly reclined prior to impact

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position



Completely reclined prior to impact

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) 5

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): _____
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion, (specify): _____
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 000
 (000) No child safety seat
 Applicable codes are found in your NASS CDS
 Data Collection, Coding and Editing
 (950) Built-in child safety seat
 (997) Other make/model (specify):

 (998) Unknown make/model
 (999) Unknown if child safety seat used

56. Type of Child Safety Seat 0
 (0) No child safety seat
 (1) Infant seat
 (2) Toddler seat
 (3) Convertible seat
 (4) Booster seat - with shield
 (5) Booster seat - without shield
 (7) Other type child safety seat (specify):

 (8) Unknown child safety seat type
 (9) Unknown if child safety seat used

57. Child Safety Seat Orientation 00
 (00) No child safety seat

Designed for Rear Facing for This Age/Weight
 (01) Rear facing
 (02) Forward facing
 (08) Other orientation (specify):

 (09) Unknown orientation

Designed For Forward Facing for This Age/Weight
 (11) Rear facing
 (12) Forward facing
 (18) Other orientation (specify):

 (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
 (21) Rear facing
 (22) Forward facing
 (28) Other orientation (specify):

 (29) Unknown orientation

 (99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 00

 59. Child Safety Seat Shield Usage 00

 60. Child Safety Seat Tether Usage 00

Note: Options below applicable to
 Variables OA58-OA60.
 (00) No child safety seat

Not Designed With Harness/Shield/Tether
 (01) After market harness/shield/tether
 added, not used
 (02) After market harness/shield/tether used
 (03) Child safety seat used, but no after market
 harness/shield/tether added
 (09) Unknown if harness/shield/tether
 added or used

Designed With Harness/Shield/Tether
 (11) Harness/shield/tether not used
 (12) Harness/shield/tether used
 (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether
 (21) Harness/shield/tether not used
 (22) Harness/shield/tether used
 (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES

61. Injury Severity (Police Rating) 1

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 4

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):

- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

- (9) Unknown

64. Hospital Stay 00

- (00) Not Hospitalized
_____ Code the number of days (up through 60)
that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 99

- _____ Code the number of days
(up through 60) that the occupant
lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP WORK HERE

VARIABLES 66-74

TO BE CODED BY THE ZONE CENTER

TO BE CODED BY THE ZONE CENTER

INJURY CONSEQUENCES

TRAUMA DATA

66. Time to Death 00
 _____ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
 (00) Not fatal
 (96) Fatal - ruled disease
 (99) Unknown

67. 1st Medically Reported Cause of Death 00

68. 2nd Medically Reported Cause of Death 00

69. 3rd Medically Reported Cause of Death 00
 _____ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
 (00) Not fatal or no additional causes
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify): _____

(97) Other result (includes fatal ruled disease) (specify): _____

(99) Unknown _____

70. Number of Recorded Injuries for This Occupant 97
 _____ Code the actual number of injuries recorded for this occupant.
 (00) No recorded injuries
 (97) Injured, details unknown
 (99) Unknown if injured

71. Glasgow Coma Scale (GCS) Score 97
 (at Medical Facility) 97
 (00) Not injured
 (01) Injured - not treated at medical facility
 (02) No GCS Score at medical facility
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
 (97) Injured, details unknown
 (99) Unknown if injured

72. Was the Occupant Given Blood? 9
 (1) No - blood not given
 (2) Yes - blood given (specify units): _____
 (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO₃ 97
 (00) Not injured
 (01) Injured, ABGs not measured or reported
 (02-50) Code the actual value of the HCO₃
 (96) ABGs reported, HCO₃ unknown
 (97) Injured, details unknown
 (99) Unknown if injured

BELT USE DETERMINATION

74. Primary Source of Belt Use Determination 1
 (0) Not equipped/not available/destroyed or rendered inoperative
 (1) Vehicle inspection
 (2) Official injury data
 (3) Driver/occupant interview
 (8) Other (specify): _____
 (9) Unknown if belt used

PSU NUMBER	<u>75</u>
CASE NUMBER	<u>097E</u>
VEHICLE NUMBER	<u>01</u>
OCCUPANT NUMBER	<u>01</u>

OCCUPANT INJURY FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

ENTIRE FORM

PAGE NUMBER (S) _____

PRECRASH ENVIRONMENTAL DATA

- 19. Relation To Interchange Or Junction 2
 - (0) Non-interchange area and non-junction
 - (1) Interchange area related
 - Non-Interchange junctions*
 - (2) Intersection related
 - (3) Driveway, alley access related
 - (4) Other junction (specify) _____
 - (5) Unknown type of junction
 - (9) Unknown
- 20. Trafficway Flow 1
 - (0) Not physically divided (two way traffic)
 - (1) Divided trafficway-median strip without positive barrier
 - (2) Divided trafficway-median strip with positive barrier
 - (3) One way traffic
 - (9) Unknown
- 21. Number Of Travel Lanes 6
 - (1) One
 - (2) Two
 - (3) Three
 - (4) Four
 - (5) Five
 - (6) Six
 - (7) Seven or more
 - (9) Unknown
- 22. Roadway Alignment 1
 - (1) Straight
 - (2) Curve right
 - (3) Curve left
 - (9) Unknown
- 23. Roadway Profile 4
 - (1) Level
 - (2) Uphill grade (> 2%)
 - (3) Hill crest
 - (4) Downhill grade (> 2%)
 - (5) Sag
 - (9) Unknown
- 24. Roadway Surface Type 2
 - (1) Concrete
 - (2) Bituminous (asphalt)
 - (3) Brick or block
 - (4) Slag, gravel, or stone
 - (5) Dirt
 - (8) Other (specify): _____
 - (9) Unknown

- 25. Roadway Surface Condition 1
 - (1) Dry
 - (2) Wet
 - (3) Snow or slush
 - (4) Ice
 - (5) Sand, dirt, or oil
 - (8) Other (specify): _____
 - (9) Unknown
- 26. Light Conditions 1
 - (1) Daylight
 - (2) Dark
 - (3) Dark, but lighted
 - (4) Dawn
 - (5) Dusk
 - (9) Unknown
- 27. Atmospheric Conditions 0
 - (0) No adverse atmospheric-related driving conditions
 - (1) Rain
 - (2) Sleet/hail
 - (3) Snow
 - (4) Fog
 - (5) Rain and fog
 - (6) Sleet and fog
 - (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): _____
 - (9) Unknown
- 28. Traffic Control Device 1
 - (0) No traffic control(s)
 - (1) Traffic control signal (not RR crossing)
 - Regulatory*
 - (2) Stop sign
 - (3) Yield sign
 - (4) School zone sign
 - (5) Other regulatory sign (specify): _____
 - (6) Warning sign (not RR crossing)
 - (7) Unknown sign
 - (8) Miscellaneous/other controls including RR controls (specify): _____
 - (9) Unknown
- 29. Traffic Control Device Functioning 2
 - (0) No traffic control device
 - (1) Traffic control device not functioning (specify): _____
 - (2) Traffic control device functioning properly
 - (9) Unknown

OCCUPANT RELATED

- 37. Driver Presence in Vehicle 1
 (0) Driver not present
 (1) Driver present
 (9) Unknown
- 38. Number of Occupants This Vehicle 01
 (00-96) Code actual number of occupants for this vehicle
 (97) 97 or more
 (99) Unknown
- 39. Number of Occupant Forms Submitted 01

AIR BAG RELATED

- 40. Is this an AOPS Vehicle? 1
 (0) No (includes unknown)
 (1) Yes - researcher determined
 (2) VIN determined air bag system
 (3) VIN determined automatic (passive) belts
 (4) VIN determined air bag and automatic (passive) belts
- 41. Air Bag(s) Deployment, First Seat Frontal 2
 (0) Not equipped or not available
 (1) No air bags deployed
Single Air Bag Vehicle
 (2) Driver air bag deployed
 (3) Driver air bag, unknown if deployed
Multiple Air Bag Vehicle
 (4) Driver side only deployed
 (5) Passenger side only deployed
 (6) Driver and passenger side deployed
 (7) Driver and passenger side unknown if deployed
 (8) Air bag(s) deployed, details unknown
 (9) Unknown
- 42. Air Bag(s) Deployment, Other Than First Seat Frontal 0
 (0) Not equipped with an "other" air bag
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown
 Specify type of "other" air bag present: _____

VEHICLE WEIGHT ITEMS

- 43. Vehicle Curb Weight 1,770
 Code weight to nearest 10 kilograms.
 (045) Less than 454 kilograms
 (612) 6,124 kilograms or more
 (999) Unknown
 $3,907 \text{ lbs} \times .4536 = 1,772.1 \text{ kgs}$
 Source: _____

- 44. Vehicle Cargo Weight 0000
 Code weight to nearest 10 kilograms.
 (000) Less than 5 kilograms
 (454) 4,536 kilograms or more
 (999) Unknown
 _____ lbs X .4536 = _____ kgs
 Source: per veh. Inspection

ROLLOVER DATA

- 45. Rollover 02
 (00) No rollover (no overturning)
Rollover (primarily about the longitudinal axis)
 (01-16) Code the number of quarter turns
 (17) Rollover, 17 or more quarter turns (specify): _____
 (98) Rollover--end-over-end (i.e., primarily about the lateral axis)
 (99) Rollover (overturn), details unknown
- 46. Rollover Initiation Type 07
 (00) No rollover
 (01) Trip-over
 (02) Flip-over
 (03) Turn-over
 (04) Climb-over
 (05) Fall-over
 (06) Bounce-over
 (07) Collision with another vehicle
 (08) Other rollover initiation type specify): _____
 (98) Rollover--end-over-end
 (99) Unknown rollover initiation type
- 47. Location of Rollover Initiation 1
 (0) No rollover
 (1) On roadway
 (2) On shoulder--paved
 (3) On shoulder--unpaved
 (4) On roadside or divided trafficway median
 (8) Rollover--end-over-end
 (9) Unknown
- 48. Rollover Initiation Object Contacted 01
 (Note: Applicable codes on back of page)
- 49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 3
 (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify): _____
 (6) Non-contact rollover forces (specify): _____
 (8) Rollover--end-over-end
 (9) Unknown
- 50. Direction of Initial Roll 2
 (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (8) Rollover--end-over-end
 (9) Unknown roll direction

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

(00) No rollover
 (01-30) — Vehicle Number

Noncollision

(31) Turn-over — fall-over
 (32) No rollover impact initiation (end-over-end)
 (34) Jackknife

Collision With Fixed Object

(41) Tree (\leq 10 cm in diameter)
 (42) Tree ($>$ 10 cm in diameter)
 (43) Shrubbery or bush
 (44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

(50) Pole or post (\leq 10 cm in diameter)
 (51) Pole or post ($>$ 10 cm but \leq 30 cm in diameter)
 (52) Pole or post ($>$ 30 cm in diameter)
 (53) Pole or post (diameter unknown)

(54) Concrete traffic barrier
 (55) Impact attenuator
 (56) Other traffic barrier (includes guardrail)
 (specify): _____

(57) Fence
 (58) Wall
 (59) Building
 (60) Ditch or culvert
 (61) Ground
 (62) Fire hydrant
 (63) Curb
 (64) Bridge
 (68) Other fixed object (specify):

(69) Unknown fixed object

Collision with Nonfixed Object

(70) Passenger car, light truck, van, or other vehicle not in-transport
 (71) Medium/heavy truck or bus not in-transport
 (76) Animal
 (77) Train
 (78) Trailer, disconnected in transport
 (79) Object fell from vehicle in-transport
 (88) Other nonfixed object (specify):

(89) Unknown nonfixed object

(98) Other event (specify):

(99) Unknown event or object



EXTERIOR VEHICLE FORM

1. Primary Sampling Unit Number <u>75</u>	3. Vehicle Number <u>02</u>
2. Case Number - Stratum <u>097E</u>	

VEHICLE IDENTIFICATION

VIN 1G1BL537XmR XXXXXXXXXX Model Year 91

Vehicle Make (specify): Chery Vehicle Model (specify): Caprice

LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
01	Begins RF BC	BC to BC	C6
02	Roof	Rollover	R. Side Roof Side Rail

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage		Field L	C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	±D
		Width (CDC)	Max Crush								
01	Front	159	C6	154	24	44	44	54	68	81	0
	Free space				13	5	3	3	5	13	
	Result				11	39	41	51	63	68	
02	Rollover	335	133								
			113								
			20								

ORIGINAL SPECIFICATIONS WORK SHEET

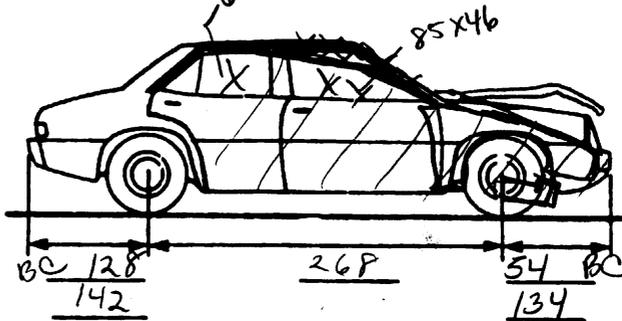
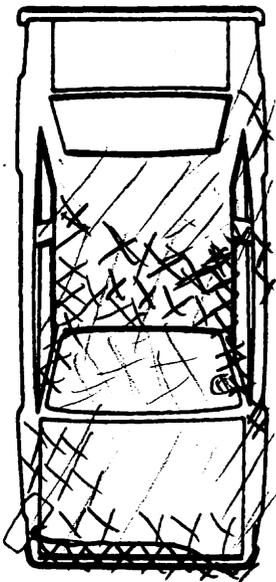
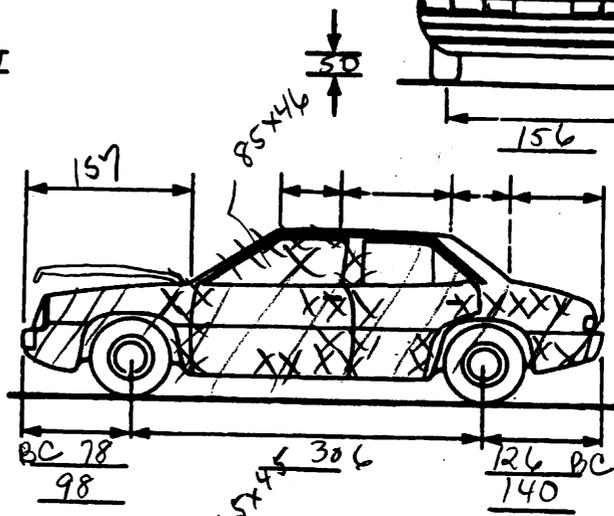
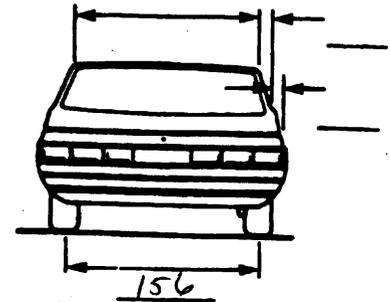
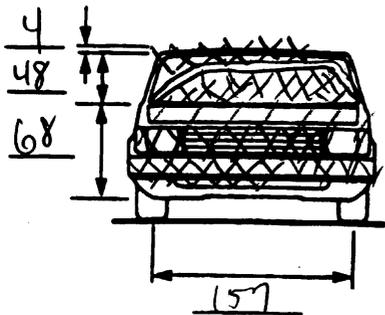
Wheelbase	<u>115.9</u>	inches	x 2.54	=	<u>294.3</u>	cm
Overall Length	<u>214.1</u>	inches	x 2.54	=	<u>543.8</u>	cm
Maximum Width	<u>77.0</u>	inches	x 2.54	=	<u>195.5</u>	cm
Curb Weight	<u>3,907</u>	pounds	x .4536	=	<u>1,772.2</u>	kg
Average Track	<u>61.25</u> <u>61.8</u> / <u>60.7</u>	inches	x 2.54	=	<u>156</u> <u>155.5</u>	cm
Front Overhang	_____	inches	x 2.54	=	_____	cm
Rear Overhang	_____	inches	x 2.54	=	_____	cm
Undeformed End Width	_____	inches	x 2.54	=	_____	cm
Engine Size: cyl./displ.	<u>V-8</u> <u>5.0L</u>	cc	x .001	=	<u>Vin = 5.7</u>	L
	_____	CID	x .0164	=	_____	L

VEHICLE DAMAGE SKETCH

<p>TIRE - WHEEL DAMAGE</p> <p>a. Rotation physically restricted</p> <p>RF <u>1</u> LF <u>2</u> RR <u>2</u> LR <u>2</u></p> <p>b. Tire deflated</p> <p>RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u></p> <p>(1) Yes (2) No (8) NA (9) Unk.</p>	<p>ORIGINAL SPECIFICATIONS</p> <p>Wheelbase <u>294</u> cm</p> <p>Overall Length <u>544</u> cm</p> <p>Maximum Width <u>196</u> cm</p> <p>Curb Weight <u>1772</u> kg</p> <p>Average Track <u>156</u> cm</p> <p>Front Overhang <u>107</u> cm</p> <p>Rear Overhang <u>141</u> cm</p> <p>Undeformed End Width <u>160</u> cm</p> <p>Engine Size: cyl./displ. <u>5.0 L V-8</u> L</p>	<p>WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only)</p> <p>RF \pm <u>15</u> °</p> <p>LF \pm _____ °</p> <p>RR \pm _____ °</p> <p>LR \pm _____ °</p> <p>Within \pm 5 degrees</p> <hr/> <p>DRIVE WHEELS</p> <p><input type="checkbox"/> FWD <input checked="" type="checkbox"/> RWD <input type="checkbox"/> 4WD</p> <hr/> <p>Approximate Cargo Weight <u>0</u> kg</p>
<p>TYPE OF TRANSMISSION</p> <p><input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic</p> <p>END SHIFT \geq 10 CM</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>		

MEASUREMENTS IN CENTIMETERS

LF 9 / 32 RF 8 / 32
LR 9 / 32 RR 9 / 32



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>01</u>	6. ²¹ <u>H</u>	7. <u>F</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>03</u>

Second Highest Delta "V"

12. <u>02</u>	13. <u>31</u>	14. <u>00</u>	15. <u>T</u>	16. <u>Y</u>	17. <u>D</u>	18. <u>0</u>	19. <u>03</u>
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CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. L	21. C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	22. ±D
<u>160</u>	<u>011</u>	<u>039</u>	<u>041</u>	<u>051</u>	<u>063</u>	<u>068</u>	<u>000</u>

Second Highest Delta "V"

23. L	24. C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	25. ±D

26. Undeformed End Width
(Coded when highest severity impact is an end plane impact.)
160
Code to the nearest centimeter
(250) 250 centimeters or more
(998) No highest severity end plane impact
(999) Unknown

27. Direct Damage Width
(For highest severity impact)
159
Code to the nearest centimeter
(250) 250 centimeters or more
(999) Unknown

28. Original Wheelbase
Code to the nearest centimeter
294
(650) 650 centimeters or more
(999) Unknown
115.9 inches X 2.54 = 294.3 centimeters

29. Original Average Track Width
Code to the nearest centimeter
156
(185) 185 centimeters or more
(999) Unknown
_____ inches X 2.54 = _____ centimeters

FUEL SYSTEM

- 30. Are CDCs Documented but Not Coded on The Automated File? 0
 (0) No
 (1) Yes

- 31. Researcher's Assessment of Vehicle Disposition 1
 (0) Not towed due to vehicle damage
 (1) Towed due to vehicle damage
 (9) Unknown

- 32. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? 0
 (0) No post manufacturer modifications
 (1) Yes - post manufacturer modifications (specify): _____

 (Include photograph of CERTIFICATION PLACARD in case report)
 (9) Unknown if vehicle is modified

- 35. Location of Fuel Tank-1 Filler Cap 1
- 36. Location of Fuel Tank-2 Filler Cap 0
 (0) No fuel tank
 (1) On back plane
 (2) Aft of center of the rear wheels (rear axle) on left side plane
 (3) Aft of center of the rear wheels (rear axle) on right side plane
 (4) Forward of center of the rear wheels (rear axle) on left side plane
 (5) Forward of center of the rear wheels (rear axle) on right side plane
 (6) Over the center of the rear wheels (rear axle) on left side plane
 (7) Over the center of the rear wheels (rear axle) on right side plane
 (8) Other (specify): _____
 (9) Unknown

- 37. Type of Fuel Tank-1 2
No photo of Tank
- 38. Type of Fuel Tank-2 0
 (0) No fuel tank (electrical vehicle)
 (1) Metallic
 (2) Non-metallic
 (9) Unknown

FIRE OCCURRENCE

- 33. Fire Occurrence 0
 (0) No fire

 Yes, fire occurred
 (1) Minor
 (2) Major
 (9) Unknown

- 34. Origin of Fire 0
 (0) No fire
 (1) Vehicle exterior (front, side, back, top)
 (2) Exhaust system
 (3) Fuel tank (and other fuel retention system parts)
 (4) Engine compartment
 (5) Cargo/trunk compartment
 (6) Instrument panel
 (7) Passenger compartment area
 (8) Other location (specify): _____

 (9) Unknown

- 39. Location of Fuel Tank-1 1
- 40. Location of Fuel Tank-2 0
 (0) No fuel tank
 (1) Aft of center of the rear wheels (rear axle) centered
 (2) Aft of center of the rear wheels (rear axle) left side
 (3) Aft of center of the rear wheels (rear axle) right side
 (4) Forward of center of the rear wheels (rear axle) centered
 (5) Forward of center of the rear wheels (rear axle) left side
 (6) Forward of center of the rear wheels (rear axle) right side
 (7) Over center of the rear wheels (rear axle)
 (8) Other (specify): _____
 (9) Unknown

- 41. Damage to Fuel Tank-1 1
- 42. Damage to Fuel Tank-2 0
 (0) No fuel tank
 (1) No damage to fuel tank
 (2) Deformed, no seam failure
 (3) Deformed, with a seam failure
 (4) Punctured
 (5) Lacerated (ripped)
 (6) Abraded (scraped)
 (7) Filler neck separation from the fuel tank
 (8) Other damage (specify): _____
 (9) Unknown

<p>43. Leakage Location of Fuel System-1 <u> 1 </u></p> <p>44. Leakage Location of Fuel System-2 <u> 0 </u></p> <p>(0) No fuel tank (1) No fuel leakage</p> <p><i>Primary Area Of Leakage</i></p> <p>(2) Tank (3) Filler neck (4) Cap (5) Lines/pump/filter (6) Vent/emission recovery (8) Other (specify): _____ (9) Unknown</p> <p>45. Fuel Type-1 <u> 01 </u></p> <p>46. Fuel Type-2 <u> 00 </u></p> <p><i>Single Fuel Type</i></p> <p>(00) No fuel tank (01) Gasoline (02) Diesel (03) CNG (Compressed Natural Gas) (04) LPG (Liquid Petroleum Gas) also known as Propane (05) LNG (Liquid Natural Gas) (06) Methanol (M100 or M85) (07) Ethanol (E100 or E85) (08) Other (Hydrogen or others) (specify): _____</p> <p>_____</p> <p><i>Electric Powered or Electric/Solar Powered Vehicles</i></p> <p>(10) Lead Acid Battery (11) Nickel-Iron Battery (12) Nickel-Cadmium Battery (13) Sodium Metal Chloride Battery (14) Sodium Sulfur Battery (18) Other (Specify): _____</p> <p>(98) Other Hybrid (specify): _____</p> <p>_____</p> <p>(99) Unknown fuel type</p>	<p>47. Is This Vehicle Equipped With More Than Two Fuel Tanks? <u> 0 </u></p> <p>(0) No (one or two tanks only)</p> <p><i>Yes - More Than Two Tanks</i></p> <p>(1) Yes -- <u>no damage</u> to any tank or filler cap and <u>no fuel system leakage</u></p> <p>(2) Yes -- <u>no damage</u> to any tank or filler cap but <u>there is fuel system leakage</u> (specify leakage location): _____</p> <p>(3) Yes -- <u>damage</u> to an additional tank or filler cap and <u>there is fuel system leakage</u> (specify the following): Type of tank _____ Tank location _____ Filler cap location _____ Tank damage _____ Location of leakage _____ Type of fuel _____</p> <p>(9) Unknown if more than two tanks</p>
<p>COMMENTS</p> <p>_____</p>	

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED ***

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



- 1. Primary Sampling Unit Number 75
- 2. Case Number - Stratum 097E
- 3. Vehicle Number 02

INTEGRITY

- 4. Passenger Compartment Integrity 06
(00) No integrity loss

Yes, Integrity Was Lost Through

- (01) Windshield
- (02) Door (side)
- (03) Door/hatch (back door)
- (04) Roof
- (05) Roof glass
- (06) Side window
- (07) Rear window (backlight)
- (08) Roof and roof glass
- (09) Windshield and door (side)
- (10) Windshield and roof
- (11) Side and rear window (side window and backlight)
- (12) Windshield and side window
- (13) Door and side window
- (98) Other combination of above (specify):
- (99) Unknown

Door, Tailgate or Hatch Opening

- 5. LF 1 6. RF 3 7. LR 1 8. RR 1 9. TG/H 0
- (0) No door/gate/hatch
- (1) Door/gate/hatch remained closed and operational
- (2) Door/gate/hatch came open during collision
- (3) Door/gate/hatch jammed shut
- (8) Other (specify):
- (9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code Ø

- 10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0
- (0) No door/gate/hatch or door not opened
- Door, Tailgate or Hatch Came Open During Collision
- (1) Door operational (no damage)
- (2) Latch/striker failure due to damage
- (3) Hinge failure due to damage
- (4) Door structure failure due to damage
- (5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
- (6) Latch/striker and hinge failure due to damage
- (8) Other failure (specify):
- (9) Unknown

GLAZING

Type of Window/Windshield Glazing

- 15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 2
- 20. BL 2 21. Roof 0 22. Other 2

- (0) No glazing
- (1) AS-1 – Laminated
- (2) AS-2 – Tempered
- (3) AS-3 – Tempered-tinted (original)
- (4) AS-2 – Tempered-with after market tint
- (5) AS-3 – Tempered-tinted (with additional after market tint)
- (6) AS-14 – Glass/Plastic
- (7) Glazing removed prior to accident
- (8) Other (specify):
- (9) Unknown

Window Precrash Glazing Status

- 23. WS 1 24. LF 2 25. RF 2 26. LR 2 27. RR 2
- 28. BL 1 29. Roof 0 30. Other 1

- (0) No glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (7) Glazing removed prior to accident
- (9) Unknown

Glazing Damage from Impact Forces

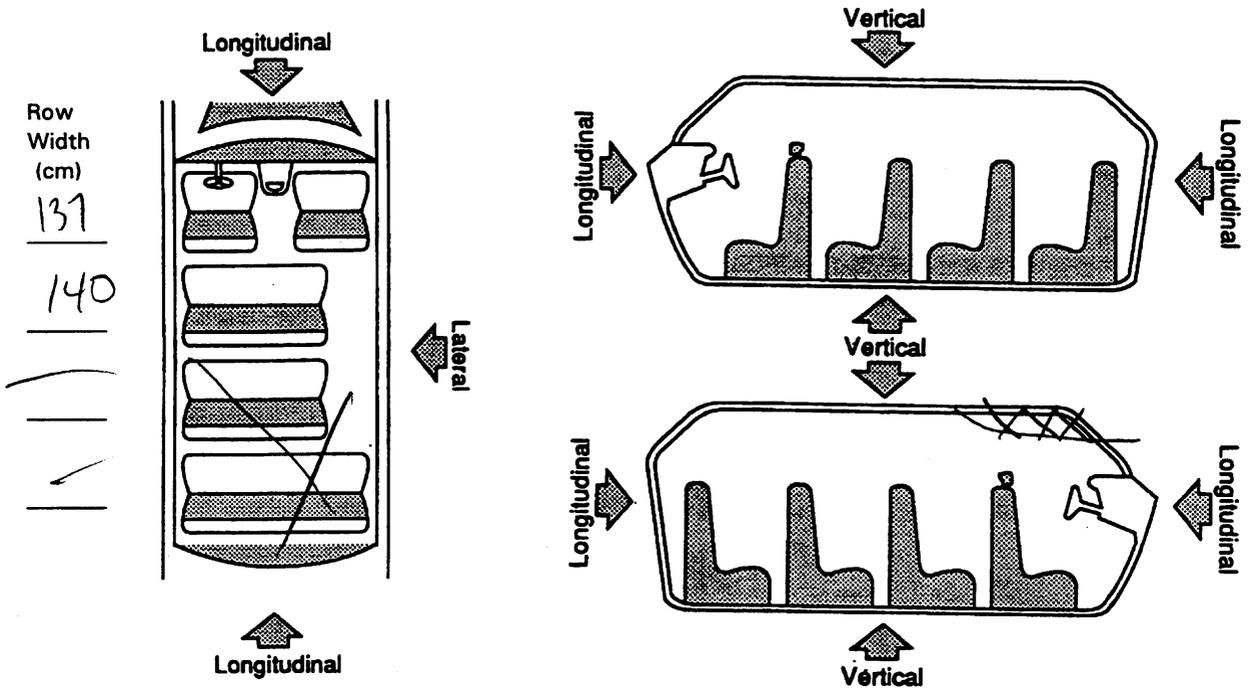
- 31. WS 2 32. LF 6 33. RF 6 34. LR 1 35. RR 6
- 36. BL 1 37. Roof 0 38. Other 1
- (0) No glazing
- (1) No glazing damage from impact forces
- (2) Glazing in place and cracked from impact forces
- (3) Glazing in place and holed from impact forces
- (4) Glazing out-of-place (cracked or not) and not holed from impact forces
- (5) Glazing out-of-place and holed from impact forces
- (6) Glazing disintegrated from impact forces
- (7) Glazing removed prior to accident
- (9) Unknown if damaged

Glazing Damage from Occupant Contact

- 39. WS 1 40. LF 1 41. RF 1 42. LR 1 43. RR 1
- 44. BL 1 45. Roof 0 46. Other 1
- (0) No glazing
- (1) No occupant contact to glazing
- (2) Glazing contacted by occupant but no glazing damage
- (3) Glazing in place and cracked by occupant contact
- (4) Glazing in place and holed by occupant contact
- (5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
- (6) Glazing out-of-place by occupant contact and holed by occupant contact
- (7) Glazing removed prior to accident
- (8) Glazing disintegrated by occupant contact
- (9) Unknown if contacted by occupant

INTRUSION WORKSHEET

NOTE: SKETCH INTRUDED AREAS



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)				DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION		
13	Roof	75	55	20	Ⓛ	Vertical
12	↓	75	64	11	Ⓛ	
13	R. side rail	71	59	12	Ⓛ	
15	A pillar	66	53	13	Ⓛ	
11	Wind Head	73	73	0		
12	↓	73	63	10	Ⓛ	
13	↓	73	55	18	Ⓛ	
13	B. pillar	85	74	11	Ⓛ	
23	Roof	86	78	8	Ⓛ	
22	↓	86	81	5		
12	Windshield	19	12	7	Ⓛ	
13	↓	19	7	12	Ⓛ	
		-		=		
		-		=		
		-		=		

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

INTRUDING COMPONENT

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>13</u>	48. <u>13</u>	49. <u>3</u>	50. <u>1</u>
2nd	51. <u>13</u>	52. <u>16</u>	53. <u>3</u>	54. <u>1</u>
3rd	55. <u>13</u>	56. <u>06</u>	57. <u>2</u>	58. <u>1</u>
4th	59. <u>13</u>	60. <u>14</u>	61. <u>2</u>	62. <u>1</u>
5th	63. <u>13</u>	64. <u>15</u>	65. <u>2</u>	66. <u>1</u>
6th	67. <u>13</u>	68. <u>07</u>	69. <u>2</u>	70. <u>1</u>
7th	71. <u>12</u>	72. <u>13</u>	73. <u>2</u>	74. <u>1</u>
8th	75. <u>12</u>	76. <u>16</u>	77. <u>2</u>	78. <u>1</u>
9th	79. <u>23</u>	80. <u>13</u>	81. <u>2</u>	82. <u>1</u>
10th	83. <u>12</u>	84. <u>15</u>	85. <u>1</u>	86. <u>1</u>

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): _____

Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

LOCATION OF INTRUSION

- Front Seat**
 (11) Left
 (12) Middle
 (13) Right
- Second Seat**
 (21) Left
 (22) Middle
 (23) Right
- Third Seat**
 (31) Left
 (32) Middle
 (33) Right

- Fourth Seat**
 (41) Left
 (42) Middle
 (43) Right
- (97) Catastrophic
 (98) Other enclosed area (specify) _____
 (99) Unknown

MAGNITUDE OF INTRUSION

- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
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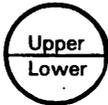
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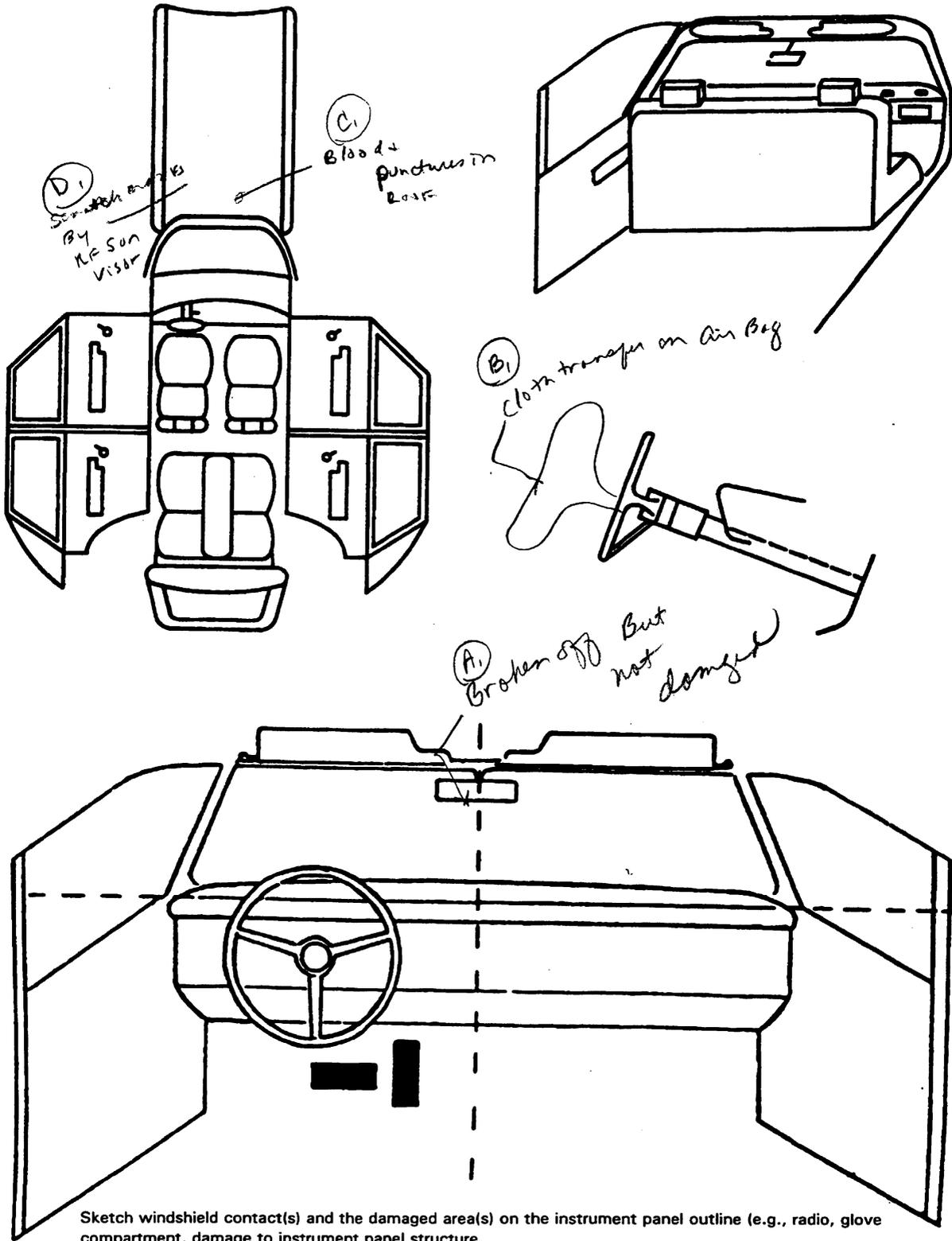
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STEERING COLUMN	INSTRUMENT PANEL
<p>87. Steering Column Type <u>2</u> (1) Fixed column (2) Tilt column (3) Telescoping column (4) Tilt and telescoping column (8) Other column type (specify): _____ (9) Unknown</p> <p>88. Tilt Steering Column Adjustment <u>2</u> (0) No tilt steering column (1) Full up (2) Between full up and center (3) Center (4) Between center and full down (5) Full down (9) Unknown</p> <p>89. Telescoping Steering Column Adjustment <u>0</u> (0) No telescoping steering column (1) Full back (2) Between full back and midpoint (3) Midpoint (4) Between midpoint and full forward (5) Full forward (9) Unknown</p> <p>90. Steering Rim/Spoke Deformation <u>00</u> _____ Code actual measured deformation to the nearest centimeter (00) No steering rim deformation (01-14) Actual measured value in centimeters (15) 15 centimeters or more (98) Observed deformation cannot be measured (99) Unknown</p> <p>91. Location of Steering Rim/Spoke Deformation <u>00</u> Deformation (00) No steering rim deformation</p> <p><i>Quarter Sections</i> (01) Section A (02) Section B (03) Section C (04) Section D</p> <p><i>Half Sections</i> (05) Upper half of rim/spoke (06) Lower half of rim/spoke (07) Left half of rim/spoke (08) Right half of rim/spoke (09) Complete steering wheel collapse (10) Undetermined location (99) Unknown</p>	<p>92. Odometer Reading <u>102</u>,000 _____ kilometers Code to the nearest 1,000 kilometers (000) No odometer (001) Less than 1,500 kilometers (500) 499,500 kilometers or more (999) Unknown <u>063,254</u> miles X 1.6093 = <u>101,794</u> kilometers Source: <u>Beh. Insper</u></p> <p>93. Instrument Panel Damage from Occupant Contact? <u>0</u> (0) No (1) Yes (9) Unknown</p> <p>94. Type of Knee Bolster Covering <u>2</u> (0) No knee bolster (1) Padded (2) Rigid plastic (8) Other (specify): _____ (9) Unknown</p> <p>95. Knee Bolsters Deformed from Occupant Contact? <u>1</u> (0) No knee bolster (1) No deformation (2) Yes - deformation (9) Unknown</p> <p>96. Did Glove Compartment Door Open During Collision(s)? <u>1</u> (0) No glove compartment door (1) No - door did not open (2) Yes - door opened (9) Unknown</p> <p>97. Adaptive (Assistive) Driving Equipment <u>0</u> (0) No adaptive driving equipment (1) Adaptive driving equipment installed (Check all that apply.) <input type="checkbox"/> Hand controls for braking/acceleration <input type="checkbox"/> Steering control devices (attached to OEM steering wheel) <input type="checkbox"/> Steering knob attached to steering wheel <input type="checkbox"/> Low effort power steering (unit or device) <input type="checkbox"/> Replacement steering wheel (i.e., reduced diameter) <input type="checkbox"/> Joy-stick steering controls <input type="checkbox"/> Wheelchair tie-downs <input type="checkbox"/> Modification to seat belts (specify): _____ <input type="checkbox"/> Additional or relocated switches (specify): _____ <input type="checkbox"/> Raised roof <input type="checkbox"/> Wall-mounted head rest (used behind wheelchair) <input type="checkbox"/> Other adaptive device (specify): _____ (9) Unknown</p>



VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).
 Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.
 Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	002	01	Head	Broken obj	3
B	170	01	Chest	Cloth transfer	2
C	205	01	Head	Blood + puncture marks	2
D	205	01	R. Arm	Scratch marks by visor	2
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

- FRONT**
 (001) Windshield
 (002) Mirror
 (003) Sunvisor
 (004) Steering wheel rim
 (005) Steering wheel hub/spoke
 (006) Steering wheel (combination of codes 004 and 005)
 (007) Steering column, transmission selector lever, other attachment
 (008) Cellular telephone or CB radio
 (009) Add on equipment (e.g., tapedeck, air conditioner)
 (010) Left instrument panel and below
 (011) Center instrument panel and below
 (012) Right instrument panel and below
 (013) Glove compartment door
 (014) Knee bolster
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
 (017) Windshield reinforced by exterior object, (specify): _____
 (019) Other front object (specify): _____

- LEFT SIDE**
 (051) Left side interior surface, excluding hardware or armrests
 (052) Left side hardware or armrest
 (053) Left A (A1/A2)-pillar
 (054) Left B-pillar
 (055) Other left pillar (specify): _____
 (056) Left side window glass
 (057) Left side window frame
 (058) Left side window sill
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
 (060) Other left side object (specify): _____
- RIGHT SIDE**
 (101) Right side interior surface, excluding hardware or armrests
 (102) Right side hardware or armrest
 (103) Right A (A1/A2)-pillar
 (104) Right B-pillar
 (105) Other right pillar (specify): _____
 (106) Right side window glass
 (107) Right side window frame
 (108) Right side window sill
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
 (110) Other right side object (specify): _____

- INTERIOR**
 (151) Seat, back support
 (152) Belt restraint webbing/buckle
 (153) Belt restraint B-pillar or door frame attachment point
 (154) Other restraint system component (specify): _____
 (155) Head restraint system
 (160) Other occupants (specify): _____
 (161) Interior loose objects
 (162) Child safety seat (specify): _____
 (163) Other interior object (specify): _____
- AIR BAG**
 (170) Air bag-driver side
 (175) Air bag compartment cover-driver side
 (180) Air bag-passenger side
 (185) Air bag compartment cover-passenger side
 (190) Other air bag (specify) _____
 (195) Other air bag compartment cover (specify) _____
- ROOF**
 (201) Front header
 (202) Rear header
 (203) Roof left side rail
 (204) Roof right side rail
 (205) Roof or convertible top
- FLOOR**
 (251) Floor (including toe pan)
 (252) Floor or console mounted transmission lever, including console
 (253) Parking brake handle
 (254) Foot controls including parking brake

- REAR**
 (301) Backlight (rear window)
 (302) Backlight storage rack, door, etc.
 (303) Other rear object (specify): _____
- ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT**
 (401) Hand controls for braking/acceleration
 (402) Steering control devices (attached to OEM steering wheel)
 (403) Steering knob attached to steering wheel
 (405) Replacement steering wheel (i.e., reduced diameter)
 (406) Joy stick steering controls
 (407) Wheelchair tie-downs
 (408) Modification to seat belts, (specify): _____
 (409) Additional or relocated switches, (specify): _____
 (410) Raised roof
 (411) Wall mounted head rest (used behind wheel chair)
 (412) Other adaptive device (specify): _____

CONFIDENCE LEVEL OF CONTACT POINT	
(1)	Certain
(2)	Probable
(3)	Possible
(9)	Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form. If a child safety seat is present, encode the data on the back of this page 11. If the vehicle has automatic restraints available, encode the appropriate data on page 6.

		Left	Center	Right
F I R S T	A-Availability	4	3	4
	B-Evidence of usage	04	00	04
	C-Used in this crash?	04	00	00
	D-Proper Use	1	0	0
	E-Failure Modes	1	0	0
	F-Anchorage Adjustment	1	0	1
S E C O N D	A-Availability	4	3	4
	B-Evidence of usage	00	00	00
	C-Used in this crash?	00	00	00
	D-Proper Use	0	0	0
	E-Failure Modes	0	0	0
	F-Anchorage Adjustment	1	0	1
O T H E R	A-Availability			
	B-Evidence of usage			
	C-Used in this crash?			
	D-Proper Use			
	E-Failure Modes			
	F-Anchorage Adjustment			

A-Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): _____
- (9) Unknown

B/C-Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): _____

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify): _____
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

D-Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of manual belt system (specify): _____
- (9) Unknown

E-Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other manual belt failure (specify): _____
- (9) Unknown

F-Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Frontal Air Bags--Left Front	Frontal Air Bags--Right Front	Other Air Bag
F I R S T	Availability/Function			
	Deployment			
	Failure			

<p>Air Bag System Availability/Function</p> <p>(0) Not equipped/not available (1) Air bag</p> <p><i>Non-functional</i></p> <p>(2) Air bag disconnected (specify): _____</p> <p>(3) Air bag not reinstalled (9) Unknown</p>	<p>Air Bag System Deployment (This Occupant Position)</p> <p>(0) Not equipped/not available (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, accident sequence undetermined (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown</p>	<p>Are There Indications of Air Bag System Failure? (This Occupant Position)</p> <p>(0) Not equipped/not available (1) No (2) Yes (specify): _____ (9) Unknown</p>
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AUTOMATIC BELTS

		Left	Right
F I R S T	A-Availability/Function		
	B-Use		
	C-Type		
	D-Proper Use		
	E-Failure Modes		

<p>A-Automatic (Passive) Belt System Availability/Function</p> <p>(0) Not equipped/not available (1) 2 point automatic belts (2) 3 point automatic belts (3) Automatic belts - type unknown</p> <p><i>Non-functional</i></p> <p>(4) Automatic belts destroyed or rendered inoperative (9) Unknown</p> <p>B-Automatic (Passive) Belt System Use</p> <p>(0) Not equipped/not available/destroyed or rendered inoperative (1) Automatic belt in use (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (3) Automatic belt use unknown (9) Unknown</p> <p>C-Automatic (Passive) Belt System Type</p> <p>(0) Not equipped/not available (1) Non-motorized system (2) Motorized system (9) Unknown</p>	<p>D-Proper Use of Automatic (Passive) Belt System</p> <p>(0) Not equipped/not available/not used (1) Automatic belt used properly (2) Automatic belt used properly with child safety seat</p> <p><i>Automatic Belt Used Improperly</i></p> <p>(3) Automatic shoulder belt worn under arm (4) Automatic shoulder belt worn behind back (5) Automatic belt worn around more than one person (6) Lap portion of automatic belt worn on abdomen (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____</p> <p>(8) Other improper use of automatic belt system (specify): _____ (9) Unknown</p>	<p>E-Automatic (Passive) Belt Failure Modes During Accident</p> <p>(0) Not equipped/not available/not in use (1) No automatic belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): _____</p> <p>(6) Broken retractor (7) Combination of above (specify): _____ (8) Other automatic belt failure (specify): _____ (9) Unknown</p>
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FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data *for the driver and first seat passenger* in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
A-Type of air bag?	1	
B-Flaps open at tear points?	2	
C-Flaps damaged?	1	
D-Air bag damaged?	0 1	
E-Source of air bag damage	0 1	
F-Air bag tethered?	1	
G-Air bag have vent ports?	2	
H-Other occupant contact air bag?	1	
I-Occupant wearing eyewear?	9	

A-Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

B-Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

C-Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

D-Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify): _____

- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

E-Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify): _____
- (03) Object carried by occupant, (specify): _____
- (04) Adaptive/assistive controls, (specify): _____
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify): _____

- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

F-Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps): _____
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

G-Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports): 2
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

H-Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

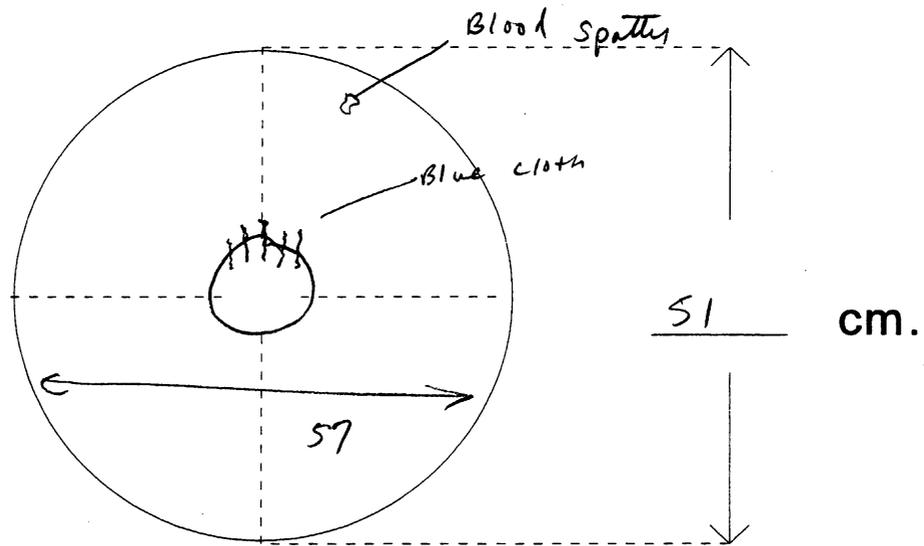
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): _____
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

I-Was This Occupant Wearing Eye-wear?

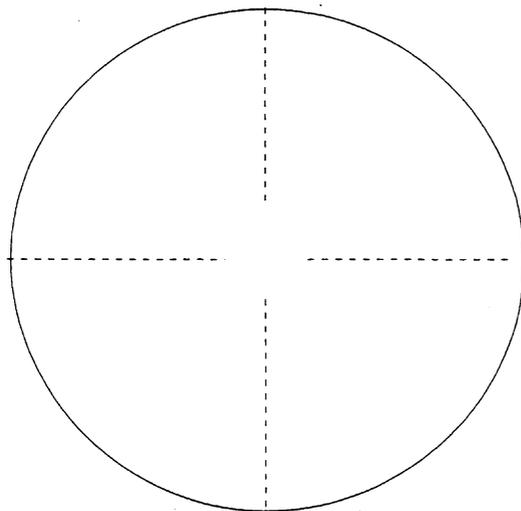
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)



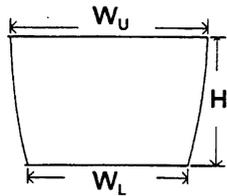
2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)



DRIVER AIR BAG SKETCHES (Cont'd)

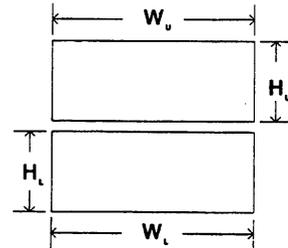
3. DRIVER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W_U) _____ width (W_L) _____
 height (H) _____



4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap b. Lower Flap
 width (W_U) 19.5 width (W_L) 19.5
 height (H_U) 6.5 height (H_L) 3



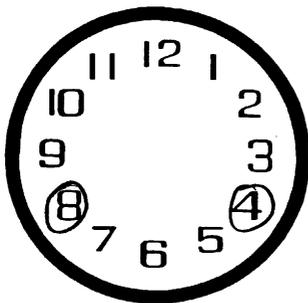
5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

inside upper Flap
w 20
H 6.5

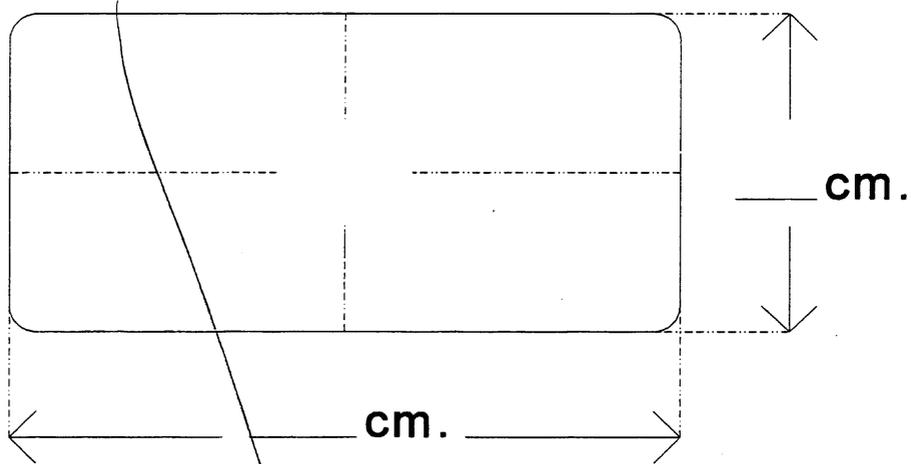
inside Lower Flap
w 19.5
H 3.5

7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS



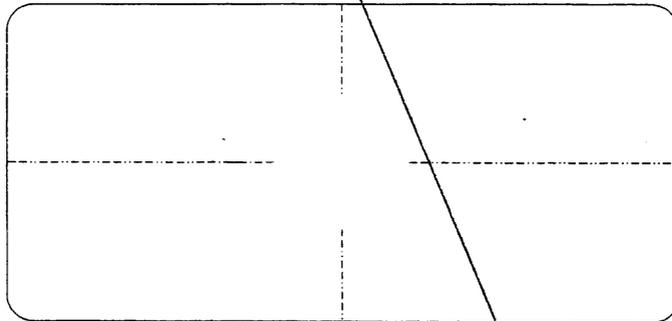
PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)



2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)

NIA

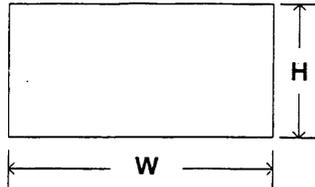


PASSENGER AIR BAG SKETCHES (Cont'd)

3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W) _____

height (H) _____



4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

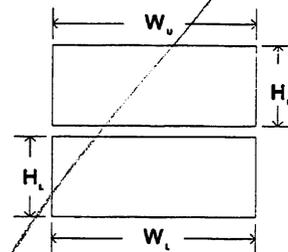
b. Lower Flap

width (W_u) _____

width (W_l) _____

height (H_u) _____

height (H_l) _____

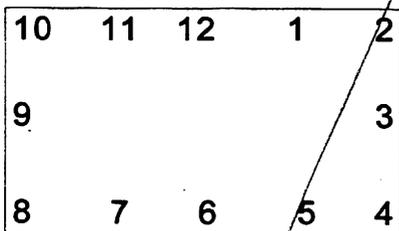


5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

N/A

7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

NIA

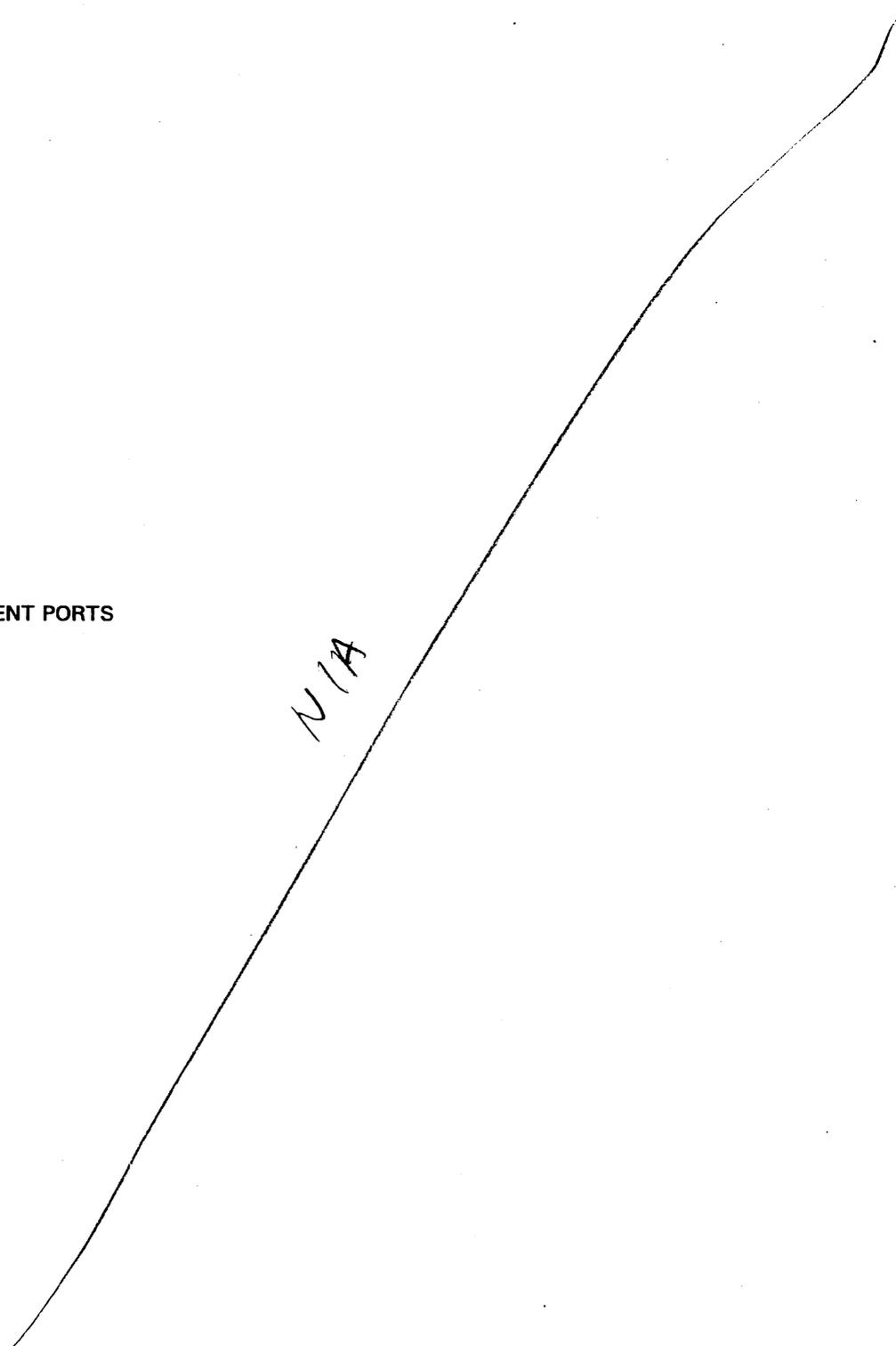
2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

"OTHER" AIR BAG SKETCHES (Cont'd)

3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG

4. SKETCH AIR BAG VENT PORTS

N/A



HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	A-Head Restraint Type/Damage	3	0	3
	B-Seat Type	03	03	03
	C-Seat Orientation	1	1	1
	D-Seat Track Position	5	5	5
	E-Seat Back Incline Pre/Post Impact	01	01	01
	F-Seat Performance	1	1	1
SECOND	A-Head Restraint Type/Damage	0	0	0
	B-Seat Type	03	03	03
	C-Seat Orientation	1	1	1
	D-Seat Track Position	1	1	1
	E-Seat Back Incline Pre/Post Impact	01	01	01
	F-Seat Performance	4	4	4
THIRD	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
OTHER	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

Seat cushion came up

**DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)**

HEAD RESTRAINTS/SEAT EVALUATION

A-Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other
Specify: _____
- (9) Unknown

B-Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Box mounted seat (i.e., van type)
- (10) Other seat type (specify): _____
- (99) Unknown

C-Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____
- (9) Unknown

D-Seat Track Adjusted Position Prior To Impact

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

Adjustable Seat Track

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

E-Seat Back Incline Prior and Post Impact

- (00) Occupant not seated or no seat
- (01) Not adjustable

Upright prior to impact

- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

Slightly reclined prior to impact

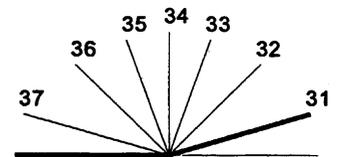
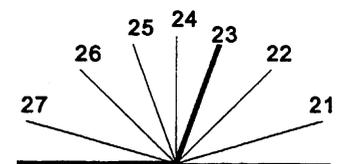
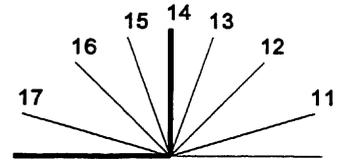
- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

Completely reclined prior to impact

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position
- (99) Unknown

F-Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): _____
- (4) _____
Seat tracks/anchors failed
- (5) _____
Deformed by impact of occupant
- (6) _____
Deformed by passenger compartment intrusion (specify): _____
- (7) _____
Combination of above (specify): _____
- (8) _____
Other (specify): _____
- (9) Unknown



Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

- 5. Child Safety Seat Tether Usage**
Note: Options Below Are Used for Variables 3-5.
- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

6. Child Safety Seat Make/Model
(Specify make/model and occupant number)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [] Yes []

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

Ejection Area

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

(7) Roof

- (8) Other area (e.g., back of pickup, etc.) (specify): _____

- (9) Unknown

Ejection Medium

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____

(5) Integral structure

- (8) Other medium (specify): _____

- (9) Unknown

Medium Status (Immediately Prior to Impact)

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

ENTRAPMENT No [] Yes []

Describe entrapment mechanism: _____

Component(s): _____

(Note on vehicle interior sketch)



OCCUPANT ASSESSMENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 75
 2. Case Number - Stratum 097E
 3. Vehicle Number 02
 4. Occupant Number 01

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 38
 Code actual age at time of accident.
 (00) Less than one year old (specify by month):

 (97) 97 years and older
 (99) Unknown

6. Occupant's Sex 1
 (1) Male
 (2) Female-not reported pregnant
 (3) Female-pregnant-1st trimester(1st-3rd month)
 (4) Female-pregnant-2nd trimester(4th-6th month)
 (5) Female-pregnant-3rd trimester(7th-9th month)
 (6) Female-pregnant-term unknown
 (9) Unknown

7. Occupant's Height 999
 Code actual height to the nearest
 centimeter.
 (999) Unknown
 _____ inches X 2.54 = _____ centimeters

8. Occupant's Weight 999
 Code actual weight to the nearest
 kilogram.
 (999) Unknown
 _____ pounds X .4536 = _____ kilograms

9. Occupant's Role 1
 (1) Driver
 (2) Passenger
 (9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position 11
Front Seat
 (11) Left side
 (12) Middle
 (13) Right side
 (14) Other (specify): _____
 (15) On or in the lap of another occupant

Second Seat
 (21) Left side
 (22) Middle
 (23) Right side
 (24) Other (specify): _____
 (25) On or in the lap of another occupant

Third Seat
 (31) Left side
 (32) Middle
 (33) Right side
 (34) Other (specify): _____
 (35) On or in the lap of another occupant

Fourth Seat
 (41) Left side
 (42) Middle
 (43) Right side
 (44) Other (specify): _____
 (45) On or in the lap of another occupant

(97) In or on unenclosed area
 (98) Other seat (specify): _____
 (99) Unknown

11. Occupant's Posture 9
 (0) Normal posture

Abnormal posture
 (1) Kneeling or standing on seat
 (2) Lying on or across seat
 (3) Kneeling, standing or sitting in front of seat
 (4) Sitting sideways or turned to talk with
 another occupant or to look out a rear
 window
 (5) Sitting on a console
 (6) Lying back in a reclined seat position
 (7) Bracing with feet or hands on a surface in
 front of seat
 (8) Other abnormal posture (specify): _____
 (9) Unknown

EJECTION/ENTRAPMENT

12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

- (5) Integral structure
- (8) Other medium (specify):

- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 2

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.
(specify): vehicle on its roof
hanging from seat belt
- (9) Unknown

17. Occupant Mobility 94

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons
(specify): _____
- (9) Unknown

BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): _____

(9) Unknown _____

19. Manual (Active) Belt System Use 04

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): _____

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify): _____

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 1 g

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of manual belt system (specify): _____

(9) Unknown _____

21. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor _____

(7) Combination of above (specify): _____

(8) Other manual belt failure (specify): _____

(9) Unknown _____

22. Manual Shoulder Belt Upper Anchorage Adjustment 1

- (0) No manual shoulder belt
- (1) No upper anchorage adjustment for manual shoulder belt

Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify): _____

(8) Other improper use of automatic belt system (specify): _____

(9) Unknown _____

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____

(6) Broken retractor _____

(7) Combination of above (specify): _____

(8) Other automatic belt failure (specify): _____

(9) Unknown _____

POLICE REPORTED RESTRAINT USE

AIR BAG SYSTEM FUNCTION

28. Police Reported Belt Use 5
- (0) None used
 - (1) Police did not indicate belt use
 - (2) Shoulder belt
 - (3) Lap belt
 - (4) Lap and shoulder belt
 - (5) Belt used, type not specified
 - (6) Child safety seat
 - (7) Automatic belt
 - (8) Other type belt, (specify):
- _____
- (9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 1
- (0) No air bag available
 - (1) Police did not indicate air bag availability/function
 - (2) Deployed
 - (3) Not deployed
 - (4) Unknown if deployed
 - (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- Vehicle inspection
 - Official injury data
 - Driver/occupant interview
 - Other (specify):
- _____
- Unknown if belt used
- _____
- _____
- _____
- _____

30. Frontal Air Bag System Availability/Function 1
(This Occupant Position)
- (0) Not equipped/not available
 - (1) Air bag
- Non-functional*
- (2) Air bag disconnected (specify):
- _____
- (3) Air bag not reinstalled
 - (9) Unknown

31. Frontal Air Bag System Deployment 1
(This Occupant Position)
- (0) Not equipped/not available
 - (1) Deployed during accident (as a result of impact)
 - (2) Deployed inadvertently just prior to accident
 - (3) Deployed, details unknown
 - (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 - (5) Unknown if deployed
 - (7) Nondeployed
 - (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function 0
(This Occupant Position)
- (0) Not equipped/not available
 - (1) Air bag
- Non-functional*
- (2) Air bag disconnected (specify):
- _____
- (3) Air bag not reinstalled
 - (9) Unknown
- Specify type of "other" air bag present:*
- _____

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0
- (0) Not equipped with an "other" air bag
 - (1) Deployed during accident (as a result of impact)
 - (2) Deployed inadvertently just prior to accident
 - (3) Deployed, details unknown
 - (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 - (5) Unknown if deployed
 - (7) Nondeployed
 - (9) Unknown

34. Are There Indications of Air Bag System Failure? 1
(This Occupant Position)
- (0) Not equipped/not available
 - (1) No
 - (2) Yes (specify):
- _____
- (9) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 9 X
 (0) Not equipped/not available
 (1) No previous accidents

 Yes
 (2) Previous accident(s) without deployment(s)
 (3) One previous accident with deployment
 (4) More than one previous accident with at least one deployment
 (8) Previous accidents, unknown deployment status
 (9) Unknown

36. Type of Air Bag 9 X
 (0) Not equipped/not available
 (1) Original manufacturer installed system
 (2) Retrofitted air bag
 (3) Replacement air bag
 (8) Unknown type of air bag
 (9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 9 X
 (0) Not equipped/not available
 (1) No prior maintenance
 (2) Yes, prior maintenance (specify): _____
 (9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01
 (00) Not equipped/not available
 _____ Code the accident event sequence number that initiated the air bag deployment
 (96) Deployed, unknown event
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown

39. CDC For Air Bag Deployment Impact 1
 (0) Not equipped/not available
 (1) Highest delta V
 (2) Second highest delta V
 (3) Other non-coded delta V (specify): _____
 (6) Deployed, unknown event
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 0.16
 (000) Not equipped/not available -0.25
 Code the value of the delta V for the impact that initiated the air bag deployment
 (996) Deployment, unknown longitudinal Delta V
 (997) Not deployed
 (998) Unknown if deployed
 (999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes
 (3) Deployed, unknown if flap(s) opened at designated tear points
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 1
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify): _____
 (3) Deployed, unknown if air bag module cover flap(s) damaged
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

43. Was There Damage To The Air Bag? 01
 (00) Not equipped/not available
 (01) Not damaged

 Yes - Air Bag Damage
 (02) Ruptured
 (03) Cut
 (04) Torn
 (05) Holed
 (06) Burned
 (07) Abraded
 (88) Other damage (specify): _____
 (95) Damaged, details unknown
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM
EVALUATION** *continued*

44. Source of Air Bag Damage 01
 (00) Not equipped/not available
 (01) Not damaged
 (02) Object worn by occupant, (specify):

 (03) Object carried by occupant, (specify):

 (04) Adaptive/assistive controls, (specify):

 (05) Fire in vehicle
 (06) Thermal burns
 (07) Rescue or emergency efforts
 (88) Other damage source (specify):

 (95) Damaged, unknown source
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown
45. Was The Air Bag Tethered? 1
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of tether straps):

 (3) Deployed, unknown if tethered
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of vent ports):
2

 (3) Deployed, unknown if vent ports present
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify):

 (3) Deployed, unknown if other occupant contact to air bag
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 4
 (0) Not air bag equipped/air bag not available
 (1) No
 (2) Eyeglasses/sunglasses
 (3) Contact lenses
 (4) Deployed, unknown if eyewear worn
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3
 (0) No head restraints
 (1) Integral—no damage
 (2) Integral—damaged during accident
 (3) Adjustable—no damage
 (4) Adjustable—damaged during accident
 (5) Add-on—no damage
 (6) Add-on—damaged during accident
 (8) Other (specify):

 (9) Unknown
50. Seat Type (this Occupant Position) 03
 (00) Occupant not seated or no seat
 (01) Bucket
 (02) Bucket with folding back
 (03) Bench
 (04) Bench with separate back cushions
 (05) Bench with folding back(s)
 (06) Split bench with separate back cushions
 (07) Split bench with folding back(s)
 (08) Pedestal (i.e., column supported)
 (09) Box mounted seat (i.e., van type)
 (10) Other seat type (specify):

 (99) Unknown
51. Seat Orientation (this Occupant Position) 1
 (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):

 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 5
 (0) Occupant not seated or no seat
 (1) Non-adjustable seat track

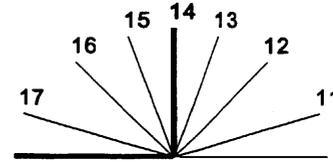
Adjustable Seat Track
 (2) Seat at forward most track position
 (3) Seat between forward most and middle track positions
 (4) Seat at middle track position
 (5) Seat between middle and rear most track positions
 (6) Seat at rear most track position
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*

53. Seat Back Incline Prior and Post Impact 01
 (00) Occupant not seated or no seat
 (01) Not adjustable

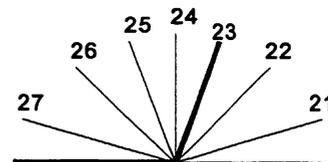
Upright prior to impact

- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position



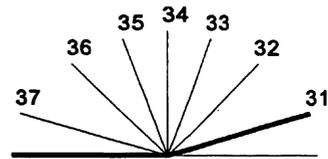
Slightly reclined prior to impact

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position



Completely reclined prior to impact

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position
- (99) Unknown



54. Seat Performance (this Occupant Position) 1
 (0) Occupant not seated or no seat
 (1) No seat performance failure(s)
 (2) Seat adjusters failed
 (3) Seat back folding locks or "seat back" failed
 (specify): _____
 (4) Seat track/anchors failed
 (5) Deformed by impact of occupant
 (6) Deformed by passenger compartment intrusion, (specify): _____

 (7) Combination of above (specify): _____

 (8) Other (specify): _____
 (9) Unknown

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 000
 (000) No child safety seat
 Applicable codes are found in your NASS CDS
 Data Collection, Coding and Editing
 (950) Built-in child safety seat
 (997) Other make/model (specify):

 (998) Unknown make/model
 (999) Unknown if child safety seat used

56. Type of Child Safety Seat 0
 (0) No child safety seat
 (1) Infant seat
 (2) Toddler seat
 (3) Convertible seat
 (4) Booster seat - with shield
 (5) Booster seat - without shield
 (7) Other type child safety seat (specify):

 (8) Unknown child safety seat type
 (9) Unknown if child safety seat used

57. Child Safety Seat Orientation 00
 (00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing
 (02) Forward facing
 (08) Other orientation (specify):

 (09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing
 (12) Forward facing
 (18) Other orientation (specify):

 (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

(21) Rear facing
 (22) Forward facing
 (28) Other orientation (specify):

 (29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 00

59. Child Safety Seat Shield Usage 00

60. Child Safety Seat Tether Usage 00

Note: Options below applicable to
 Variables OA58-OA60.

(00) No child safety seat

Not Designed With Harness/Shield/Tether

(01) After market harness/shield/tether
 added, not used
 (02) After market harness/shield/tether used
 (03) Child safety seat used, but no after market
 harness/shield/tether added
 (09) Unknown if harness/shield/tether
 added or used

Designed With Harness/Shield/Tether

(11) Harness/shield/tether not used
 (12) Harness/shield/tether used
 (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used
 (22) Harness/shield/tether used
 (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES

61. Injury Severity (Police Rating)

1

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality

4

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
 - (4) Transported and released
 - (5) Treatment at scene - nontransported
 - (6) Treatment later
 - (7) Treatment - other (specify):
- _____
- (8) Transported to a medical facility-unknown if treated
 - (9) Unknown

63. Type Of Medical Facility (for Initial Treatment)

1

- (0) Not treated at a medical facility
 - (1) Trauma center
 - (2) Hospital
 - (3) Medical clinic
 - (4) Physician's office
 - (5) Treatment later at medical facility
 - (8) Other (specify):
- _____
- (9) Unknown

64. Hospital Stay

00

- (00) Not Hospitalized
- Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
 - (99) Unknown

65. Working Days Lost

99

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
 - (61) 61 days or more
 - (62) Fatally injured
 - (97) Not working prior to accident
 - (99) Unknown

STOP WORK HERE

VARIABLES 66-74

TO BE CODED BY THE ZONE CENTER

TO BE CODED BY THE ZONE CENTER

INJURY CONSEQUENCES

TRAUMA DATA

66. Time to Death 00
Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
(00) Not fatal
(96) Fatal - ruled disease
(99) Unknown

67. 1st Medically Reported Cause of Death 00

68. 2nd Medically Reported Cause of Death 00

69. 3rd Medically Reported Cause of Death 00
Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
(00) Not fatal or no additional causes
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant 97
Code the actual number of injuries recorded for this occupant.
(00) No recorded injuries
(97) Injured, details unknown
(99) Unknown if injured

71. Glasgow Coma Scale (GCS) Score 97
(at Medical Facility)
(00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.
(97) Injured, details unknown
(99) Unknown if injured

72. Was the Occupant Given Blood? 9
(1) No - blood not given
(2) Yes - blood given (specify units):
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO3 97
(00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO3
(96) ABGs reported, HCO3 unknown
(97) Injured, details unknown
(99) Unknown if injured

BELT USE DETERMINATION

74. Primary Source of Belt Use Determination 1
(0) Not equipped/not available/destroyed or rendered inoperative
(1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify):
(9) Unknown if belt used

PSU NUMBER	<u>75</u>
CASE NUMBER	<u>D97E</u>
VEHICLE NUMBER	<u>02</u>
OCCUPANT NUMBER	<u>01</u>

OCCUPANT INJURY FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

ENTIRE FORM

PAGE NUMBER (S) _____



SMASH PROGRAM SUMMARY

(All Measurements In Metric)

Identifying Title

75 097E 01 [REDACTED] 96
 Primary Case No.-Stratum Accident Event Date (Month, day, year) of Run
 Sampling Unit Sequence No.

GENERAL INFORMATION

VEHICLE 1		VEHICLE 2	
NASS Vehicle Number	<u>01</u>	NASS Vehicle Number	<u>02</u>
Year	<u>1994</u>	Year	<u>1991</u>
Make	<u>Saturn</u>	Make	<u>Chevrolet</u>
Model	<u>SL-2</u>	Model	<u>Caprice</u>
Body Style	<u>4S</u>	Body Style	<u>4S</u>
CDC	<u>01FREE7</u>	CDC	<u>11FDEW3</u>
Damaged Side	<u> </u>	Damaged Side	<u> </u>
PDOF	<u>±030°</u>	PDOF	<u>±020°</u>
Heading Angle	<u>±130°</u>	Heading Angle	<u>±000°</u>

VEHICLE SPECIFICATIONS

VEHICLE 1		VEHICLE 2	
Wheelbase	<u>260</u> cm	Wheelbase	<u>294</u> cm
Overall Length	<u>448</u> cm	Overall Length	<u>544</u> cm
Overall Width	<u>172</u> cm	Overall Width	<u>196</u> cm
Weight	<u>1091</u> + <u>58</u> + <u>0</u> = <u>1149</u> kg Curb Occupant(s) Cargo	Weight	<u>1772</u> + <u>80</u> + <u>0</u> = <u>1852</u> kg Curb Occupant(s) Cargo
Engine Displacement	<u>1.9</u> L	Engine Displacement	<u>5.7</u> L
Drive System	<u>FWD</u>	Drive System	<u>RWD</u>
Size	<u>3</u>	Size	<u>4</u>
Stiffness	<u>3</u>	Stiffness	<u>4</u>

DAMAGE INFORMATION

VEHICLE 1		VEHICLE 2	
Damage known?	<u>Y</u>	Damage known?	<u>Y</u>
Damage Length	<u>123</u> cm	Damage Length	<u>160</u> cm
Damage Offset	<u>±046</u> cm	Damage Offset	<u>±000</u> cm
Crush Depth:	C1 <u>002</u> cm	Crush Depth:	C1 <u>011</u> cm
	C2 <u>002</u> cm		C2 <u>039</u> cm
	C3 <u>005</u> cm		C3 <u>041</u> cm
	C4 <u>009</u> cm		C4 <u>051</u> cm
	C5 <u>020</u> cm		C5 <u>063</u> cm
	C6 <u>037</u> cm		C6 <u>068</u> cm

SCENE INFORMATION

Rest and Impact Positions No Yes

	VEHICLE 1		VEHICLE 2		
Rest	X	_____ . ____ m	Rest	X	_____ . ____ m
Position	Y	_____ . ____ m	Position	Y	_____ . ____ m
	PSI	_____ °		PSI	_____ °
Impact	X	_____ . ____ m	Impact	X	_____ . ____ m
Position	Y	_____ . ____ m	Position	Y	_____ . ____ m
	PSI	_____ °		PSI	_____ °
Slip Angle (-180 to +180)		_____ °	Slip Angle (-180 to +180)		_____ °

VEHICLE MOTION

Sustained Contact <input type="checkbox"/> No <input type="checkbox"/> Yes		Sustained Contact <input type="checkbox"/> No <input type="checkbox"/> Yes	
VEHICLE 1		VEHICLE 2	
Vehicle Rotation <input type="checkbox"/> No <input type="checkbox"/> Yes	Vehicle Rotation <input type="checkbox"/> No <input type="checkbox"/> Yes	Vehicle Rotation <input type="checkbox"/> No <input type="checkbox"/> Yes	Vehicle Rotation <input type="checkbox"/> No <input type="checkbox"/> Yes
Rotation Stop Before Rest <input type="checkbox"/> No <input type="checkbox"/> Yes	Rotation Stop Before Rest <input type="checkbox"/> No <input type="checkbox"/> Yes	Rotation Stop Before Rest <input type="checkbox"/> No <input type="checkbox"/> Yes	Rotation Stop Before Rest <input type="checkbox"/> No <input type="checkbox"/> Yes
End of Rotation	X _____ . ____ m	End of Rotation	X _____ . ____ m
Position	Y _____ . ____ m	Position	Y _____ . ____ m
	PSI _____ °		PSI _____ °
Curved Path <input type="checkbox"/> No <input type="checkbox"/> Yes		Curved Path <input type="checkbox"/> No <input type="checkbox"/> Yes	
Point on Path	X _____ . ____ m Y _____ . ____ m	Point on Path	X _____ . ____ m Y _____ . ____ m
Rotation Direction <input type="checkbox"/> None <input type="checkbox"/> CW <input type="checkbox"/> CCW	Rotation Direction <input type="checkbox"/> None <input type="checkbox"/> CW <input type="checkbox"/> CCW	Rotation Direction <input type="checkbox"/> None <input type="checkbox"/> CW <input type="checkbox"/> CCW	Rotation Direction <input type="checkbox"/> None <input type="checkbox"/> CW <input type="checkbox"/> CCW
Rotation >360° <input type="checkbox"/> No <input type="checkbox"/> Yes	Rotation >360° <input type="checkbox"/> No <input type="checkbox"/> Yes	Rotation >360° <input type="checkbox"/> No <input type="checkbox"/> Yes	Rotation >360° <input type="checkbox"/> No <input type="checkbox"/> Yes

FRICTION INFORMATION

Coefficient of Friction _____

Rolling Resistance Option 1

Vehicle 1 Rolling Resistance	Vehicle 2 Rolling Resistance
LF _____ RF _____	LF _____ RF _____
LR _____ RR _____	LR _____ RR _____

IF THIS COMMON IMPACT WAS WITH A CDS VEHICLE NOT IN TRANSPORT, FILL IN THE INFORMATION BELOW.

Model Year: _____

Make: _____

Model: _____

VIN: _____

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

Complete and ATTACH the appropriate damage sketch and dimensions to the form.

Summary of Results Using Damage

p75-097E 1st event damage run.

Speed Change
(Damage)

Vehicle #1

Total 43 km/h (27 mph)
 Longitudinal -37 km/h (-23 mph)
 Latitudinal -21 km/h (-13 mph)
 PDOF Angle 30 °
 Energy Dissipated = 23804 Joules (17555 Ft-Lb)
 Barrier Equivalent Speed = 22.0 km/h (13.7 mph)
 Calculated using size and stiffness categories.

Vehicle #2

Total 27 km/h (17 mph)
 Longitudinal -25 km/h (-16 mph)
 Latitudinal 9 km/h (6 mph)
 PDOF Angle -20 °
 Energy Dissipated = 128525 Joules (94782 Ft-Lb)
 Barrier Equivalent Speed = 38.4 km/h (23.9 mph)
 Calculated using crush coefficients found in the vehicle database.

General Information

	Vehicle #1	Vehicle #2
	-----	-----
Year	1994	1991
Make	Saturn	Chevrolet
Model	SL2	Caprice
CDC	01FREE7	11FDEW3
Side Damaged	F	F
PDOF Angle	30 °	-20 °
Heading Angle	130 °	0 °

Calculation method:	Size and Stiffness	Calculated Crush Coeff.
Size Category	3	**
Stiffness Category	3	**
Vehicle Weight	1149 kgs (2533 lbs)	**
d0 crush coeff.	***** sqrt(N)	109.88 sqrt(N)
d1 crush coeff.	***** sqrt(N)/cm	6.02 sqrt(N)/cm

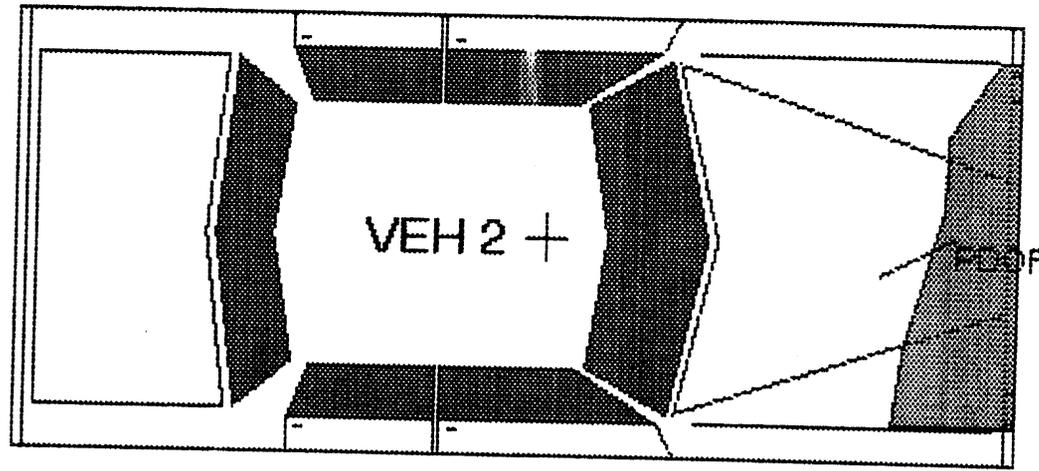
Damage Information

Vehicle Damage Known	Vehicle #1	Vehicle #2
	----- Yes	----- Yes
Crush Length	123.0 cm (48 in)	160.0 cm (63 in)
C1	2.0 cm (1 in)	11.0 cm (4 in)
C2	2.0 cm (1 in)	39.0 cm (15 in)
C3	5.0 cm (2 in)	41.0 cm (16 in)
C4	9.0 cm (4 in)	51.0 cm (20 in)
C5	20.0 cm (8 in)	63.0 cm (25 in)
C6	37.0 cm (15 in)	68.0 cm (27 in)
D	46.0 cm (18 in)	0.0 cm (0 in)
D'	75.7 cm (30 in)	14.1 cm (6 in)

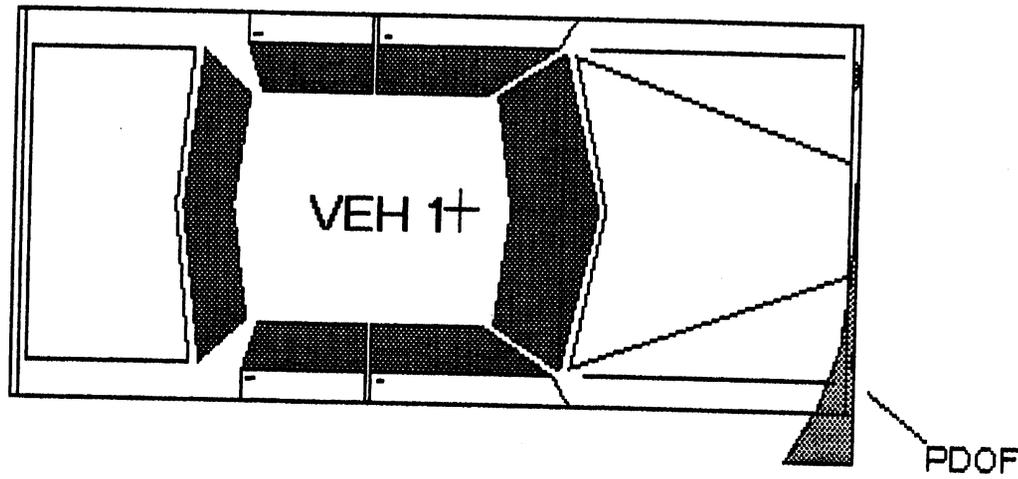
Vehicle Dimensions

	Vehicle #1	Vehicle #2
	-----	-----
Length	448.0 cm (176 in)	543.8 cm (214 in)
Width	172.0 cm (68 in)	195.6 cm (77 in)
Wheelbase	260.0 cm (102 in)	294.4 cm (116 in)
Weight	1149 kgs (2533 lbs)	1852 kgs (4083 lbs)
CG to Front of Veh	228.1 cm (90 in)	205.7 cm (81 in)
Engine Displacement	1.9 liters	5.7 liters
Moment of Inertia	208341 kgs (18441 lbs)	494544 kgs (43773 lbs)
Vehicle Mass	1149 kgs (6.6 lb-s ² /in)	1852 kgs (10.6 lb-s ² /in)

1991 Chevrolet Caprice



1994 Saturn SL2



final

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75097E00010012 [REDACTED] 969.0010000000000102F0205F
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046 12303126014301000202040101001000
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52101011214303150110000000000014100990000000097979971

INTERIOR VEHICLE Vehicle: 1

11

INTRA ERRORS

OCC0541 2 ***** THIS CASE SHOWS A POSSIBLE HOLED WINDSHIELD. *****
CC0542 ***** CHECK YOUR DATA AND IF CORRECT, NOTIFY YOUR ZONE *****
CC0543 GLAZING WINDSHIELD IV31 equals 3 or 5 or CONTACT WINDSHIELD IV39
CC0544 equals 4 or 6.

0

OCCUPANT ASSESSMENT Vehicle: 1 Occupant: 1

11

INTRA ERRORS

OHH2001 2 If AIR BAG AVAILABILITY/FUNCTION OA30 equals 1-3, then AUTOMATIC
HH2002 BELT AVAILABILITY OA23 should equal 0.

0

GENERAL VEHICLE Vehicle: 2

11

INTRA ERRORS

OGG0421 2 If ROLLOVER GV45 equals 01-17 or 98, then BASIS FOR DELTA V GV58
GG0422 should equal 04-10.

01

PSU75

ERROR SUMMARY SCREEN

96

CASE 097E

CURRENT VERSION: 9.00

FORM NAME	NUMBER OF DOLLAR SIGNS	NUMBER OF LEVEL 1 ERRORS	NUMBER OF LEVEL 2 ERRORS	VERSION NUMBER CONSISTENT
Accident	0	0	0	Y
General Vehicle	0	0	1	Y
Vehicle Exterior	0	0	0	Y
Vehicle Interior	0	0	1	Y
Occupant Assessment	0	0	1	Y
Occupant Injury	0	0	0	Y
Total Inter Errors		0	0	
Total Case Errors	0	0	3	

0

Final

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03546000128790721 0405
75097E00010012 969.0410000000000102F0205F
75097E00020012 969.0410000000000205T3100N
75097E01000021 9.04 000000000942400104168ZK5577RZ 01999064096008021492
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52101011214303150110000000000014100990000000097979971

INTERIOR VEHICLE Vehicle: 1

11

INTRA ERRORS

OCC0541 2 ***** THIS CASE SHOWS A POSSIBLE HOLED WINDSHIELD. *****
CC0542 ***** CHECK YOUR DATA AND IF CORRECT, NOTIFY YOUR ZONE *****
CC0543 GLAZING WINDSHIELD IV31 equals 3 or 5 or CONTACT WINDSHIELD IV39
CC0544 equals 4 or 6.

0

OCCUPANT ASSESSMENT Vehicle: 1 Occupant: 1

11

INTRA ERRORS

OHH2001 2 If AIR BAG AVAILABILITY/FUNCTION DA30 equals 1-3, then AUTOMATIC
HH2002 BELT AVAILABILITY DA23 should equal 0.

0

GENERAL VEHICLE Vehicle: 2

11

INTRA ERRORS

OGG0421 2 If ROLLOVER GV45 equals 01-17 or 98, then BASIS FOR DELTA V GV58
GG0422 should equal 04-10.

01

PSU75

ERROR SUMMARY SCREEN

97

CASE 097E

CURRENT VERSION: 9.04

FORM NAME	NUMBER OF DOLLAR SIGNS	NUMBER OF LEVEL 1 ERRORS	NUMBER OF LEVEL 2 ERRORS	VERSION NUMBER CONSISTENT
Accident	0	0	0	Y
General Vehicle	0	0	1	Y
Vehicle Exterior	0	0	0	Y
Vehicle Interior	0	0	1	Y
Occupant Assessment	0	0	1	Y
Occupant Injury	0	0	0	Y
Total Inter Errors		0	0	
Total Case Errors	0	0	3	

0



PSU 75-097E (1996) #1



PSU 75-097E (1998) #2



PSU 75-097E (1996) #3



PSU 75-097E (1996) #4



PSU 75-097E (1996) #5



PSU 75-097E (1996) #6



PSU 75-097E (1998) #7



PSU 75-097E (1996) #8



PSU 75-097E (1996) #9



PSU 75-097E (1996) #10



PSU 75-097E (1996) #11



PSU 75-097E (1998) #12



PSU 75-097E (1996) #13



PSU 75-097E (1996) #14



PSU 75-097E (1996) #15



PSU 75-097E (1996) #16



PSU 75-097E (1998) #17



PSU 75-097E (1996) #18



PSU 75-097E (1996) #19



PSU 75-097E (1996) #20



PSU 75-087E (1996) #21



PSU 75-097E (1996) #22



PSU 75-097E (1996) #23



PSU 75-097E (1996) #24



PSU 75-097E (1996) #25



PSU 75-097E (1996) #26



PSU 75-097E (1996) #27



PSU 75-097E (1998) #28



PSU 75-097E (1996) #29



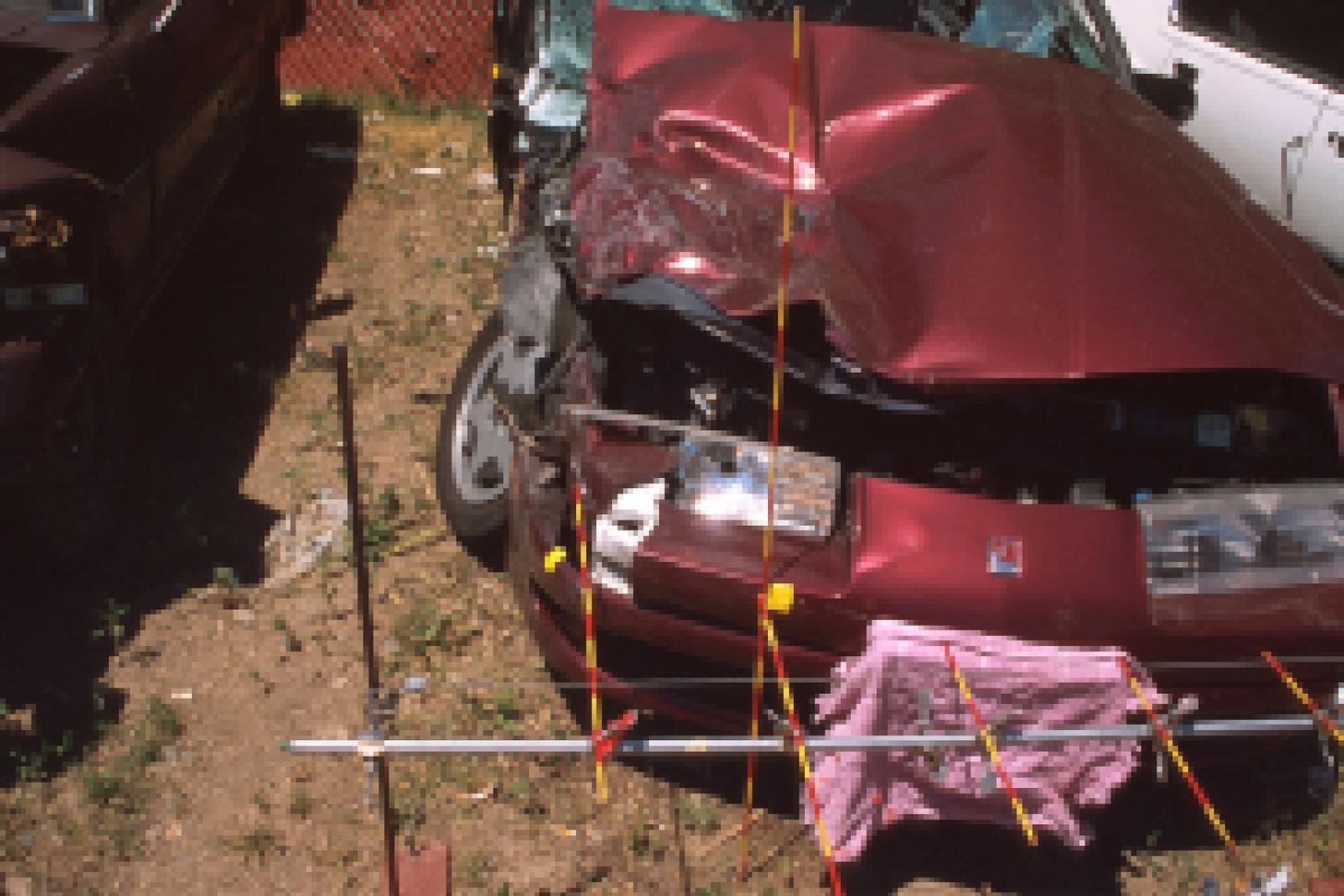
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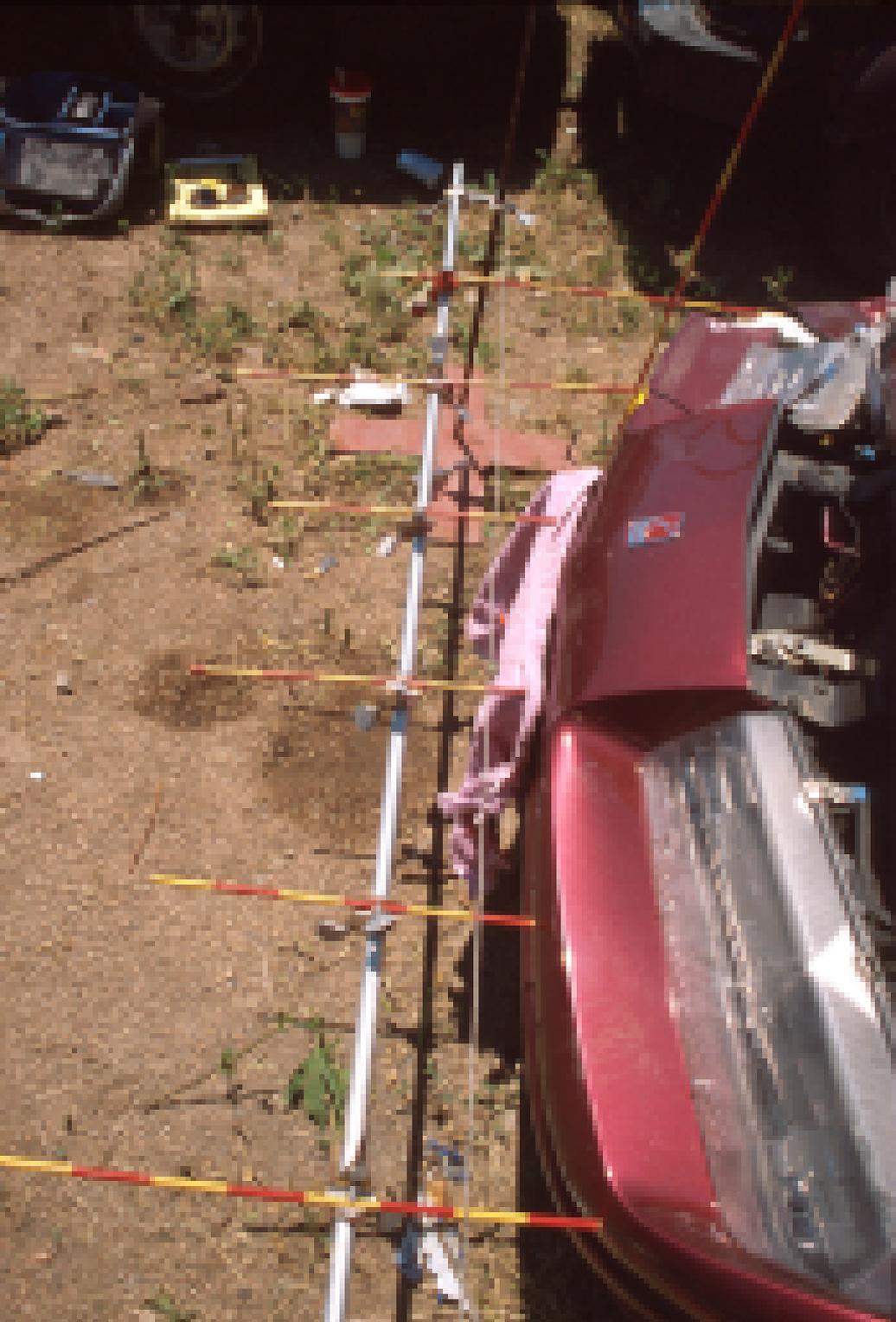
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PSU 75-097E (1998) #32



PSU 75-097E (1996) #33



PSU 75-097E (1998) #34



PSU 75-097E (1996) #35



PSU 75-097E (1986) #38



PSU 75-087E (1986) #37



PSU 75-087E (1998) #38



PSU 75-097E (1996) #39



PSU 75-097E (1996) #40



PSU 75-097E (1996) #41



PSU 75-097E (1996) #42



PSU 75-097E (1996) #43



PSU 75-097E (1996) #44



PSU 75-097E (1996) #45



PSU 75-097E (1996) #46



PSU 75-087E (1998) #47



PSU 75-097E (1996) #48



PSU 75-097E (1996) #49



PSU 75-097E (1996) #50



PSU 75-097E (1996) #51



PSU 75-097E (1996) #52



PSU 75-097E (1996) #53



PSU 75-097E (1996) #54



PSU 75-097E (1996) #55



PSU 75-097E (1996) #56



PSU 75-097E (1996) #57



PSU 75-097E (1996) #58



PSU 75-097E (1996) #59



PSU 75-097E (1995) #60



PSU 75-097E (1996) #61



PSU 75-097E (1996) #82



PSU 75-097E (1996) #63



PSU 75-097E (1998) #64



PSU 75-097E (1996) #85



PSU 75-097E (1996) #66



PSU 75-097E (1996) #67



PSU 75-097E (1996) #68



FSU 75-097E (1996) #89



PSU 75-097E (1996) #70



PSU 75-097E (1996) #71



PSU 75-097E (1996) #72



PSU 75-097E (1996) #73



PSU 75-087E (1996) #74



PSU 75-097E (1986) #75



PSU 75-097E (1996) #78



PSU 75-097E (1996) #77



PSU 75-097E (1996) #78



PSU 75-097E (1996) #79



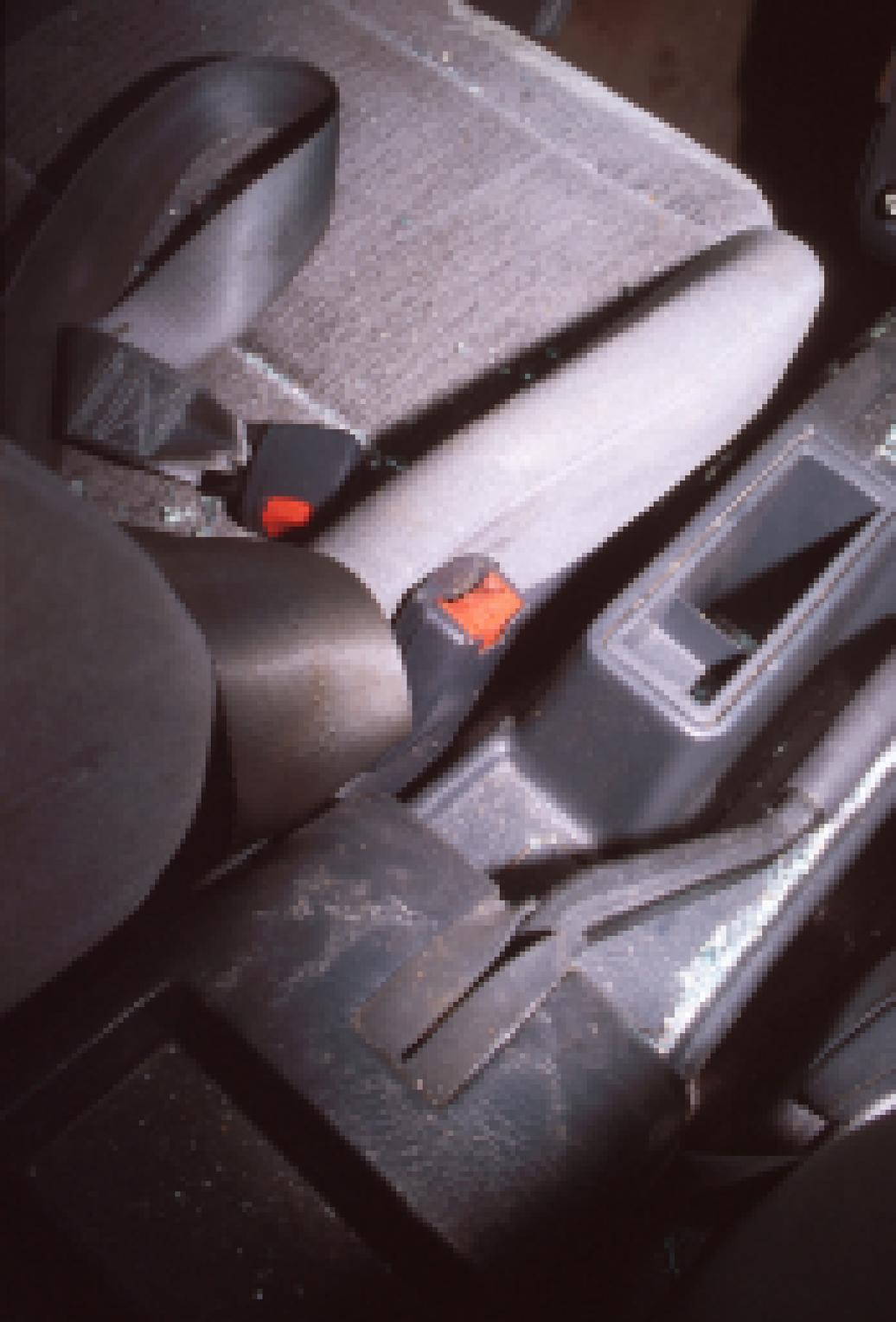
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PSU 75-097E (1998) #62



PSU 75-097E (1996) #83



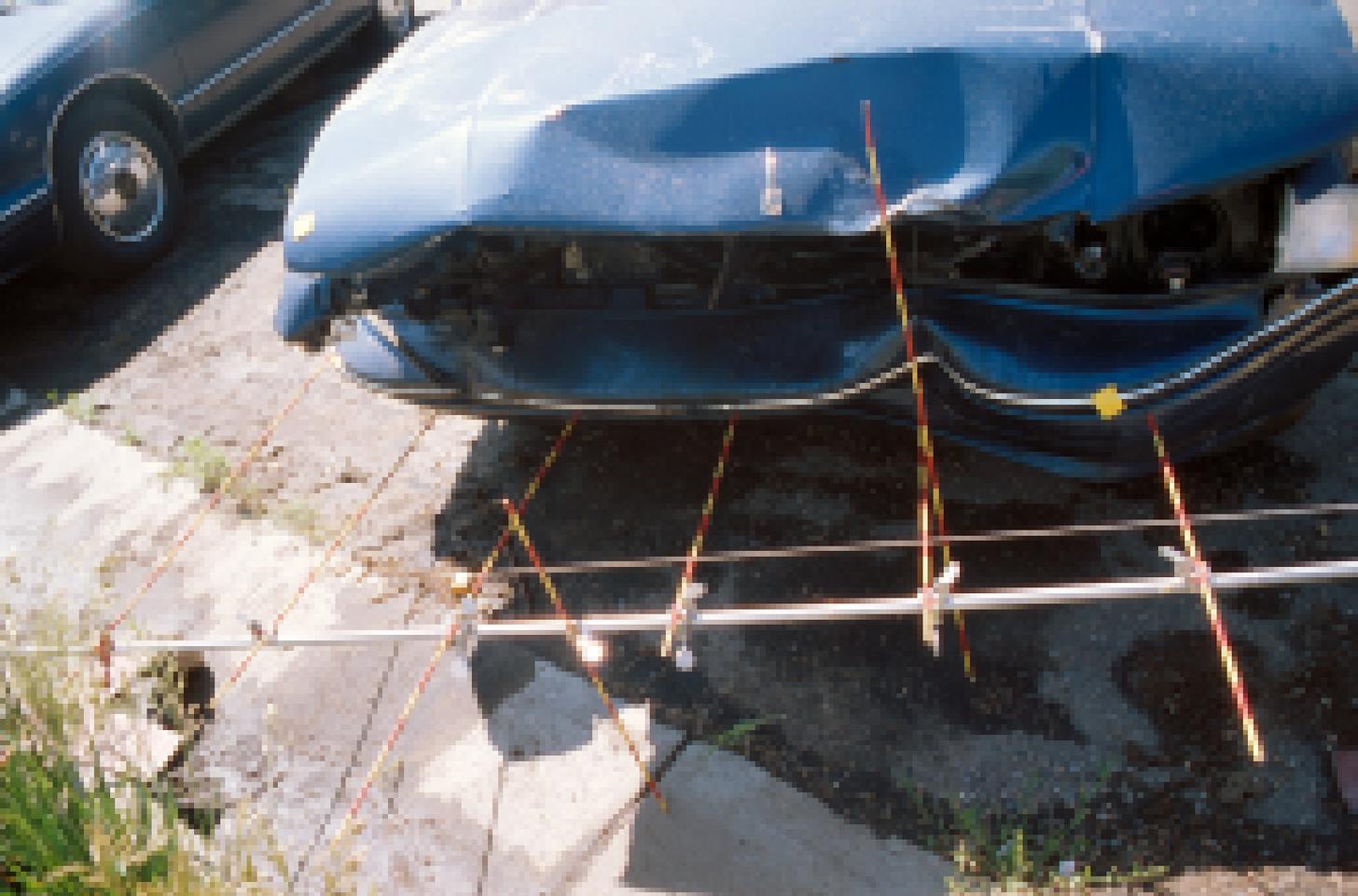
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PSU 75-097E (1996) #86



PSU 75-097E (1996) #87



PSU 75-097E (1996) #88



PSU 75-097E (1996) #89



PSU 75-087E (1996) #90



PSU 75-097E (1996) #91



PSU 75-097E (1996) #92



PSU 75-097E (1996) #93



PSU 75-097E (1996) #94



PSU 75-097E (1996) #95



PSU 75-097E (1996) #96



PSU 75-097E (1998) #97



PSU 75-097E (1998) #98



PSU 75-097E (1996) #99



PSU 75-097E (1996) #100



PSU 75-097E (1996) #101



PSU 75-097E (1998) #102



PSU 75-097E (1996) #103



PSU 75-087E (1996) #104



PSU 75-097E (1996) #105



PSU 75-097E (1996) #106



PSU 75-097E (1996) #107



PSU 75-097E (1996) #108



PSU 75-097E (1996) #109



PSU 75-097E (1996) #110



PSU 75-087E (1996) #111



PSU 75-097E (1996) #112



PSU 75-097E (1996) #113



PSU 75-097E (1996) #114



PSU 75-097E (1996) #115



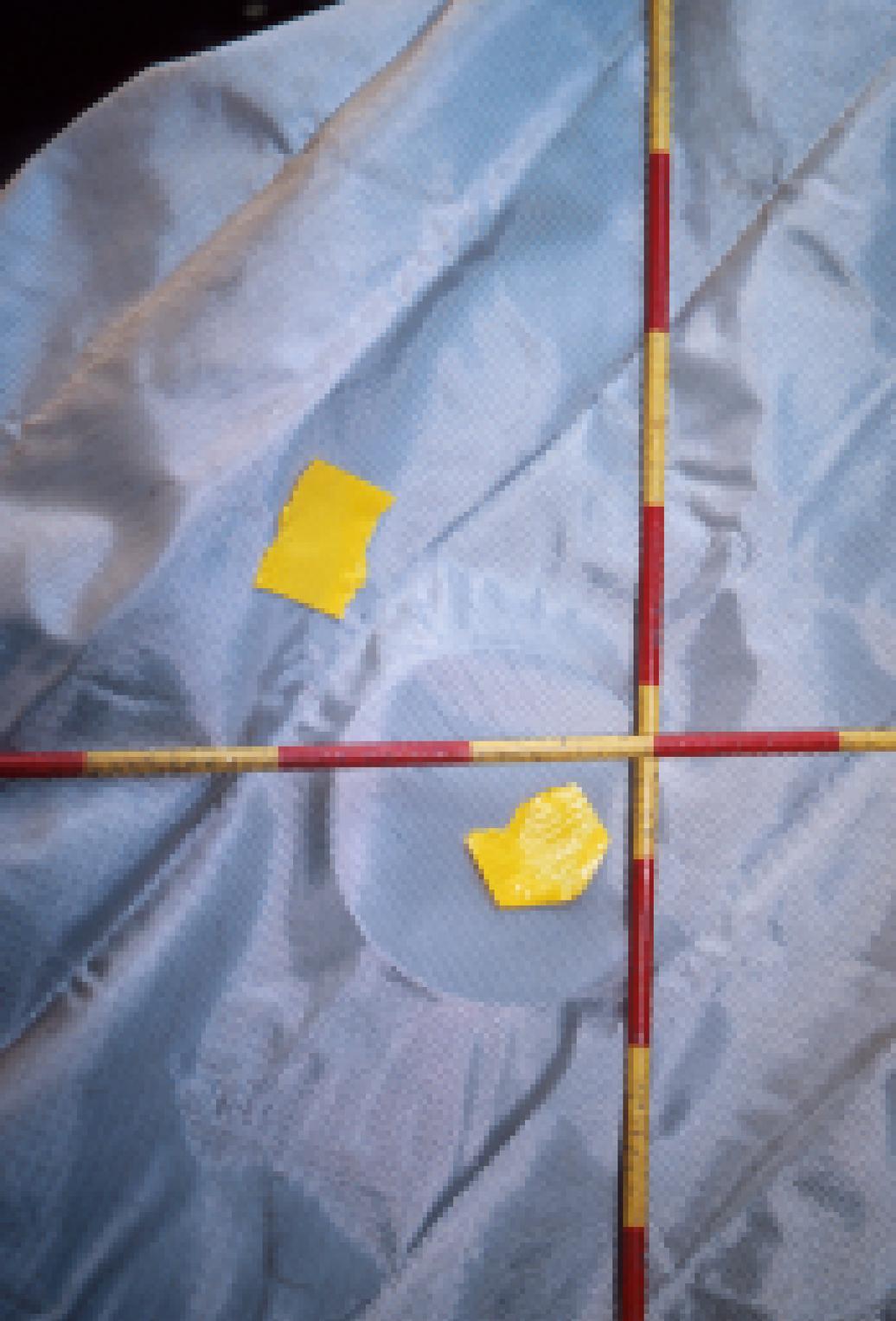
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PSU 75-097E (1998) #117



PSU 75-097E (1996) #118



PSU 75-097E (1996) #119



PSU 75-097E (1998) #120



PSU 75-097E (1996) #121



PSU 75-097E (1996) #122



PSU 75-097E (1996) #123



PSU 75-097E (1996) #124



PSU 75-097E (1996) #125



PSU 75-097E (1996) #126



PSU 75-097E (1996) #127



PSU 75-097E (1996) #128



PSU 75-097E (1996) #129



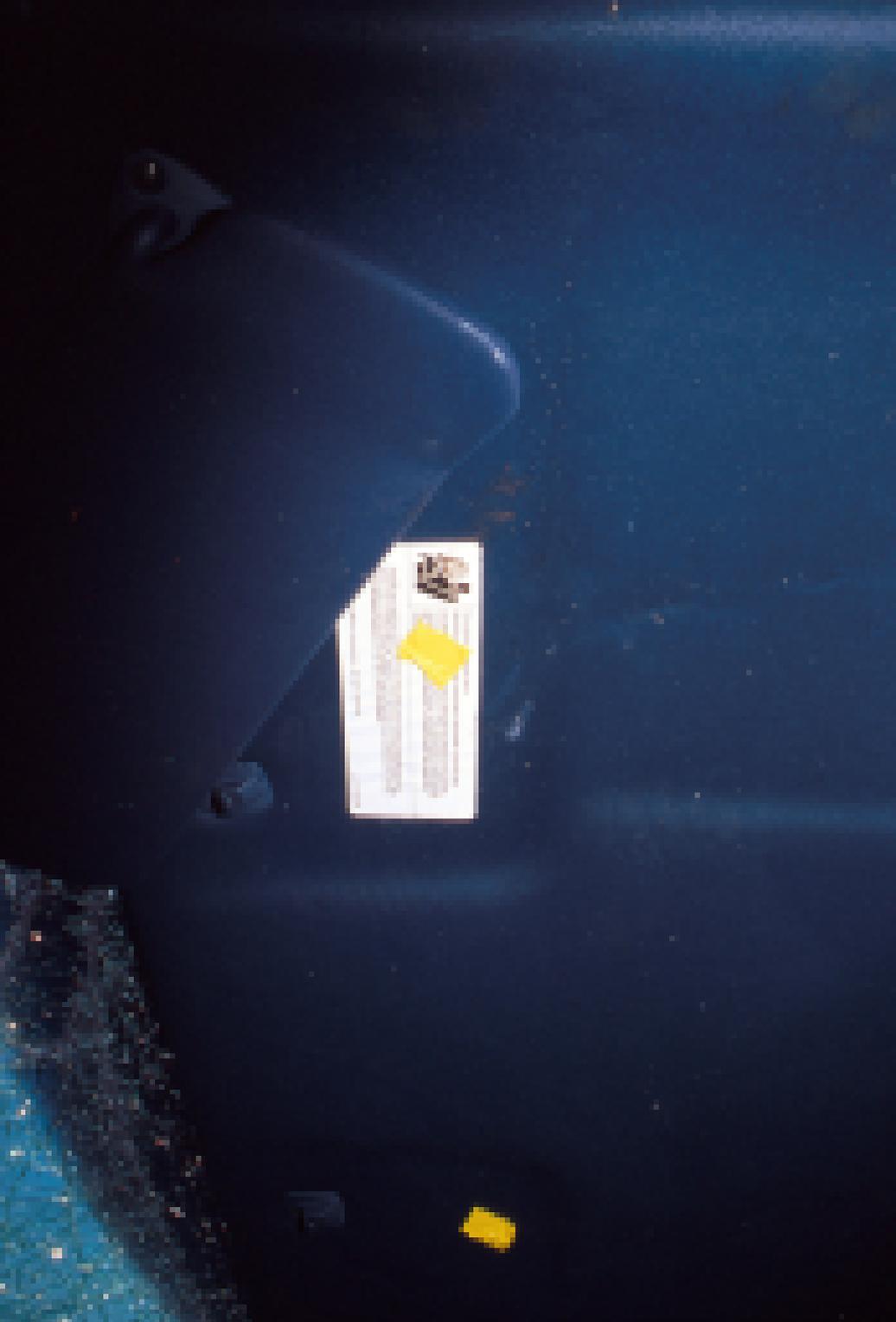
PSU 75-097E (1998) #130



PSU 75-097E (1996) #131



PSU 75-097E (1998) #132



PSU 75-097E (1996) #133



PSU 75-097E (1996) #134



PSU 75-097E (1998) #135



PSU 75-097E (1996) #136



PSU 75-097E (1996) #137



PSU 75-097E (1996) #138