



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 12 CASE NO. 157A TYPE OF ACCIDENT \_\_\_\_\_

### 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

<p><b>Body Region</b></p> <ul style="list-style-type: none"> <li>Abdomen</li> <li>Ankle—foot</li> <li>Arm (upper)</li> <li>Back-thoracolumbar spine</li> <li>Brain</li> <li>Chest</li> <li>Ears</li> <li>Eye</li> <li>Elbow</li> <li>Face</li> <li>Forearm</li> <li>Head—skull</li> <li>Heart</li> <li>Kidneys</li> <li>Knee</li> <li>Leg (lower)</li> <li>Liver</li> <li>Lower limbs(s) (whole or unknown part)</li> <li>Mouth</li> <li>Neck—cervical spine</li> <li>Nose</li> </ul>	<ul style="list-style-type: none"> <li>Pelvic—hip</li> <li>Pulmonary—lungs</li> <li>Shoulder</li> <li>Spleen</li> <li>Thigh</li> <li>Thyroid, other endocrine gland</li> <li>Upper limb(s) (whole or unknown part)</li> <li>Vertebrae</li> <li>Whole body</li> <li>Wrist—hand</li> </ul> <p><b>Injury Type</b></p> <ul style="list-style-type: none"> <li>Abrasion</li> <li>Amputation</li> <li>Avulsion</li> <li>Burn</li> <li>Concussion</li> <li>Contusion</li> <li>Crush</li> <li>Detachment, separation</li> <li>Dislocation</li> </ul>	<ul style="list-style-type: none"> <li>Fracture</li> <li>Fracture and dislocation</li> <li>Laceration</li> <li>Other</li> <li>Perforation, puncture</li> <li>Rupture</li> <li>Sprain</li> <li>Strain</li> <li>Total severance, transection</li> <li>Unknown</li> </ul> <p><b>Abbreviated Injury Scale</b></p> <ul style="list-style-type: none"> <li>(1) Minor injury</li> <li>(2) Moderate injury</li> <li>(3) Serious injury</li> <li>(4) Severe injury</li> <li>(5) Critical injury</li> <li>(6) Maximum (untreatable)</li> <li>(7) Injured, unknown severity</li> </ul>
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**DO NOT SANITIZE THIS FORM**

PSU12

1995 Case Summary Form

CASE 157A

TYPE OF ACCIDENT: TWO VEHICLE BROADSIDE

A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES

VEHICLE 1 WAS SOUTHBOUND ON A 2 LANE 2 WAY LOCAL ROADWAY. TURNING LEFT, NORTHBOUND VEHICLE 2 FRONT CONTACTED THE RIGHT SIDE OF VEHICLE 1. THE VEHICLE TRAVELLED QUITE A DISTANCE BEFORE COMING TO FINAL REST. THERE WAS A GREAT DEEAL OF INTRUSION TO VEHICLE 1 WITH THE POSSIBILITY OF PARTIAL EJECTION OF THE DRIVER AS THERE WAS RED TRANSFER ON THE SEATBELT AND ON THE HOOD OF VEHICLE 2. THE POLICE REPORT STATES DRIVER 1 WAS ENTRAPPED, YET THERE WAS NO SPECIFIC COMPONENT AT THE TIME OF THE VEHICLE INSPECTION WHICH WAS EVIDENT FOR ENTRAPMENT. NO ALCOHOL PRESENCE IN THE ACCIDENT.

01

PGU12

1995 Case Summary Form

CASE 157A

TYPE OF ACCIDENT: TWO VEHICLE BROADSIDE

B. VEHICLE PROFILE(S)

Vehicle No.	Class of Vehicle	Year/Make/Model	Damage Plane	Severity Descr.	Component Failure
1	COMPACT	1994 CHEVROLET CAVALIER	RIGHT	SEVERE	NONE
2	LARGE PICKUP TRUCK	1995 GMC SIERRA SL 1500	FRONT	SEVERE	NONE

01

PSU12

1995 Case Summary Form

CASE 157A

TYPE OF ACCIDENT: TWO VEHICLE BROADSIDE

C. PERSON PROFILE(S)

V e h. No	Person Role	Seat Positon	Restraint Use	Body Region	Injury Type	A	Injury Source	
						I S		
1	DRIVER	LEFT FRONT	AUTO LAPSHOULDER					<i>neck fracture &amp; roof (indirect)</i>
2	DRIVER	LEFT FRONT	LAPSHOULDER	AIRBAG				<i>Chest contusion / airbag</i>



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

# ACCIDENT COLLISION DIAGRAM

RECEIVED

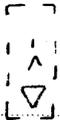
1 of 3

1996  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

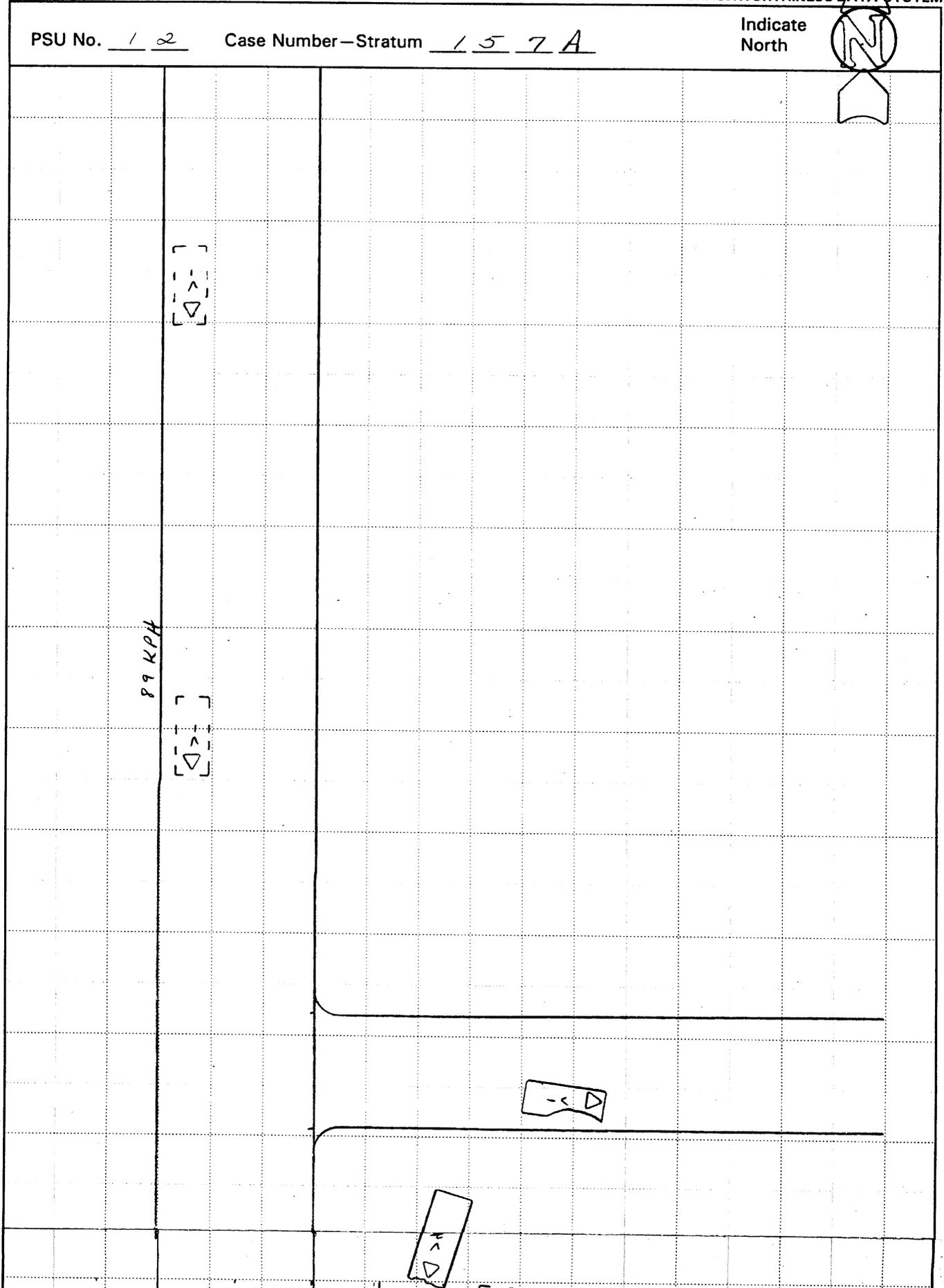
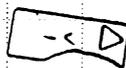
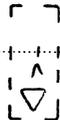
PSU No. 1 2

Case Number - Stratum 1 5 7 A

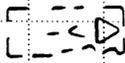
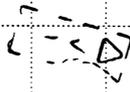
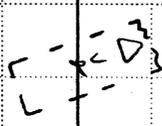
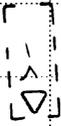
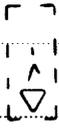
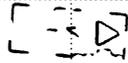
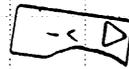
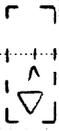
Indicate  
North

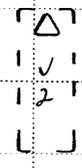
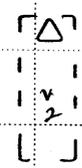
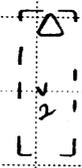
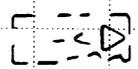
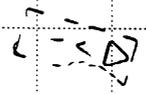
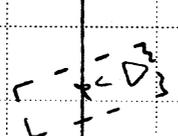
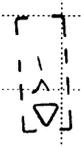
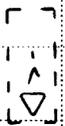
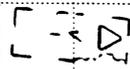


89 MPH



89 KPA





⊕ ← RP







# ACCIDENT FORM

1. Primary Sampling Unit Number     12      
2. Case Number - Stratum   157A  

## IDENTIFICATION

3. Number of General Vehicle Forms Submitted     02      
4. Date of Accident (Month,Day,Year)     ███ / ███ / 95      
5. Time of Accident     1850      
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     0      
10.      SS19                                          0    

## NUMBER OF EVENTS

11. Number of Recorded Events in This Accident     03      
    02      
Code the number of events which occurred in this accident.  
NASS Coding Change  
1st Review: 1G  
2nd Review:

## 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>01</u>	13. <u>01</u>	14. <u>02</u>	15. <u>R</u>	16. <u>02</u>	17. <u>31</u>	18. <u>F</u>
19. <u>02</u>	20. <u>01</u>	21. <u>02</u>	22. <u>R</u>	23. <u>02</u>	24. <u>31</u>	25. <u>L</u>
26. <u>03</u>	27. <u>02</u>	28. <u>31</u>	29. <u>L</u>	30. <u>68</u>	31. <u>00</u>	32. <u>0</u>
33. <u>04</u>	34. <u>    </u>	35. <u>    </u>	36. <u>    </u>	37. <u>    </u>	38. <u>    </u>	39. <u>    </u>
40. <u>05</u>	41. <u>    </u>	42. <u>    </u>	43. <u>    </u>	44. <u>    </u>	45. <u>    </u>	46. <u>    </u>

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

### CODES FOR CLASS OF VEHICLE

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>(00) Not a motor vehicle</li> <li>(01) Subcompact/mini (wheelbase &lt; 254 cm)</li> <li>(02) Compact (wheelbase ≥ 254 but &lt; 265 cm)</li> <li>(03) Intermediate (wheelbase ≥ 265 but &lt; 278 cm)</li> <li>(04) Full size (wheelbase ≥ 278 but &lt; 291 cm)</li> <li>(05) Largest (wheelbase ≥ 291 cm)</li> <li>(09) Unknown passenger car size</li> <li>(14) Compact utility vehicle</li> <li>(15) Large utility vehicle (≤ 4,500 kgs GVWR)</li> <li>(16) Utility station wagon (≤ 4,500 kgs GVWR)</li> <li>(19) Unknown utility type</li> <li>(20) Minivan (≤ 4,500 kgs GVWR)</li> <li>(21) Large van (≤ 4,500 kgs GVWR)</li> <li>(24) Van Based school bus (≤ 4,500 kgs GVWR)</li> <li>(28) Other van type (≤ 4,500 kgs GVWR)</li> <li>(29) Unknown van type (≤ 4,500 kgs GVWR)</li> <li>(30) Compact pickup truck (≤ 4,500 kgs GVWR)</li> </ul> | <ul style="list-style-type: none"> <li>(31) Large pickup truck (≤ 4,500 kgs GVWR)</li> <li>(38) Other pickup truck (≤ 4,500 kgs GVWR)</li> <li>(39) Unknown pickup truck type (≤ 4,500 kgs GVWR)</li> <li>(45) Other light truck (≤ 4,500 kgs GVWR)</li> <li>(48) Unknown light truck type (≤ 4,500 kgs GVWR)</li> <li>(49) Unknown light vehicle type</li> <li>(50) School bus (excludes van based)(&gt; 4,500 kgs GVWR)</li> <li>(58) Other bus (&gt; 4,500 kgs GVWR)</li> <li>(59) Unknown bus type</li> <li>(60) Truck (&gt; 4,500 kgs GVWR)</li> <li>(67) Tractor without trailer</li> <li>(68) Tractor-trailer(s)</li> <li>(78) Unknown medium/heavy truck type</li> <li>(79) Unknown light/medium/heavy truck type</li> <li>(80) Motored cycle</li> <li>(90) Other vehicle</li> <li>(99) Unknown</li> </ul> |
|--|--|

### CODES FOR GENERAL AREA OF DAMAGE (GAD)

- |  |  |   |   |
|--|--|---|---|
| <b>CDS APPLICABLE AND OTHER VEHICLES</b> | <ul style="list-style-type: none"> <li>(O) Not a motor vehicle</li> <li>(N) Noncollision</li> <li>(F) Front</li> </ul> | <ul style="list-style-type: none"> <li>(R) Right side</li> <li>(L) Left side</li> <li>(B) Back</li> </ul> | <ul style="list-style-type: none"> <li>(T) Top</li> <li>(U) Undercarriage</li> <li>(9) Unknown</li> </ul> |
|--|--|---|---|

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

### CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

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

**PRECRASH ENVIRONMENTAL DATA**

19. Relation To Interchange Or Junction 3

- (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) \_\_\_\_\_

(9) Unknown

20. Trafficway Flow 0

- (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 2

- (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 1

- (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 5

- (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 0

- (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 0

- (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 0 1  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown
- 39. Number of Occupant Forms Submitted 0 1

**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 0  
 (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, 1 4 0  
 Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown  
2, 5 1 5 lbs X .4536 = 1, 1 4 1 kgs  
 Source: \_\_\_\_\_

- 44. Vehicle Cargo Weight 0, 0 2 0  
 Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown  
4 0 lbs X .4536 = 1 8 kgs  
 Source: \_\_\_\_\_

**ROLLOVER DATA**

- 45. Rollover 0 0  
 (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 0 0  
 (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 0  
 (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 0 0  
 (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 \_\_\_\_\_



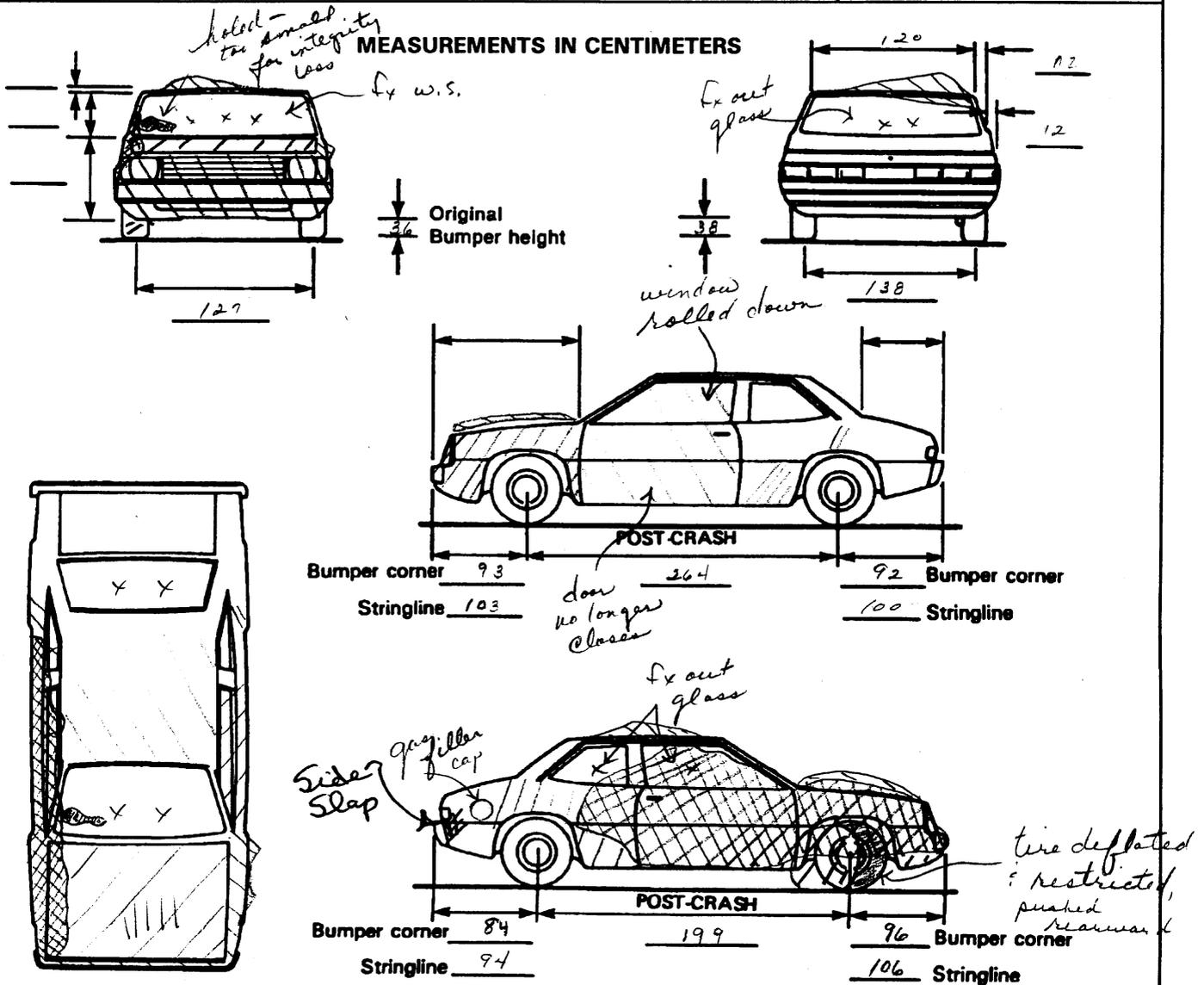
## ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>101.3</u>	inches	x 2.54	=	_____	cm
Overall Length	<u>182.3</u>	inches	x 2.54	=	_____	cm
Maximum Width	<u>66.3</u>	inches	x 2.54	=	_____	cm
Curb Weight	14 <u>2,515</u>	pounds	x .4536	=	____,	kg
Average Track	<u>55.5</u>	inches	x 2.54	=	_____	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.	_____	cc	x .001	=	_____	L
	_____	CID	x .0164	=	_____	L

**VEHICLE DAMAGE SKETCH**

<p><b>TIRE—WHEEL DAMAGE</b></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>1</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><b>ORIGINAL SPECIFICATIONS</b></p> <p>Wheelbase <u>257</u> cm</p> <p>Overall Length <u>463</u> cm</p> <p>Maximum Width <u>168</u> cm</p> <p>Curb Weight <u>1141</u> kg</p> <p>Average Track <u>141</u> cm</p> <p>Front Overhang <u>106</u> cm</p> <p>Rear Overhang <u>100</u> cm</p> <p>Undeformed End Width <u>148 rear</u> cm</p> <p>Engine Size: cyl./displ. <u>2.2/24</u> L</p>	<p><b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only)</p> <p>RF <math>\pm</math> <u>15</u> ° LF <math>\pm</math> _____ ° RR <math>\pm</math> _____ ° LR <math>\pm</math> _____ °</p> <p>Within <math>\pm</math> 5 degrees</p> <hr/> <p><b>DRIVE WHEELS</b></p> <p><input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD</p> <hr/> <p>Approximate Cargo Weight <u>40</u> <sup>lb.</sup> kg</p>
<p><b>TYPE OF TRANSMISSION</b></p> <p><input type="checkbox"/> Manual <input type="checkbox"/> Automatic</p> <p>END SHIFT <math>\geq</math> 10 CM</p> <p><input type="checkbox"/> Yes <input 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>02</u>	7. <u>R</u>	8. <u>D</u>	9. <u>A</u>	10. <u>W</u>	11. <u>04</u>

Second Highest Delta "V"

12. <u>02</u>	13. <u>02</u>	14. <u>03</u>	15. <u>R</u>	16. <u>B</u>	17. <u>E</u>	18. <u>E</u>	19. <u>01</u>
---------------	---------------	---------------	--------------	--------------	--------------	--------------	---------------

MASS CODING CHANGE  
1st Review: 1G  
2nd Review: \_\_\_\_\_

**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 <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	22. ±D
<u>306</u>	<u>006</u>	<u>010</u>	<u>086</u>	<u>060</u>	<u>008</u>	<u>000</u>	<u>⊕ - 087</u>

Second Highest Delta "V"

23. L	24. C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	25. ±D
_____	_____	_____	_____	_____	_____	_____	_____

26. Undeformed End Width (Coded when highest severity impact is an end plane impact.) 998  
 \_\_\_\_\_ 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) 238  
 \_\_\_\_\_ Code to the nearest centimeter  
 (250) 250 centimeters or more  
 (999) Unknown

28. Original Wheelbase \_\_\_\_\_ Code to the nearest centimeter 257  
 (650) 650 centimeters or more  
 (999) Unknown  
161.3 inches X 2.54 = \_\_\_\_\_ centimeters

29. Original Average Track Width \_\_\_\_\_ Code to the nearest centimeter 141  
 (185) 185 centimeters or more  
 (999) Unknown  
55.5 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 3
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 1
38. Type of Fuel Tank-2 0  
 (0) No fuel tank (electrical vehicle)  
 (1) Metallic  
 (2) Non-metallic  
 (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 2
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

**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

<p>43. Leakage Location of Fuel System-1 <span style="float:right"><u>  1  </u></span></p> <p>44. Leakage Location of Fuel System-2 <span style="float:right"><u>  0  </u></span></p> <p style="margin-left: 20px;">(0) No fuel tank (1) No fuel leakage</p> <p><i>Primary Area Of Leakage</i></p> <p style="margin-left: 20px;">(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 <span style="float:right"><u>  0  1  </u></span></p> <p>46. Fuel Type-2 <span style="float:right"><u>  0  0  </u></span></p> <p><i>Single Fuel Type</i></p> <p style="margin-left: 20px;">(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><i>Electric Powered or Electric/Solar Powered Vehicles</i></p> <p style="margin-left: 20px;">(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>(99) Unknown fuel type</p>	<p>47. Is This Vehicle Equipped With More Than Two Fuel Tanks? <span style="float:right"><u>  0  </u></span></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><b>COMMENTS</b></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 12  
 2. Case Number - Stratum 157A  
 3. Vehicle Number 01

## INTEGRITY

4. Passenger Compartment Integrity 11  
 (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 1 7. LR 0 8. RR 0 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 0

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 0

- (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 4 25. RF 2 26. LR 1 27. RR 1  
 28. BL 1 29. Roof 0 30. Other 0

- (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 1 33. RF 6 34. LR 1 35. RR 6  
 36. BL 6 37. Roof 0 38. Other 0

(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

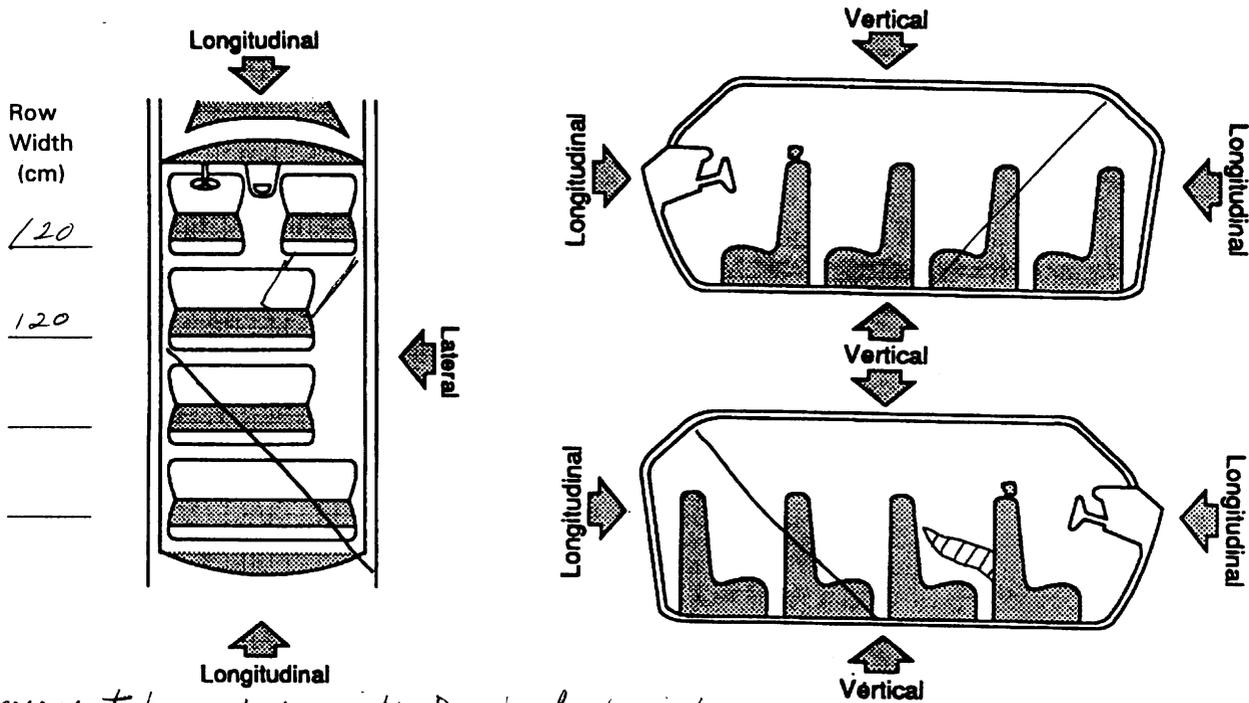
### Glazing Damage from Occupant Contact

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

(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



meas. taken whole width of veh. for lat. intrusion

LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION	
13	(R) door	120	62	= 40 <sup>per 13 zone</sup>	lat
12	(R) door	120	62	= 22 <sup>per 12 zone</sup>	}
13	(R) window frame	110	84	= 26	
23	(R) front door	120	70	= 40 <sup>per 23 zone</sup>	
22	(R) front door	120	70	= 30 <sup>per 22 zone</sup>	
23	(R) back panel	110	108	= 2	
23	(R) front seatback	18	52	= 34	long
22	" " "	18	43	= 25	long
13	IP	96	76	= 20	long
12	IP	96	82	= 14	long
13	A pilla	120	92	= 28	lat
23	B pilla	120	99	= 21	}
13	roof rail	108	92	= 16	
23	roof rail	108	94	= 14	
13	sill	110	72	= 38	3

V2 may have hood intruded thru window

### 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>1 3</u>	48. <u>1 1</u>	49. <u>4</u>	50. <u>3</u>
2nd	51. <u>2 3</u>	52. <u>1 1</u>	53. <u>4</u>	54. <u>3</u>
3rd	55. <u>1 3</u>	56. <u>1 ?</u>	57. <u>4</u>	58. <u>3</u>
4th	59. <u>2 3</u>	60. <u>2 0</u>	61. <u>4</u>	62. <u>2</u>
5th	63. <u>2 2</u>	64. <u>1 1</u>	65. <u>4</u>	66. <u>3</u>
6th	67. <u>1 3</u>	68. <u>0 6</u>	69. <u>3</u>	70. <u>3</u>
7th	71. <u>1 3</u>	72. <u>1 7</u>	73. <u>3</u>	74. <u>3</u>
8th	75. <u>2 2</u>	76. <u>2 0</u>	77. <u>3</u>	78. <u>2</u>
9th	79. <u>1 2</u>	80. <u>1 1</u>	81. <u>3</u>	82. <u>3</u>
10th	83. <u>2 3</u>	84. <u>0 7</u>	85. <u>3</u>	86. <u>3</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) Hbod
- (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><b>Front Seat</b></p> <ul style="list-style-type: none"> <li>(11) Left</li> <li>(12) Middle</li> <li>(13) Right</li> </ul> <p><b>Second Seat</b></p> <ul style="list-style-type: none"> <li>(21) Left</li> <li>(22) Middle</li> <li>(23) Right</li> </ul> <p><b>Third Seat</b></p> <ul style="list-style-type: none"> <li>(31) Left</li> <li>(32) Middle</li> <li>(33) Right</li> </ul> | <p><b>Fourth Seat</b></p> <ul style="list-style-type: none"> <li>(41) Left</li> <li>(42) Middle</li> <li>(43) Right</li> </ul> <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 RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

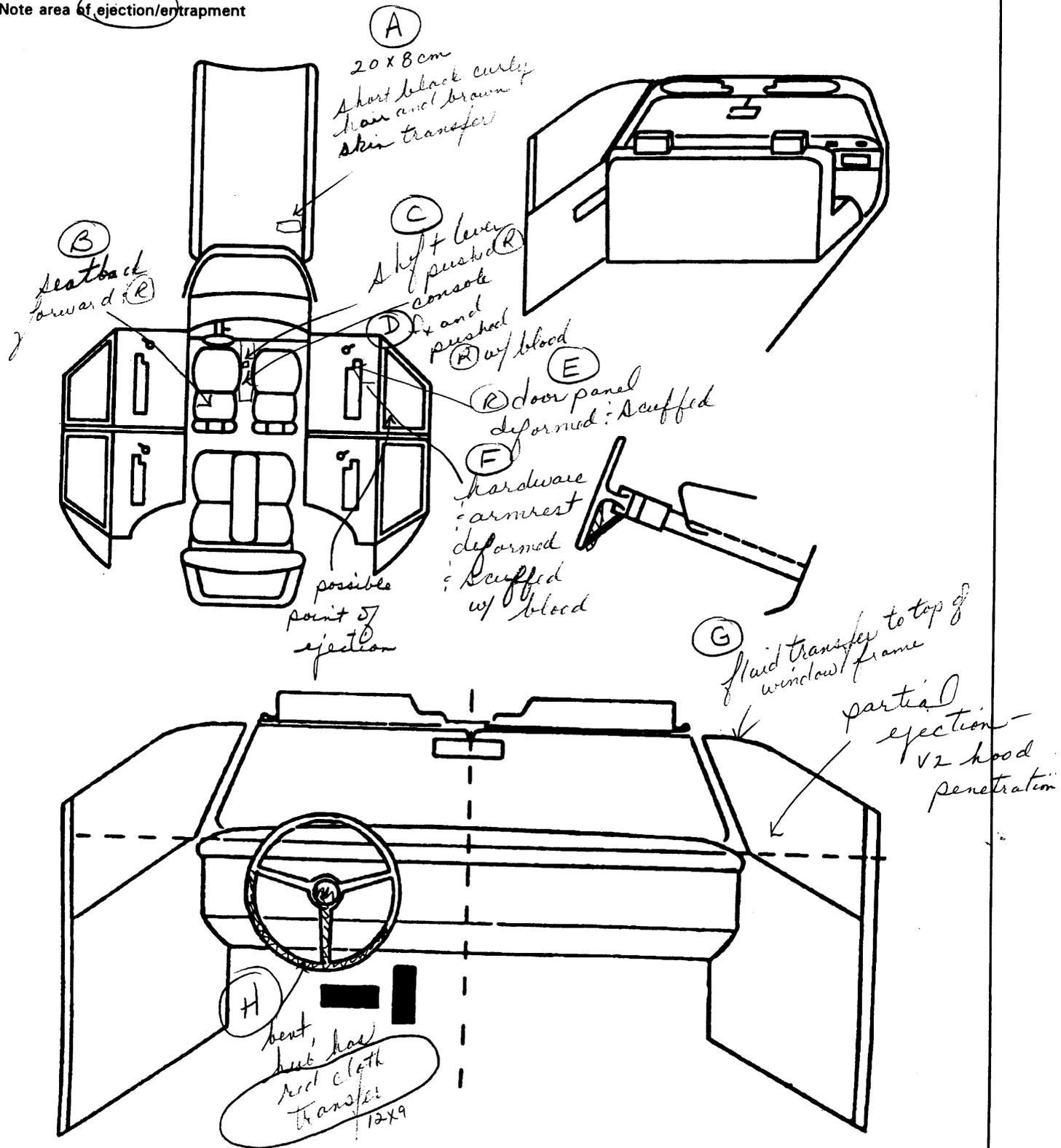
COMPARISON VALUE	-	DAMAGE VALUE	=	DEFORMATION
11	-	23	=	12
	-		=	
	-		=	
	-		=	

Large empty rectangular area for additional data or notes.

STEERING COLUMN	INSTRUMENT PANEL
<p>87. Steering Column Type <span style="float: right;"><u>1</u></span></p> <p>(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 <span style="float: right;"><u>0</u></span></p> <p>(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 <span style="float: right;"><u>0</u></span></p> <p>(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 <span style="float: right;"><u>1 2</u></span></p> <p>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 <span style="float: right;"><u>0 7</u></span></p> <p>(00) No steering rim deformation</p> <p><i>Quarter Sections</i></p> <p>(01) Section A                      (02) Section B                      (03) Section C                      (04) Section D</p> <div style="display: flex; align-items: center; gap: 20px;">   </div> <p><i>Half Sections</i></p> <p>(05) Upper half of rim/spoke                      (06) Lower half of rim/spoke                      (07) Left half of rim/spoke                      (08) Right half of rim/spoke</p> <div style="display: flex; align-items: center; gap: 20px;">  </div> <p>(09) Complete steering wheel collapse                      (10) Undetermined location                      (99) Unknown</p>	<p>92. Odometer Reading <span style="float: right;"><u>0 7 8</u>,000</span></p> <p>_____ 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>48,377</u> miles X 1.6093 = <u>77,853</u> kilometers</p> <p>Source: _____</p> <p>93. Instrument Panel Damage from Occupant Contact? <span style="float: right;"><u>0</u></span></p> <p>(0) No                      (1) Yes                      (9) Unknown</p> <p>94. Type of Knee Bolster Covering <span style="float: right;"><u>0</u></span></p> <p>(0) No knee bolster                      (1) Padded                      (2) Rigid plastic                      (8) Other (specify): _____                      (9) Unknown</p> <p>95. Knee Bolsters Deformed from Occupant Contact? <span style="float: right;"><u>0</u></span></p> <p>(0) No knee bolster                      (1) No deformation                      (2) Yes - deformation                      (9) Unknown</p> <p>96. Did Glove Compartment Door Open During Collision(s)? <span style="float: right;"><u>2</u></span></p> <p>(0) No glove compartment door                      (1) No - door did not open                      (2) Yes - door opened                      (9) Unknown</p> <p>97. Adaptive (Assistive) Driving Equipment <span style="float: right;"><u>0</u></span></p> <p>(0) No adaptive driving equipment                      (1) Adaptive driving equipment installed (Check all that apply.)</p> <p><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): _____</p> <p><input type="checkbox"/> Additional or relocated switches (specify): _____</p> <p><input type="checkbox"/> Raised roof  <input type="checkbox"/> Wall-mounted head rest (used behind wheelchair)  <input type="checkbox"/> Other adaptive device (specify): _____</p> <p>(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	205	01	head	20x8cm hair: skin transfer	1
B	151	01	back	seat back forward	1
C	252	01	(R) leg	shift + locker pushed (R)	1
D	252	01	(R) leg	broken, pushed (R) w/ blood	1
E	101	01	(R) side	scuffed	1
F	102	01	(R) side	scuffed w/ blood	1
G	107	01	mouth	fluid transfer	1
H	006	01	ribs	bent w/ red cloth transfer	1
I					
J					
K					
L					
M					
N					

**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., tape deck, 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): \_\_\_\_\_

**CODES FOR INTERIOR COMPONENTS**

**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.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
<b>F I R S T</b>	Availability	0	0	0
	Evidence of usage	00	00	00
	Used in this crash?	00	00	00
	Proper Use	0	0	0
	Failure Modes	0	0	0
	Anchorage Adjustment	0	0	0
<b>S E C O N D</b>	Availability	4	3	4
	Evidence of usage	00	* 99	00
	Used in this crash?	00	00	00
	Proper Use	0	0	0
	Failure Modes	0	0	0
	Anchorage Adjustment	1	0	1
<b>O T H E R</b>	Availability			
	Evidence of usage	<i>* frozen under cargo - unable to dislodge.</i>		
	Used in this crash?			
	Proper Use			
	Anchorage Adjustment			

**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

**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

**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

**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

**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

		Left Front	Right Front	Other
F I R S T	Availability/Function	○	○	○
	Deployment	○	○	○
	Failure	○	○	○

- |  |  |  |
|--|--|--|
| <p><b>Air Bag System Availability/Function</b></p> <p>(0) Not equipped/not available<br/>(1) Air bag</p> <p><i>Non-functional</i></p> <p>(2) Air bag disconnected (specify): _____</p> <p>(3) Air bag not reinstalled<br/>(9) Unknown</p> <p><b>Are There Indications of Air Bag System Failure? (This Occupant Position)</b></p> <p>(0) Not equipped/not available<br/>(1) No<br/>(2) Yes (specify): _____</p> <p>(9) Unknown</p> | <p><b>Frontal Air Bag System Deployment (This Occupant Position)</b></p> <p>(0) Not equipped/not available<br/>(1) Deployed during accident (as a result of impact)<br/>(2) Deployed inadvertently just prior to accident<br/>(3) Deployed, accident sequence undetermined<br/>(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)<br/>(5) Unknown if deployed<br/>(7) Nondeployed<br/>(9) Unknown</p> | <p><b>Air Bag(s) Deployment, <u>Other</u> Than First Seat Frontal (This Occupant Position)</b></p> <p>(0) Not equipped with an <u>"other"</u> air bag<br/>(1) Deployed during accident (as a result of impact)<br/>(2) Deployed inadvertently just prior to accident<br/>(3) Deployed, details unknown<br/>(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)<br/>(5) Unknown if deployed<br/>(7) Nondeployed<br/>(9) Unknown</p> |
|--|--|--|

#### AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	2	2
	Use <i>red transfer on webbing -</i>	1	2
	Type <i>last 1/3 of belt badly scraped</i>	1	1
	Proper Use <i>in restrained position</i>	1	○
	Failure Modes	1	○

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

## 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
Type of air bag?	0	0
Flaps open at tear points?	0	0
Flaps damaged?	0	0
Air bag damaged?	00	00
Source of air bag damage	00	00
Air bag tethered?	0	0
Air bag have vent ports?	0	0
Other occupant contact air bag?	0	0
Occupant wearing eyewear?	0	0

**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

**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

**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

**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): \_\_\_\_\_

**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

**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

**Did The Air Bag Have Vent Ports?**

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

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

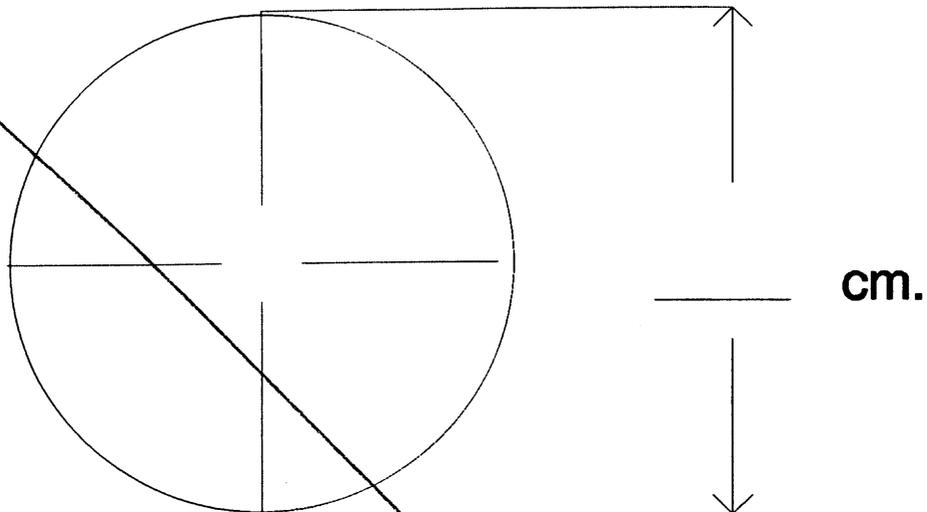
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

**Was This Occupant Wearing Eye-wear?**

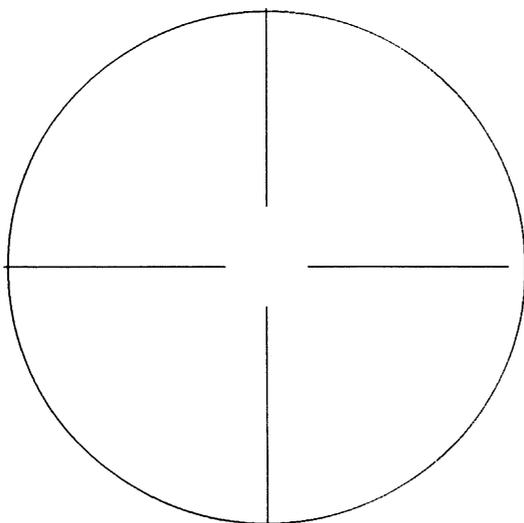
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

**DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES**

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



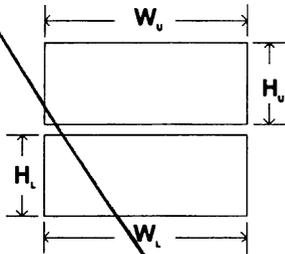
2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)



**DRIVER AIR BAG SKETCHES (Cont'd)**

**3. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)**

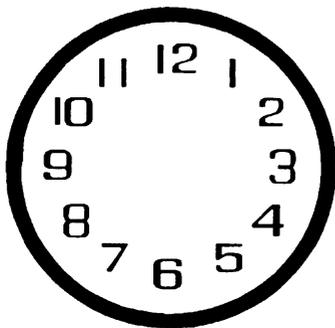
a. Upper Flap                      b. Lower Flap  
width ( $W_u$ ) \_\_\_\_\_ width ( $W_l$ ) \_\_\_\_\_  
height ( $H_u$ ) \_\_\_\_\_ height ( $H_l$ ) \_\_\_\_\_



**4. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE**

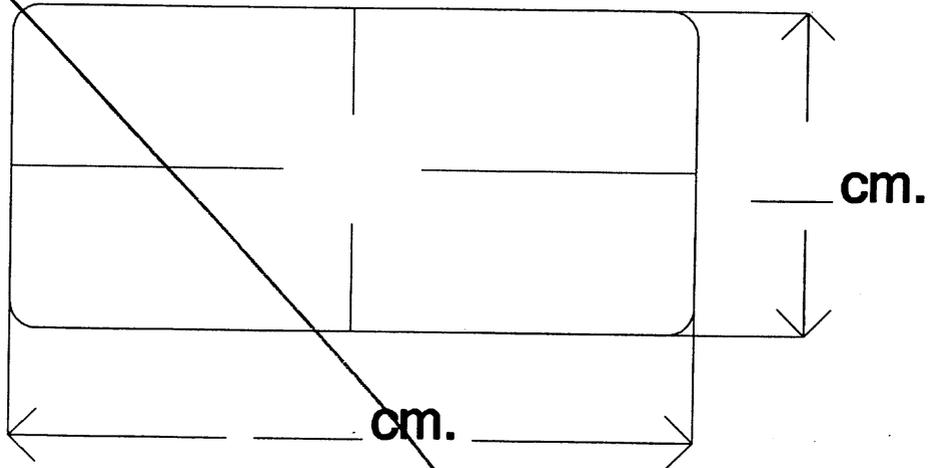
**5. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS**

**6. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS**

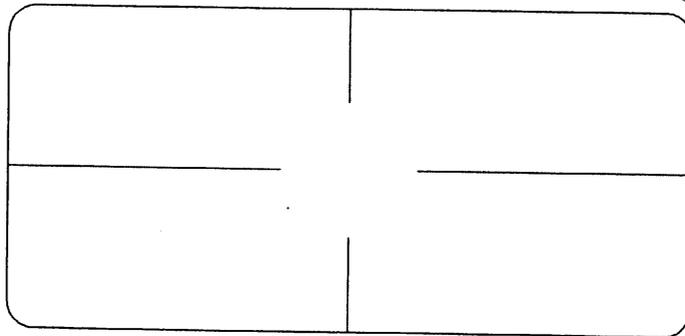


**PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES**

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



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



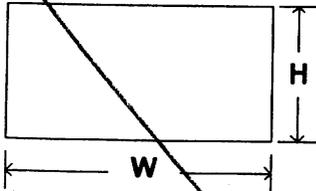
**PASSENGER AIR BAG SKETCHES (Cont'd)**

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

a. Flap

width (W) \_\_\_\_\_

height (H) \_\_\_\_\_



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

a. Upper Flap

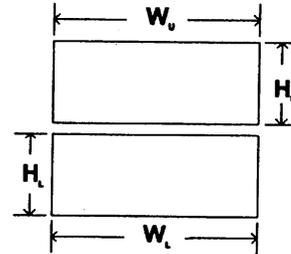
b. Lower Flap

width ( $W_u$ ) \_\_\_\_\_

width ( $W_l$ ) \_\_\_\_\_

height ( $H_u$ ) \_\_\_\_\_

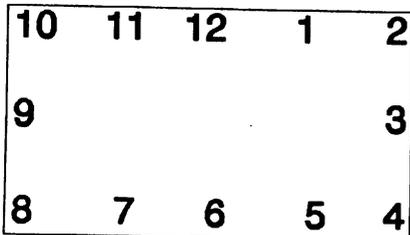
height ( $H_l$ ) \_\_\_\_\_



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

**6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS**

**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)

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**

**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
F I R S T	Head Restraint Type/Damage	1	0	1
	Seat Type	02	00	02
	Seat Performance	6	0	6
	Seat Orientation	1	0	1
	Seat Track Position	6	0	6
	Seat Back Incline Pre/Post Impact	26	00	22
S E C O N D	Head Restraint Type/Damage	0	0	0
	Seat Type	03	03	03
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
	Seat Track Position	1	1	1
	Seat Back Incline Pre/Post Impact	01	01	01
T H I R D	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
O T H E R	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			

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

## HEAD RESTRAINTS/SEAT EVALUATION

**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

**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) Other seat type (specify): \_\_\_\_\_  
 (10) Box mounted seat (i.e., van type)  
 (99) Unknown

**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): pushed rearward  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

**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

**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

**Seat Back Incline Prior and Post Impact**

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

**Upright prior to impact**

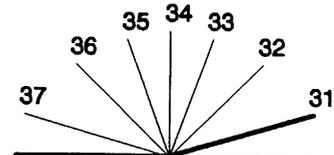
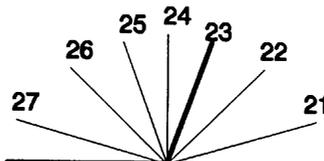
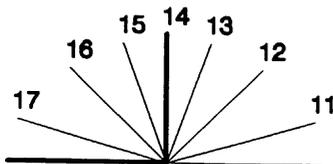
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

**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



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

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

## 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):

*intrusion; kinematics may have caused ejection of (R) side of O1 along w/ evidence of red transfer to webbing of seatbelt, S.W. hub, and hood of V2 has red transfer*

Occupant Number	01					
Ejection	2					
(Note on Vehicle Interior Sketch) Ejection Area	2					
Ejection Medium	4					
Medium Status	2					

**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):

*closed glass*

(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: *none noted*

Component(s):

(Note in vehicle interior diagram)



# OCCUPANT ASSESSMENT FORM

## OCCUPANT'S SEATING

1. Primary Sampling Unit Number 12  
 2. Case Number - Stratum 157A  
 3. Vehicle Number 01  
 4. Occupant Number 01

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 48  
 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 175  
 Code actual height to the nearest centimeter.  
 (999) Unknown  
69 inches X 2.54 = \_\_\_\_\_ centimeters
8. Occupant's Weight 074  
 Code actual weight to the nearest kilogram.  
 (999)Unknown  
163 pounds X .4536 = \_\_\_\_\_ kilograms
9. Occupant's Role 1  
 (1) Driver  
 (2) Passenger  
 (9) Unknown

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 2

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

13. Ejection Area 3

- (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 4

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):  
Ⓜ front glass, fr by V2
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 2

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

16. Entrapment 0

- (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

17. Occupant Mobility 1

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 0
- (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 00
- (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 0
- (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 0
- (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. Shoulder Belt Upper Anchorage Adjustment 0
- (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
23. Automatic (Passive) Belt System Availability/Function 2
- (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 1
- (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 1
- (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) Unknown \_\_\_\_\_
27. 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 \_\_\_\_\_

\* belt was scraped badly 2/3 of the way when in restrained position

**POLICE REPORTED RESTRAINT USE**

**AIR BAG SYSTEM FUNCTION**

28. Police Reported Belt Use 0
- (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 0
- (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.

- [ ] Not equipped/not available/destroyed or rendered inoperative
- [  ] Vehicle inspection
- [ ] Official injury data
- [ ] Driver/occupant interview
- [ ] Other (specify): \_\_\_\_\_
- [ ] Unknown if belt used \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

30. Frontal Air Bag System Availability/Function (This Occupant Position) 0
- (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 (This Occupant Position) 0
- (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 (This Occupant Position) 0
- (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? (This Occupant Position) 0
- (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)? 0

- (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 0

- (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? 0

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify): \_\_\_\_\_

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 00

- (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 0

- (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 0 0

(\_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? 0

- (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? 0

- (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? 00

- (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 00  
 (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? 0  
 (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? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 \_\_\_\_\_  
 (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? 0  
 (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? 0  
 (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

**HEAD RESTRAINT AND SEAT EVALUATION**

49. Head Restraint Type/Damage by Occupant at This Occupant Position 1  
 (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) 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 6  
 (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

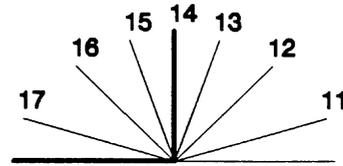
**HEAD RESTRAINT AND SEAT EVALUATION *continued***

53. Seat Back Incline Prior and Post Impact 26

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

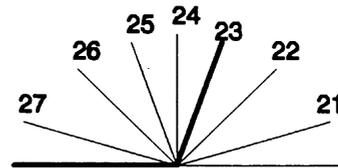
*Upright prior to impact*

- (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



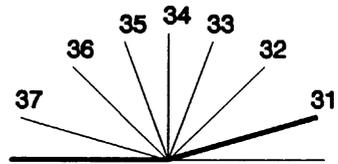
*Slightly reclined prior to impact*

- (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) 6

- (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): seat back pushed forward: (R) lodged by center console;
- (7) Combination of above (specify): (R) seat
- (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) 4

- (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 1

- (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 62

- \_\_\_\_\_ 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**66. Time to Death 01

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 9968. 2nd Medically Reported Cause of Death 0069. 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 01

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

**TRAUMA DATA**71. Glasgow Coma Scale (GCS) Score (at Medical Facility) 02

- (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) - HCO<sub>3</sub> 01

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> 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



# OCCUPANT INJURY FORM

1. Primary Sampling Unit Number <u>12</u>	3. Vehicle Number <u>01</u>
2. Case Number - Stratum <u>157A</u>	4. Occupant Number <u>01</u>

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	A.I.S. - 90						Injury Source	Injury Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect				
1st	5. <u>7</u>	6. <u>6</u>	7. <u>5</u>	8. <u>02</u>	9. <u>16</u>	10. <u>2</u>	11. <u>6</u>	12. <u>205</u>	13. <u>3</u>	14. <u>2</u>	15. <u>00</u>
2nd	16. ___	17. ___	18. ___	19. ___	20. ___	21. ___	22. ___	23. ___	24. ___	25. ___	26. ___
3rd	27. ___	28. ___	29. ___	30. ___	31. ___	32. ___	33. ___	34. ___	35. ___	36. ___	37. ___
4th	38. ___	39. ___	40. ___	41. ___	42. ___	43. ___	44. ___	45. ___	46. ___	47. ___	48. ___
5th	49. ___	50. ___	51. ___	52. ___	53. ___	54. ___	55. ___	56. ___	57. ___	58. ___	59. ___
6th	60. ___	61. ___	62. ___	63. ___	64. ___	65. ___	66. ___	67. ___	68. ___	69. ___	70. ___
7th	71. ___	72. ___	73. ___	74. ___	75. ___	76. ___	77. ___	78. ___	79. ___	80. ___	81. ___
8th	82. ___	83. ___	84. ___	85. ___	86. ___	87. ___	88. ___	89. ___	90. ___	91. ___	92. ___
9th	93. ___	94. ___	95. ___	96. ___	97. ___	98. ___	99. ___	100. ___	101. ___	102. ___	103. ___
10th	104. ___	105. ___	106. ___	107. ___	108. ___	109. ___	110. ___	111. ___	112. ___	113. ___	114. ___

# OCCUPANT INJURY DATA

	Source of Injury Data	A.I.S. - 90					Aspect	Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity					
11th	---	---	---	---	---	---	-----	---	---	---	
12th	---	---	---	---	---	---	-----	---	---	---	
13th	---	---	---	---	---	---	-----	---	---	---	
14th	---	---	---	---	---	---	-----	---	---	---	
15th	---	---	---	---	---	---	-----	---	---	---	
16th	---	---	---	---	---	---	-----	---	---	---	
17th	---	---	---	---	---	---	-----	---	---	---	
18th	---	---	---	---	---	---	-----	---	---	---	
19th	---	---	---	---	---	---	-----	---	---	---	
20th	---	---	---	---	---	---	-----	---	---	---	
21st	---	---	---	---	---	---	-----	---	---	---	
22nd	---	---	---	---	---	---	-----	---	---	---	
23rd	---	---	---	---	---	---	-----	---	---	---	
24th	---	---	---	---	---	---	-----	---	---	---	
25th	---	---	---	---	---	---	-----	---	---	---	

**OCCUPANT INJURY CLASSIFICATION**

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.  To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(1) Right
(2) Face			(2) Left
(3) Neck			(3) Bilateral
(4) Thorax			(4) Central
(5) Abdomen			(5) Anterior
(6) Spine			(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified			(9) Unknown
			(0) Whole region
	<u>Vessels, Nerves, Organs.</u>		
	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		
	The exceptions to this rule apply to:		
<b>Type of Anatomic Structure</b>	<u>Whole Area</u>		
(1) Whole Area	(02) Skin - Abrasion		
(2) Vessels	(04) Skin - Contusion		
(3) Nerves	(06) Skin - Laceration		
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion		
(5) Skeletal (includes joints)	(10) Amputation		
(6) Head - LOC	(20) Burn		
(9) Skin	(30) Crush		
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		

**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

**SOURCE OF INJURY DATA**

**INJURY SOURCE**

**DIRECT/INDIRECT INJURY**

OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

**CONFIDENCE LEVEL**

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

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## INJURY SOURCES

### 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., tape deck, 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
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (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): \_\_\_\_\_

### EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): \_\_\_\_\_
- (454) Unknown exterior objects

### EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): \_\_\_\_\_
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): \_\_\_\_\_
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): \_\_\_\_\_
- (514) Unknown exterior of other motor vehicle

### OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (551) Ground
- (598) Other vehicle or object (specify): \_\_\_\_\_
- (599) Unknown vehicle or object

### NONCONTACT INJURY

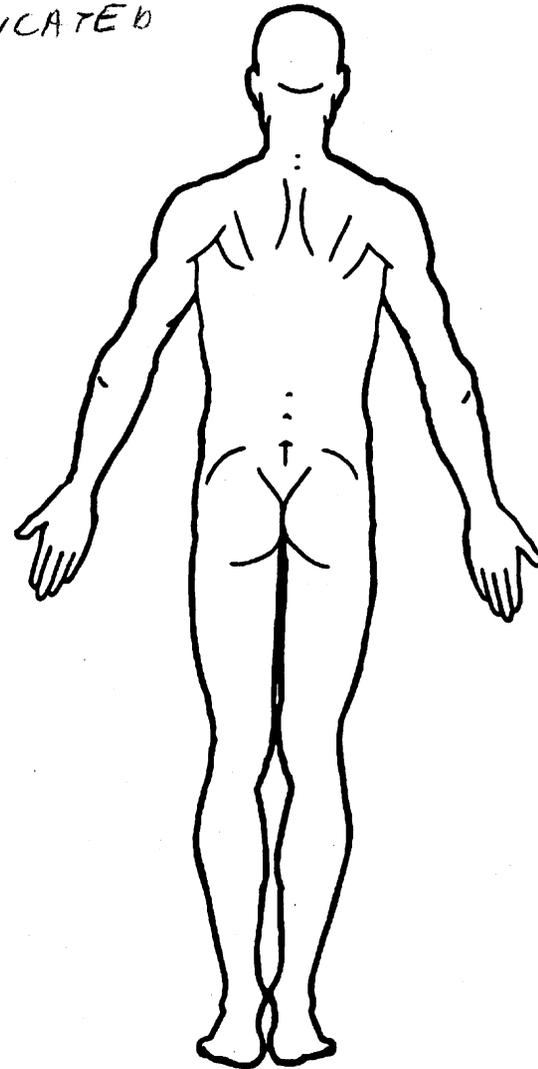
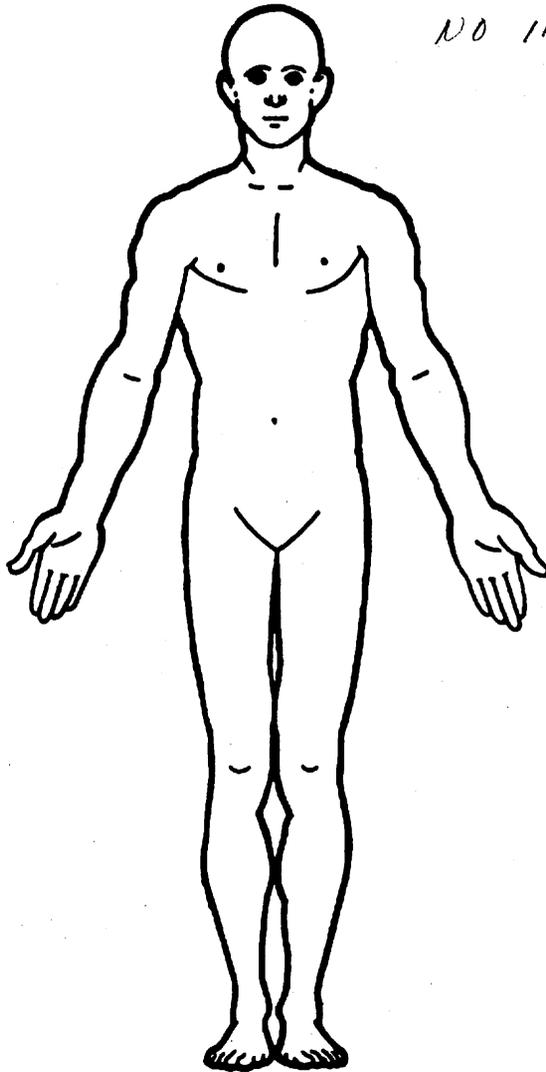
- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): \_\_\_\_\_
- (604) Air bag exhaust gases
- (697) Injured, unknown source

# OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

ER EMS ; UNRESPONSIVE AT SCENE & IN ER

NO INJURIES INDICATED



# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

No

Yes

Blood Alcohol Level (mg/dl)

BAL = 0

Glasgow Coma Scale Score

GCSS =     

*unresponsive*

Units of Blood Given

Units = NR

Arterial Blood Gases

pH =     

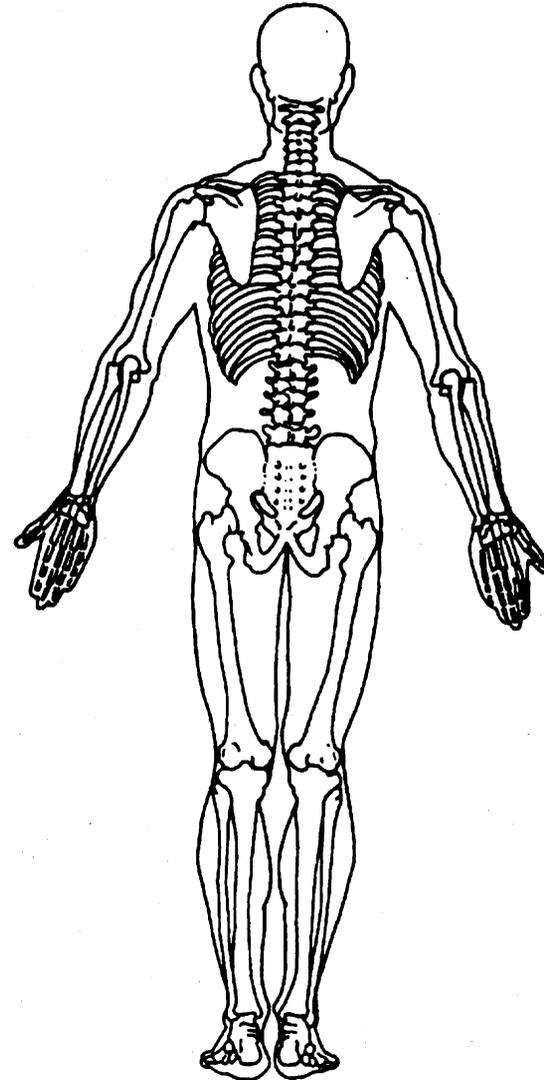
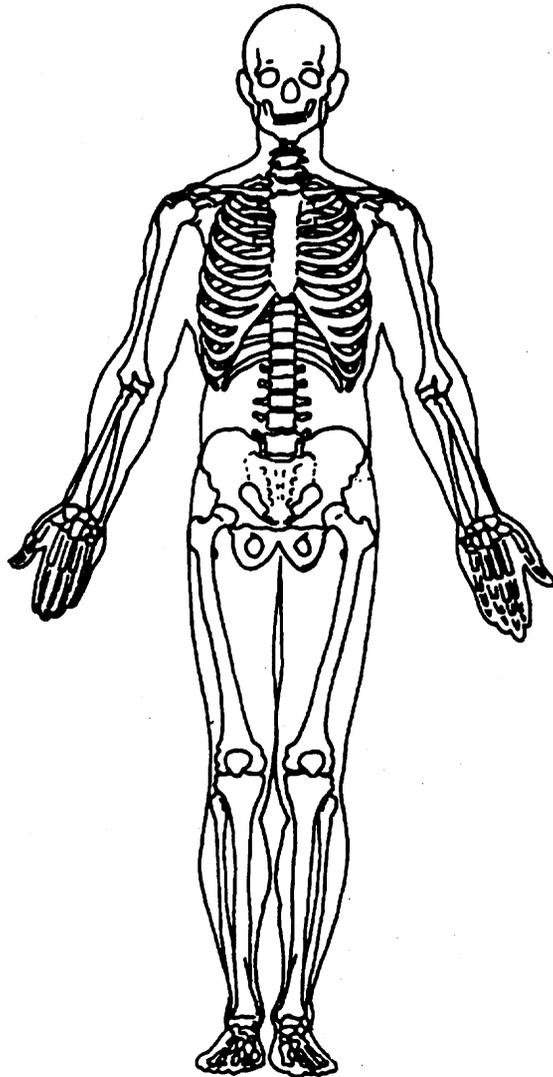
PO<sub>2</sub> =     

PCO<sub>2</sub> =     

HCO<sub>3</sub> =     

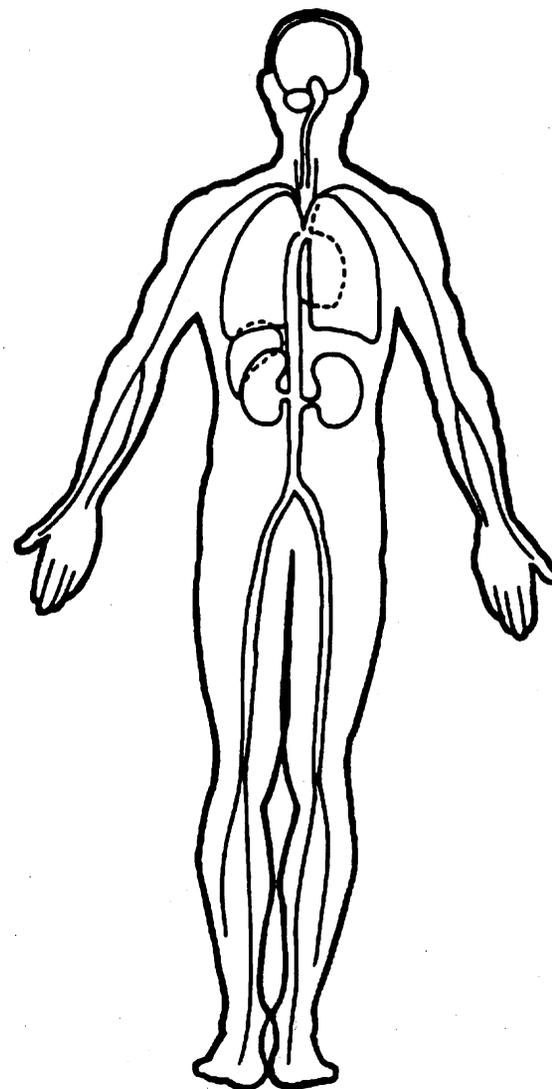
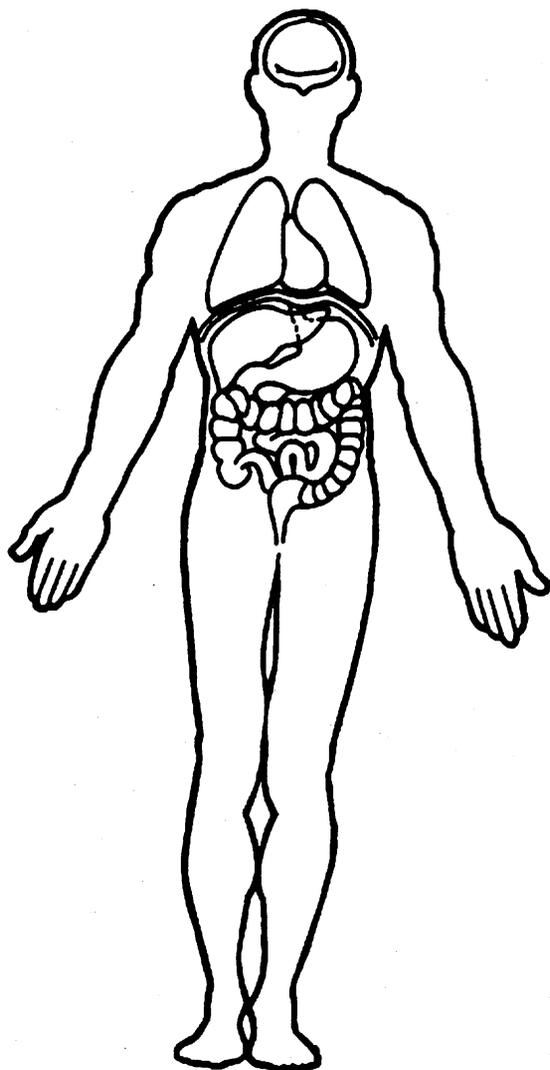
*no blood*

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## OFFICIAL INJURY DATA — INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



**UPDATE FORM**

1. Primary Sampling Unit Number 12  
 2. Case Number — Stratum 157A  
 3. Vehicle Number 01  
 4. Occupant Number 01

Rec'd [redacted] 96

Driver or Occupant Name [redacted]  
 Address [redacted] er-death cert  
 Other Information: \_\_\_\_\_  
 (Sanitize this section prior to Update submission.)

**STATUS OF OCCUPANT INFORMATION**

	INITIAL SUBMISSION	UPDATED INFORMATION
OAL08. Date Official Medical Data Requested	[redacted]	95
OAL09. Date Official Medical Data Obtained	[redacted]	96
OAL16. Injury Treatment Status	02	—
OAL17. Injury Information		
<u>Official</u>		
a. Autopsy (invasive examination)	B —	010
b. Post-ER medical record which includes information about death based on non-invasive examination	B 08	111
c. Admission record/summary or admission/discharge face sheet	B —	—
d. Discharge summary	B —	—
e. Operative report	B —	—
f. Radiographic record(s) (X-ray, CT scan)	B —	—
g. History and physical examination and/or consultation records	B —	—
h. Emergency room records (includes nurses' notes)	B 08	111
j. Private physician	B —	—
<u>Unofficial</u>		
k. Lay coroner	B —	—
l. EMS record	B —	111
m. Interviewee	B 11	—
n. Other source (specify):	B —	B —
o. Police report	B 11	B —

	INITIAL SUBMISSION	UPDATED INFORMATION
OAL18. Medical Facility Code	02	—
GV14. Alcohol Test Results For Driver	00	—
GV16. Other Drug Specimen Test Type For Driver	0	—
OA05. Occupant's Age	48	—
OA06. Occupant's Sex	1	—
OA07. Occupant's Height	175	—
OA08. Occupant's Weight	074	—
OA61. Treatment-Mortality	4	—
OA62. Type of Medical Facility (for Initial Treatment)	1	—
OA63. Hospital Stay	00	—

**PRECRASH ENVIRONMENTAL DATA**

19. Relation To Interchange Or Junction 3  
 (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) \_\_\_\_\_

(9) Unknown

20. Trafficway Flow 0  
 (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 2

(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 1

(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 5

(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 0

(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 0

(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 1,730  
 Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown  
3,814 lbs X .4536 = 1,730 kgs

Source: \_\_\_\_\_

- 44. Vehicle Cargo Weight 0,000  
 Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown  
 \_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

Source: \_\_\_\_\_

**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 0  
 (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 \_\_\_\_\_

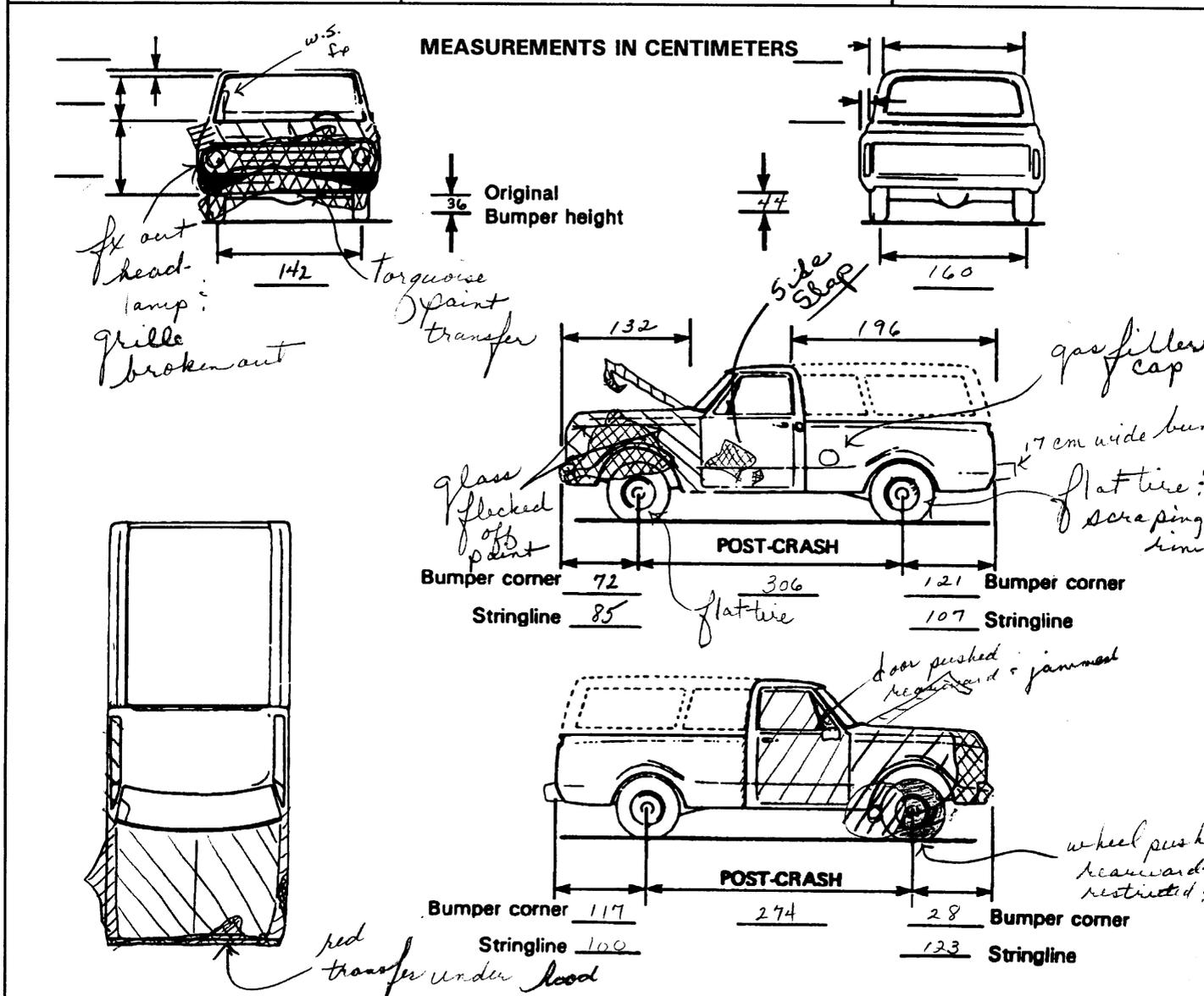


## ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>117.5</u>	inches	x 2.54	=	_____	cm
Overall Length	<u>194.5</u>	inches	x 2.54	=	_____	cm
Maximum Width	_____	inches	x 2.54	=	_____	cm
Curb Weight	<u>3,814</u>	pounds	x .4536	=	____,	kg
Average Track	_____	inches	x 2.54	=	_____	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.	_____	cc	x .001	=	____.	L
	_____	CID	x .0164	=	____.	L

### VEHICLE DAMAGE SKETCH

<p><b>TIRE—WHEEL DAMAGE</b></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>1</u> LF <u>1</u> RR <u>2</u> LR <u>1</u></p> <p>(1) Yes (2) No (8) NA (9) Unk.</p>	<p><b>ORIGINAL SPECIFICATIONS</b></p> <p>Wheelbase <u>298</u> cm</p> <p>Overall Length <u>494</u> cm</p> <p>Maximum Width <u>not given</u> cm</p> <p>Curb Weight <u>1730</u> kg</p> <p>Average Track <u>not given</u> cm</p> <p>Front Overhang <u>96</u> cm</p> <p>Rear Overhang <u>100</u> cm</p> <p>Undeformed End Width <u>178 rear</u> cm</p> <p>Engine Size: cyl./displ. <u>V6/4.3L</u> L</p>	<p><b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only)</p> <p>RF <math>\oplus</math> <u>20</u> ° LF <math>\pm</math> _____ ° RR <math>\pm</math> _____ ° LR <math>\pm</math> _____ °</p> <p>Within <math>\pm</math> 5 degrees</p> <hr/> <p><b>DRIVE WHEELS</b></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><b>TYPE OF TRANSMISSION</b></p> <p><input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic</p> <p><b>END SHIFT <math>\geq</math> 10 CM</b></p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>		



**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. <u>12</u>	7. <u>F</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>04</u>

Second Highest Delta "V"

12. <u>02</u>	13. <u>01</u> <del>68</del>	14. <u>09</u> <u>+2</u>	15. <u>L</u>	16. <u>P</u> <del>X</del>	17. <u>E</u> <u>W</u>	18. <u>W</u> <del>N</del>	19. <u>01</u>
---------------	--------------------------------	----------------------------	--------------	------------------------------	--------------------------	------------------------------	---------------

CLASS CODING CHANGES  
1st Review: IG  
2nd Review: \_\_\_\_\_

**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 <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	22. ±D
<u>178</u>	<u>007</u>	<u>013</u>	<u>029</u>	<u>058</u>	<u>067</u>	<u>086</u>	<u>+ 000</u>

Second Highest Delta "V"

23. L	24. C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	25. ±D
_____	_____	_____	_____	_____	_____	_____	_____

<p>26. Undeformed End Width (Coded when highest severity impact is an end plane impact.) <u>178</u> Code to the nearest centimeter (250) 250 centimeters or more (998) No highest severity end plane impact (999) Unknown</p> <p>27. Direct Damage Width (For highest severity impact) <u>152</u> Code to the nearest centimeter (250) 250 centimeters or more (999) Unknown</p>	<p>28. Original Wheelbase Code to the nearest centimeter <u>298</u> (650) 650 centimeters or more (999) Unknown <u>117.5</u> inches X 2.54 = _____ centimeters</p> <p>29. Original Average Track Width Code to the nearest centimeter <u>999</u> (185) 185 centimeters or more (999) Unknown _____ inches X 2.54 = _____ centimeters</p>
--	--

**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 4
- 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 1
- 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 5
- 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 <span style="float:right">1</span></p> <p>44. Leakage Location of Fuel System-2 <span style="float:right">0</span></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 <span style="float:right">0 1</span></p> <p>46. Fuel Type-2 <span style="float:right">0 0</span></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>(99) Unknown fuel type</p>	<p>47. Is This Vehicle Equipped With More Than Two Fuel Tanks? <span style="float:right">0</span></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><b>COMMENTS</b></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 12  
 2. Case Number - Stratum 157A  
 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 0 8. RR 0 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 0

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 0 19. RR 0  
 20. BL 2 21. Roof 0 22. Other 0

- (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 0 27. RR 0  
 28. BL 1 29. Roof 0 30. Other 0

- (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 1 34. LR 0 35. RR 0  
 36. BL 1 37. Roof 0 38. Other 0

- (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 0 43. RR 0  
 44. BL 1 45. Roof 0 46. Other 0

- (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



### 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>13</u>	48. <u>05</u>	49. <u>1</u>	50. <u>2</u>
2nd	51. _____	52. _____	53. _____	54. _____
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

#### 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><b>Front Seat</b></p> <ul style="list-style-type: none"> <li>(11) Left</li> <li>(12) Middle</li> <li>(13) Right</li> </ul> <p><b>Second Seat</b></p> <ul style="list-style-type: none"> <li>(21) Left</li> <li>(22) Middle</li> <li>(23) Right</li> </ul> <p><b>Third Seat</b></p> <ul style="list-style-type: none"> <li>(31) Left</li> <li>(32) Middle</li> <li>(33) Right</li> </ul> | <p><b>Fourth Seat</b></p> <ul style="list-style-type: none"> <li>(41) Left</li> <li>(42) Middle</li> <li>(43) Right</li> </ul> <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

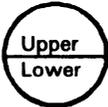
#### DOMINANT CRUSH DIRECTION

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

# STEERING RIM/SPOKE DEFORMATION

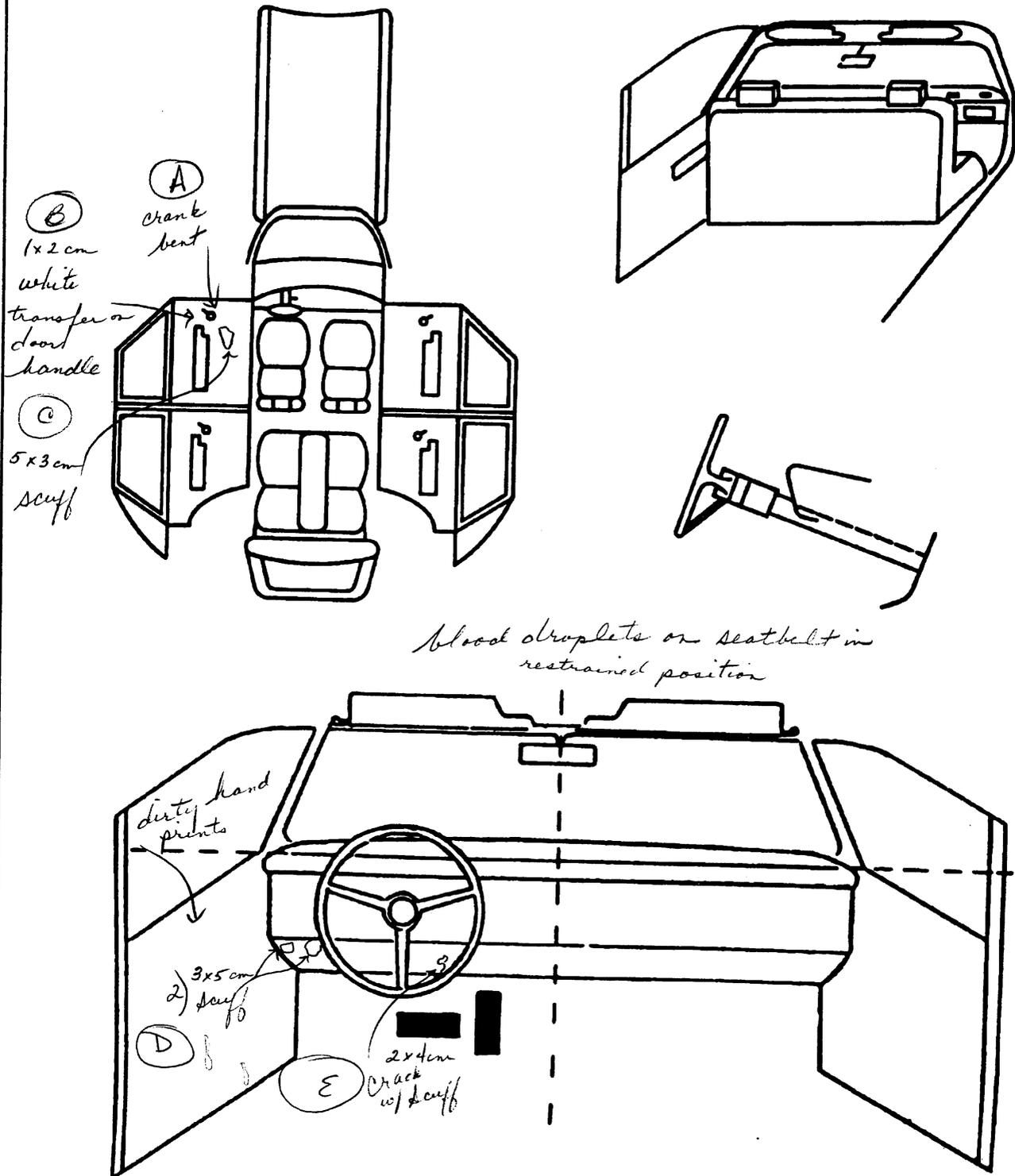
(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
10	—	10	=	0
	—		=	
	—		=	
	—		=	

STEERING COLUMN	INSTRUMENT PANEL
<p>87. Steering Column Type <span style="float: right;"><u>1</u></span></p> <p>(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 <span style="float: right;"><u>0</u></span></p> <p>(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 <span style="float: right;"><u>0</u></span></p> <p>(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 <span style="float: right;"><u>00</u></span>                      _____ 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 <span style="float: right;"><u>00</u></span></p> <p>(00) No steering rim deformation</p> <p><i>Quarter Sections</i></p> <p>(01) Section A                      (02) Section B                      (03) Section C                      (04) Section D</p> <div style="display: flex; align-items: center; gap: 20px;">   </div> <p><i>Half Sections</i></p> <p>(05) Upper half of rim/spoke                      (06) Lower half of rim/spoke                      (07) Left half of rim/spoke                      (08) Right half of rim/spoke</p> <div style="display: flex; align-items: center; gap: 20px;">  </div> <p>(09) Complete steering wheel collapse                      (10) Undetermined location                      (99) Unknown</p>	<p>92. Odometer Reading <span style="float: right;"><u>003,000</u></span></p> <p>_____ 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>1,809</u> miles X 1.6093 = _____ <u>2,911</u> kilometers</p> <p>Source: _____</p> <p>93. Instrument Panel Damage from Occupant Contact? <span style="float: right;"><u>1</u></span></p> <p>(0) No                      (1) Yes                      (9) Unknown</p> <p>94. Type of Knee Bolster Covering <span style="float: right;"><u>2</u></span></p> <p>(0) No knee bolster                      (1) Padded                      (2) Rigid plastic                      (8) Other (specify): _____                      (9) Unknown</p> <p>95. Knee Bolsters Deformed from Occupant Contact? <span style="float: right;"><u>2</u></span></p> <p>(0) No knee bolster                      (1) No deformation                      (2) Yes - deformation                      (9) Unknown</p> <p>96. Did Glove Compartment Door Open During Collision(s)? <span style="float: right;"><u>1</u></span></p> <p>(0) No glove compartment door                      (1) No - door did not open                      (2) Yes - door opened                      (9) Unknown</p> <p>97. Adaptive (Assistive) Driving Equipment <span style="float: right;"><u>0</u></span></p> <p>(0) No adaptive driving equipment                      (1) Adaptive driving equipment installed (Check all that apply.)</p> <p><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): _____</p> <p>(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	052	01	(L) Leg	window crank bent	1
B	052	01	(L) arm	1x2 cm white transfer	1
C	051	01	(L) Leg	5x3 cm scuff	1
D	010	01	(L) knee	two 3x5 cm scuff	1
E	010	01	(R) knee	2x4 cm crack w/ scuff	1
F					
G					
H					
I					
J					
K					
L					
M					
N					

**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., tape deck, 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): \_\_\_\_\_

**CODES FOR INTERIOR COMPONENTS**

**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.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

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

**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

**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

**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

**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

**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**

		Left Front	Right Front	Other
FIRST	Availability/Function	/	0	0
	Deployment	/	0	0
	Failure	/	0	0

**Air Bag System Availability/Function**

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify): \_\_\_\_\_

- (3) Air bag not reinstalled
- (9) Unknown

**Are There Indications of Air Bag System Failure? (This Occupant Position)**

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_
- (9) Unknown

**Frontal Air Bag System Deployment (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, 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

**Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position)**

- (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

**AUTOMATIC BELTS**

		Left	Right
FIRST	Availability/Function	0	0
	Use	0	0
	Type	0	0
	Proper Use	0	0
	Failure Modes	0	0

**Automatic (Passive) Belt System Availability/Function**

- (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

**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

**Automatic (Passive) Belt System Type**

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

**Proper Use of Automatic (Passive) Belt System**

- (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

**Automatic (Passive) Belt Failure Modes During Accident**

- (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

## 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
Type of air bag?	1	0
Flaps open at tear points?	2	0
Flaps damaged?	1	0
Air bag damaged?	01	00
Source of air bag damage	01	00
Air bag tethered?	2	0
Air bag have vent ports?	2	0
Other occupant contact air bag?	1	0
Occupant wearing eyewear?	1	0

**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

**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

**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

**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

**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

**Was The Air Bag Tethered?**

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

**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

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

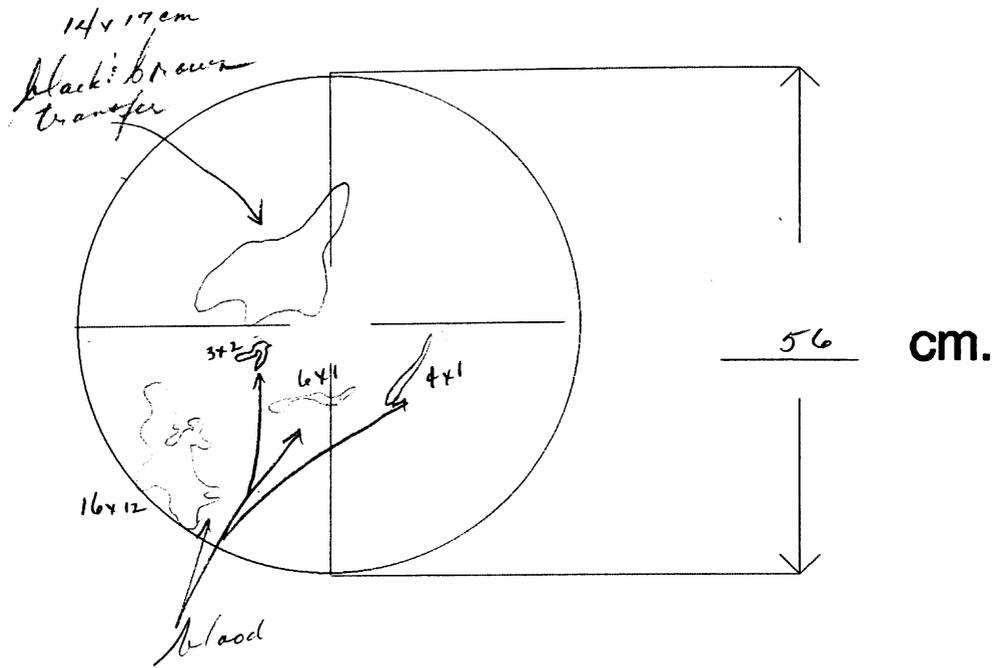
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

**Was This Occupant Wearing Eye-wear?**

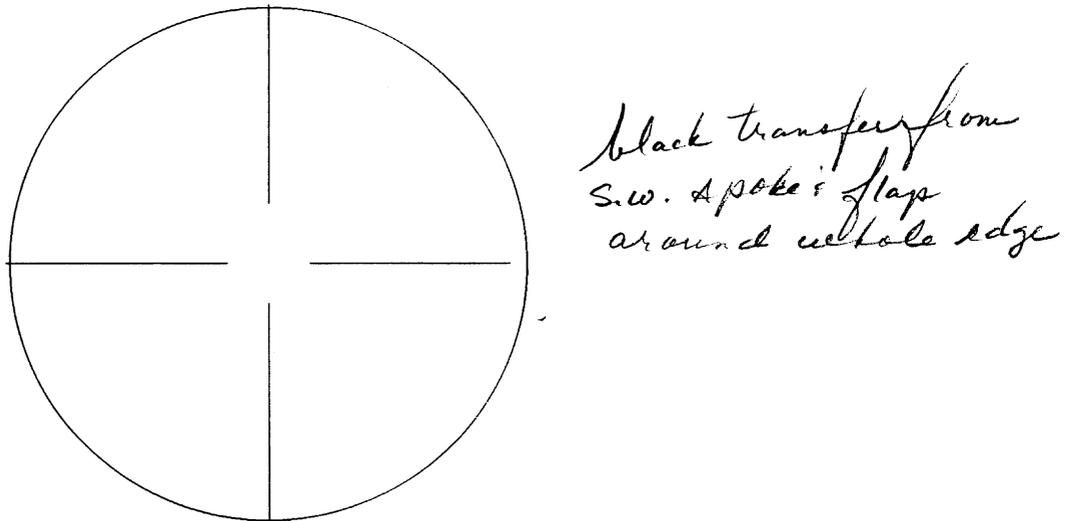
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

**DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES**

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



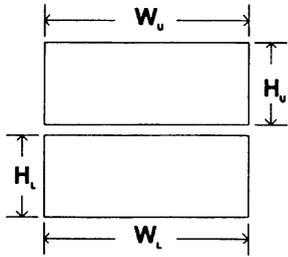
2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)



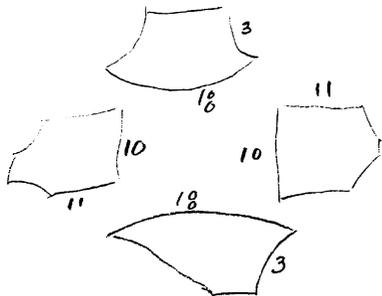
### DRIVER AIR BAG SKETCHES (Cont'd)

#### 3. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

- a. Upper Flap                      b. Lower Flap
- width ( $W_U$ ) \_\_\_\_\_      width ( $W_L$ ) \_\_\_\_\_
- height ( $H_U$ ) \_\_\_\_\_      height ( $H_L$ ) \_\_\_\_\_

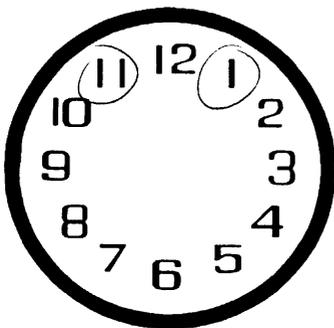


#### 4. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE



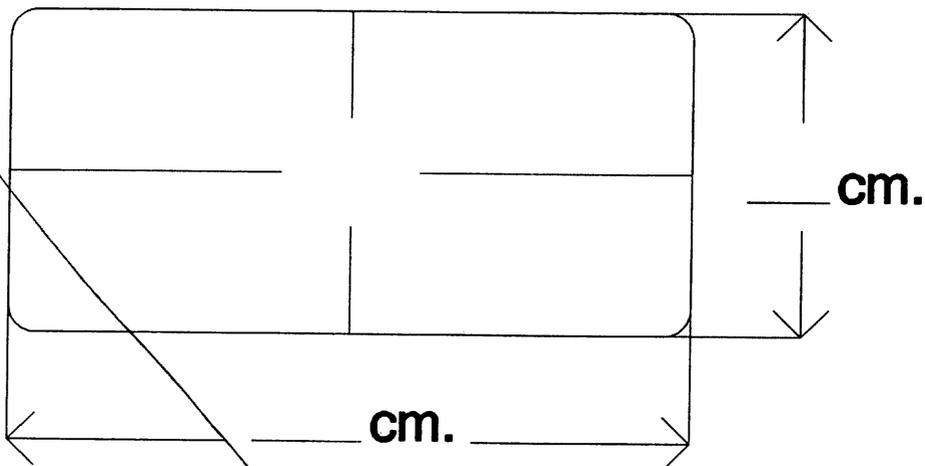
#### 5. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

#### 6. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS

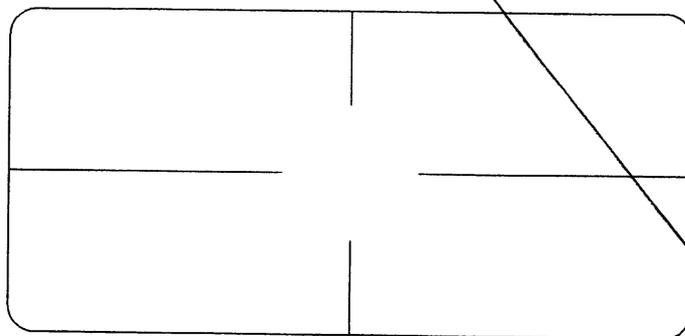


**PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES**

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



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



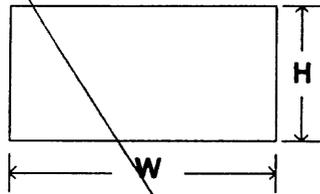
**PASSENGER AIR BAG SKETCHES (Cont'd)**

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

a. Flap

width (W) \_\_\_\_\_

height (H) \_\_\_\_\_



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

a. Upper Flap

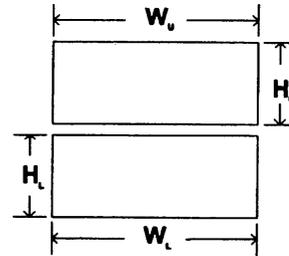
b. Lower Flap

width ( $W_u$ ) \_\_\_\_\_

width ( $W_l$ ) \_\_\_\_\_

height ( $H_u$ ) \_\_\_\_\_

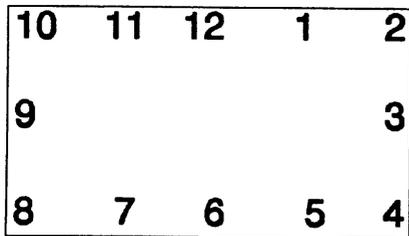
height ( $H_l$ ) \_\_\_\_\_



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

**6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS**

**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)

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**

**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
F I R S T	Head Restraint Type/Damage	3	0	3
	Seat Type	05	05	05
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
	Seat Track Position	6	6	6
	Seat Back Incline Pre/Post Impact	01	01	01
S E C O N D	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
T H I R D	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
O T H E R	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			

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

## HEAD RESTRAINTS/SEAT EVALUATION

**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

**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) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

**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

**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

**Seat Track Adjusted Position Prior To Impact**

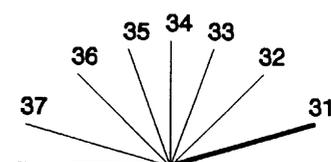
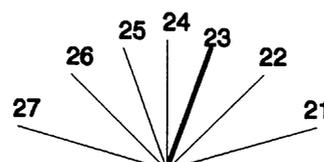
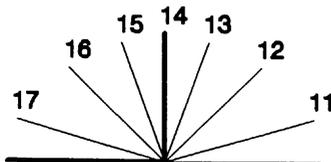
- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track
- Adjustable Seat Track*
- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at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

**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



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

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

## 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						

<p><b>Ejection</b></p> <p>(1) Complete ejection (2) Partial ejection (3) Ejection, Unknown degree (9) Unknown</p> <p><b>Ejection Area</b></p> <p>(1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear</p>	<p>(7) Roof (8) Other area (e.g., back of pickup, etc.) (specify): _____</p> <p>(9) Unknown</p> <p><b>Ejection Medium</b></p> <p>(1) Door/hatch/tailgate (2) Nonfixed roof structure (3) Fixed glazing (4) Nonfixed glazing (specify): _____</p>	<p>(5) Integral structure (8) Other medium (specify): _____</p> <p>(9) Unknown</p> <p><b>Medium Status (Immediately Prior to Impact)</b></p> <p>(1) Open (2) Closed (3) Integral structure (9) Unknown</p>
--	--	--

**ENTRAPMENT** No [  ] Yes [  ]

Describe entrapment mechanism: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Component(s): \_\_\_\_\_

\_\_\_\_\_

(Note in vehicle interior diagram)



# OCCUPANT ASSESSMENT FORM

## OCCUPANT'S SEATING

1. Primary Sampling Unit Number 12  
 2. Case Number - Stratum 15 7 A  
 3. Vehicle Number 02  
 4. Occupant Number 01

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

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 41  
 Code actual age at time of accident.  
 (00) Less than one year old (specify by month): \_\_\_\_\_  
 (97) 97 years and older  
 (99) Unknown

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

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

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

7. Occupant's Height 178  
 Code actual height to the nearest centimeter.  
 (999) Unknown  
70 inches X 2.54 = \_\_\_\_\_ centimeters

*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

8. Occupant's Weight 095  
 Code actual weight to the nearest kilogram.  
 (999)Unknown  
210 pounds X .4536 = \_\_\_\_\_ kilograms

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

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

*Abnormal posture* driver only has 1 hand  
 (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

## 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

## 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

## 15. Medium Status (Immediately Prior To Impact)

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

## 17. Occupant Mobility

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

4

## BELT SYSTEM FUNCTION

- |   |   |
|---|---|
| <p>18. Manual (Active) Belt System Availability <u>4</u></p> <p>(0) None available<br/>           (1) Belt removed/destroyed<br/>           (2) Shoulder belt<br/>           (3) Lap belt<br/>           (4) Lap and shoulder belt<br/>           (5) Belt available—type unknown</p> <p><i>Integral Belt Partially Destroyed</i><br/>           (6) Shoulder belt (lap belt destroyed/removed)<br/>           (7) Lap belt (shoulder belt destroyed/removed)<br/>           (8) Other belt (specify): _____</p> <p>(9) Unknown _____</p>   | <p>22. Shoulder Belt Upper Anchorage Adjustment <u>1</u></p> <p>(0) No shoulder belt<br/>           (1) No upper anchorage adjustment for shoulder belt</p> <p><i>Adjustable shoulder Belt Upper Anchorage</i><br/>           (2) In full up position<br/>           (3) In mid position<br/>           (4) In full down position<br/>           (5) Position unknown<br/>           (9) Unknown if position has adjustable upper anchorage adjustment</p>  |
| <p>19. Manual (Active) Belt System Use <u>0 4</u></p> <p>(00) None used, not available, or belt removed/destroyed<br/>           (01) Inoperative (specify): _____</p> <p>(02) Shoulder belt _____<br/>           (03) Lap belt _____<br/>           (04) Lap and shoulder belt _____<br/>           (05) Belt used—type unknown _____<br/>           (08) Other belt used (specify): _____</p> <p>(12) Shoulder belt used with child safety seat _____<br/>           (13) Lap belt used with child safety seat _____<br/>           (14) Lap and shoulder belt used with child safety seat _____<br/>           (15) Belt used with child safety seat—type unknown _____<br/>           (18) Other belt used with child safety seat (specify): _____<br/>           (99) Unknown if belt used _____</p> | <p>23. Automatic (Passive) Belt System Availability/Function <u>0</u></p> <p>(0) Not equipped/not available<br/>           (1) 2 point automatic belts<br/>           (2) 3 point automatic belts<br/>           (3) Automatic belts - type unknown</p> <p><i>Non-functional</i><br/>           (4) Automatic belts destroyed or rendered inoperative<br/>           (9) Unknown</p>  |
| <p>20. Proper Use of Manual (Active) Belts <u>1</u></p> <p>(0) None used or not available<br/>           (1) Belt used properly<br/>           (2) Belt used properly with child safety seat</p> <p><i>Belt Used Improperly</i><br/>           (3) Shoulder belt worn under arm<br/>           (4) Shoulder belt worn behind back or seat<br/>           (5) Belt worn around more than one person<br/>           (6) Lap belt worn on abdomen<br/>           (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____</p> <p>(8) Other improper use of manual belt system (specify): _____</p> <p>(9) Unknown _____</p>   | <p>24. Automatic (Passive) Belt System Use <u>0</u></p> <p>(0) Not equipped/not available/destroyed or rendered inoperative<br/>           (1) Automatic belt in use<br/>           (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____<br/>           (3) Automatic belt use unknown _____<br/>           (9) Unknown</p>  |
| <p>21. Manual (Active) Belt Failure Modes During Accident <u>1</u></p> <p>(0) No manual belt used or not available<br/>           (1) No manual belt failure(s)<br/>           (2) Torn webbing (stretched webbing not included)<br/>           (3) Broken buckle or latchplate<br/>           (4) Upper anchorage separated<br/>           (5) Other anchorage separated (specify): _____</p> <p>(6) Broken retractor _____<br/>           (7) Combination of above (specify): _____</p> <p>(8) Other manual belt failure (specify): _____</p> <p>(9) Unknown _____</p>  | <p>25. Automatic (Passive) Belt System Type <u>0</u></p> <p>(0) Not equipped/not available<br/>           (1) Non-motorized system<br/>           (2) Motorized system<br/>           (9) Unknown</p> <p>26. Proper Use of Automatic (Passive) Belt System <u>0</u></p> <p>(0) Not equipped/not available/not used<br/>           (1) Automatic belt used properly<br/>           (2) Automatic belt used properly with child safety seat</p> <p><i>Automatic Belt Used Improperly</i><br/>           (3) Automatic shoulder belt worn under arm<br/>           (4) Automatic shoulder belt worn behind back<br/>           (5) Automatic belt worn around more than one person<br/>           (6) Lap portion of automatic belt worn on abdomen<br/>           (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): _____<br/>           (9) Unknown _____</p> |
|   | <p>27. Automatic (Passive) Belt Failure Modes During Accident <u>0</u></p> <p>(0) Not equipped/not available/not in use<br/>           (1) No automatic belt failure(s)<br/>           (2) Torn webbing (stretched webbing not included)<br/>           (3) Broken buckle or latchplate<br/>           (4) Upper anchorage separated<br/>           (5) Other anchorage separated (specify): _____</p> <p>(6) Broken retractor _____<br/>           (7) Combination of above (specify): _____<br/>           (8) Other automatic belt failure (specify): _____<br/>           (9) Unknown _____</p>   |

POLICE REPORTED RESTRAINT USE	AIR BAG SYSTEM FUNCTION
<p>28. Police Reported Belt Use <span style="float: right;"><u>4</u></span></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 <span style="float: right;"><u>2</u></span></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 type="checkbox"/> Not equipped/not available/destroyed or rendered inoperative  <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>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>30. Frontal Air Bag System Availability/Function (This Occupant Position) <span style="float: right;"><u>1</u></span></p> <p>(0) Not equipped/not available                      (1) Air bag</p> <p><i>Non-functional</i>                      (2) Air bag disconnected (specify): _____                      (3) Air bag not reinstalled                      (9) Unknown</p> <p>31. Frontal Air Bag System Deployment (This Occupant Position) <span style="float: right;"><u>1</u></span></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, 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 (This Occupant Position) <span style="float: right;"><u>0</u></span></p> <p>(0) Not equipped/not available                      (1) Air bag</p> <p><i>Non-functional</i>                      (2) Air bag disconnected (specify): _____                      (3) Air bag not reinstalled                      (9) Unknown</p> <p><i>Specify type of "other" air bag present:</i>                      _____</p> <p>33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) <span style="float: right;"><u>0</u></span></p> <p>(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? (This Occupant Position) <span style="float: right;"><u>1</u></span></p> <p>(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)? 1

- (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 1

- (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? 1

- (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  
1 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 047

Delta V For Air Bag Deployment Impact

(000) Not equipped/not available 046

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) Unknown41. 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? 2  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
2  
 \_\_\_\_\_  
 (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):  
 \_\_\_\_\_  
 (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? 1  
 (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

**HEAD RESTRAINT AND SEAT EVALUATION**

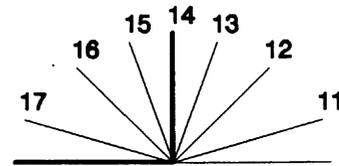
49. Head Restraint Type/Damage by Occupant at This Occupant Position 3  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown
50. Seat Type (this Occupant Position) 05  
 (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 6  
 (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

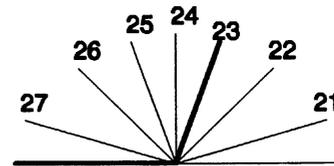
*Upright prior to impact*

- (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



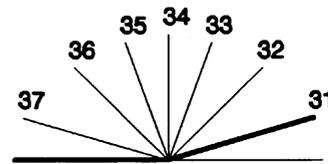
*Slightly reclined prior to impact*

- (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 0 0 0  
 (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 0 0  
 (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 0 0

59. Child Safety Seat Shield Usage 0 0

60. Child Safety Seat Tether Usage 0 0

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) 2

- (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 06

- to day work week* 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 04  
 \_\_\_\_\_ 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 15  
 (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? 1  
 (1) No - blood not given  
 (2) Yes - blood given  
 (specify units): \_\_\_\_\_  
 (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 20  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> 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



# OCCUPANT INJURY FORM

1. Primary Sampling Unit Number <u>12</u>	3. Vehicle Number <u>02</u>
2. Case Number - Stratum <u>157A</u>	4. Occupant Number <u>01</u>

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	A.I.S. - 90							Injury Source	Injury Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source				
<i>Chest cont</i> 1st	5. <u>3</u>	6. <u>4</u>	7. <u>9</u>	8. <u>04</u>	9. <u>02</u>	10. <u>1</u>	11. <u>0</u>	12. <u>170</u>	13. <u>1</u>	14. <u>1</u>	15. <u>00</u>
<i>head cont</i> 2nd	16. <u>7</u>	17. <u>1</u>	18. <u>9</u>	19. <u>04</u>	20. <u>02</u>	21. <u>1</u>	22. <u>5</u>	23. <u>015</u>	24. <u>3</u>	25. <u>1</u>	26. <u>00</u>
④ <i>elbow lac</i> 3rd	27. <u>3</u>	28. <u>7</u>	29. <u>9</u>	30. <u>06</u>	31. <u>02</u>	32. <u>1</u>	33. <u>2</u>	34. <u>602</u>	35. <u>2</u>	36. <u>3</u>	37. <u>60</u>
<i>head of consciousness</i> 4th	38. <u>3</u>	39. <u>1</u>	40. <u>6</u>	41. <u>04</u>	42. <u>02</u>	43. <u>1</u>	44. <u>0</u>	45. <u>015</u>	46. <u>3</u>	47. <u>1</u>	48. <u>00</u>
5th	49. ___	50. ___	51. ___	52. ___	53. ___	54. ___	55. ___	56. ___	57. ___	58. ___	59. ___
6th	60. ___	61. ___	62. ___	63. ___	64. ___	65. ___	66. ___	67. ___	68. ___	69. ___	70. ___
7th	71. ___	72. ___	73. ___	74. ___	75. ___	76. ___	77. ___	78. ___	79. ___	80. ___	81. ___
8th	82. ___	83. ___	84. ___	85. ___	86. ___	87. ___	88. ___	89. ___	90. ___	91. ___	92. ___
9th	93. ___	94. ___	95. ___	96. ___	97. ___	98. ___	99. ___	100. ___	101. ___	102. ___	103. ___
10th	104. ___	105. ___	106. ___	107. ___	108. ___	109. ___	110. ___	111. ___	112. ___	113. ___	114. ___



## OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(3) Bilateral
(4) Thorax	<u>Vessels, Nerves, Organs.</u>		(4) Central
(5) Abdomen	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(5) Anterior
(6) Spine			(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified	The exceptions to this rule apply to:		(9) Unknown
			(0) Whole region
Type of Anatomic Structure	Whole Area	Abbreviated Injury Scale	
(1) Whole Area	(02) Skin - Abrasion	(1) Minor Injury	
(2) Vessels	(04) Skin - Contusion	(2) Moderate Injury	
(3) Nerves	(06) Skin - Laceration	(3) Serious Injury	
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion	(4) Severe Injury	
(5) Skeletal (includes joints)	(10) Amputation	(5) Critical Injury	
(6) Head - LOC	(20) Burn	(6) Maximum (untreatable)	
(9) Skin	(30) Crush	(7) Injured, unknown severity	
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		

## SOURCE OF INJURY DATA

## INJURY SOURCE

## DIRECT/INDIRECT INJURY

OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

## CONFIDENCE LEVEL

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

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## INJURY SOURCES

### 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., tape deck, 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
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (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):

### EXTERIOR OF OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify):
- (454) Unknown exterior objects

### EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify):
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify):
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify):
- (514) Unknown exterior of other motor vehicle

### OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (551) Ground
- (598) Other vehicle or object (specify):
- (599) Unknown vehicle or object

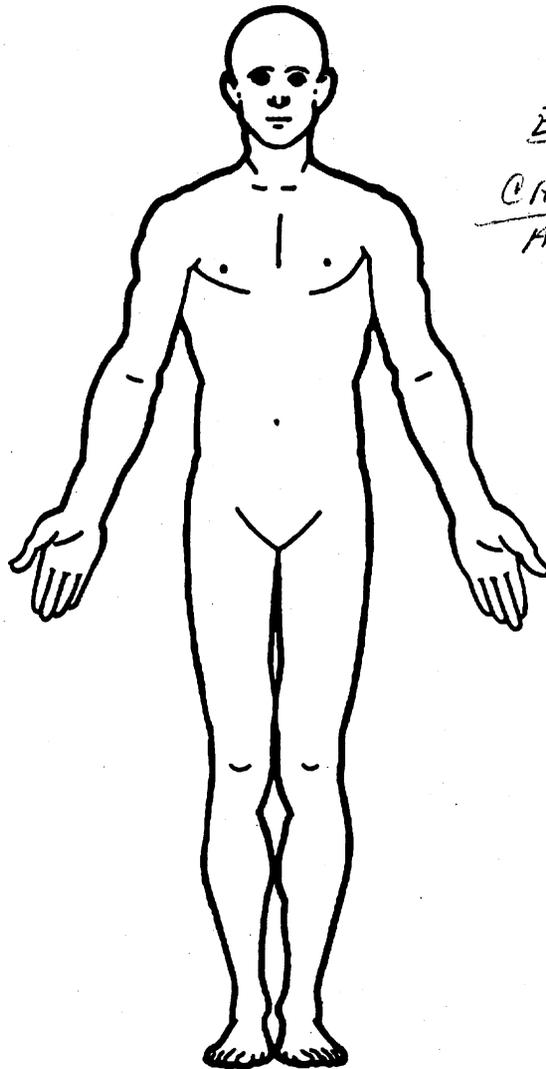
### NONCONTACT INJURY

- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify):
- (604) Air bag exhaust gases
- (697) Injured, unknown source

# OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

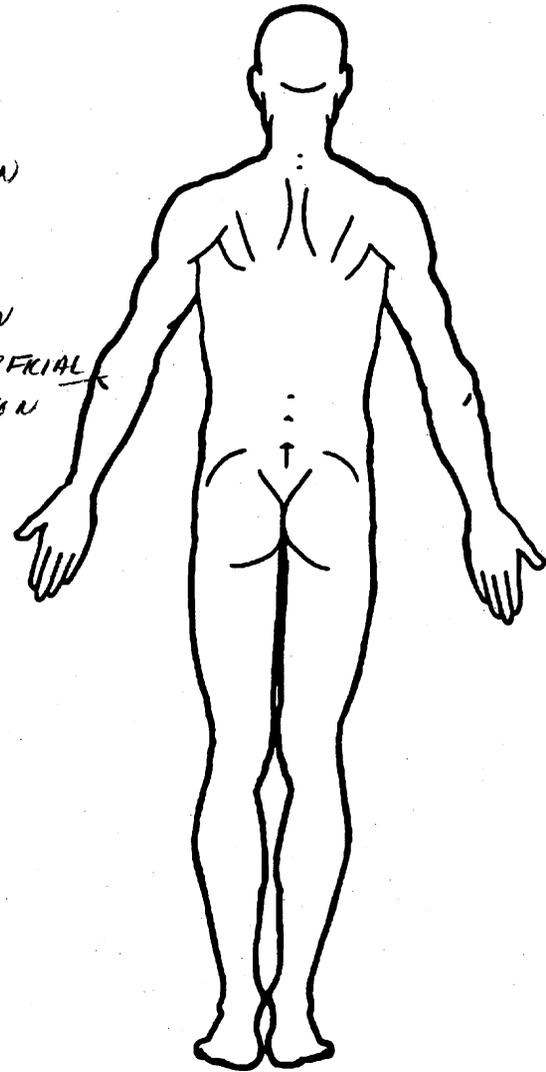
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

ER DIZZY AT THE SCENE but A/OX3



ER  
CHEST CONTUSION  
AIR BAG

Ⓛ ELBOW  
SMALL, SUPERFICIAL  
LACERATION  
GLASS IN  
WOUND



# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

No

Yes

Blood Alcohol  
Level (mg/dl)

BAL = NR

Glasgow Coma  
Scale Score

GCSS = 15

Units of Blood  
Given

Units = 0

Arterial Blood  
Gases

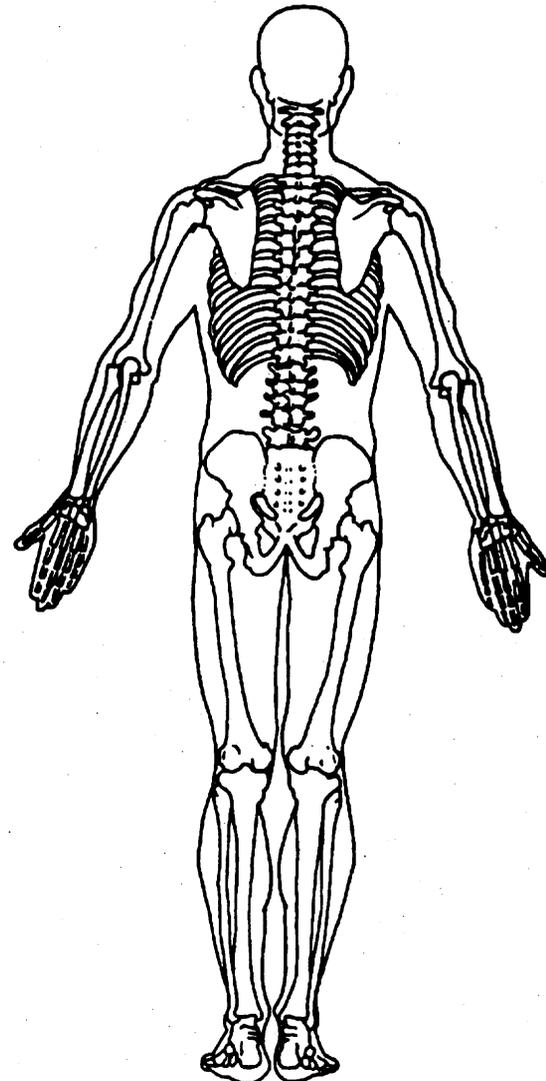
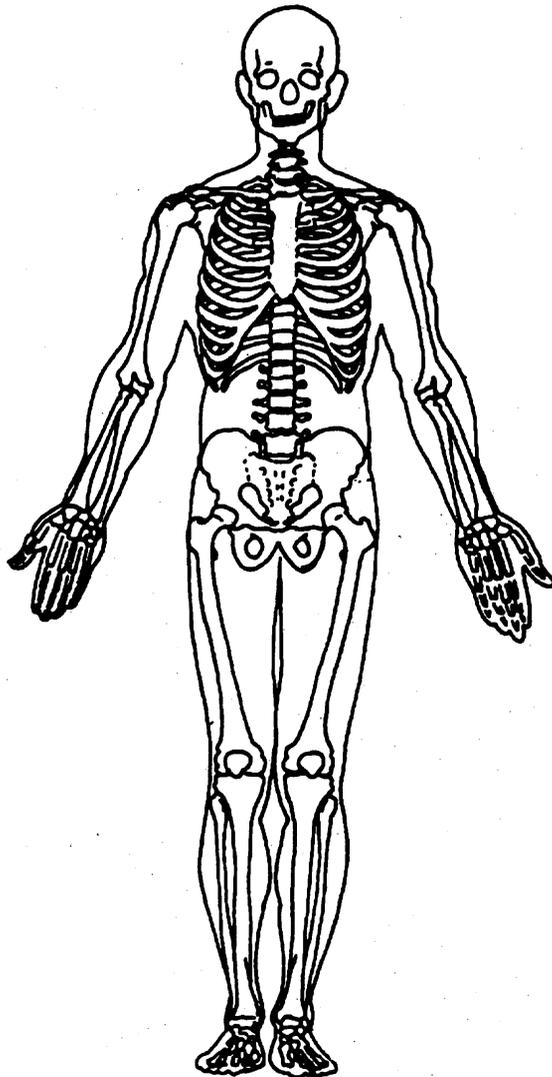
pH =     

PO<sub>2</sub> =     

PCO<sub>2</sub> =     

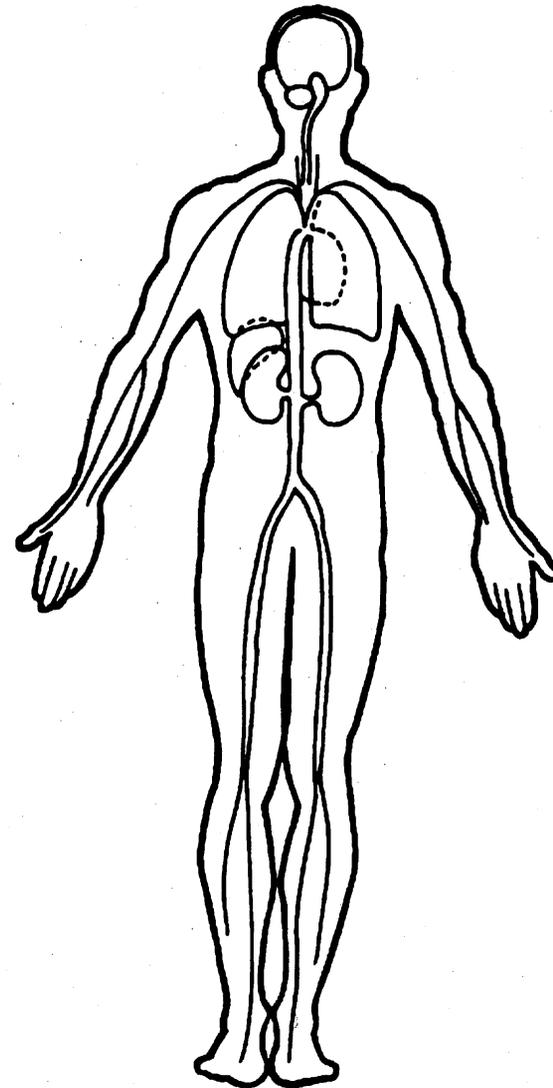
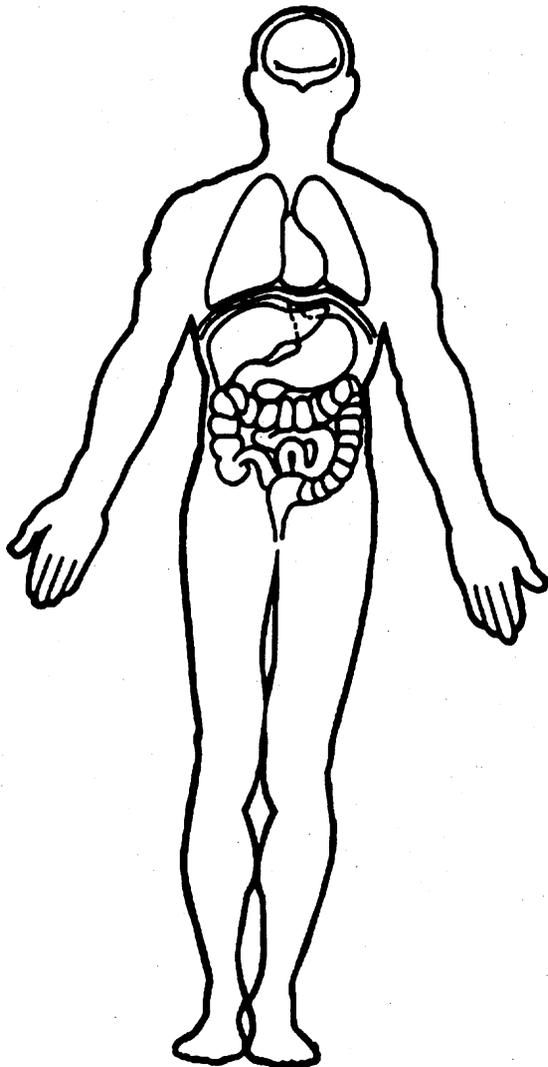
HCO<sub>3</sub> = 20

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## OFFICIAL INJURY DATA – INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





# CRASHPC PROGRAM SUMMARY

National Highway Traffic Safety Administration

(All Measurements In Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

### Identifying Title

<u>12</u> Primary Sampling Unit	<u>157A</u> Case No.-Stratum	<u>01</u> Accident Event Sequence No.	<u>[REDACTED] 95</u> Date (Month, day, year) of Run
------------------------------------	---------------------------------	--	--

### CRASHPC Vehicle Identification

Vehicle 1	<u>1994</u>	<u>Chevrolet</u>	<u>Cavalier</u>	<u>1</u>
Vehicle 2	<u>1995</u>	<u>Gmc</u>	<u>Jeep 1500 SL</u>	<u>2</u>
	Year	Make	Model	NASS Veh. No.

## GENERAL INFORMATION

VEHICLE 1			VEHICLE 2		
Size	<u>2</u>		Size	<u>7</u>	
Weight			Weight		
$\frac{1141}{\text{Curb}} + \frac{74}{\text{Occupant(s)}} + \frac{18}{\text{Cargo}} = \frac{1233}{\text{kg}}$			$\frac{1730}{\text{Curb}} + \frac{95}{\text{Occupant(s)}} + \frac{0}{\text{Cargo}} = \frac{1825}{\text{kg}}$		
CDC	<u>02 R D A W 4</u>		CDC	<u>12 F D E W 4</u>	
PDOF (-180 to +180)	<u>± 70°</u>		PDOF (-180 to +180)	<u>± 10°</u>	
Stiffness	<u>2</u>		Stiffness	<u>1</u>	

## SCENE INFORMATION

Rest and Impact Positions [ ] No, Go To Damage Information [ ] Yes

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

## VEHICLE MOTION

Sustained Contact [ ] No [ ] Yes

VEHICLE 1			VEHICLE 2		
Vehicle Rotation	[ ] No [ ] Yes		Vehicle Rotation	[ ] No [ ] Yes	
Rotation Stop Before Rest	[ ] No [ ] Yes		Rotation Stop Before Rest	[ ] No [ ] Yes	
End of Rotation Position	X	_____ m	End of Rotation Position	X	_____ m
	Y	_____ m		Y	_____ m
	PSI	_____ °		PSI	_____ °
Curved Path	[ ] No [ ] Yes		Curved Path	[ ] No [ ] Yes	
Point on Path			Point on Path		
X	_____ m	Y	X	_____ m	Y
Rotation Direction	[ ] None [ ] CW [ ] CCW		Rotation Direction	[ ] None [ ] CW [ ] CCW	
Rotation >360°	[ ] No [ ] Yes		Rotation >360°	[ ] No [ ] Yes	

**FRICITION INFORMATION** **TRAJECTORY INFORMATION**

Coefficient of Friction \_\_\_\_\_  
 Rolling Resistance Option \_\_\_\_\_

Vehicle 1 Rolling Resistance  
 LF \_\_\_\_ . \_\_\_\_ RF \_\_\_\_ . \_\_\_\_  
 LR \_\_\_\_ . \_\_\_\_ RR \_\_\_\_ . \_\_\_\_

Vehicle 2 Rolling Resistance  
 LF \_\_\_\_ . \_\_\_\_ RF \_\_\_\_ . \_\_\_\_  
 LR \_\_\_\_ . \_\_\_\_ RR \_\_\_\_ . \_\_\_\_

**Trajectory Data** [ ] No [ ] Yes  
*If No, Go To Damage Information*

Vehicle 1 Steer Angles  
 LF \_\_\_\_\_ ° RF \_\_\_\_\_ °  
 LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

Vehicle 2 Steer Angles  
 LF \_\_\_\_\_ ° RF \_\_\_\_\_ °  
 LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

**Terrain Boundary** [ ] No [ ] Yes

First Point  
 X \_\_\_\_\_ . \_\_\_\_ m Y \_\_\_\_\_ . \_\_\_\_ m

Second Point  
 X \_\_\_\_\_ . \_\_\_\_ m Y \_\_\_\_\_ . \_\_\_\_ m

Secondary Coefficient of Friction \_\_\_\_\_

**DAMAGE INFORMATION**

	VEHICLE 1		VEHICLE 2
Damage Length	L <u>306</u> cm	Damage Length	L <u>172</u> cm
Crush Depths	C <sub>1</sub> _____ <u>6</u> cm	Crush Depths	C <sub>1</sub> _____ <u>7</u> cm
	C <sub>2</sub> _____ <u>10</u> cm		C <sub>2</sub> _____ <u>13</u> cm
	C <sub>3</sub> _____ <u>86</u> cm		C <sub>3</sub> _____ <u>29</u> cm
	C <sub>4</sub> _____ <u>60</u> cm		C <sub>4</sub> _____ <u>58</u> cm
	C <sub>5</sub> _____ <u>8</u> cm		C <sub>5</sub> _____ <u>67</u> cm
	C <sub>6</sub> _____ <u>0</u> cm		C <sub>6</sub> _____ <u>86</u> cm
Damage Offset	D $\pm$ <u>87</u> cm	Damage Offset	D $\pm$ _____ <u>0</u> cm

**IF THIS COMMON IMPACT WAS WITH A MOTOR 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 vehicle damage sketch and dimensions to the Form.

INPUT

CALCULATE

TRAJECTORY

OUTPUT

GRAPHICS

EXIT

TITLE

P12-157A-01-V1 TO V2

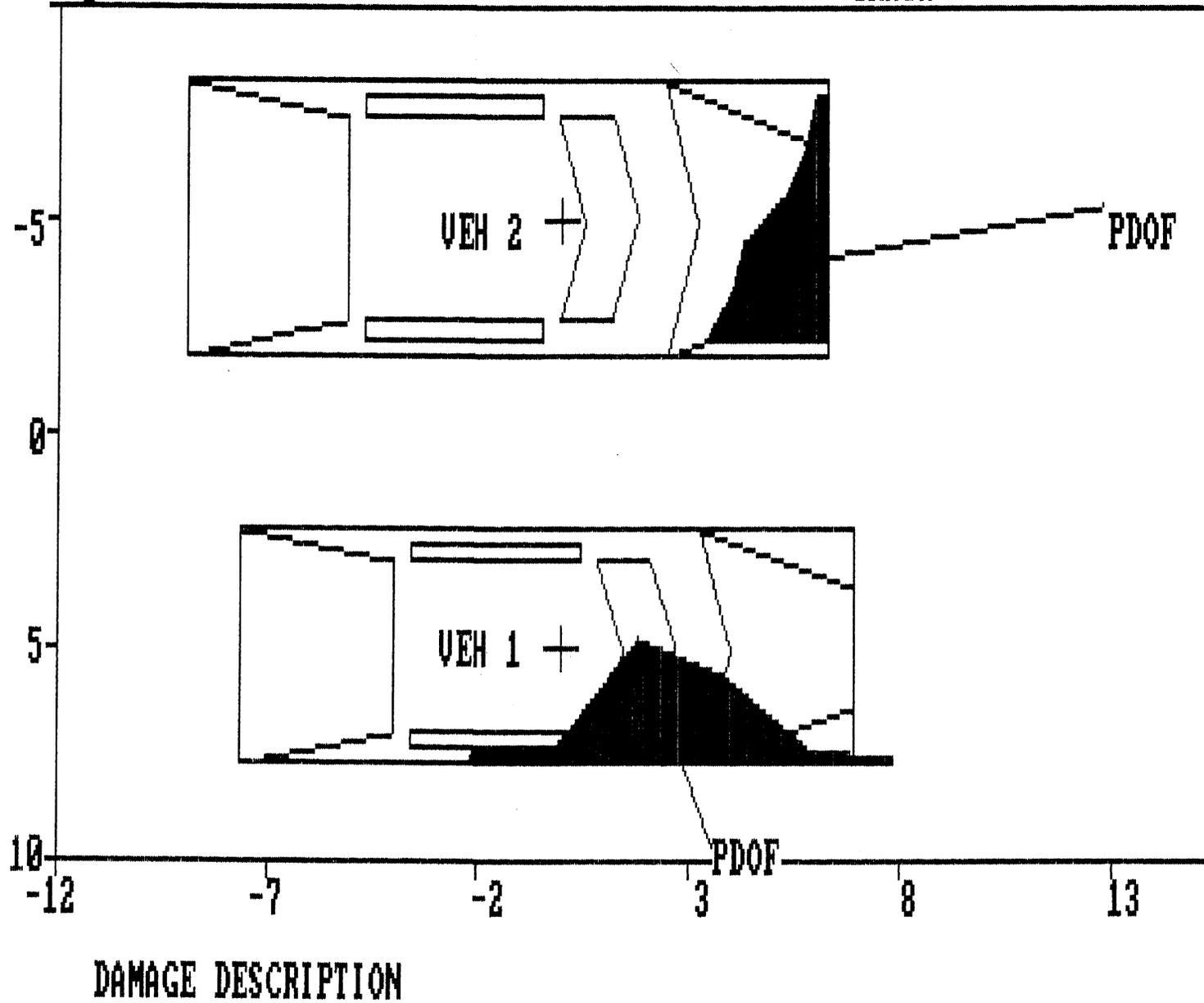
GENERAL INFORMATION

VEHICLE #1	
SIZE	2
WEIGHT	1233.
CDC	02RDAW4
PDOF	70.00
STIFFNESS	2
CANCEL	ACCEPT

VEHICLE #2	
SIZE	7
WEIGHT	1825.
CDC	12FDEW4
PDOF	-10.00
STIFFNESS	7
CANCEL	ACCEPT

Printing Picture:

CRASH



METRIC INPUT

SUMMARY OF CRASHPC RESULTS USING DAMAGE

---

P12-157A-01-V1 TO V2

SPEED CHANGE  
(DAMAGE)

VEHICLE #1

TOTAL 69 KPH ( 43 MPH)  
LONGITUDINAL -24 KPH ( -15 MPH)  
LATITUDINAL -65 KPH ( -40 MPH)  
PDOF ANGLE 70 DEGREES  
ENERGY DISSIPATED = 184356 JOULES ( 135956 FT-LB)

VEHICLE #2

TOTAL 47 KPH ( 29 MPH)  
LONGITUDINAL -46 KPH ( -29 MPH)  
LATITUDINAL 8 KPH ( 5 MPH)  
PDOF ANGLE -10 DEGREES  
ENERGY DISSIPATED = 253816 JOULES ( 187180 FT-LB)

DAMAGE DATA

---

	VEHICLE #1	VEHICLE #2
SIZE CATEGORY	2	7
STIFFNESS CATEGORY	2	7
VEHICLE WEIGHT	1233 KGS ( 2718 LBS)	1825 KGS ( 4023 LBS)
CDC	O2RDAW4	12FDEW4
PDOF ANGLE	70 DEGREES	-10 DEGREES
CRUSH LENGTH	306 CM. ( 120 IN.)	178 CM. ( 70 IN.)
C1	6 CM. ( 2 IN.)	7 CM. ( 3 IN.)
C2	10 CM. ( 4 IN.)	13 CM. ( 5 IN.)
C3	86 CM. ( 34 IN.)	29 CM. ( 11 IN.)
C4	60 CM. ( 24 IN.)	58 CM. ( 23 IN.)
C5	8 CM. ( 3 IN.)	67 CM. ( 26 IN.)
C6	0 CM. ( 0 IN.)	86 CM. ( 34 IN.)
D	87 CM. ( 34 IN.)	0 CM. ( 0 IN.)
D'	79 CM. ( 31 IN.)	30 CM. ( 12 IN.)

(\* INDICATES DEFAULT VALUE)

DIMENSIONS AND INERTIAL PROPERTIES

---

	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	118 CM. ( 46 IN.)	123 CM. ( 49 IN.)
CG TO REAR AXLE	127 CM. ( 50 IN.)	174 CM. ( 69 IN.)
TRACK	139 CM. ( 55 IN.)	172 CM. ( 68 IN.)
CG TO FRONT OF VEH	212 CM. ( 83 IN.)	192 CM. ( 76 IN.)
CG TO REAR OF VEH	-233 CM. ( -92 IN.)	-272 CM. (-107 IN.)
CG TO SIDE OF VEH	85 CM. ( 34 IN.)	100 CM. ( 40 IN.)
MOMENT OF INERTIA	9461 KGS ( 20857 LBS)	17619 KGS ( 38842 LBS)
VEHICLE MASS	3 KGS ( 7 LBS)	5 KGS ( 10 LBS)



**FRICITION INFORMATION** **TRAJECTORY INFORMATION**

Coefficient of Friction \_\_\_\_\_  
 Rolling Resistance Option \_\_\_\_\_

Vehicle 1 Rolling Resistance  
 LF \_\_\_\_\_ RF \_\_\_\_\_  
 LR \_\_\_\_\_ RR \_\_\_\_\_

Vehicle 2 Rolling Resistance  
 LF \_\_\_\_\_ RF \_\_\_\_\_  
 LR \_\_\_\_\_ RR \_\_\_\_\_

**Trajectory Data** [ ] No [ ] Yes  
*If No, Go To Damage Information*

Vehicle 1 Steer Angles  
 LF \_\_\_\_\_ ° RF \_\_\_\_\_ °  
 LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

Vehicle 2 Steer Angles  
 LF \_\_\_\_\_ ° RF \_\_\_\_\_ °  
 LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

**Terrain Boundary** [ ] No [ ] Yes

\_\_\_\_\_

First Point  
 X \_\_\_\_\_ m Y \_\_\_\_\_ m

Second Point  
 X \_\_\_\_\_ m Y \_\_\_\_\_ m

Secondary Coefficient of Friction \_\_\_\_\_

**DAMAGE INFORMATION**

	VEHICLE 1		VEHICLE 2
Damage Length	L _____ cm	Damage Length	L <u>178</u> cm
Crush Depths	C <sub>1</sub> _____ cm	Crush Depths	C <sub>1</sub> _____ <u>7</u> cm
	C <sub>2</sub> _____ cm		C <sub>2</sub> _____ <u>13</u> cm
	C <sub>3</sub> _____ cm		C <sub>3</sub> _____ <u>29</u> cm
	C <sub>4</sub> _____ cm		C <sub>4</sub> _____ <u>58</u> cm
	C <sub>5</sub> _____ cm		C <sub>5</sub> _____ <u>67</u> cm
	C <sub>6</sub> _____ cm		C <sub>6</sub> _____ <u>86</u> cm
Damage Offset	D <sup>±</sup> _____ cm	Damage Offset	D <sup>±</sup> _____ <u>0</u> cm

**IF THIS COMMON IMPACT WAS WITH A MOTOR 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 vehicle damage sketch and dimensions to the Form.

TITLE  
P12-157A-01-V2 WITH BARRIER EQUIVALENT RUN

GENERAL INFORMATION

VEHICLE #1	
SIZE	11
WEIGHT	1000000.
CDC	
PDOF	
STIFFNESS	
CANCEL	ACCEPT

VEHICLE #2	
SIZE	7
WEIGHT	1825.
CDC	12FDEW4
PDOF	-10.00
STIFFNESS	7
CANCEL	ACCEPT

METRIC INPUT

SUMMARY OF CRASHPC RESULTS USING DAMAGE

---

P12-157A-01-V2 WITH BARRIER EQUIVALENT RUN

SPEED CHANGE  
(DAMAGE)

VEHICLE #1

TOTAL	0 KPH ( 0 MPH)
LONGITUDINAL	0 KPH ( 0 MPH)
LATITUDINAL	0 KPH ( 0 MPH)
PDOF ANGLE	0 DEGREES
ENERGY DISSIPATED =	0 JOULES ( 0 FT-LB)

VEHICLE #2

TOTAL	56 KPH ( 35 MPH)
LONGITUDINAL	-55 KPH ( -34 MPH)
LATITUDINAL	10 KPH ( 6 MPH)
PDOF ANGLE	-10 DEGREES
ENERGY DISSIPATED =	253816 JOULES ( 187180 FT-LB)

DAMAGE DATA

---

VEHICLE #1

VEHICLE #2

SIZE CATEGORY	11	7
STIFFNESS CATEGORY	0	7
VEHICLE WEIGHT	***** KGS (2204586 LBS) *	1825 KGS ( 4023 LBS)
CDC	BARRIER	12FDEW4
PDOF ANGLE	0 DEGREES *	-10 DEGREES
CRUSH LENGTH	0 CM. ( 0 IN.) *	178 CM. ( 70 IN.)
C1	0 CM. ( 0 IN.) *	7 CM. ( 3 IN.)
C2	0 CM. ( 0 IN.) *	13 CM. ( 5 IN.)
C3	0 CM. ( 0 IN.) *	29 CM. ( 11 IN.)
C4	0 CM. ( 0 IN.) *	58 CM. ( 23 IN.)
C5	0 CM. ( 0 IN.) *	67 CM. ( 26 IN.)
C6	0 CM. ( 0 IN.) *	86 CM. ( 34 IN.)
D	0 CM. ( 0 IN.) *	0 CM. ( 0 IN.)
D'	0 CM. ( 0 IN.) *	30 CM. ( 12 IN.)

(\* INDICATES DEFAULT VALUE)

DIMENSIONS AND INERTIAL PROPERTIES

---

	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	127 CM. ( 50 IN.)	123 CM. ( 49 IN.)
CG TO REAR AXLE	127 CM. ( 50 IN.)	174 CM. ( 69 IN.)
TRACK	127 CM. ( 50 IN.)	172 CM. ( 68 IN.)
CG TO FRONT OF VEH	127 CM. ( 50 IN.)	192 CM. ( 76 IN.)
CG TO REAR OF VEH	-127 CM. ( -50 IN.)	-272 CM. (-107 IN.)
CG TO SIDE OF VEH	127 CM. ( 50 IN.)	100 CM. ( 40 IN.)
MOMENT OF INERTIA	***** KGS (***** LBS)	17619 KGS ( 38842 LBS)
VEHICLE MASS	2600 KGS ( 5732 LBS)	5 KGS ( 10 LBS)



**FRICITION INFORMATION** **TRAJECTORY INFORMATION**

Coefficient of Friction \_\_\_\_\_  
 Rolling Resistance Option \_\_\_\_\_

Vehicle 1 Rolling Resistance  
 LF \_\_\_\_\_ RF \_\_\_\_\_  
 LR \_\_\_\_\_ RR \_\_\_\_\_

Vehicle 2 Rolling Resistance  
 LF \_\_\_\_\_ RF \_\_\_\_\_  
 LR \_\_\_\_\_ RR \_\_\_\_\_

Trajectory Data  No  Yes  
*If No, Go To Damage Information*

Vehicle 1 Steer Angles  
 LF \_\_\_\_\_ ° RF \_\_\_\_\_ °  
 LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

Vehicle 2 Steer Angles  
 LF \_\_\_\_\_ ° RF \_\_\_\_\_ °  
 LR \_\_\_\_\_ ° RR \_\_\_\_\_ °

Terrain Boundary  No  Yes

\_\_\_\_\_

First Point  
 X \_\_\_\_\_ m Y \_\_\_\_\_ m

Second Point  
 X \_\_\_\_\_ m Y \_\_\_\_\_ m

Secondary Coefficient of Friction \_\_\_\_\_

**DAMAGE INFORMATION**

	VEHICLE 1		VEHICLE 2
Damage Length	L <u>306</u> cm	Damage Length	L _____ cm
Crush Depths	C <sub>1</sub> _____ <u>6</u> cm	Crush Depths	C <sub>1</sub> _____ cm
	C <sub>2</sub> _____ <u>16</u> cm		C <sub>2</sub> _____ cm
	C <sub>3</sub> _____ <u>86</u> cm		C <sub>3</sub> _____ cm
	C <sub>4</sub> _____ <u>60</u> cm		C <sub>4</sub> _____ cm
	C <sub>5</sub> _____ <u>8</u> cm		C <sub>5</sub> _____ cm
	C <sub>6</sub> _____ <u>0</u> cm		C <sub>6</sub> _____ cm
Damage Offset	D <u>4</u> <u>87</u> cm	Damage Offset	D <u>±</u> _____ cm

**IF THIS COMMON IMPACT WAS WITH A MOTOR 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 vehicle damage sketch and dimensions to the Form.

TITLE  
P12-157A-01-V1 TO BARRIER EQUIVALENT RUN

GENERAL INFORMATION

VEHICLE #1	
SIZE	2
WEIGHT	1233.
CDC	02RDAW4
PDOF	70.00
STIFFNESS	2
CANCEL	ACCEPT

VEHICLE #2	
SIZE	11
WEIGHT	1000000.
CDC	
PDOF	
STIFFNESS	
CANCEL	ACCEPT

METRIC INPUT

SUMMARY OF CRASHPC RESULTS USING DAMAGE

---

P12-157A-01-V1 TO BARRIER EQUIVALENT RUN

SPEED CHANGE  
(DAMAGE)

VEHICLE #1  
TOTAL                            58 KPH ( 36 MPH)  
LONGITUDINAL                 -20 KPH ( -12 MPH)  
LATITUDINAL                  -54 KPH ( -34 MPH)  
PDOF ANGLE                        70 DEGREES  
ENERGY DISSIPATED = 184356 JOULES ( 135956 FT-LB)

VEHICLE #2  
TOTAL                            0 KPH ( 0 MPH)  
LONGITUDINAL                 0 KPH ( 0 MPH)  
LATITUDINAL                  0 KPH ( 0 MPH)  
PDOF ANGLE                        0 DEGREES  
ENERGY DISSIPATED = 0 JOULES ( 0 FT-LB)

DAMAGE DATA

---

	VEHICLE #1	VEHICLE #2
SIZE CATEGORY	2	11
STIFFNESS CATEGORY	2	0
VEHICLE WEIGHT	1233 KGS ( 2718 LBS)	***** KGS (2204586 LBS) *
CDC	O2RDAW4	BARRIER
PDOF ANGLE	70 DEGREES	0 DEGREES *
CRUSH LENGTH	306 CM. ( 120 IN.)	0 CM. ( 0 IN.) *
C1	6 CM. ( 2 IN.)	0 CM. ( 0 IN.) *
C2	10 CM. ( 4 IN.)	0 CM. ( 0 IN.) *
C3	86 CM. ( 34 IN.)	0 CM. ( 0 IN.) *
C4	60 CM. ( 24 IN.)	0 CM. ( 0 IN.) *
C5	8 CM. ( 3 IN.)	0 CM. ( 0 IN.) *
C6	0 CM. ( 0 IN.)	0 CM. ( 0 IN.) *
D	87 CM. ( 34 IN.)	0 CM. ( 0 IN.) *
D'	79 CM. ( 31 IN.)	0 CM. ( 0 IN.) *

(\* INDICATES DEFAULT VALUE)

DIMENSIONS AND INERTIAL PROPERTIES

---

	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	118 CM. ( 46 IN.)	127 CM. ( 50 IN.)
CG TO REAR AXLE	127 CM. ( 50 IN.)	127 CM. ( 50 IN.)
TRACK	139 CM. ( 55 IN.)	127 CM. ( 50 IN.)
CG TO FRONT OF VEH	212 CM. ( 83 IN.)	127 CM. ( 50 IN.)
CG TO REAR OF VEH	-233 CM. ( -92 IN.)	-127 CM. ( -50 IN.)
CG TO SIDE OF VEH	85 CM. ( 34 IN.)	127 CM. ( 50 IN.)
MOMENT OF INERTIA	9461 KGS ( 20857 LBS)	***** KGS (***** LBS)
VEHICLE MASS	3 KGS ( 7 LBS)	2600 KGS ( 5732 LBS)



OCCUPANT ASSESSMENT Vehicle: 1 Occupant: 1

INTRA ERRORS

HH1271 2 \*\*\*\*\* THIS CASE SHOWS EJECTION WITH RESTRAINT USAGE. \*\*\*\*\*  
 HH1272 \*\*\*\*\* CHECK YOUR DATA AND IF CORRECT, NOTIFY YOUR ZONE \*\*\*\*\*  
 HH1273 EJECTION DA12 is equal to 1-3 and ((MANUAL BELT USE DA19 does  
 HH1274 not equal 00, 01 or 99) or  
 HH1275 (FRONTAL AIR BAG SYSTEM DEPLOYMENT DA31 does not equal 0, 7 or  
 HH1276 9) or (AUTOMATIC BELT USE DA24 does not equal 0, 2 or 9)).

OCCUPANT ASSESSMENT Vehicle: 2 Occupant: 1

INTRA ERRORS

HH1091 2 If TREATMENT DA62 equals 0, 4 or 5, then WORKING DAYS LOST DA65  
 HH1092 should equal 00, 01, 97 or 99.

INTER ERRORS

GT0021 2 If TOTAL DELTA V GV59 is greater than or equal to 065, and less  
 GT0022 than 999, then at least one A.I.S. SEVERITY DI10(n) should be  
 GT0023 greater than or equal to 3. GV=01

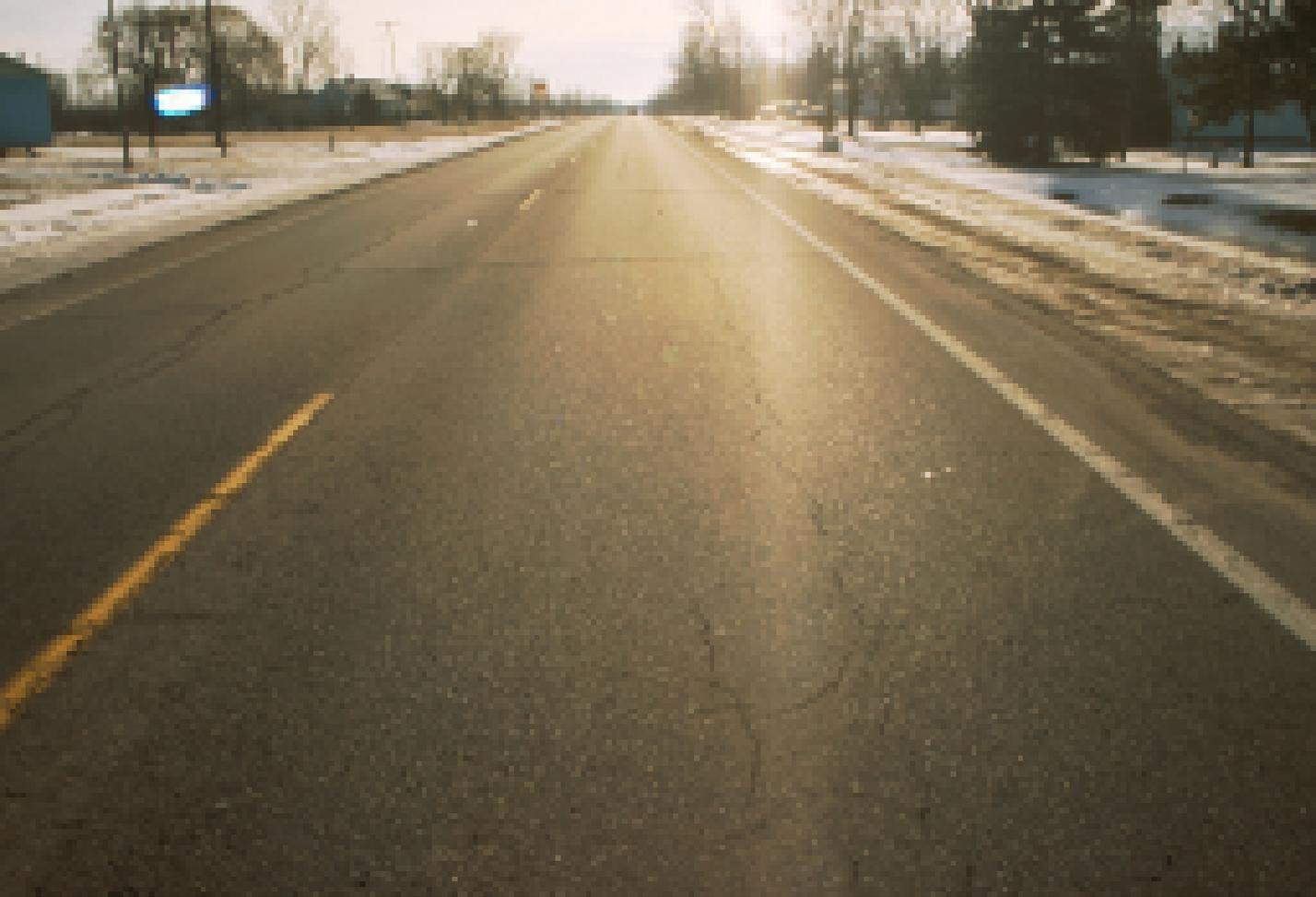
PSU12 ERROR SUMMARY SCREEN  
 CASE 157A  
 CURRENT VERSION: 8.05

96

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	0	Y
Vehicle Exterior	0	0	0	Y
Vehicle Interior	0	0	0	Y
Occupant Assessment	0	0	2	Y
Occupant Injury	0	0	0	Y
Total Inter Errors		0	1	
Total Case Errors	0	0	3	







PSU 12-157A (1995) #1



**PSU 12-157A (1985) #2**



**PSU 12-157A (1995) #3**



PSU 12-157A (1995) #4



**PSU 12-157A (1995) #5**



**PSU 12-157A (1995) #6**



**PSU 12-157A (1995) #7**



**PSU 12-157A (1995) #B**



PSU 12-157A (1995) #9



**PSU 12-157A (1995) #10**



**PSU 12-157A (1995) #11**



PSU 12-157A (1895) #12



PSU 12-157A (1995) #13



PSU 12-157A (1995) #14



PSU 12-157A(1995)#15



**PSU 12-157A (1995) #16**



**PSU 12-157A (1895) #17**



PSU 12-157A (1995) #18



PSU 12-157A (1995) #19



**PSU 12-157A (1995) #20**



**PSU 12-157A (1995) #21**



**PSU 12-157A (1995) #22**



**PSU 12-157A (1995) #23**



**PSU 12-157A (1995) #24**



**PSU 12-157A (1995) #25**



PSU 12-157A (1995) #26



**PSU 12-157A (1985) #27**



**PSU 12-157A (1995) #28**



PSU 12-157A (1995) #29



**PSU 12-157A (1995) #30**



**PSU 12-157A (1995) #31**



**PSU 12-157A (1995) #32**



**PSU 12-157A (1995) #33**



**PSU 12-157A (1995) #34**



**PSU 12-157A (1995) #35**



**PSU 12-157A (1995) #36**



PSU 12-157A (1985) #37



**PSU 12-157A (1995) #38**



**PSU 12-157A (1985) #39**



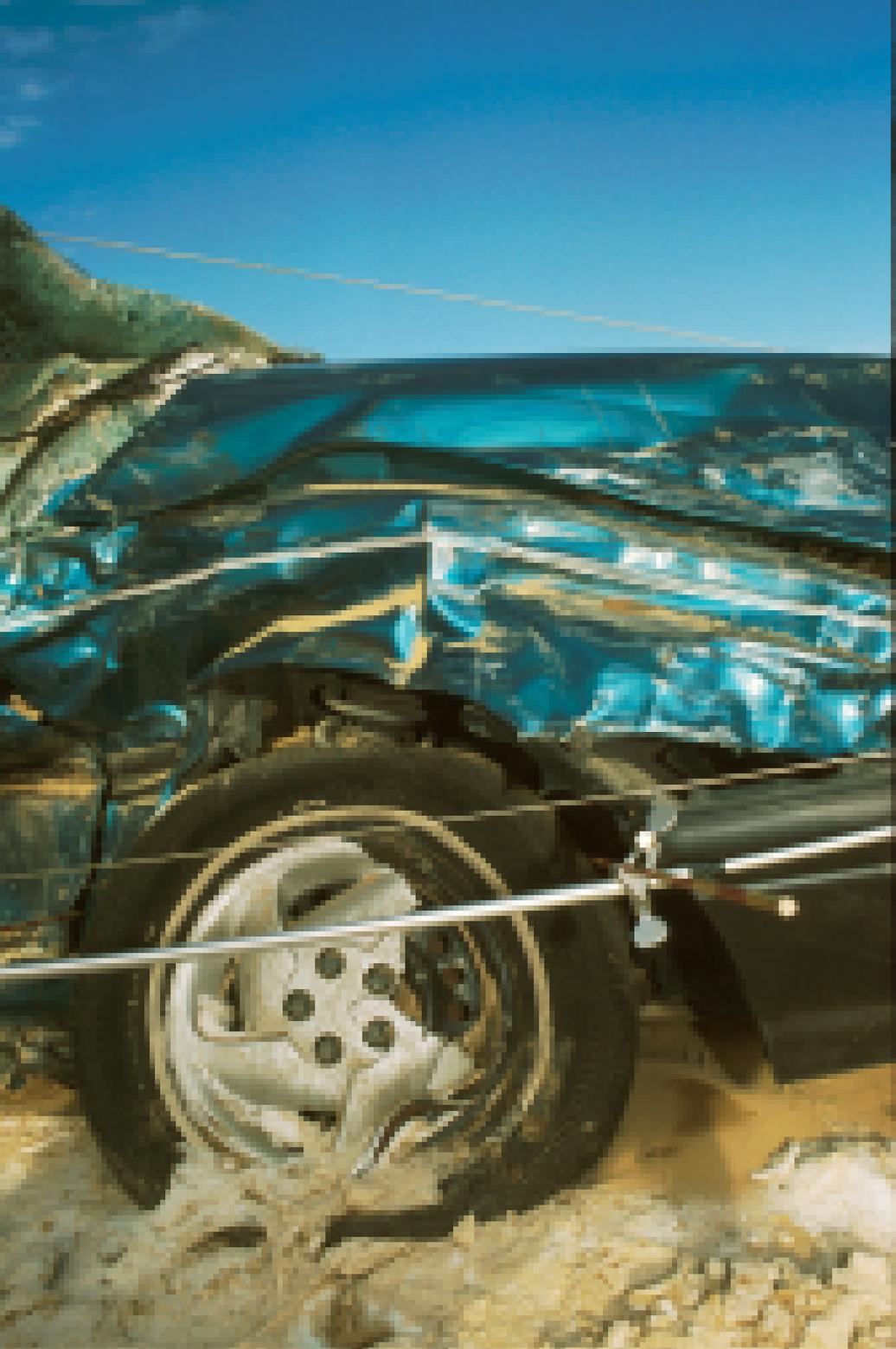
**PSU 12-157A (1985) #40**



**PSU 12-157A(1995)#41**



**PSU 12-157A (1995) #42**



**PSU 12-157A(1995) #43**



**PSU 12-157A (1995) #44**



**PSU 12-157A (1995) #45**



**PSU 12-157A (1995) #46**



**PSU 12-157A (1995) #47**



**PSU 12-157A (1995) #48**



PSU 12-157A (1985) #49



PSU 12-157A (1995) #50



**PSU 12-157A (1995) #51  
Best Available**



**PSU 12-157A (1995) #52**  
**Best Available**



**PSU 12-157A (1985) #53**  
**Best Available**



**PSU 12-157A (1995) #54**  
**Best Available**



PSU 12-157A (1995) #55



PSU 12-157A (1985) #56



**PSU 12-157A (1995) #57**  
**Best Available**



**PSU 12-157A (1995) #58**



**PSU 12-157A (1995) #59**  
**Best Available**



**PSU 12-157A (1985) #60**  
**Best Available**



**PSU 12-157A (1995) #61**  
**Best Available**



PSU 12-157A (1995) #62



**PSU 12-157A (1995) #63**  
**Best Available**



**FSU 12-157A (1985) #64**



**PSU 12-157A (1995) #65  
Best Available**



**PSU 12-157A (1995) #66**  
**Best Available**



**PSU 12-157A (1995) #67**  
**Best Available**



**PSU 12-157A (1995) #68**  
**Best Available**



**PSU 12-157A (1995) #69**  
**Best Available**



**PSU 12-157A (1995) #70**



**PSU 12-157A (1995) #71**



**PSU 12-157A (1995) #72**



**PSU 12-157A(1995)#73**



PSU 12-157A(1995) #74



PSU 12-157A(1995)#75



PSU 12-157A (1985) #76



**PSU 12-157A (1995) #77**



PSU 12-157A (1985) # 78



PSU 12-157A (1995) #79



**PSU 12-157A (1995) #80**  
**Best Available**



PSU 12-157A (1985) #81



PSU 72-138A (1996) #82



**PSU 12-157A (1995) #83**



PSU 12-157A (1995) #84



**PSU 12-157A (1995) #85**  
**Best Available**



**PSU 12-157A (1995) #86**  
**Best Available**



**PSU 12-157A (1995) #87  
Best Available**



**PSU 12-157A (1995) #68**  
**Best Available**



**PSU 12-157A (1995) #89**  
**Best Available**



**PSU 12-157A (1995) #90  
Best Available**



**PSU 12-157A (1995) #91  
Best Available**



**PSU 12-157A (1995) #92**  
**Best Available**



**PSU 12-157A (1995) #93**  
**Best Available**



**PSU 12-157A (1985) #84  
Best Available**



PSU 12-157A (1985) #85



**PSU 12-157A (1995) #96  
Best Available**



**PSU 12-157A (1985) #87**  
**Best Available**



**PSU 12-157A (1995) #90**  
**Best Available**



**PSU 12-157A (1995) #99**  
**Best Available**



**PSU 12-157A (1995) #100**  
**Best Available**



**PSU 12-157A (1995) #101**



**PSU 12-157A (1995) #102**  
**Best Available**



**PSU 12-157A (1995) #103**  
**Best Available**



**PSU 12-157A (1995) #104**  
**Best Available**



PSU 12-157A (1995) #105



PSU 12-157A (1995) #106

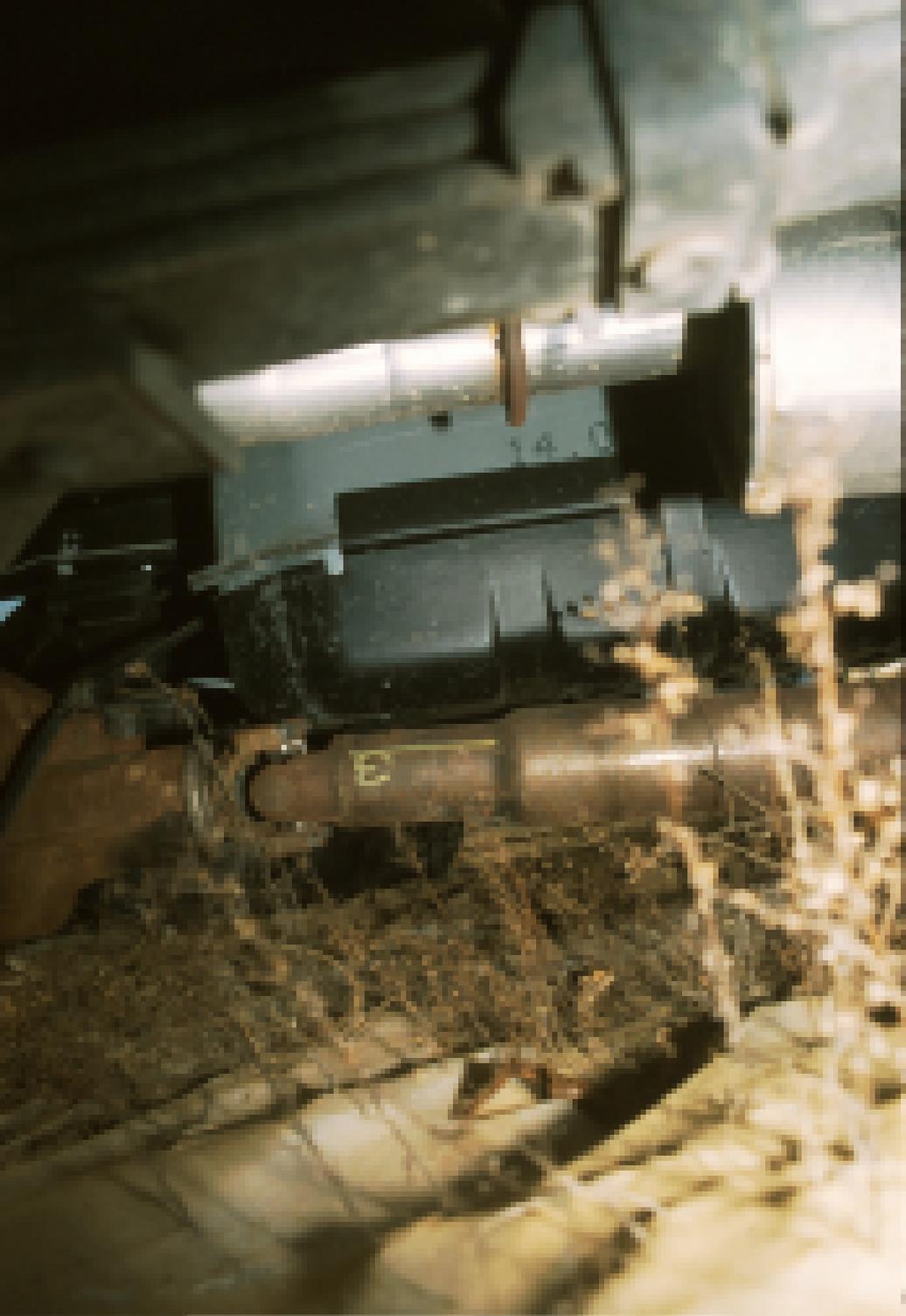


**PSU 12-157A (1995) #107**  
**Best Available**



**PSU 12-157A(1995)#108**

**Best Available**



PSU 12-157A (1995) #109



**PSU 12-157A (1995) #110**



**PSU 12-157A(1995)#111**



**PSU 12-157A (1995) #112**



PSU 12-157A (1995) #113



**PSU 12-157A (1995) #114**  
**Best Available**



**PSU 12-157A (1995) #115**  
**Best Available**



**PSU 12-157A (1995) #116**  
**Best Available**



**PSU 12-157A(1995)#117**  
**Best Available**



**PSU 12-157A (1995) #118**



**PSU 12-157A (1995) #119**



**PSU 12-157A (1995) #120**  
**Best Available**



PSU 12-157A (1995) #121



**PSU 12-157A (1995) #122**  
**Best Available**



**PSU 12-157A(1995)#123**



**PSU 12-157A (1995) #124**  
**Best Available**



**PSU 12-157A (1995) #125**  
**Best Available**



**PSU 12-157A (1995) #126**  
**Best Available**



**PSU 12-157A (1996) #127**



**PSU 12-157A (1995) #126**



**PSU 12-157A(1995)#129**



**PSU 12-157A (1995) #130**



**PSU 12-157A(1995)#131**  
**Best Available**



**PSU 12-157A (1995) #132**  
**Best Available**



**PSU 12-157A (1995) #133**  
**Best Available**



**PSU 12-157A (1995) #134**  
**Best Available**