



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 78 CASE NO. 176C 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.)

## B. VEHICLE PROFILE(S)

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

**DO NOT SANITIZE THIS FORM**

**C. PERSON PROFILE(S)**

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

**Body Region**

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

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

**Injury Type**

Abrasion  
 Amputation  
 Avulsion  
 Burn  
 Concussion  
 Contusion  
 Crush  
 Detachment, separation  
 Dislocation

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

**Abbreviated Injury Scale**

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

**DO NOT SANITIZE THIS FORM**



PSU78

1996 Case Summary Form

CASE 176C

TYPE OF ACCIDENT: 3-VEHICLES - INTERSECTION

A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES

V-1 was northbound on a 5-lane, urban, level, bituminous roadway approaching an intersection controlled by traffic signals. V-2 was westbound on an intersecting 3-lane bituminous roadway, stopped. V-2 entered the intersection as V-1 crossed in front. The front of V-2 struck the right side of V-1 causing V-1 to rapidly rotate clockwise while entering the southbound lanes of traffic. V-1 began to overturn and while overturning, struck southbound V-3 on the left front and side. V-1 came to final rest on the top, upside down. V-2 was driven to the roadside and parked by the driver, facing west. V-3 came to final rest in the #1 southbound lane facing south. All 3 vehicles were towed and only the driver of V-1 was transported.

01

PSU78

1996 Case Summary Form

CASE 176C

TYPE OF ACCIDENT: 3-VEHICLES -- INTERSECTION

B. VEHICLE PROFILE(S)

V e h. No	Class of Vehicle	Year/Make/ Model	Most Severe Damage Based on Vehicle Inspection		Component Failure
			Damage Plane	Severity Descr.	
1	Compact	1994 MERCURY Topaz 4 Door	Right	Moderate	None
2	Large Pickup Truck	1994 FORD Ranger Super Cab 4x2	Front	Unknown	Unknown
3	Full Size	1975 FORD Granada 2 Door	Front	Moderate	None

01

FSU78

1996 Case Summary Form

CASE 176C

TYPE OF ACCIDENT: 3-VEHICLES - INTERSECTION

C. PERSON PROFILE(S)

Most Severe Injury  
(TO BE COMPLETED BY ZONE CENTER)

V e h. No	Person Role	Seat Positon	Restraint Use	Body Region	Injury Type	A	
						I S	Injury Source
1	Driver	LF	L & S	Arm	Abrasion	1	Glass
2	Driver	LF	L & S	Leg	Abrasion	1	Steering rim
3	Driver	LF	None Used		No injury		

0



# ACCIDENT COLLISION MEASUREMENT TABLE

Primary Sampling Unit Number 78

Case Number - Stratum 176 C

### ACCIDENT COLLISION DIAGRAM

Document the physical plant:

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

Document vehicle dynamics including:

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

CRASH DATA

	VEH. #1	VEH. #2	VEH. #3
Heading Angle	<u>000</u>	<u>270</u>	<u>180</u>
Surface Type	<u>Bit</u>	<u>Bit</u>	<u>Bit</u>
Surface Condition	<u>dry</u>	<u>dry</u>	<u>dry</u>
Coefficient of Friction	<u>.7</u>	<u>.7</u>	<u>.7</u>
Grade (v/h) Measurement (between impact and final rest)	<u>0/124</u>	<u>0/124</u>	<u>0/124</u>
Grade (v/h) Measurement (at location of rollover initiation)	<u>0/124</u>	<u>N/A</u>	<u>N/A</u>
Grade (v/h) Measurement (at pre-crash location)	<u>0/124</u>	<u>0/124</u>	<u>0/124</u>

Reference Point: TRAFFIC SIGNAL Pole Reference line: WEST Edge CURBLINE OF  
ON N/W CORNER S/B ROADWAY

RP → NORTH Item	Distance and Direction from Reference Point	Distance and Direction from Reference Line
Begin Gouge	2.0 N. RP	9.6 E. RL
End Gouge	3.2 N. "	9.6 E. "
intersect X-WALK	3.6 N. "	∅.∅ ON "
" " "	7.0 N. "	∅.∅ ON "
Police Mark - poss. skid	7.0 N. "	6.8 E. "
inteseect X-WALK Line	8.6 N. "	∅.∅ ON "
begin Gouge	8.6 N. "	8.6 E. "
End Gouge	9.5 N. "	8.5 E. "
Begin Scrape	10.6 N. "	6.8 E. "
End Scrape	12.8 N. "	6.6 E. "
Police (FRP) MARK (V3 RF?)	14.5 N. "	1.3 E. "
Begin Gouge	14.7 N. "	2.8 E. "
Police (FRA) MARK (V3 RR?)	17.3 N. "	1.1 E. "





# ACCIDENT FORM

1. Primary Sampling Unit Number 78

2. Case Number - Stratum 176C

## IDENTIFICATION

3. Number of General Vehicle Forms Submitted 03

4. Date of Accident (Month, Day, Year) 19 6

5. Time of Accident 1512

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 Run Off Road 0

## NUMBER OF EVENTS

11. Number of Recorded Events in This Accident 03

Code the number of events which occurred in this accident.

## ACCIDENT EVENTS

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

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>0 1</u>	13. <u>01</u>	14. <u>02</u>	15. <u>R</u>	16. <u>02</u>	17. <u>30</u>	18. <u>F</u>
19. <u>0 2</u>	20. <u>01</u>	21. <u>02</u>	22. <u>T</u>	23. <u>31</u>	24. <u>00</u>	25. <u>N</u>
26. <u>0 3</u>	27. <u>01</u>	28. <u>02</u>	29. <u>R</u>	30. <u>03</u>	31. <u>04</u>	32. <u>F</u>
33. <u>0 4</u>	34. _____	35. _____	36. _____	37. _____	38. _____	39. _____
40. <u>0 5</u>	41. _____	42. _____	43. _____	44. _____	45. _____	46. _____

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

### CODES FOR CLASS OF VEHICLE

- |   |   |
|---|---|
| <p>V1 (00) Not a motor vehicle</p> <p>(01) Subcompact/mini (wheelbase &lt; 254 cm)</p> <p>(02) Compact (wheelbase ≥ 254 but &lt; 265 cm)</p> <p>(03) Intermediate (wheelbase ≥ 265 but &lt; 278 cm)</p> <p>V3 (04) Full size (wheelbase ≥ 278 but &lt; 291 cm)</p> <p>(05) Largest (wheelbase ≥ 291 cm)</p> <p>(09) Unknown passenger car size</p> <p>(14) Compact utility vehicle</p> <p>(15) Large utility vehicle (≤ 4,536 kgs GVWR)</p> <p>(16) Utility station wagon (≤ 4,536 kgs GVWR)</p> <p>(19) Unknown utility type</p> <p>(20) Minivan (≤ 4,536 kgs GVWR)</p> <p>(21) Large van (≤ 4,536 kgs GVWR)</p> <p>(24) Van Based school bus (≤ 4,536 kgs GVWR)</p> <p>(28) Other van type (≤ 4,536 kgs GVWR)</p> <p>(29) Unknown van type (≤ 4,536 kgs GVWR)</p> <p>(30) Compact pickup truck (≤ 4,536 kgs GVWR)</p> | <p>V2 (31) Large pickup truck (≤ 4,536 kgs GVWR)</p> <p>(38) Other pickup truck (≤ 4,536 kgs GVWR)</p> <p>(39) Unknown pickup truck type (≤ 4,536 kgs GVWR)</p> <p>(45) Other light truck (≤ 4,536 kgs GVWR)</p> <p>(48) Unknown light truck type (≤ 4,536 kgs GVWR)</p> <p>(49) Unknown light vehicle type</p> <p>(50) School bus (excludes van based) (&gt; 4,536 kgs GVWR)</p> <p>(58) Other bus (&gt; 4,536 kgs GVWR)</p> <p>(59) Unknown bus type</p> <p>(60) Truck (&gt; 4,536 kgs GVWR)</p> <p>(67) Tractor without trailer</p> <p>(68) Tractor-trailer(s)</p> <p>(78) Unknown medium/heavy truck type</p> <p>(79) Unknown light/medium/heavy truck type</p> <p>(80) Motored cycle</p> <p>(90) Other vehicle</p> <p>(99) Unknown</p> |
|---|---|

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

- |  |   |  |  |
|--|---|--|--|
| <p>CDS APPLICABLE AND OTHER VEHICLES</p> | <p>(O) Not a motor vehicle</p> <p>(N) Noncollision</p> <p>(F) Front</p> | <p>(R) Right side</p> <p>(L) Left side</p> <p>(B) Back</p> | <p>(T) Top</p> <p>(U) Undercarriage</p> <p>(9) Unknown</p> |
|--|---|--|--|

- |                                |   |  |  |
|--------------------------------|---|--|--|
| <p>TDC APPLICABLE VEHICLES</p> | <p>(O) Not a motor vehicle</p> <p>(N) Noncollision</p> <p>(F) Front</p> <p>(R) Right side</p> | <p>(L) Left side</p> <p>(B) Back of unit with cargo area (rear of trailer or straight truck)</p> <p>(D) Back (rear of tractor)</p> | <p>(C) Rear of cab</p> <p>(V) Front of cargo area</p> <p>(T) Top</p> <p>(U) Undercarriage</p> <p>(9) Unknown</p> |
|--------------------------------|---|--|--|

### CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

- |  |  |
|--|--|
| <p>(01-30) — Vehicle Number</p> <p>Noncollision</p> <p>(31) Overturn — rollover (excludes end-over-end)</p> <p>(32) Rollover — end-over-end</p> <p>(33) Fire or explosion</p> <p>(34) Jackknife</p> <p>(35) Other intraunit damage (specify): _____</p> <p>(36) Noncollision injury _____</p> <p>(38) Other noncollision (specify): _____</p> <p>(39) Noncollision — details unknown _____</p> <p>Collision With Fixed Object</p> <p>(41) Tree (≤ 10 cm in diameter)</p> <p>(42) Tree (&gt; 10 cm in diameter)</p> <p>(43) Shrubbery or bush</p> <p>(44) Embankment</p> <p>(45) Breakaway pole or post (any diameter)</p> <p>Nonbreakaway Pole or Post</p> <p>(50) Pole or post (≤ 10 cm in diameter)</p> <p>(51) Pole or post (&gt; 10 cm but ≤ 30 cm in diameter)</p> <p>(52) Pole or post (&gt; 30 cm in diameter)</p> <p>(53) Pole or post (diameter unknown)</p> <p>(54) Concrete traffic barrier</p> <p>(55) Impact attenuator</p> <p>(56) Other traffic barrier (includes guardrail) (specify): _____</p> | <p>(57) Fence</p> <p>(58) Wall</p> <p>(59) Building</p> <p>(60) Ditch or culvert</p> <p>(61) Ground</p> <p>(62) Fire hydrant</p> <p>(63) Curb</p> <p>(64) Bridge</p> <p>(68) Other fixed object (specify): _____</p> <p>(69) Unknown fixed object _____</p> <p>Collision with Nonfixed Object</p> <p>(70) Passenger car, light truck, van, or other vehicle not in-transport</p> <p>(71) Medium/heavy truck or bus not in-transport</p> <p>(72) Pedestrian</p> <p>(73) Cyclist or cycle</p> <p>(74) Other nonmotorist or conveyance _____</p> <p>(75) Vehicle occupant _____</p> <p>(76) Animal</p> <p>(77) Train</p> <p>(78) Trailer, disconnected in transport</p> <p>(79) Object fell from vehicle in-transport</p> <p>(88) Other nonfixed object (specify): _____</p> <p>(89) Unknown nonfixed object _____</p> <p>(98) Other event (specify): _____</p> <p>(99) Unknown event or object _____</p> |
|--|--|

**PRECRASH ENVIRONMENTAL DATA**

- 19. Relation To Interchange Or Junction 2
  - (0) Non-interchange area and non-junction
  - (1) Interchange area related
  - Non-Interchange junctions*
  - (2) Intersection related
  - (3) Driveway, alley access related
  - (4) Other junction (specify) \_\_\_\_\_
  - (5) Unknown type of junction
  - (9) Unknown
  
- 20. Trafficway Flow 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 5
  - (1) One
  - (2) Two
  - (3) Three
  - (4) Four
  - (5) Five
  - (6) Six
  - (7) Seven or more
  - (9) Unknown
  
- 22. Roadway Alignment 1
  - (1) Straight
  - (2) Curve right
  - (3) Curve left
  - (9) Unknown
  
- 23. Roadway Profile 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 1
  - (1) Daylight
  - (2) Dark
  - (3) Dark, but lighted
  - (4) Dawn
  - (5) Dusk
  - (9) Unknown
  
- 27. Atmospheric Conditions 0
  - (0) No adverse atmospheric-related driving conditions
  - (1) Rain
  - (2) Sleet/hail
  - (3) Snow
  - (4) Fog
  - (5) Rain and fog
  - (6) Sleet and fog
  - (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): \_\_\_\_\_
  - (9) Unknown
  
- 28. Traffic Control Device 1
  - (0) No traffic control(s)
  - (1) Traffic control signal (not RR crossing)
  - Regulatory*
  - (2) Stop sign
  - (3) Yield sign
  - (4) School zone sign
  - (5) Other regulatory sign (specify): \_\_\_\_\_
  - (6) Warning sign (not RR crossing)
  - (7) Unknown sign
  - (8) Miscellaneous/other controls including RR controls (specify): \_\_\_\_\_
  - (9) Unknown
  
- 29. Traffic Control Device Functioning 2
  - (0) No traffic control device
  - (1) Traffic control device not functioning (specify): \_\_\_\_\_
  - (2) Traffic control device functioning properly
  - (9) Unknown

OCCUPANT RELATED

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

AIR BAG RELATED

- 40. Is this an AOPS Vehicle? 1  
 (0) No (includes unknown)  
 (1) Yes - researcher determined  
 (2) VIN determined air bag system  
 (3) VIN determined automatic (passive) belts  
 (4) VIN determined air bag and automatic (passive) belts
- 41. Air Bag(s) Deployment, First Seat Frontal 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 1,170  
 Code weight to nearest 10 kilograms.  
 (045) Less than 454 kilograms  
 (612) 6,124 kilograms or more  
 (999) Unknown  
2,588 lbs X .4536 = 1,174 kgs  
 Source: \_\_\_\_\_

- 44. Vehicle Cargo Weight 0,000  
 Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (454) 4,536 kilograms or more  
 (999) Unknown  
 lbs X .4536 = \_\_\_\_\_ kgs  
 Source: inspection & interview

ROLLOVER DATA

- 45. Rollover 02  
 (00) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
 (01-16) Code the number of quarter turns  
 (17) Rollover, 17 or more quarter turns (specify): \_\_\_\_\_  
 (98) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (99) Rollover (overturn), details unknown
- 46. Rollover Initiation Type 01  
 (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 ? possibly?  
 (08) Other rollover initiation type specify): \_\_\_\_\_  
 (98) Rollover--end-over-end  
 (99) Unknown rollover initiation type
- 47. Location of Rollover Initiation 1  
 (0) No rollover  
 (1) On roadway  
 (2) On shoulder—paved  
 (3) On shoulder—unpaved  
 (4) On roadside or divided trafficway median  
 (8) Rollover--end-over-end  
 (9) Unknown
- 48. Rollover Initiation Object Contacted 61  
 (Note: Applicable codes on back of page)
- 49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 1  
 (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 1  
 (0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (8) Rollover--end-over-end  
 (9) Unknown roll direction

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

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

### Noncollision

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

### Collision With Fixed Object

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

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

### Nonbreakaway Pole or Post

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

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

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

- (69) \_\_\_\_\_  
Unknown fixed object

### Collision with Nonfixed Object

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

- (89) \_\_\_\_\_  
Unknown nonfixed object

- (98) Other event (specify):

- (99) \_\_\_\_\_  
Unknown event or object



# EXTERIOR VEHICLE FORM

1. Primary Sampling Unit Number <u>78</u>	3. Vehicle Number <u>01</u>
2. Case Number - Stratum <u>176C</u>	

## VEHICLE IDENTIFICATION

VIN 1MEPM36U7RK [REDACTED] Model Year 94  
 Vehicle Make (specify): Mercury Vehicle Model (specify): Topaz 4dr

## LOCATOR

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

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
01	47. Back of (RF) → Ends 25. Behind (RB)	47. Back of (RF) → 29. (RB)	@ 64. ahead (RD) AXLE = 22.
02	Top-Rollover - side-side-front-end		at (RE) A pillar
03	beginning to ahead (RF) → Ends 34. ahead (RF)	70. ahead (RE) - Ends Behind (RE)	@ C6 = 42.

## CRUSH PROFILE IN CENTIMETERS

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

1st event - max crush @ C3 = 22. cm  
 Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts. Stand offset 20. cm from midline + 86.5 = 107.  
 2nd event - rollover  
 Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.  
 3rd pos w/ V3 - Front bumper gone - no bumper corner measurement for this side/top - impact  
 Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage		Field L	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	±D
		Width (CDC)	Max Crush								
01	(R) trim line	230.	42.	234.	21	33.	42.	38.	32.	21.	
01	F/S	/	0	/	1.	0	0	0	0	0	
01	stand offset	/	20.	/	20.	20.	20.	20.	20.	20.	
01	Result	230.	22.	234.	0	13.	22.	18.	12.	1.	-33.
03	(R) Front trim	36.		108.	20.	22.	23.	26.	42.	68.	not
03	F/S	/		/	0	0.	1.	2.	4.	6.	not
03	stand offset	/	20.	/	20.	20.	20.	20.	20.	20.	not
03	Result	36.		108.	0	2.	2.	4.	18.	42.	+141.
02	Top/rollover	no stands set for rollover damage									

HS Form 435A (Rev. 1/96)

$$\textcircled{1} \quad \frac{250}{2} = 125$$

$$\frac{234}{2} = 117$$

$$+25 \quad \frac{29}{2} = 14.5$$

$$= 33.$$

$$\textcircled{2} \quad \frac{250}{2} = 125$$

$$\frac{108}{2} = 54$$

$$+70 \quad \frac{70}{2} = 35$$

$$= 141.$$

ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>99.9</u>	inches	x 2.54	=	<u>253.74</u> cm
Overall Length	<u>177.0</u>	inches	x 2.54	=	<u>449.58</u> cm
Maximum Width	<u>68.3</u>	inches	x 2.54	=	<u>173.4</u> cm
Curb Weight	<u>2,588</u>	pounds	x .4536	=	<u>1,173.9</u> kg
Average Track	<u>56.2</u>	inches	x 2.54	=	<u>142.8</u> cm
Front Overhang	_____	inches	x 2.54	=	_____ cm
Rear Overhang	_____	inches	x 2.54	=	_____ cm
Undeformed End Width	_____	inches	x 2.54	=	_____ cm
Engine Size: cyl./displ.	<del>27</del> <u>V6</u>	cc	x .001	=	<u>3,0</u> <del>2.3</del> L
	F <u>54.9</u>		CID	x .0164	= _____ L
	R <u>57.6</u>				

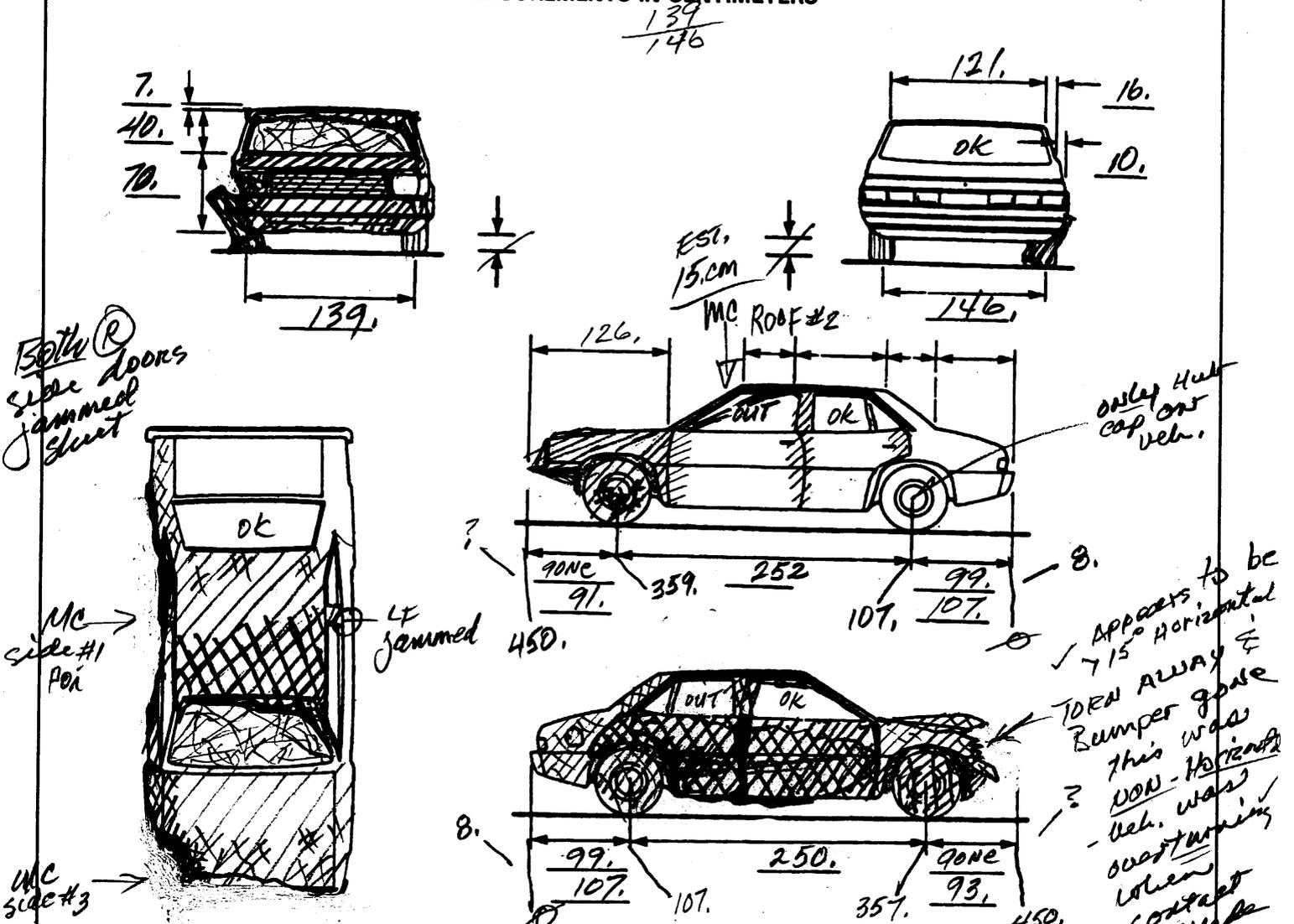
$$\frac{54.9}{57.6} = \frac{139.4}{146.3} =$$

56.25 avg. = 142.8 avg

**VEHICLE DAMAGE SKETCH**

<b>TIRE—WHEEL DAMAGE</b> a. Rotation physically restricted RF <u>2</u> LF <u>2</u> RR <u>1</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		b. Tire deflated RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u>		<b>ORIGINAL SPECIFICATIONS</b> Wheelbase <u>254.</u> cm Overall Length <u>450.</u> cm Maximum Width <u>173.</u> cm Curb Weight <u>1174.</u> kg Average Track <u>143.</u> cm Front Overhang <u>89.</u> cm Rear Overhang <u>107.</u> cm Undeformed End Width <u>155.</u> cm Engine Size: cyl./displ. <u>V6/3.0</u> L		<b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only) RF ± <u>N</u> ° LF ± <u>N</u> ° RR ± <u>A</u> ° LR ± <u>A</u> ° Within ± 5 degrees	
<b>TYPE OF TRANSMISSION</b> <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic END SHIFT ≥ 10 CM <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				<b>DRIVE WHEELS</b> <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD		Approximate Cargo Weight <u>0</u> kg	

**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.

**CDC WORKSHEET**

**CODES FOR OBJECT CONTACTED**

(01-30) — Vehicle Number

**Noncollision**

- (31) Overturn — rollover (excludes end-over-end)
- (32) Rollover—end-over-end
- (33) Fire or explosion
- (34) Jackknife
- (35) Other intraunit damage (specify): \_\_\_\_\_

- (36) Noncollision injury
- (38) Other noncollision (specify): \_\_\_\_\_

(39) Noncollision — details unknown

**Collision With Fixed Object**

- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment
- (45) Breakaway pole or post (any diameter)

**Nonbreakaway Pole or Post**

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

- (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
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance
- (75) Vehicle occupant
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): \_\_\_\_\_

- (89) Unknown nonfixed object
- (98) Other event (specify): \_\_\_\_\_
- (99) Unknown event or object

**DEFORMATION CLASSIFICATION BY EVENT NUMBER**

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01	02	+90	00	R	D	E	W	02
02	31	000	00	T	D	D	0	03
03	03	+70??	00	R	F	E	??W	??
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---

Researcher believes this to have been a non-horizontal impact at >15° from horizontal at time it occurred, but initial contact was on right side of V<sub>1</sub> and front plane of V<sub>2</sub>.

**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. <del>02</del> <u>01</u>	7. <u>R</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <del>03</del> <u>02</u>
Second Highest Delta "V"							
12. <u>02</u>	13. <u>31</u>	14. <u>00</u>	15. <u>T</u>	16. <u>D</u>	17. <u>D</u>	18. <u>0</u>	19. <u>03</u>

**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>234</u>	<u>000</u>	<u>013</u>	<u>022</u>	<u>018</u>	<u>012</u>	<u>001</u>	<u>⊕ 033</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
				<u>Roll Over</u>			
							+ -

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) 230  
Code to the nearest centimeter  
(250) 250 centimeters or more  
(999) Unknown

28. Original Wheelbase 254.  
Code to the nearest centimeter  
(650) 650 centimeters or more  
(999) Unknown  
99.9 inches X 2.54 = 253.7 centimeters

29. Original Average Track Width 143.  
Code to the nearest centimeter  
(185) 185 centimeters or more  
(999) Unknown  
56.2 inches X 2.54 = 142.8 centimeters

**FUEL SYSTEM**

- 30. Are CDCs Documented but Not Coded on The Automated File? /  
 (0) No  
 (1) Yes
  
- 31. Researcher's Assessment of Vehicle Disposition /  
 (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 /
- 38. Type of Fuel Tank-2 0  
 (0) No fuel tank (electrical vehicle)  
 (1) Metallic  
 (2) Non-metallic  
 (9) Unknown

**FIRE OCCURRENCE**

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

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

- 41. Damage to Fuel Tank-1 /
- 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

43. Leakage Location of Fuel System-1 1

44. Leakage Location of Fuel System-2 0

(0) No fuel tank  
(1) No fuel leakage

*Primary Area Of Leakage*

(2) Tank  
(3) Filler neck  
(4) Cap  
(5) Lines/pump/filter  
(6) Vent/emission recovery  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

45. Fuel Type-1 01

46. Fuel Type-2 00

*Single Fuel Type*

(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): \_\_\_\_\_

*Electric Powered or Electric/Solar Powered Vehicles*

(10) Lead Acid Battery  
(11) Nickel-Iron Battery  
(12) Nickel-Cadmium Battery  
(13) Sodium Metal Chloride Battery  
(14) Sodium Sulfur Battery  
(18) Other (Specify): \_\_\_\_\_

(98) Other Hybrid (specify): \_\_\_\_\_

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks? 0

(0) No (one or two tanks only)

*Yes - More Than Two Tanks*

(1) Yes -- no damage to any tank or filler cap and no fuel system leakage

(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): \_\_\_\_\_

(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):  
Type of tank \_\_\_\_\_  
Tank location \_\_\_\_\_  
Filler cap location \_\_\_\_\_  
Tank damage \_\_\_\_\_  
Location of leakage \_\_\_\_\_  
Type of fuel \_\_\_\_\_

(9) Unknown if more than two tanks

**COMMENTS**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\*\*\* 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 78  
 2. Case Number - Stratum 176 C  
 3. Vehicle Number 01

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

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

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

### Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 2 27. RR 2  
 28. BL 1 29. Roof 0 30. Other 1  
 (0) No glazing  
 (1) Fixed  
 (2) Closed  
 (3) Partially opened  
 (4) Fully opened  
 (7) Glazing removed prior to accident  
 (9) Unknown

### Glazing Damage from Impact Forces

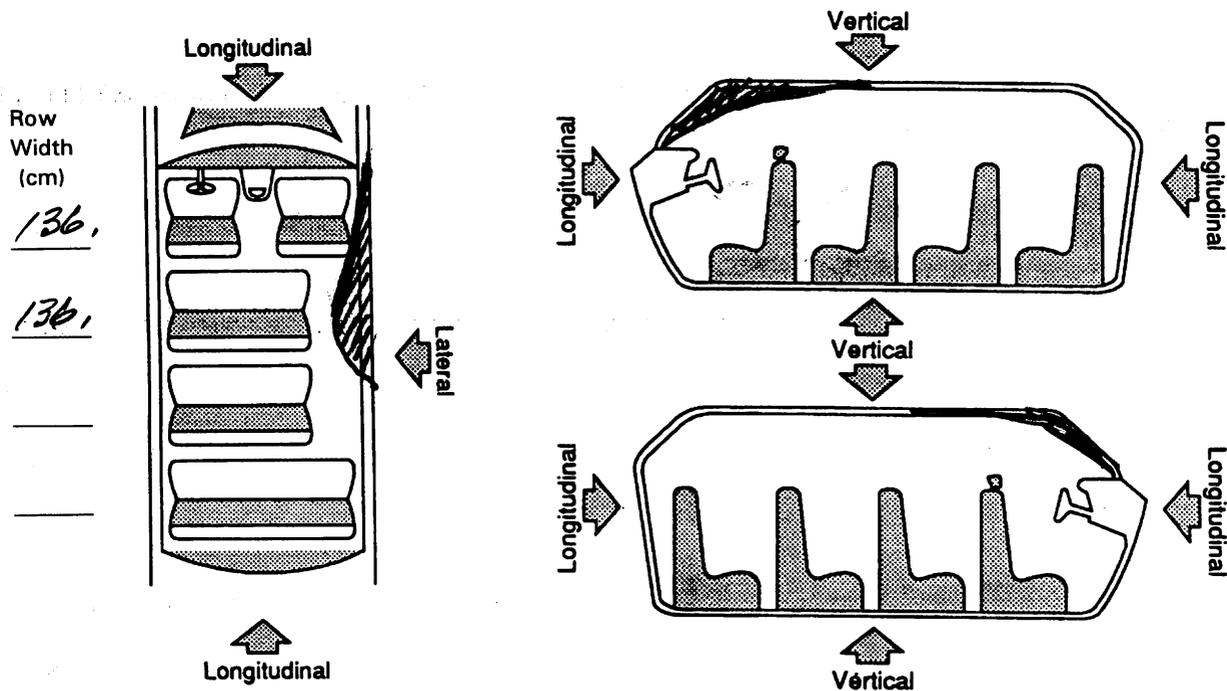
31. WS 2 32. LF 6 33. RF 1 34. LR 1 35. RR 6  
 36. BL 1 37. Roof 0 38. Other 1  
 (0) No glazing  
 (1) No glazing damage from impact forces  
 (2) Glazing in place and cracked from impact forces  
 (3) Glazing in place and holed from impact forces  
 (4) Glazing out-of-place (cracked or not) and not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

### Glazing Damage from Occupant Contact

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

# INTRUSION WORKSHEET

**NOTE: SKETCH INTRUDED AREAS**



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION	
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION		
13	door	136.	10.	126	Lat	9.
13	seat	?	3cm	3.	Lat	
13	ROOF	88.	10.	78.	Vert.	
13	header	94.	14.	80.	Vert.	5.
13	A-pillar	94.	13.	81.	Vert.	6.
13	side rail	94	8.	86.	Vert.	
23	B-pillar	136	28.	108.	Lat	①
23	door	136	26.	110.	Lat	2.
23	seat	?	3cm	3.	Lat	
23	C-pillar	136.	10.	124.	Lat	10.
11	header	94.	16.	78.	Vert.	3.
11	ROOF	88.	12.	76.	Vert.	7.
11	side rail	94.	10.	84.	Vert.	
12	ROOF	88.	12.	76.	Vert.	8.
11	A-pillar	94.	16.	78.	Vert.	4

### OCCUPANT AREA INTRUSION

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

#### INTRUDING COMPONENT

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>23</u>	48. <u>07</u>	49. <u>3</u>	50. <u>3</u>
2nd	51. <u>23</u>	52. <u>11</u>	53. <u>3</u>	54. <u>3</u>
3rd	55. <u>11</u>	56. <u>16</u>	57. <u>3</u>	58. <u>1</u>
4th	59. <u>11</u>	60. <u>06</u>	61. <u>3</u>	62. <u>1</u>
5th	63. <u>13</u>	64. <u>16</u>	65. <u>2</u>	66. <u>1</u>
6th	67. <u>13</u>	68. <u>06</u>	69. <u>2</u>	70. <u>1</u>
7th	71. <u>11</u>	72. <u>13</u>	73. <u>2</u>	74. <u>1</u>
8th	75. <u>12</u>	76. <u>13</u>	77. <u>2</u>	78. <u>1</u>
9th	79. <u>13</u>	80. <u>11</u>	81. <u>2</u>	82. <u>3</u>
10th	83. <u>23</u>	84. <u>08</u>	85. <u>2</u>	86. <u>3</u>

#### Interior Components

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

#### Exterior Components

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

#### LOCATION OF INTRUSION

- |  |   |
|--|---|
| <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

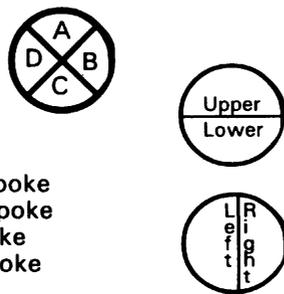
# STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	-	DAMAGE VALUE	=	DEFORMATION
10.	-	10.	=	<del>0</del>
	-		=	
	-		=	
	-		=	

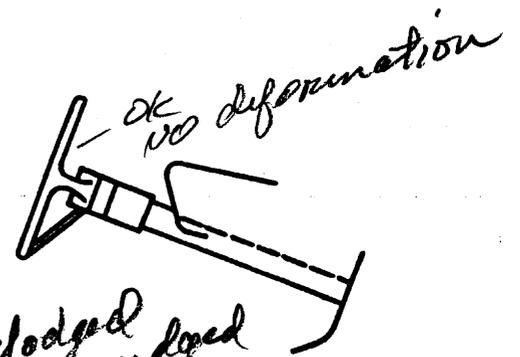
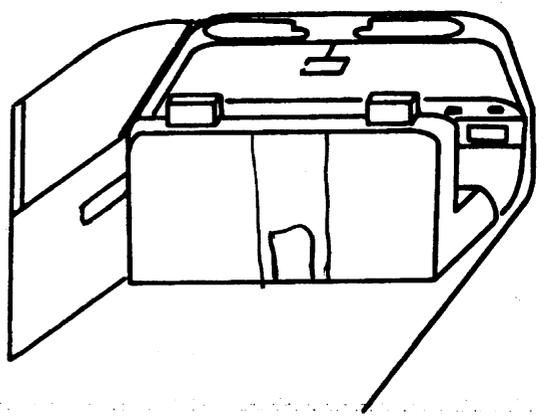
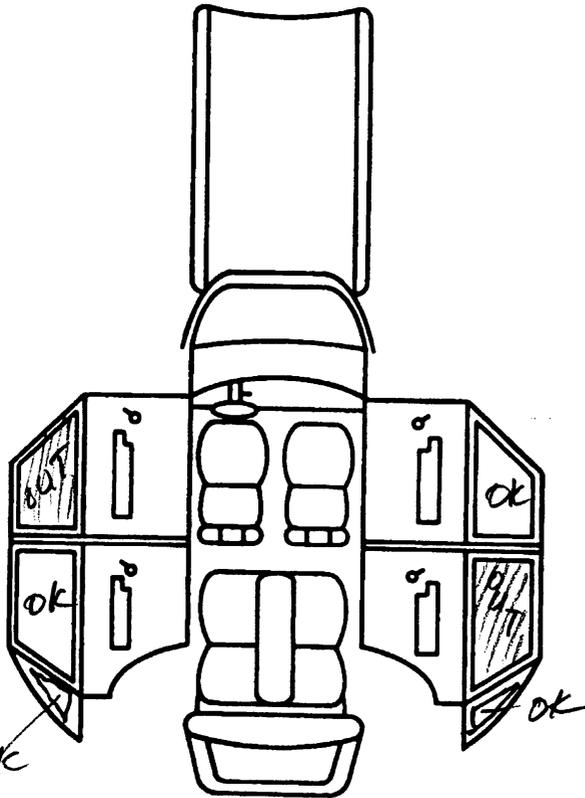
Large empty rectangular area for notes or additional data.

STEERING COLUMN	INSTRUMENT PANEL
<p>87. Steering Column Type <span style="float: right;"><u>2</u></span>                      (1) Fixed column  <del>(2) Tilt column</del>                      (3) Telescoping column                      (4) Tilt and telescoping column                      (8) Other column type (specify): _____                      (9) <u>Unknown</u></p> <p>88. Tilt Steering Column Adjustment <span style="float: right;"><u>3</u></span>                      (0) No tilt steering column                      (1) Full up                      (2) Between full up and center  <del>(3) Center</del>                      (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>                      (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>                      Deformation                      (00) No steering rim deformation</p> <p><i>Quarter Sections</i>                      (01) Section A                      (02) Section B                      (03) Section C                      (04) Section D</p> <p><i>Half Sections</i>                      (05) Upper half of rim/spoke                      (06) Lower half of rim/spoke                      (07) Left half of rim/spoke                      (08) Right half of rim/spoke</p> <p>(09) Complete steering wheel collapse                      (10) Undetermined location                      (99) Unknown</p>	<p>92. Odometer Reading <span style="float: right;"><u>063</u>,000</span>                      _____ 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>39,093</u> miles X 1.6093 = <u>62,912</u> kilometers</p> <p>Source: <u>veh. inspection</u></p> <p>93. Instrument Panel Damage from Occupant Contact? <span style="float: right;"><u>0</u></span>                      (0) No                      (1) Yes                      (9) Unknown</p> <p>94. Type of Knee Bolster Covering <span style="float: right;"><u>0</u></span>                      (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>                      (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>                      (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>                      (0) No adaptive driving equipment                      (1) Adaptive driving equipment installed (Check all that apply.)  <input type="checkbox"/> Hand controls for braking/acceleration  <input type="checkbox"/> Steering control devices (attached to OEM steering wheel)  <input type="checkbox"/> Steering knob attached to steering wheel  <input type="checkbox"/> Low effort power steering (unit or device)  <input type="checkbox"/> Replacement steering wheel (i.e., reduced diameter)  <input type="checkbox"/> Joy-stick steering controls  <input type="checkbox"/> Wheelchair tie-downs  <input type="checkbox"/> Modification to seat belts (specify): _____  <input type="checkbox"/> Additional or relocated switches (specify): _____  <input type="checkbox"/> Raised roof  <input type="checkbox"/> Wall-mounted head rest (used behind wheelchair)  <input type="checkbox"/> Other adaptive device (specify): _____                      (9) Unknown</p>



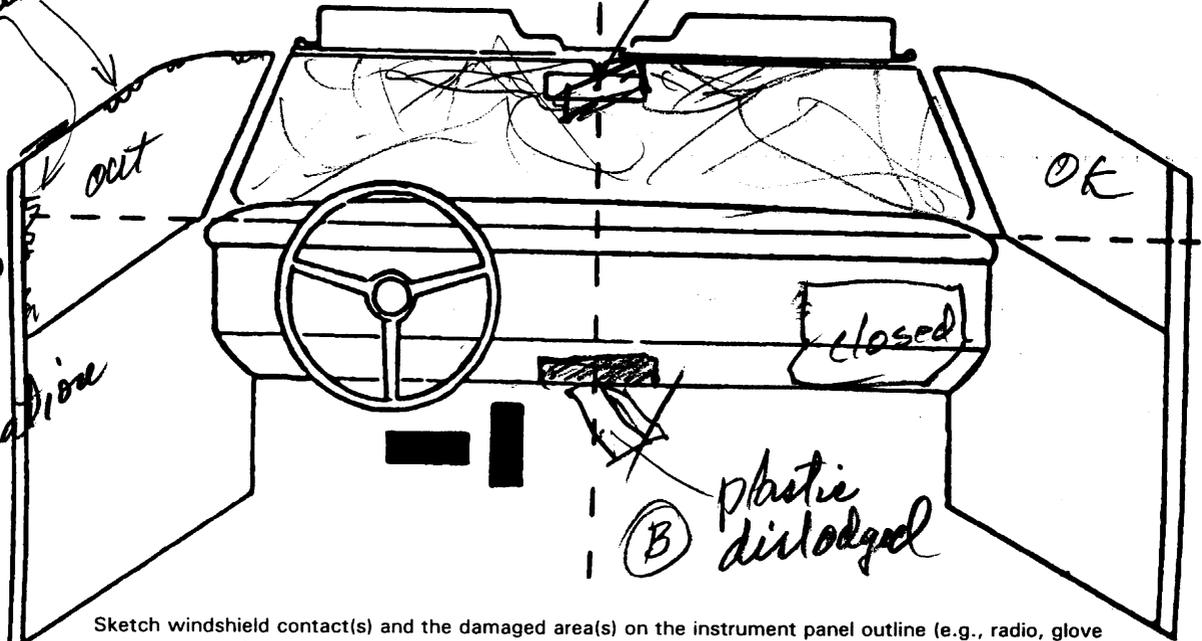
### VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



glass kernels  
still adhering  
in track

Motorized  
door  
Belt cut  
by extrication  
fronts  
separate  
lap (OK)



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

**POINTS OF OCCUPANT CONTACT**

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	002	01	hand?	dislodged & smudged	1
B	011	01	knee?	plastic dislodged	2
C					
D					
E					
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., tapedeck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object, (specify): \_\_\_\_\_
- (019) Other front object (specify): \_\_\_\_\_

**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 wheelchair)
- (412) Other adaptive device (specify): \_\_\_\_\_

**CONFIDENCE LEVEL OF CONTACT POINT**

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



### AUTOMATIC RESTRAINTS

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

#### AIR BAGS

		Frontal Air Bags--Left Front	Frontal Air Bags--Right Front	Other Air Bag
F I R S T	Availability/Function	0	0	0
	Deployment	0	0	0
	Failure	0	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

**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

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

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

#### AUTOMATIC BELTS

		Left	Right
F I R S T	A-Availability/Function	/	/
	B-Use	/	/
	C-Type	2	2
	D-Proper Use	/	0
	E-Failure Modes	/	/

**A-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

**B-Automatic (Passive) Belt System Use**

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

**C-Automatic (Passive) Belt System Type**

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

**D-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

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

**A-Type of Air Bag**

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

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

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

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

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

**D-Was There Damage To The Air Bag?**

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

*Yes - Air Bag Damage*

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

**E-Source of Air Bag Damage**

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

**F-Was The Air Bag Tethered?**

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

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

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

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

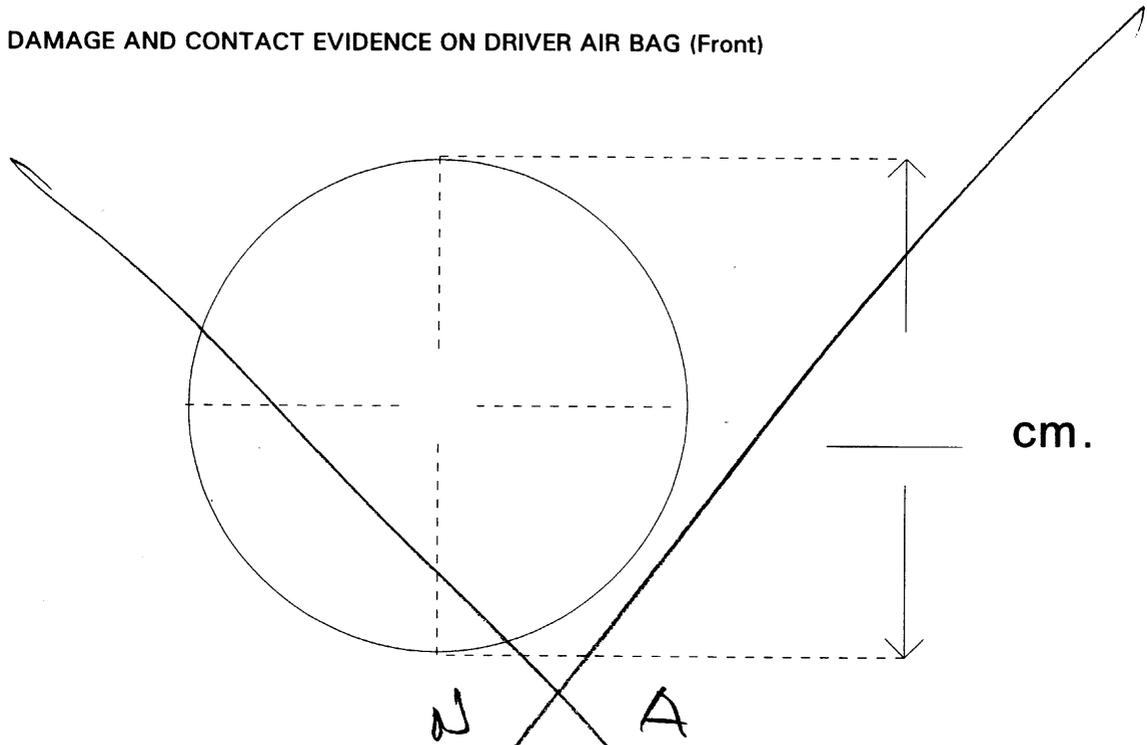
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

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

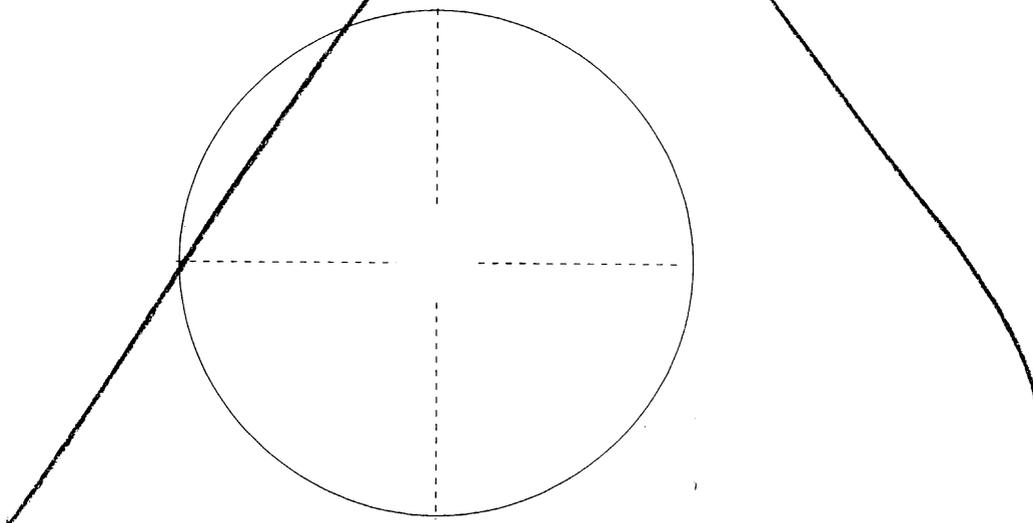
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

**DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES**

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



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

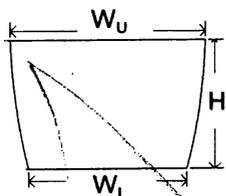


**DRIVER AIR BAG SKETCHES (Cont'd)**

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

width ( $W_U$ ) \_\_\_\_\_ width ( $W_L$ ) \_\_\_\_\_

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



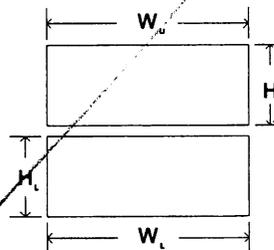
4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_ width ( $W_L$ ) \_\_\_\_\_

height ( $H_U$ ) \_\_\_\_\_ height ( $H_L$ ) \_\_\_\_\_



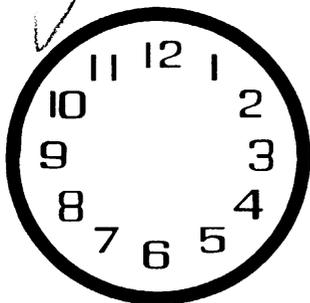
5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

N

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

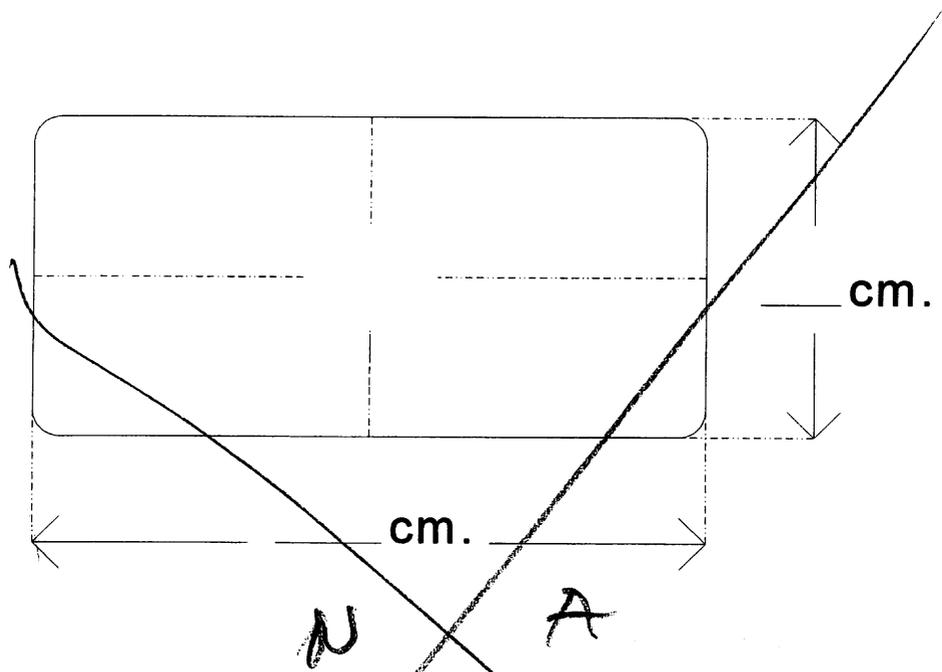
A

7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS

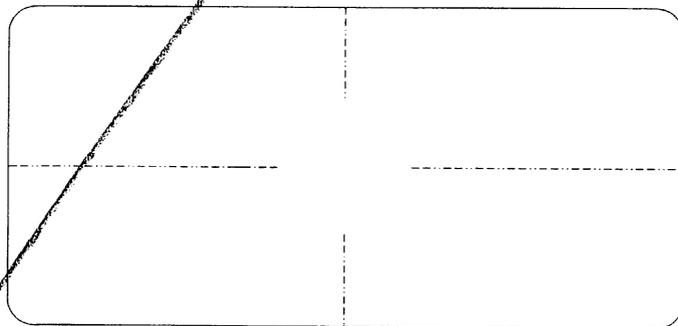


**PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES**

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



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

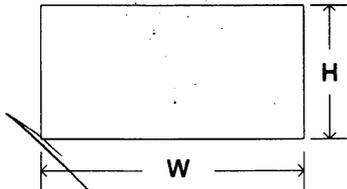


**PASSENGER AIR BAG SKETCHES (Cont'd)**

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

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

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



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

a. Upper Flap

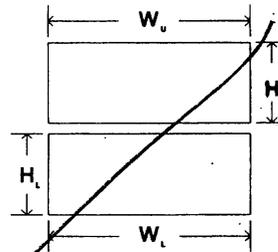
b. Lower Flap

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

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

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

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



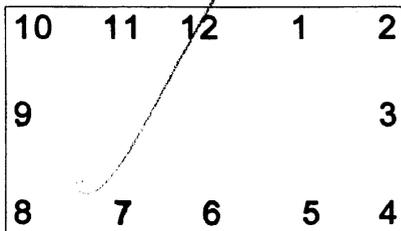
**5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE**

N

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

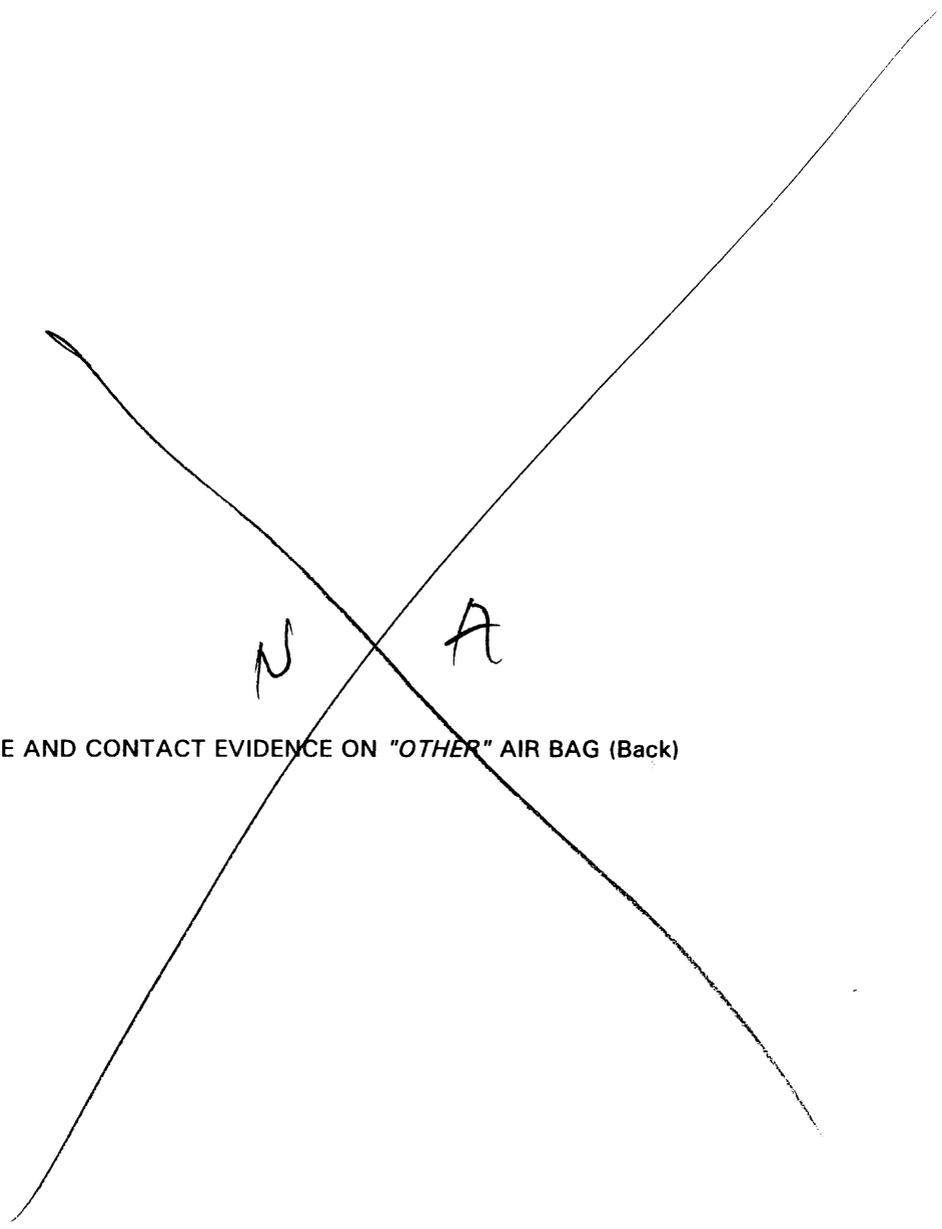
A

**7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS**



**"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES**

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

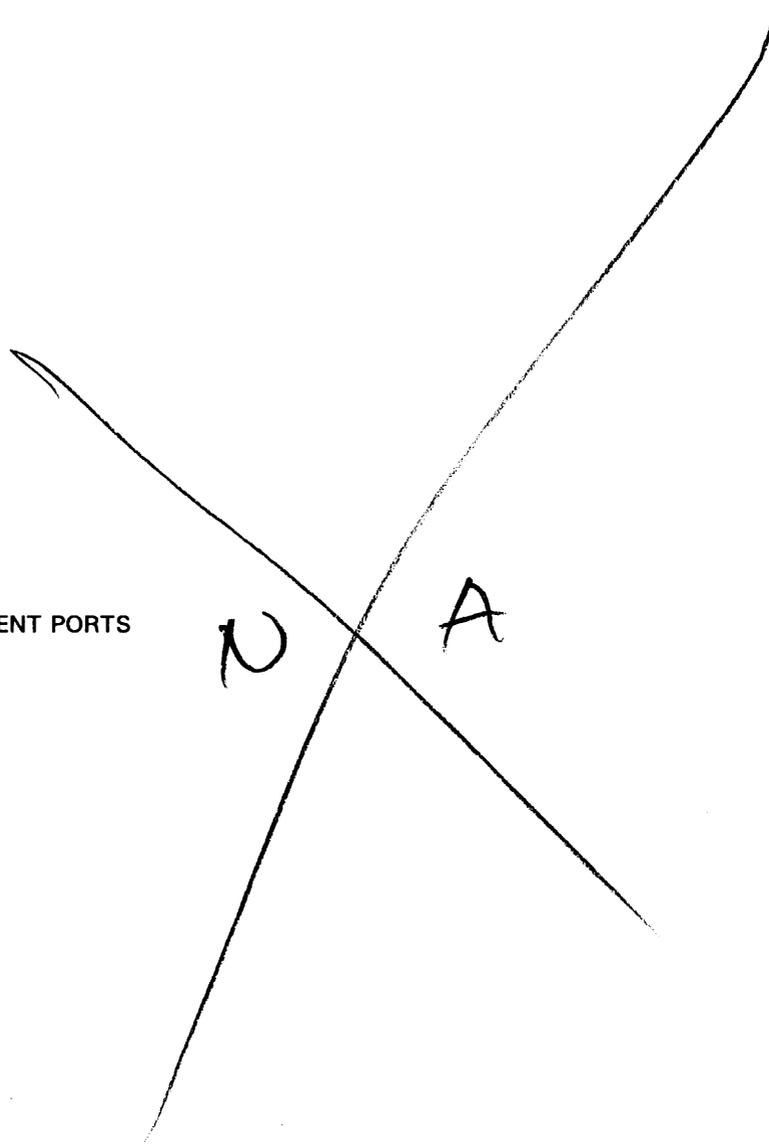


2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

**"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 on the next 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
<b>F I R S T</b>	A-Head Restraint Type/Damage	3	0	3
	B-Seat Type	01	00	01
	C-Seat Orientation	1	0	1
	D-Seat Track Position	3	0	6
	E-Seat Back Incline Pre/Post Impact	14	0	13
	F-Seat Performance	1	0	6
<b>S E C O N D</b>	A-Head Restraint Type/Damage	0	0	0
	B-Seat Type	03	03	03
	C-Seat Orientation	1	1	1
	D-Seat Track Position	1	1	1
	E-Seat Back Incline Pre/Post Impact	01	01	01
	F-Seat Performance	1	1	6
<b>T H I R D</b>	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
<b>O T H E R</b>	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

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

NONE

**HEAD RESTRAINTS/SEAT EVALUATION**

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

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

**B-Seat Type (this Occupant Position)**

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

**C-Seat Orientation (this Occupant Position)**

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

**D-Seat Track Adjusted Position Prior To Impact**

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

**E-Seat Back Incline Prior and Post Impact**

- (00) Occupant not seated or no seat
- (01) Not adjustable —
- Upright prior to impact*
- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

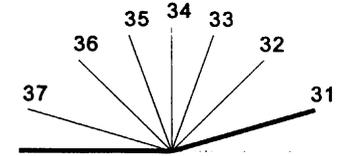
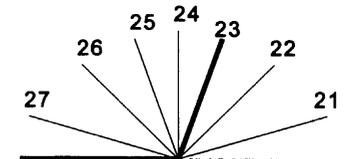
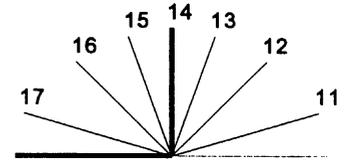
- Slightly reclined prior to impact*
- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely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

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

- (99) Unknown

**F-Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): (R) pillar & door
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) 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			N/A			
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat
  - (0) No child safety seat
  - (1) Infant seat
  - (2) Toddler seat
  - (3) Convertible seat
  - (4) Booster seat
  - (7) Other type child safety seat (specify): \_\_\_\_\_
  - (8) Unknown child safety seat type
  - (9) Unknown if child safety seat used
2. Child Safety Seat Orientation
  - (00) No child safety seat
  - Designed for Rear Facing for This Age/Weight
    - (01) Rear facing
    - (02) Forward facing
    - (08) Other orientation (specify): \_\_\_\_\_
  - (09) Unknown orientation
  - Designed for Forward Facing for This Age/Weight
    - (11) Rear facing
    - (12) Forward facing
    - (18) Other orientation (specify): \_\_\_\_\_
  - (19) Unknown orientation
  - Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
    - (21) Rear facing
    - (22) Forward facing
    - (28) Other orientation (specify): \_\_\_\_\_
  - (29) Unknown orientation
  - (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage
4. Child Safety Seat Shield Usage
5. Child Safety Seat Tether Usage
  - Note: Options Below Are Used for Variables 3-5.
  - (00) No child safety seat
  - Not Designed with Harness/Shield/Tether
    - (01) After market harness/shield/tether added, not used
    - (02) After market harness/shield/tether used
    - (03) Child safety seat used, but no after market harness/shield/tether added
    - (09) Unknown if harness/shield/tether added or used
  - Designed With Harness/Shield/Tether
    - (11) Harness/shield/tether not used
    - (12) Harness/shield/tether used
    - (19) Unknown if harness/shield/tether used
  - Unknown If Designed With Harness/Shield/Tether
    - (21) Harness/shield/tether not used
    - (22) Harness/shield/tether used
    - (29) Unknown if harness/shield/tether used
  - (99) Unknown if child safety seat used
6. Child Safety Seat Make/Model
  - (Specify make/model and occupant number)
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_

**EJECTION/ENTRAPMENT DATA**

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

**EJECTION** No  Yes [ ]

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

**Ejection**

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

**Ejection Area**

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

(7) Roof

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

- (9) Unknown

**Ejection Medium**

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

(5) Integral structure

- (8) Other medium (specify): \_\_\_\_\_

- (9) Unknown

**Medium Status (Immediately Prior to Impact)**

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

**ENTRAPMENT** No  Yes [ ]

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

(Note on vehicle interior sketch)



# OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number 78

2. Case Number - Stratum 176C

3. Vehicle Number 01

4. Occupant Number 01

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 17  
Code actual age at time of accident.  
(00) Less than one year old (specify by month): \_\_\_\_\_  
  
(97) 97 years and older  
(99) Unknown

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

7. Occupant's Height 166  
Code actual height to the nearest centimeter.  
(999) Unknown  
  
65.5 inches X 2.54 = 166.37 centimeters

8. Occupant's Weight 054  
Code actual weight to the nearest kilogram.  
(999) Unknown  
  
120 pounds X .4536 = 54.4 kilograms

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

## OCCUPANT'S SEATING

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

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

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

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

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

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

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

## EJECTION/ENTRAPMENT

12. Ejection 0

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

13. Ejection Area 0

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

14. Ejection Medium 0

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

15. Medium Status (Immediately Prior To Impact) 0

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

16. Entrapment 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 3

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

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 3

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

*Integral Belt Partially Destroyed*

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

(9) 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. Manual Shoulder Belt Upper Anchorage Adjustment 0

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

*Adjustable shoulder Belt Upper Anchorage*

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

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

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

*Non-functional*

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

24. Automatic (Passive) Belt System Use 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 2

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

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

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

*Automatic Belt Used Improperly*

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

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

- (8) Other improper use of automatic belt system (specify):
- (9) 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

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>1</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 checked="" type="checkbox"/> Vehicle inspection  <input type="checkbox"/> Official injury data  <input type="checkbox"/> <u>Driver/occupant interview</u>  <input type="checkbox"/> Other (specify):                      _____  <input type="checkbox"/> Unknown if belt used                      _____                      _____                      _____</p>	<p>30. Frontal Air Bag System Availability/Function (This Occupant Position) <span style="float: right;"><u>0</u></span></p> <p>(0) Not equipped/not available                      (1) Air bag  <i>Non-functional</i>                      (2) Air bag disconnected (specify):                      _____                      (3) Air bag not reinstalled                      (9) Unknown</p> <p>31. Frontal Air Bag System Deployment (This Occupant Position) <span style="float: right;"><u>0</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  <i>Non-functional</i>                      (2) Air bag disconnected (specify):                      _____                      (3) Air bag not reinstalled                      (9) Unknown  <i>Specify type of "other" air bag present:</i>                      _____</p> <p>33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) <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>0</u></span></p> <p>(0) Not equipped/not available                      (1) No                      (2) Yes (specify):                      _____                      (9) Unknown</p>

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

<p>35. Had Vehicle Been in Previous Accident(s)? <u>0</u>                  (0) Not equipped/not available                  (1) No previous accidents</p> <p>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</p>	<p>40. Longitudinal Component of Delta V For Air Bag Deployment Impact <u>+ 000</u>                  (000) Not equipped/not available  <i>Code the value of the delta V for the impact that initiated the air bag deployment</i>                  (_996) Deployment, unknown longitudinal Delta V                  (_997) Not deployed                  (_998) Unknown if deployed                  (_999) Unknown</p>
<p>36. Type of Air Bag <u>0</u>                  (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</p>	<p>41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? <u>0</u>                  (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</p>
<p>37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? <u>0</u>                  (0) Not equipped/not available                  (1) No prior maintenance                  (2) Yes, prior maintenance (specify): _____                  (9) Unknown</p>	<p>42. Were Air Bag Module Cover Flap(s) Damaged? <u>0</u>                  (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</p>
<p>38. Air Bag Deployment Accident Event Sequence Number <u>00</u>                  (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</p>	<p>43. Was There Damage To The Air Bag? <u>00</u>                  (00) Not equipped/not available                  (01) Not damaged</p> <p>Yes - Air Bag Damage                  (02) Ruptured                  (03) Cut                  (04) Torn                  (05) Holed                  (06) Burned                  (07) Abraded                  (88) Other damage (specify): _____</p>
<p>39. CDC For Air Bag Deployment Impact <u>0</u>                  (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</p>	<p>(95) Damaged, details unknown                  (96) Deployed, unknown if damaged                  (97) Not deployed                  (98) Unknown if deployed                  (99) Unknown</p>

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

**HEAD RESTRAINT AND SEAT EVALUATION**

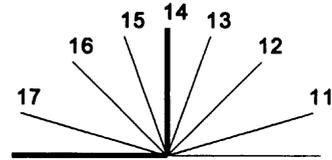
49. Head Restraint Type/Damage by Occupant at This Occupant Position 3
- (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown
50. Seat Type (this Occupant Position) 01
- (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 3
- (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 14  
 (00) Occupant not seated or no seat  
 (01) Not adjustable

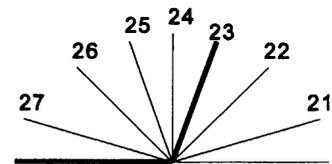
***Upright prior to impact***

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



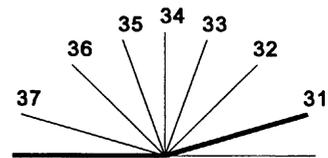
***Slightly reclined prior to impact***

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



***Completely reclined prior to impact***

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



(99) Unknown

54. Seat Performance (this Occupant Position) 1

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

## CHILD SAFETY SEAT

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

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

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

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

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

*Designed for Rear Facing for This Age/Weight*

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

\_\_\_\_\_  
 (09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

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

\_\_\_\_\_  
 (19) Unknown orientation

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

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

\_\_\_\_\_  
 (29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 00

59. Child Safety Seat Shield Usage 00

60. Child Safety Seat Tether Usage 00

Note: Options below applicable to  
 Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

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

*Designed With Harness/Shield/Tether*

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

*Unknown If Designed With Harness/Shield/Tether*

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

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**

61. Injury Severity (Police Rating) 3

- (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) 2

- (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 00

- \_\_\_\_ 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

**EMERGENCY RESPONSE INFORMATION**

EMS Notification

- (1) Not notified ROAD VEHICLE
- (2) Notified
- (9) Unknown AIR VEHICLE

EMS Notification Time (first unit)

- (9999) Unknown ROAD VEHICLE
- AIR VEHICLE

EMS Arrival Time (first unit)

- (9998) EMS cancelled or did not arrive ROAD VEHICLE
- (9999) Unknown AIR VEHICLE

EMS Departure Time To Treatment Facility (transporting unit)

- (9997) EMS arrived, provided treatment, but did not transport ROAD VEHICLE
- (9998) EMS arrived, but was not used AIR VEHICLE
- (9999) Unknown

EMS Arrival Time At Treatment Facility

- (9999) Unknown ROAD VEHICLE
- AIR VEHICLE

EMS Type

- |                               |                     |                          |
|-------------------------------|---------------------|--------------------------|
| (01) Fire department          | <u>FIRST UNIT</u>   | <u>TRANSPORTING UNIT</u> |
| (02) Rescue squad             |                     |                          |
| (03) Police department        | <u>ROAD VEHICLE</u> |                          |
| (04) Trauma unit              |                     |                          |
| (05) Disaster unit            | <u>AIR VEHICLE</u>  |                          |
| (06) Ambulance service unit   |                     |                          |
| (07) Hospital                 |                     |                          |
| (08) Mortuaries/funeral homes |                     |                          |
| (98) Other, specify: _____    |                     |                          |
| (99) Unknown                  |                     |                          |

EMS Care

- |  |                     |                         |
|--|---------------------|-------------------------|
| (01) No care administered  | <u>ON-SCENE</u>     | <u>DURING TRANSPORT</u> |
| (02) First aid   |                     |                         |
| (03) Resuscitation   | <u>ROAD VEHICLE</u> |                         |
| (04) CPR   |                     |                         |
| (05) Emergency cardiac care  | <u>AIR VEHICLE</u>  |                         |
| (06) Life support system monitoring (blood pressure, pulse rate, respiration, EKG) |                     |                         |
| (07) Emergency burn care   |                     |                         |
| (08) Combination of above, specify: _____  |                     |                         |
| (98) Other, specify: _____   |                     |                         |
| (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 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 06  
 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 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> 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>78</u>	3. Vehicle Number <u>01</u>
2. Case Number - Stratum <u>176C</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.

	A.I.S. - 90							Injury Source	Injury Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
	Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect				
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>2</u>	12. <u>152</u>	13. <u>2</u>	14. <u>1</u>	15. <u>00</u>
2nd	16. <u>3</u>	17. <u>7</u>	18. <u>9</u>	19. <u>02</u>	20. <u>02</u>	21. <u>1</u>	22. <u>2</u>	23. <u>602</u>	24. <u>1</u>	25. <u>3</u>	26. <u>00</u>
3rd	27. <u>3</u>	28. <u>7</u>	29. <u>9</u>	30. <u>04</u>	31. <u>02</u>	32. <u>1</u>	33. <u>2</u>	34. <u>051</u>	35. <u>1</u>	36. <u>1</u>	37. <u>00</u>
4th	38. <u>3</u>	39. <u>8</u>	40. <u>9</u>	41. <u>02</u>	42. <u>02</u>	43. <u>1</u>	44. <u>2</u>	45. <u>004</u>	46. <u>1</u>	47. <u>1</u>	48. <u>00</u>
5th	49. <u>3</u>	50. <u>8</u>	51. <u>9</u>	52. <u>04</u>	53. <u>02</u>	54. <u>1</u>	55. <u>2</u>	56. <u>004</u>	57. <u>1</u>	58. <u>1</u>	59. <u>00</u>
6th	60. <u>7</u>	61. <u>1</u>	62. <u>9</u>	63. <u>04</u>	64. <u>02</u>	65. <u>1</u>	66. <u>6</u>	67. <u>054</u>	68. <u>2</u>	69. <u>1</u>	70. <u>00</u>
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						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	Aspect				
11th	---	---	---	---	---	---	---	---	---	---
12th	---	---	---	---	---	---	---	---	---	---
13th	---	---	---	---	---	---	---	---	---	---
14th	---	---	---	---	---	---	---	---	---	---
15th	---	---	---	---	---	---	---	---	---	---
16th	---	---	---	---	---	---	---	---	---	---
17th	---	---	---	---	---	---	---	---	---	---
18th	---	---	---	---	---	---	---	---	---	---
19th	---	---	---	---	---	---	---	---	---	---
20th	---	---	---	---	---	---	---	---	---	---
21st	---	---	---	---	---	---	---	---	---	---
22nd	---	---	---	---	---	---	---	---	---	---
23rd	---	---	---	---	---	---	---	---	---	---
24th	---	---	---	---	---	---	---	---	---	---
25th	---	---	---	---	---	---	---	---	---	---

2



## 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.)

Restrained?

No  
 Yes

Blood Alcohol Level (mg/dl)

BAL = \_\_\_

Glasgow Coma Scale Score

GCSS = 15

Units of Blood Given

Units = \_\_\_

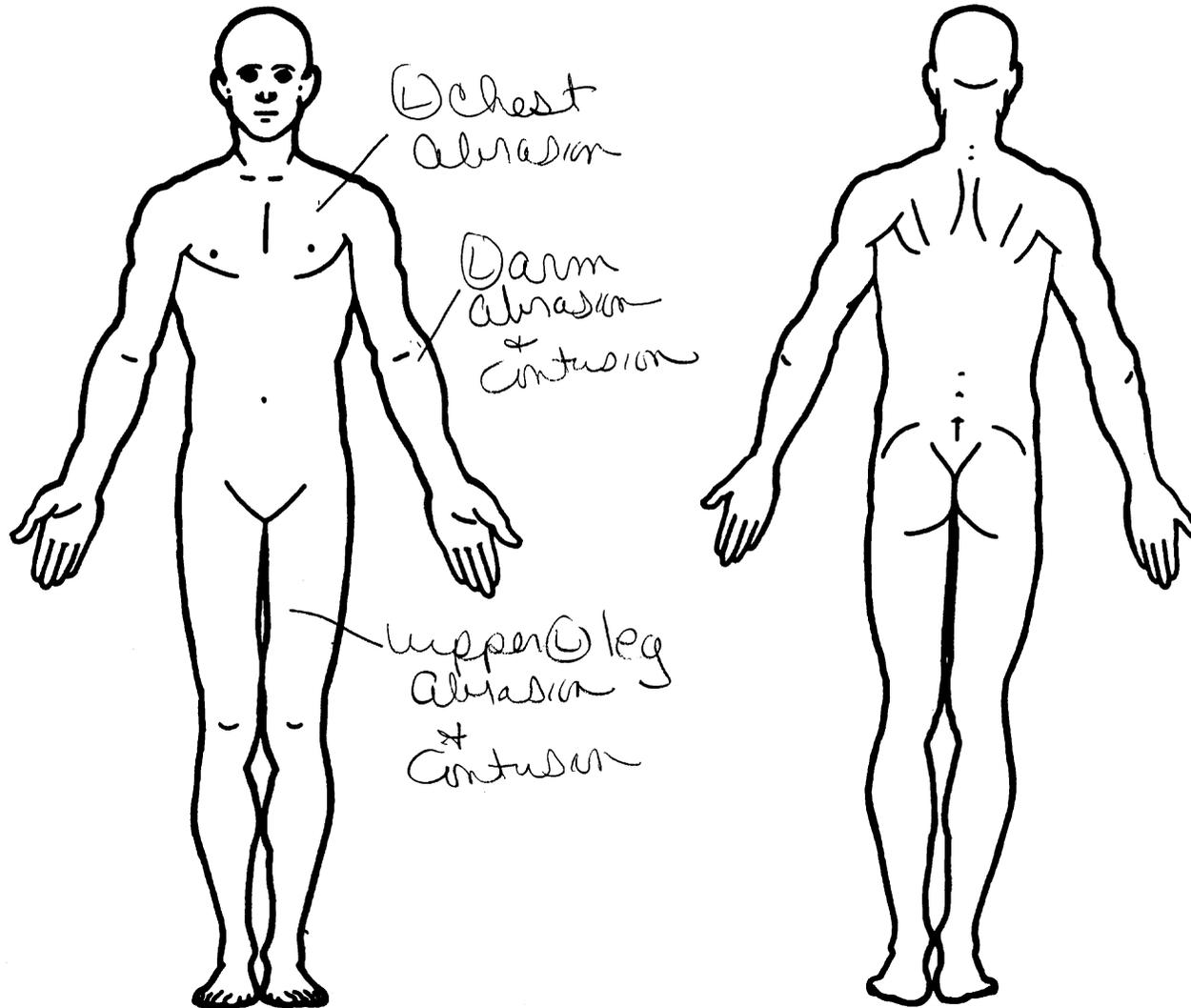
Arterial Blood Gases

pH = \_\_\_

PO<sub>2</sub> = \_\_\_

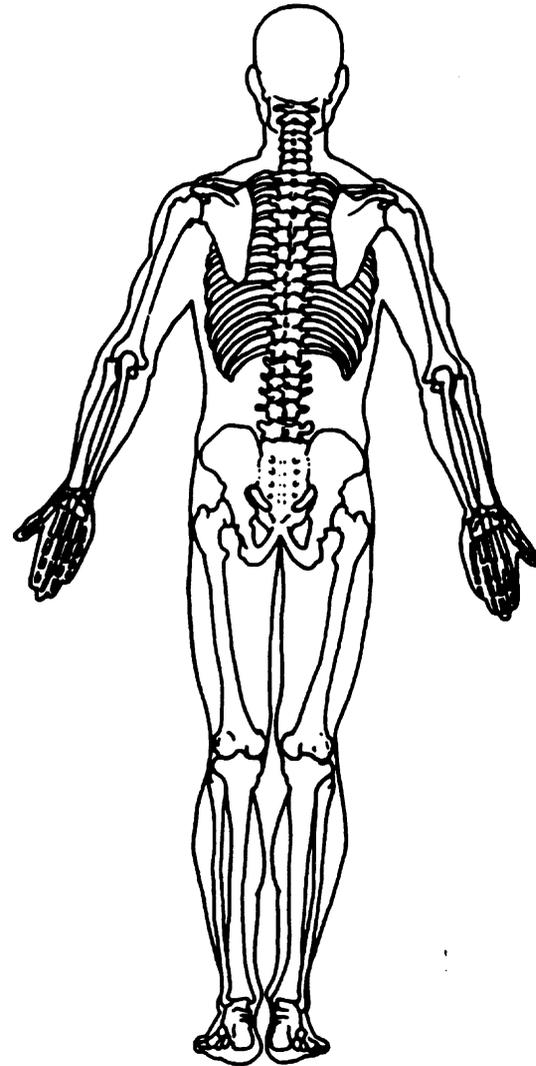
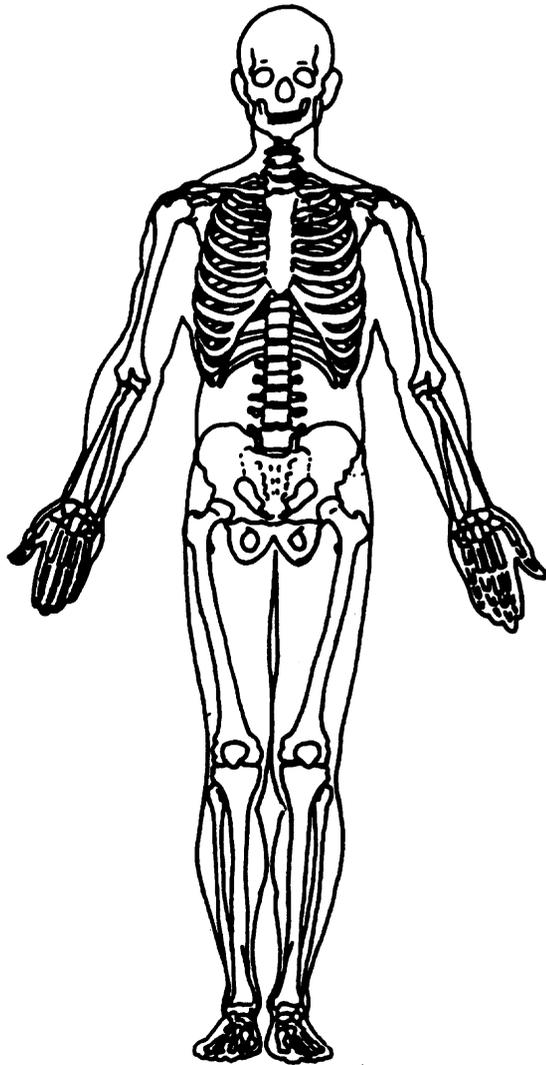
PCO<sub>2</sub> = \_\_\_

HCO<sub>3</sub> = \_\_\_



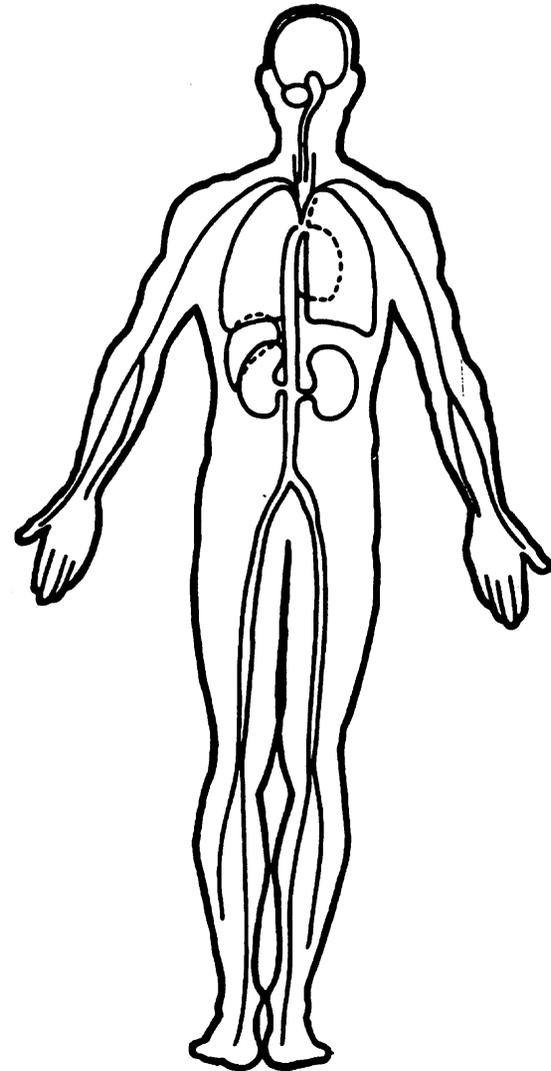
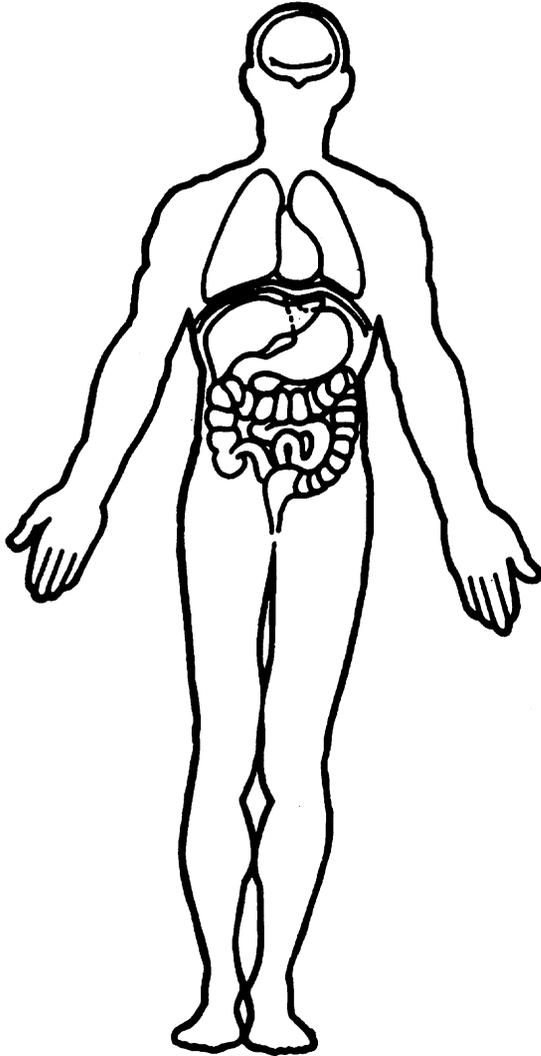
## OFFICIAL INJURY DATA — SKELETAL INJURIES

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.)



## 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.)



**PRECRASH ENVIRONMENTAL DATA**

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

*Non-Interchange junctions*

(2) Intersection related  
 (3) Driveway, alley access related  
 (4) Other junction (specify) \_\_\_\_\_

(5) Unknown type of junction

(9) Unknown

20. Trafficway Flow 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 3

(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 1

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

27. Atmospheric Conditions 0

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

28. Traffic Control Device 1

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

*Regulatory*

(2) Stop sign  
 (3) Yield sign  
 (4) School zone sign  
 (5) Other regulatory sign (specify): \_\_\_\_\_

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

(9) Unknown

29. Traffic Control Device Functioning 2

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

**OCCUPANT RELATED**

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

**AIR BAG RELATED**

- 40. Is this an AOPS Vehicle? 0  
 (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 1.460  
 Code weight to nearest 10 kilograms.  
 (045) Less than 454 kilograms  
 (612) 6,124 kilograms or more  
 (999) Unknown  
3.209 lbs X .4536 = 1.455.6 kgs  
 Source: \_\_\_\_\_

- 44. Vehicle Cargo Weight 000  
 Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (454) 4,536 kilograms or more  
 (999) Unknown  
 \_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs  
 Source: interview driver

**ROLLOVER DATA**

- 45. Rollover 00  
 (00) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
 (01-16) Code the number of quarter turns 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

PSU NUMBER	<u>78</u>
CASE NUMBER	<u>176C</u>
VEHICLE NUMBER	<u>02</u>

# EXTERIOR VEHICLE FORM

*THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:*

- ENTIRE FORM
- PAGE NUMBER (S) \_\_\_\_\_

PSU NUMBER

78

CASE NUMBER

176C

VEHICLE NUMBER

02

# INTERIOR VEHICLE FORM

*THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:*

ENTIRE FORM

PAGE NUMBER (S) \_\_\_\_\_



# OCCUPANT ASSESSMENT FORM

- 1. Primary Sampling Unit Number 78
- 2. Case Number - Stratum 176C
- 3. Vehicle Number 02
- 4. Occupant Number 01

## OCCUPANT'S CHARACTERISTICS

- 5. Occupant's Age 26  
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 180  
Code actual height to the nearest centimeter.  
(999) Unknown  
  
71 inches X 2.54 = 180.34 centimeters
- 8. Occupant's Weight 084  
Code actual weight to the nearest kilogram.  
(999) Unknown  
  
185 pounds X .4536 = 83.9 kilograms
- 9. Occupant's Role 1  
(1) Driver  
(2) Passenger  
(9) Unknown

## OCCUPANT'S SEATING

- 10. Occupant's Seat Position 11  
*Front Seat*  
(11) Left side  
(12) Middle  
(13) Right side  
(14) Other (specify): \_\_\_\_\_  
(15) On or in the lap of another occupant  
  
*Second Seat*  
(21) Left side  
(22) Middle  
(23) Right side  
(24) Other (specify): \_\_\_\_\_  
(25) On or in the lap of another occupant  
  
*Third Seat*  
(31) Left side  
(32) Middle  
(33) Right side  
(34) Other (specify): \_\_\_\_\_  
(35) On or in the lap of another occupant  
  
*Fourth Seat*  
(41) Left side  
(42) Middle  
(43) Right side  
(44) Other (specify): \_\_\_\_\_  
(45) On or in the lap of another occupant  
  
(97) In or on unenclosed area  
(98) Other seat (specify): \_\_\_\_\_  
(99) Unknown
- 11. Occupant's Posture 0  
(0) Normal posture  
  
*Abnormal posture*  
(1) Kneeling or standing on seat  
(2) Lying on or across seat  
(3) Kneeling, standing or sitting in front of seat  
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window  
(5) Sitting on a console  
(6) Lying back in a reclined seat position  
(7) Bracing with feet or hands on a surface in front of seat  
(8) Other abnormal posture (specify): \_\_\_\_\_  
(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection 0

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

13. Ejection Area 0

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

14. Ejection Medium 0

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

15. Medium Status (Immediately Prior To Impact) 0

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

16. Entrapment 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 4

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

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

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

*Integral Belt Partially Destroyed*

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

(9) Unknown

19. Manual (Active) Belt System Use 04

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

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

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

20. Proper Use of Manual (Active) Belts 1

- (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 9

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

(6) Broken retractor

(7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Manual Shoulder Belt Upper Anchorage Adjustment 1

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

*Adjustable shoulder Belt Upper Anchorage*

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

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

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

*Non-functional*

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

24. Automatic (Passive) Belt System Use 0

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

25. Automatic (Passive) Belt System Type 0

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

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

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

*Automatic Belt Used Improperly*

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

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

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

(9) Unknown

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

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

(6) Broken retractor

(7) Combination of above (specify):

(8) Other automatic belt failure (specify):

(9) Unknown

**POLICE REPORTED RESTRAINT USE**

**AIR BAG SYSTEM FUNCTION**

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

(9) Police indicated "unknown"

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

Check the Primary Source Used In Determining Belt Use.

- Vehicle inspection
- Official injury data
- Driver/occupant interview
- Other (specify):

Unknown if belt used

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

30. Frontal Air Bag System Availability/Function (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 + 000  
 (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*
**HEAD RESTRAINT AND SEAT EVALUATION**

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

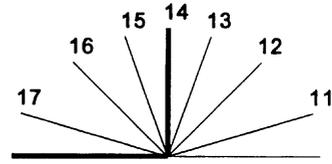
49. Head Restraint Type/Damage by Occupant at This Occupant Position 9
- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown
50. Seat Type (this Occupant Position) 99
- (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) 9
- (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 9
- (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 99  
 (00) Occupant not seated or no seat  
 (01) Not adjustable

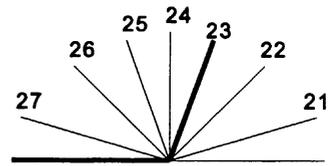
***Upright prior to impact***

- (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



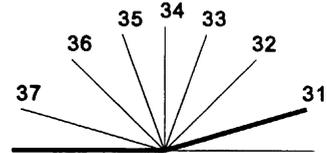
***Slightly reclined prior to impact***

- (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) 9

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

## CHILD SAFETY SEAT

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

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

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

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

*Designed for Rear Facing for This Age/Weight*

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

\_\_\_\_\_  
 (09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

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

\_\_\_\_\_  
 (19) Unknown orientation

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

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

\_\_\_\_\_  
 (29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 00

59. Child Safety Seat Shield Usage 00

60. Child Safety Seat Tether Usage 00

Note: Options below applicable to  
 Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

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

*Designed With Harness/Shield/Tether*

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

*Unknown If Designed With Harness/Shield/Tether*

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

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**

61. Injury Severity (Police Rating) 0

- (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 0

- (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) 0

- (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 00

- \_\_\_\_\_ 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

**EMERGENCY RESPONSE INFORMATION**

EMS Notification

- (1) Not notified
- (2) Notified
- (9) Unknown

ROAD VEHICLE

AIR VEHICLE

EMS Notification Time (first unit)

- (9999) Unknown

ROAD VEHICLE

AIR VEHICLE

EMS Arrival Time (first unit)

- (9998) EMS cancelled or did not arrive
- (9999) Unknown

ROAD VEHICLE

AIR VEHICLE

EMS Departure Time To Treatment Facility (transporting unit)

- (9997) EMS arrived, provided treatment, but did not transport
- (9998) EMS arrived, but was not used
- (9999) Unknown

ROAD VEHICLE

AIR VEHICLE

EMS Arrival Time At Treatment Facility

- (9999) Unknown

ROAD VEHICLE

AIR VEHICLE

EMS Type

- (01) Fire department
- (02) Rescue squad
- (03) Police department
- (04) Trauma unit
- (05) Disaster unit
- (06) Ambulance service unit
- (07) Hospital
- (08) Mortuaries/funeral homes
- (98) Other, specify: \_\_\_\_\_
- (99) Unknown

FIRST UNIT

TRANSPORTING UNIT

ROAD VEHICLE

AIR VEHICLE

EMS Care

- (01) No care administered
- (02) First aid
- (03) Resuscitation
- (04) CPR
- (05) Emergency cardiac care
- (06) Life support system monitoring (blood pressure, pulse rate, respiration, EKG)
- (07) Emergency burn care
- (08) Combination of above, specify: \_\_\_\_\_
- (98) Other, specify: \_\_\_\_\_
- (99) Unknown

ON-SCENE

DURING TRANSPORT

ROAD VEHICLE

AIR VEHICLE

**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 01

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 (at Medical Facility) 01

- (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? L

- (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 3

- (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>78</u>	3. Vehicle Number <u>02</u>
2. Case Number - Stratum <u>176C</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	Body Region	A.I.S. - 90				Injury Source	Injury Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number	
			Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity					Aspect
1st	5. <u>7</u>	6. <u>8</u>	7. <u>9</u>	8. <u>02</u>	9. <u>02</u>	10. <u>1</u>	11. <u>2</u>	12. <u>051</u>	13. <u>2</u>	14. <u>1</u>	15. <u>99</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 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
<b>Type of Anatomic Structure</b>	<b>Whole Area</b>		
(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		
	<b>Head - LOC</b>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<b>Spine</b>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		
		<b>Abbreviated Injury Scale</b>	
		(1) Minor Injury	
		(2) Moderate Injury	
		(3) Serious Injury	
		(4) Severe Injury	
		(5) Critical Injury	
		(6) Maximum (untreatable)	
		(7) Injured, unknown severity	
<b>SOURCE OF INJURY DATA</b>		<b>INJURY SOURCE CONFIDENCE LEVEL</b>	
<p><b>OFFICIAL RECORDS</b></p> <p>(1) Autopsy records with or without hospital/medical records</p> <p>(2) Hospital/medical records other than emergency room (e.g., discharge summary)</p> <p>(3) Emergency room records only (including associated X-rays or other lab reports)</p> <p>(4) Private physician, walk-in or emergency clinic</p> <p><b>UNOFFICIAL RECORDS</b></p> <p>(5) Lay coroner report</p> <p>(6) E.M.S. personnel</p> <p>(7) Interviewee</p> <p>(8) Other source (specify): _____</p> <p>(9) Police _____</p>		<p>(1) Certain</p> <p>(2) Probable</p> <p>(3) Possible</p> <p>(9) Unknown</p>	
		<b>DIRECT/INDIRECT INJURY</b>	
		<p>(1) Direct contact injury</p> <p>(2) Indirect contact injury</p> <p>(3) Noncontact injury</p> <p>(7) Injured, unknown source</p>	

## 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.)

Restrained?

No

Yes

Blood Alcohol Level  
(mg/dl)

BAL = \_\_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_\_

Units of Blood  
Given

Units = \_\_\_\_

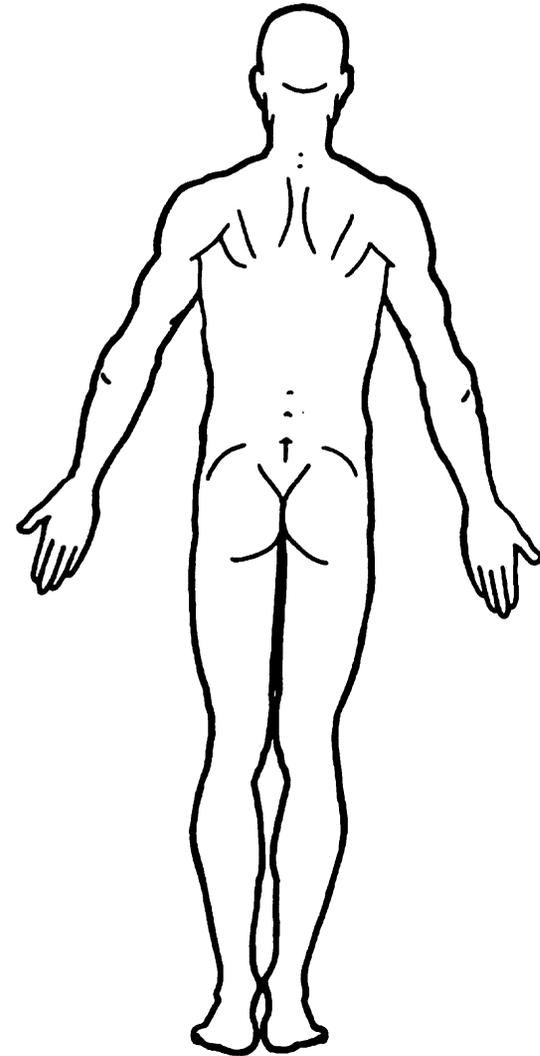
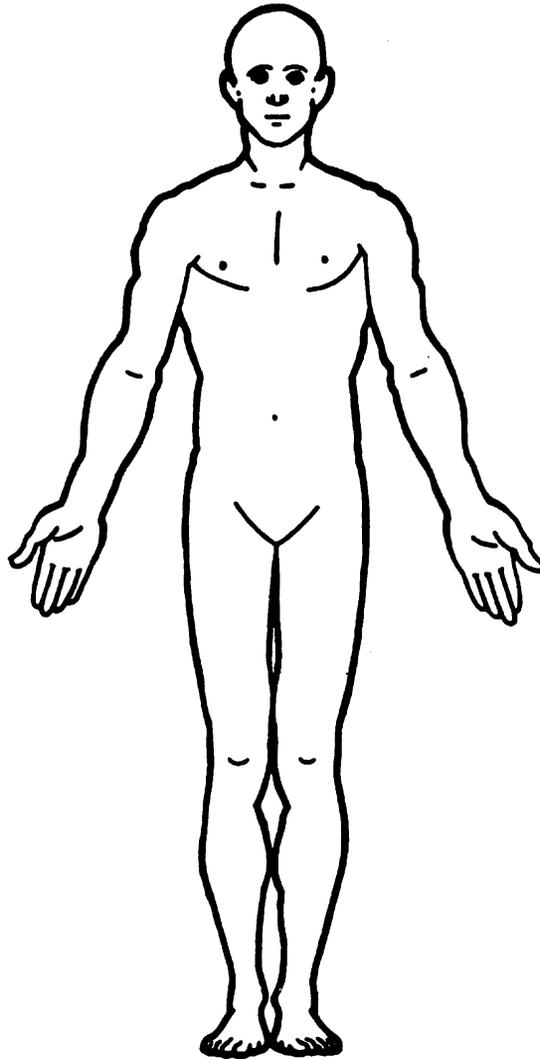
Arterial Blood Gases

pH = \_\_\_\_

PO<sub>2</sub> = \_\_\_\_

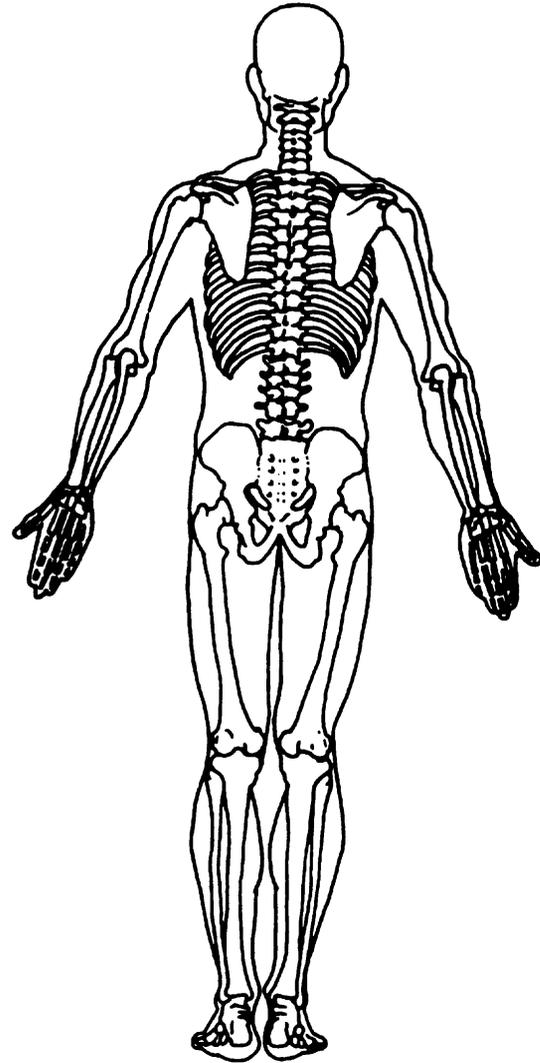
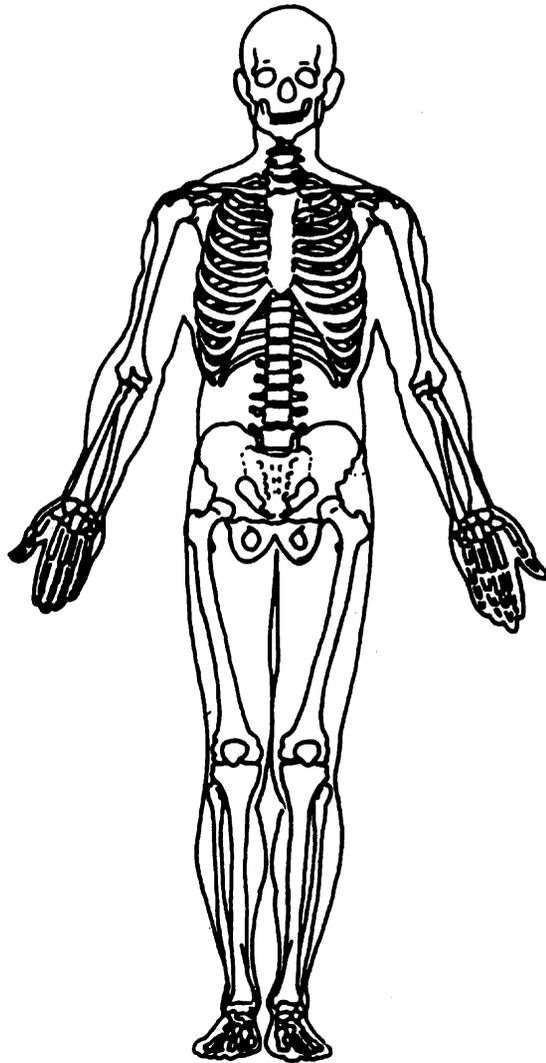
PCO<sub>2</sub> \_\_\_\_

HCO<sub>3</sub> \_\_\_\_



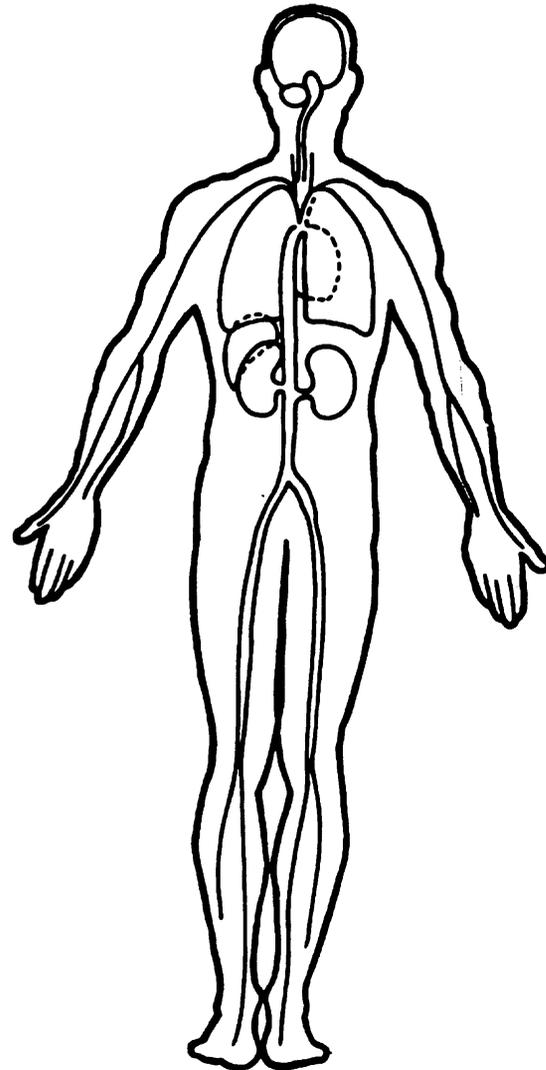
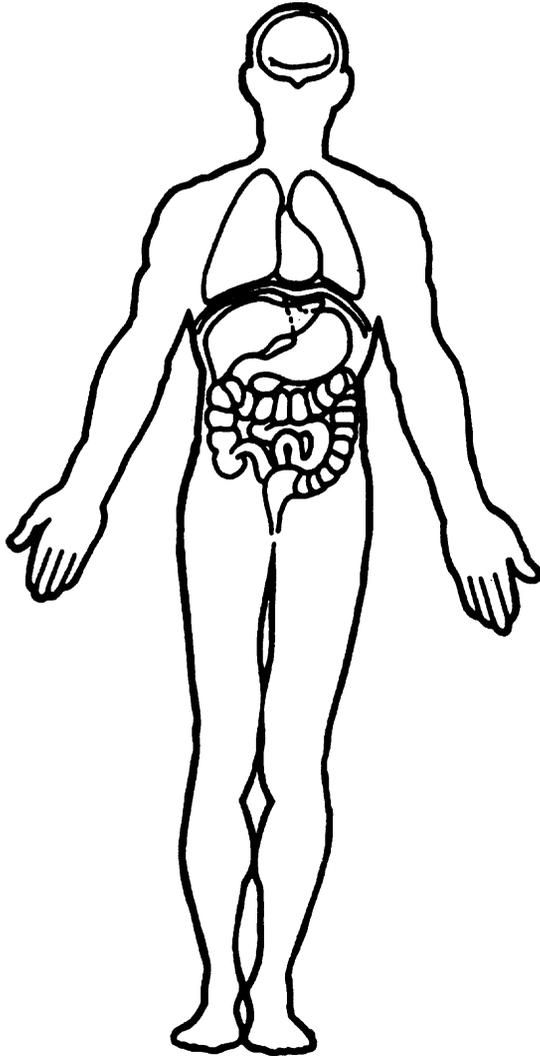
## OFFICIAL INJURY DATA — SKELETAL INJURIES

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.)



## 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.)



**PRECRASH ENVIRONMENTAL DATA**

19. Relation To Interchange Or Junction 2  
 (0) Non-interchange area and non-junction  
 (1) Interchange area related  
  
*Non-Interchange junctions*  
 (2) Intersection related  
 (3) Driveway, alley access related  
 (4) Other junction (specify) \_\_\_\_\_  
 (5) \_\_\_\_\_  
 (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 5  
 (1) One  
 (2) Two  
 (3) Three  
 (4) Four  
~~(5) Five~~  
 (6) Six  
 (7) Seven or more  
 (9) Unknown

22. Roadway Alignment 1  
 (1) Straight  
 (2) Curve right  
 (3) Curve left  
 (9) Unknown

23. Roadway Profile 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 1  
 (1) Daylight  
 (2) Dark  
 (3) Dark, but lighted  
 (4) Dawn  
 (5) Dusk  
 (9) Unknown

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

28. Traffic Control Device 1  
 (0) No traffic control(s)  
 (1) Traffic control signal (not RR crossing)  
  
*Regulatory*  
 (2) Stop sign  
 (3) Yield sign  
 (4) School zone sign  
 (5) Other regulatory sign (specify): \_\_\_\_\_  
 (6) Warning sign (not RR crossing)  
 (7) Unknown sign  
 (8) Miscellaneous/other controls including RR controls (specify): \_\_\_\_\_  
 (9) Unknown

29. Traffic Control Device Functioning 2  
 (0) No traffic control device  
 (1) Traffic control device not functioning (specify): \_\_\_\_\_  
 (2) Traffic control device functioning properly  
 (9) Unknown

OCCUPANT RELATED

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

AIR BAG RELATED

- 40. Is this an AOPS Vehicle? 0  
 (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 1.47 0  
 Code weight to nearest 10 kilograms.  
 (045) Less than 454 kilograms  
 (612) 6,124 kilograms or more  
 (999) Unknown  
3.243 lbs X .4536 = 1.471 kgs  
 Source: veh. inspection

- 44. Vehicle Cargo Weight 0.00 0  
 Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (454) 4,536 kilograms or more  
 (999) Unknown  
 lbs X .4536 = \_\_\_\_\_ kgs  
 Source: veh. inspection

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 \_\_\_\_\_



1. Primary Sampling Unit Number <u>78</u>	3. Vehicle Number <u>03</u>
2. Case Number - Stratum <u>176C</u>	

VEHICLE IDENTIFICATION

VIN 5W82L176275 Model Year 75  
 Vehicle Make (specify): FORD Vehicle Model (specify): GRANADA E DR

LOCATOR

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

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
Event 03	Begins @ 18 cm to right of C <sub>1</sub>	4 E.W. = 160	@ C <sub>1</sub> = 70
	Ends @ C <sub>1</sub> = 18 cm		

CRUSH PROFILE IN CENTIMETERS

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

Measure C<sub>1</sub> to C<sub>6</sub> from driver to passenger side in front or rear impacts and rear to front in side impacts. *Bumper lead taken into consideration above*

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

Use as many lines/columns as necessary to describe each damage profile. *MC @ C<sub>1</sub> = Back to zone to on fender & hood & door*

*V<sub>1</sub> was airborne & overhanging*

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage		Field L	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	±D
		Width (CDC)	Max Crush								
#1 03	at Bumper	18	C <sub>1</sub>	160	8	9	4	4	9	7	
	F/S	/	/	/	7	9	4	4	9	7	
03	Result	18	10	160	1	0	0	0	0	0	-85
03	above Bumper	18	C <sub>1</sub>	160	90	27	15	15	26	20	
	F/S & Lead	/	-	/	20	26	15	15	26	20	
03	Result	18	70	160	70	10	0	0	0	0	-85
03	averaged				X	0	0	0	0	0	
#1 03	actual	18	70	160	35.5	0	0	0	0	0	-85

# ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>109.9</u>	inches	x 2.54	=	<u>279.1</u>	cm
Overall Length	<u>197.7</u>	inches	x 2.54	=	<u>502.1</u>	cm
Maximum Width	<u>74.0</u>	inches	x 2.54	=	<u>187.9</u>	cm
Curb Weight	<u>3,243</u>	pounds	x .4536	=	<u>1,471.02</u>	kg
Average Track	<u>58.1</u>	inches	x 2.54	=	<u>147.57</u>	cm
Front Overhang	_____	inches	x 2.54	=	_____	cm
Rear Overhang	_____	inches	x 2.54	=	_____	cm
Undeformed End Width	_____	inches	x 2.54	=	_____	cm
Engine Size: cyl./displ.	_____	cc	x .001	=	_____	L
	(6) - <u>200</u>	CID	x .0164	=	<u>3.3</u>	L

$$\begin{array}{r}
 F \quad \frac{58.5}{2} = \frac{148.59}{2} \\
 R \quad \frac{57.7}{2} = \frac{146.5}{2} \\
 \hline
 \text{Avg} \quad \frac{147.57}{2} = \text{Avg}
 \end{array}$$

(58.1) Avg

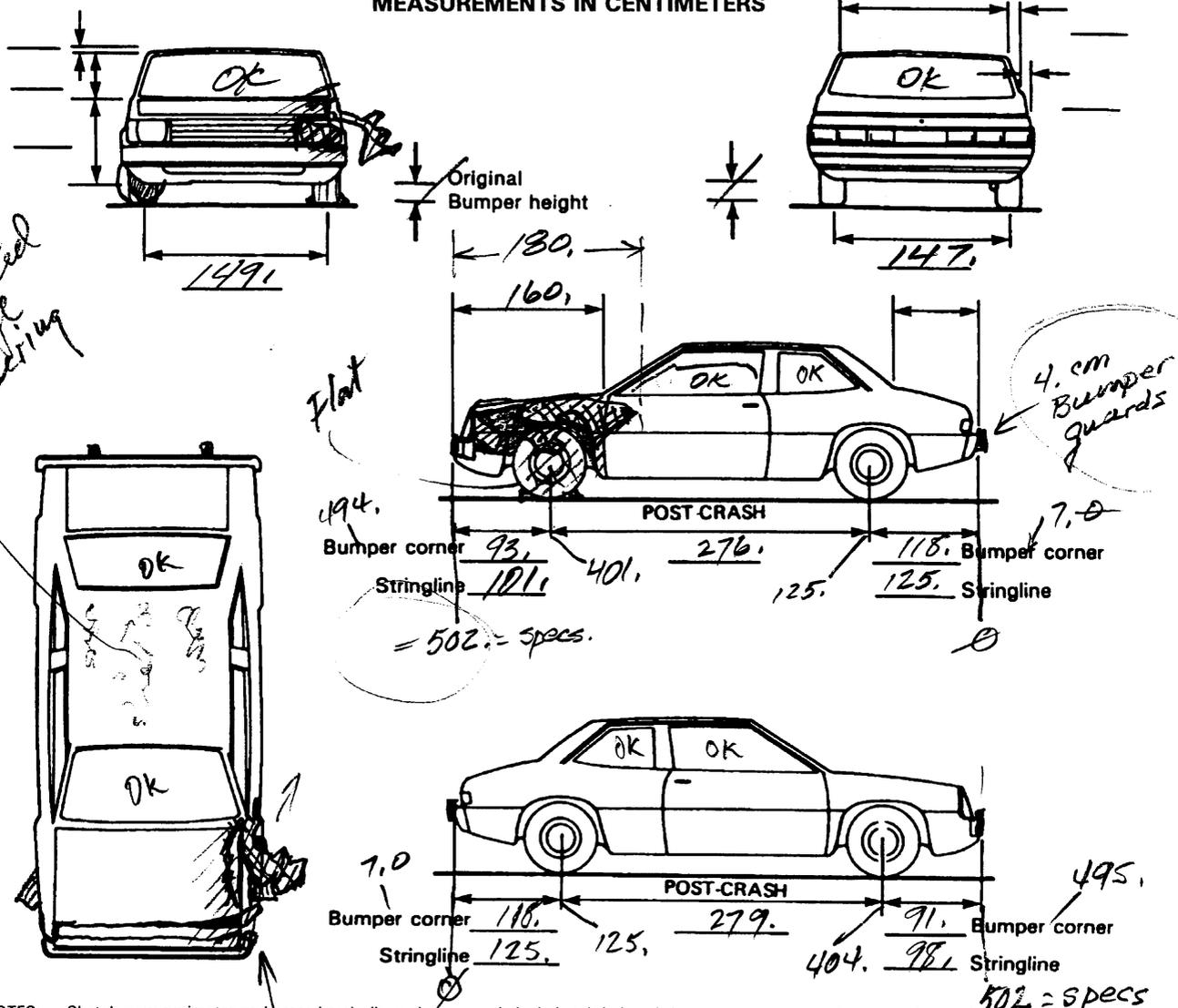
$$\begin{array}{r}
 \frac{188}{2} = 94 \\
 \frac{18}{2} = 9 \\
 \hline
 = 85 = d
 \end{array}$$

**VEHICLE DAMAGE SKETCH**

<b>TIRE - WHEEL DAMAGE</b> a. Rotation physically restricted RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		b. Tire deflated RF <u>2</u> LF <u>1</u> RR <u>2</u> LR <u>2</u>		<b>ORIGINAL SPECIFICATIONS</b> Wheelbase <u>279.</u> cm Overall Length <u>502.</u> cm Maximum Width <u>188.</u> cm Curb Weight <u>1471.</u> kg Average Track <u>148.</u> cm Front Overhang <u>98.</u> cm Rear Overhang <u>125.</u> cm Undeformed End Width <u>180.</u> cm Engine Size: cyl./displ. <u>(6) = 3.3</u> L		<b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only) RF ± <u>±40</u> ° LF ± <u>0</u> ° ← Locked RR ± <u>0</u> ° LR ± <u>0</u> ° Within ± 5 degrees	
<b>TYPE OF TRANSMISSION</b> <input checked="" type="checkbox"/> Manual <input type="checkbox"/> Automatic END SHIFT ≥ 10 CM <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				<b>DRIVE WHEELS</b> <input type="checkbox"/> FWD <input checked="" type="checkbox"/> RWD <input type="checkbox"/> 4WD		Approximate Cargo Weight <u>0</u> kg	

*Floor shift*

**MEASUREMENTS IN CENTIMETERS**



*detonated trigger downing*

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>03</u>	5. <u>01</u>	6. <u>72</u> <u>00</u>	7. <u>F</u>	8. <u>L</u>	9. <u>M</u>	10. <u>E</u>	11. <u>03</u>

Second Highest Delta "V"

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

**CRUSH PROFILE IN CENTIMETERS**

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

HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>±D</u>
--------------	--------------------------	----------------------	----------------------	----------------------	----------------------	----------------------	---------------

*take out*

~~160~~ ~~070~~ ~~000~~ ~~000~~ ~~000~~ ~~000~~ ~~000~~ ~~000~~ 085

Second Highest Delta "V"

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

26. Undeformed End Width  
(Coded when highest severity impact is an end plane impact.) 180  
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) 038  
Code to the nearest centimeter  
(250) 250 centimeters or more  
(999) Unknown

28. Original Wheelbase 279  
Code to the nearest centimeter  
(650) 650 centimeters or more  
(999) Unknown  
109.9 inches X 2.54 = 279.1 centimeters

29. Original Average Track Width 148  
Code to the nearest centimeter  
(185) 185 centimeters or more  
(999) Unknown  
58.1 inches X 2.54 = 147.57 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

## 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

35. Location of Fuel Tank-1 Filler Cap 1
36. Location of Fuel Tank-2 Filler Cap 0  
 (0) No fuel tank  
~~(1) On back plane~~  
 (2) Aft of center of the rear wheels (rear axle) on left side plane  
 (3) Aft of center of the rear wheels (rear axle) on right side plane  
 (4) Forward of center of the rear wheels (rear axle) on left side plane  
 (5) Forward of center of the rear wheels (rear axle) on right side plane  
 (6) Over the center of the rear wheels (rear axle) on left side plane  
 (7) Over the center of the rear wheels (rear axle) on right side plane  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown
37. Type of Fuel Tank-1 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 1
40. Location of Fuel Tank-2 0  
 (0) No fuel tank  
~~(1) Aft of center of the rear wheels (rear axle) centered~~  
 (2) Aft of center of the rear wheels (rear axle) left side  
 (3) Aft of center of the rear wheels (rear axle) right side  
 (4) Forward of center of the rear wheels (rear axle) centered  
 (5) Forward of center of the rear wheels (rear axle) left side  
 (6) Forward of center of the rear wheels (rear axle) right side  
 (7) Over center of the rear wheels (rear axle)  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown
41. Damage to Fuel Tank-1 1
42. Damage to Fuel Tank-2 0  
 (0) No fuel tank  
 (1) No damage to fuel tank  
 (2) Deformed, no seam failure  
 (3) Deformed, with a seam failure  
 (4) Punctured  
 (5) Lacerated (ripped)  
 (6) Abraded (scraped)  
 (7) Filler neck separation from the fuel tank  
 (8) Other damage (specify): \_\_\_\_\_  
 (9) Unknown

43. Leakage Location of Fuel System-1 1

44. Leakage Location of Fuel System-2 0

(0) No fuel tank  
(1) No fuel leakage

*Primary Area Of Leakage*

(2) Tank  
(3) Filler neck  
(4) Cap  
(5) Lines/pump/filter  
(6) Vent/emission recovery  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

45. Fuel Type-1 01

46. Fuel Type-2 00

*Single Fuel Type*

(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): \_\_\_\_\_

*Electric Powered or Electric/Solar Powered Vehicles*

(10) Lead Acid Battery  
(11) Nickel-Iron Battery  
(12) Nickel-Cadmium Battery  
(13) Sodium Metal Chloride Battery  
(14) Sodium Sulfur Battery  
(18) Other (Specify): \_\_\_\_\_

(98) Other Hybrid (specify): \_\_\_\_\_

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks? 0

(0) No (one or two tanks only)

*Yes - More Than Two Tanks*

(1) Yes -- no damage to any tank or filler cap and no fuel system leakage

(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): \_\_\_\_\_

(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):  
 Type of tank \_\_\_\_\_  
 Tank location \_\_\_\_\_  
 Filler cap location \_\_\_\_\_  
 Tank damage \_\_\_\_\_  
 Location of leakage \_\_\_\_\_  
 Type of fuel \_\_\_\_\_

(9) Unknown if more than two tanks

**COMMENTS**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



1. Primary Sampling Unit Number 78  
 2. Case Number - Stratum 176c  
 3. Vehicle Number 03

**INTEGRITY**

4. Passenger Compartment Integrity 00  
 (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 / 6. RF / 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 Ø**

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

**GLAZING**

**Type of Window/Windshield Glazing**

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 2  
 20. BL 2 21. Roof 0 22. Other 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 / 24. LF 3 25. RF 3 26. LR / 27. RR /  
 28. BL / 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**

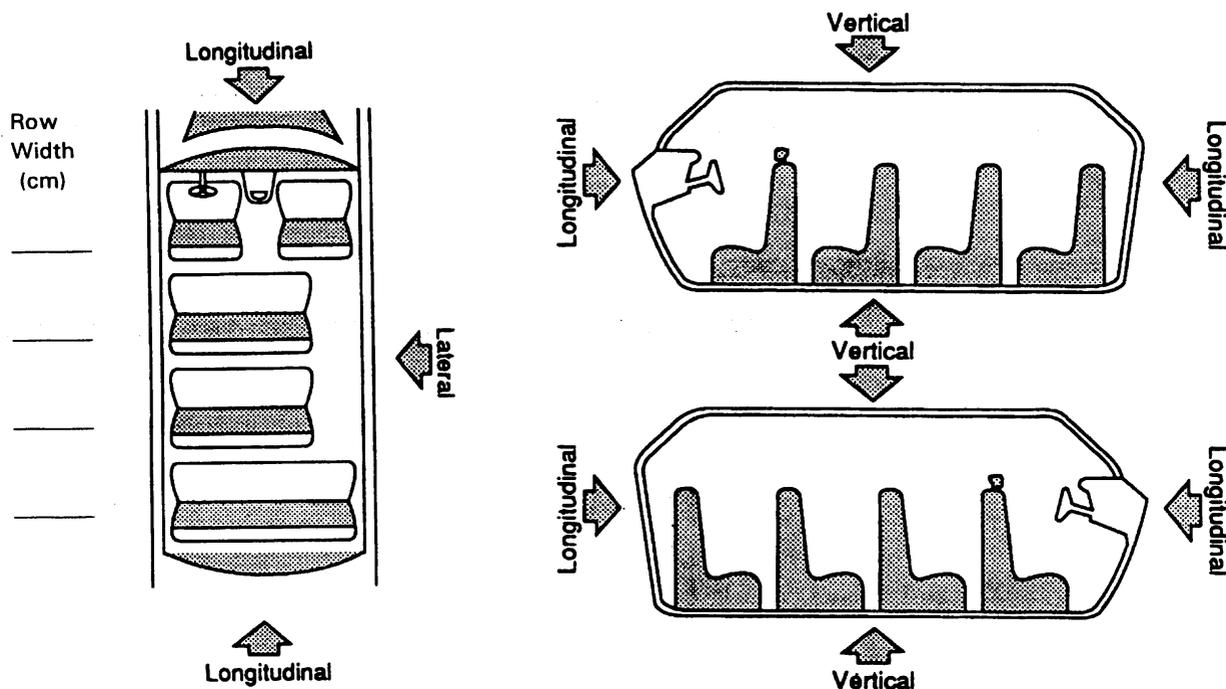
31. WS / 32. LF / 33. RF / 34. LR / 35. RR /  
 36. BL / 37. Roof 0 38. Other 0
- (0) No glazing
  - (1) No glazing damage from impact forces
  - (2) Glazing in place and cracked from impact forces
  - (3) Glazing in place and holed from impact forces
  - (4) Glazing out-of-place (cracked or not) and 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 / 40. LF / 41. RF / 42. LR / 43. RR /  
 44. BL / 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**



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
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		-	-	=	
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		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	

*no intrusions*

**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. _____	48. _____	49. _____	50. _____
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**

- Front Seat
- (11) Left
  - (12) Middle
  - (13) Right

- Fourth Seat
- (41) Left
  - (42) Middle
  - (43) Right

- Second Seat
- (21) Left
  - (22) Middle
  - (23) Right

- (97) Catastrophic
- (98) Other enclosed area (specify) \_\_\_\_\_

- Third Seat
- (31) Left
  - (32) Middle
  - (33) Right

- (99) Unknown

**MAGNITUDE OF INTRUSION**

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

**DOMINANT CRUSH DIRECTION**

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

# STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	-	DAMAGE VALUE	=	DEFORMATION
14.	-	14.	=	<del>0</del>
	-		=	
	-		=	
	-		=	

**STEERING COLUMN**

**INSTRUMENT PANEL**

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

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

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

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

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

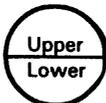
*Quarter Sections*

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



*Half Sections*

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



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

92. Odometer Reading 181,000  
 kilometers  
 Code to the nearest 1,000 kilometers  
 (000) No odometer  
 (001) Less than 1,500 kilometers = 112,668 mi.  
 (500) 499,500 kilometers or more  
 (999) Unknown 100K minimum  
12,668 miles X 1.6093 = 181,310 kilometers

Source: veh inspection

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

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

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

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

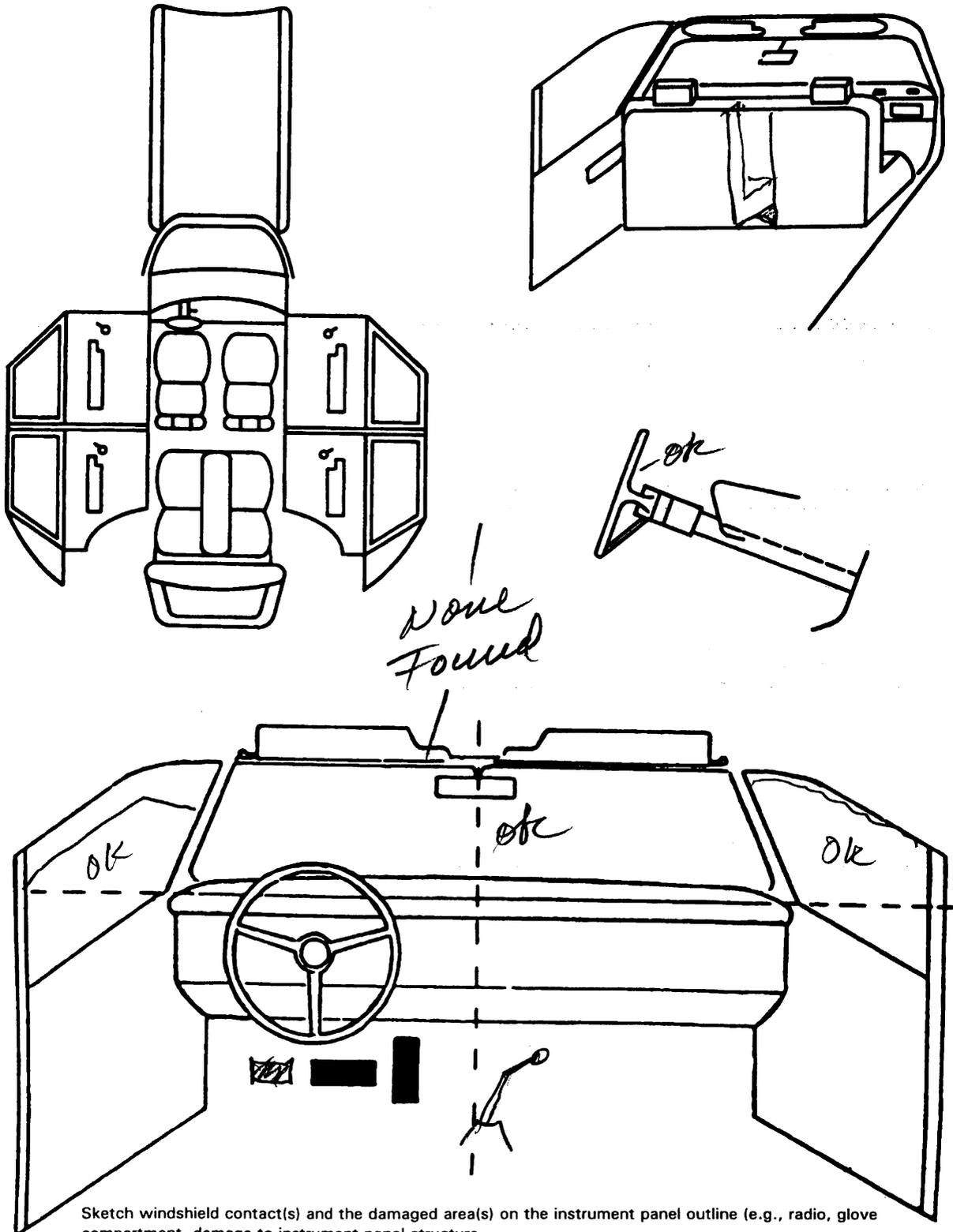
97. Adaptive (Assistive) Driving Equipment 0  
 (0) No adaptive driving equipment  
 (1) Adaptive driving equipment installed (Check all that apply.)  
 [ ] Hand controls for braking/acceleration  
 [ ] Steering control devices (attached to OEM steering wheel)  
 [ ] Steering knob attached to steering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

- [ ] Raised roof
- [ ] Wall-mounted head rest (used behind wheelchair)
- [ ] Other adaptive device (specify):

(9) Unknown

### VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



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

**POINTS OF OCCUPANT CONTACT**

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

*None found*

<p><b>FRONT</b>                  (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): _____</p>	<p><b>CODES FOR INTERIOR COMPONENTS</b></p> <p><b>LEFT SIDE</b>                  (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): _____</p> <p><b>RIGHT SIDE</b>                  (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): _____</p>	<p><b>INTERIOR</b>                  (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): _____</p> <p><b>AIR BAG</b>                  (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) _____</p> <p><b>ROOF</b>                  (201) Front header                  (202) Rear header                  (203) Roof left side rail                  (204) Roof right side rail                  (205) Roof or convertible top</p> <p><b>FLOOR</b>                  (251) Floor (including toe pan)                  (252) Floor or console mounted transmission lever, including console                  (253) Parking brake handle                  (254) Foot controls including parking brake</p>	<p><b>REAR</b>                  (301) Backlight (rear window)                  (302) Backlight storage rack, door, etc.                  (303) Other rear object (specify): _____</p> <p><b>ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT</b>                  (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): _____</p>
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CONFIDENCE LEVEL OF CONTACT POINT	
(1)	Certain
(2)	Probable
(3)	Possible
(9)	Unknown

# MANUAL RESTRAINTS

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

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

**A-Manual (Active) Belt System Availability**

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

*Integral Belt Partially Destroyed*

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

- (9) Unknown

**B/C-Manual (Active) Belt System Use**

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

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

**D-Proper Use of Manual (Active) Belts**

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

*Belt Used Improperly*

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

**E-Manual (Active) Belt Failure Modes During Accident**

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

**F-Shoulder Belt Upper Anchorage Adjustment**

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

*Adjustable shoulder Belt Upper Anchorage*

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

A - No evidence of recent usage!

## AUTOMATIC RESTRAINTS

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

### AIR BAGS

		Frontal Air Bags--Left Front	Frontal Air Bags-Right Front	Other Air Bag
F I R S T	Availability/Function	0	0	0
	Deployment	0	0	0
	Failure	0	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

**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

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

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

### AUTOMATIC BELTS

		Left	Right
F I R S T	A-Availability/Function	0	0
	B-Use	0	0
	C-Type	0	0
	D-Proper Use	0	0
	E-Failure Modes	0	0

**A-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

**B-Automatic (Passive) Belt System Use**

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

**C-Automatic (Passive) Belt System Type**

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

**D-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

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

**A-Type of Air Bag**

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

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

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

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

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

**D-Was There Damage To The Air Bag?**

- (00) Not equipped/not available
- (01) Not damaged
- Yes - Air Bag Damage*
- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify): \_\_\_\_\_
- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

**E-Source of Air Bag Damage**

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

**F-Was The Air Bag Tethered?**

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

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

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

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

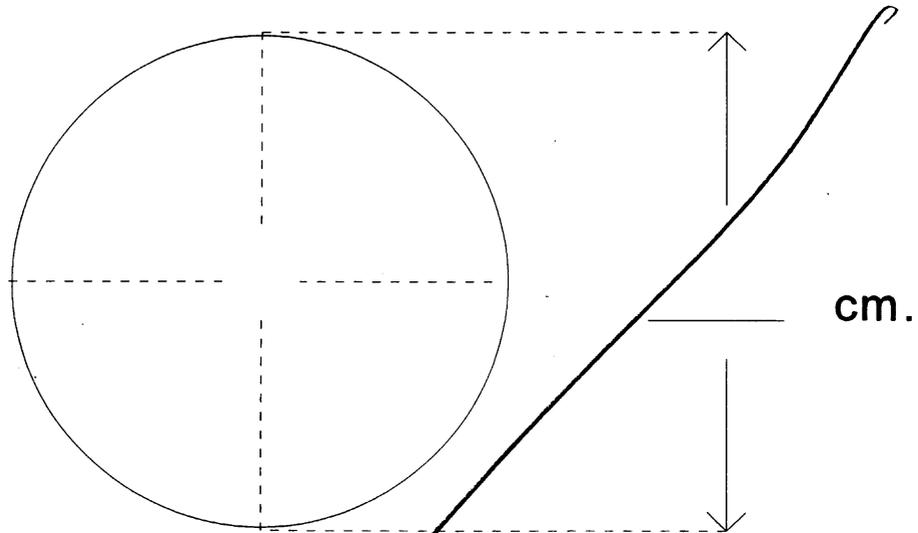
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

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

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

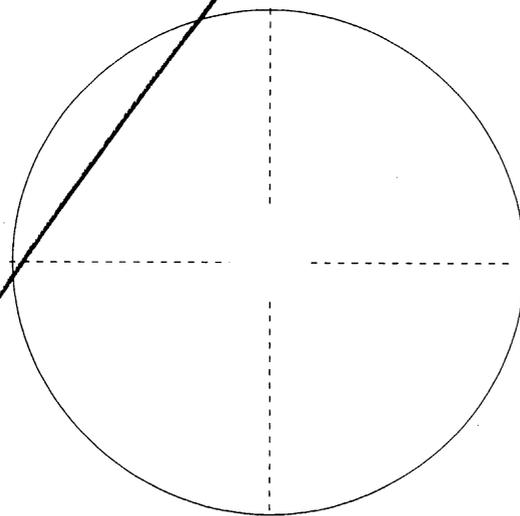
**DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES**

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



N A

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

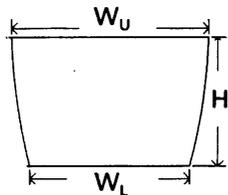


DRIVER AIR BAG SKETCHES (Cont'd)

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

width ( $W_U$ ) \_\_\_\_\_ width ( $W_L$ ) \_\_\_\_\_

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



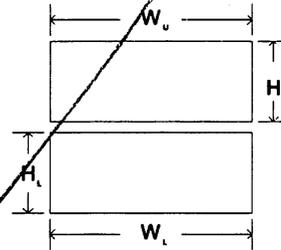
4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_ width ( $W_L$ ) \_\_\_\_\_

height ( $H_U$ ) \_\_\_\_\_ height ( $H_L$ ) \_\_\_\_\_

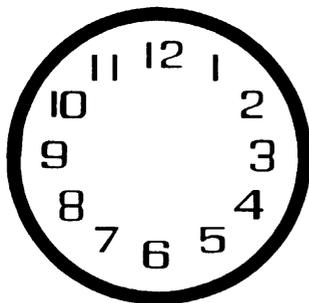


5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

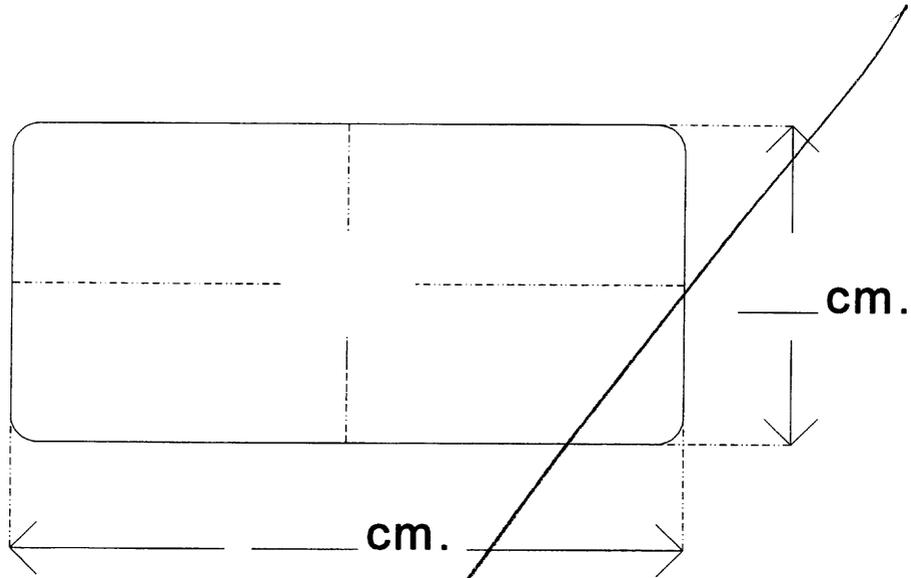
*N/A*

7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS



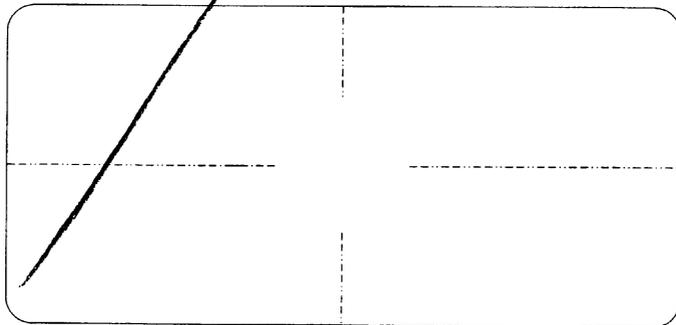
**PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES**

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



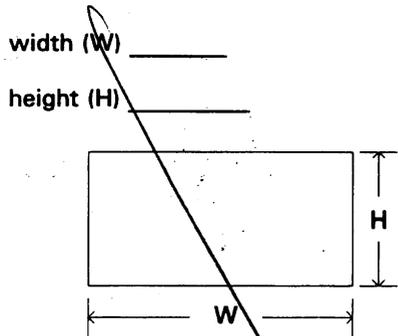
NSA

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

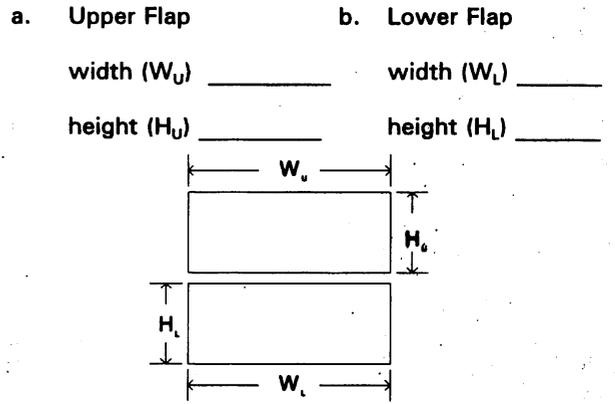


**PASSENGER AIR BAG SKETCHES (Cont'd)**

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



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

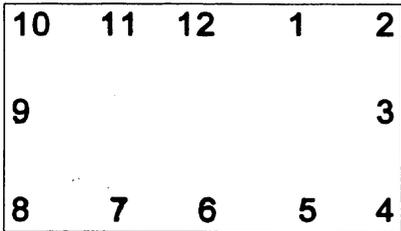


**5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE**

*N/A*

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

**7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS**



**"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES**

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

N

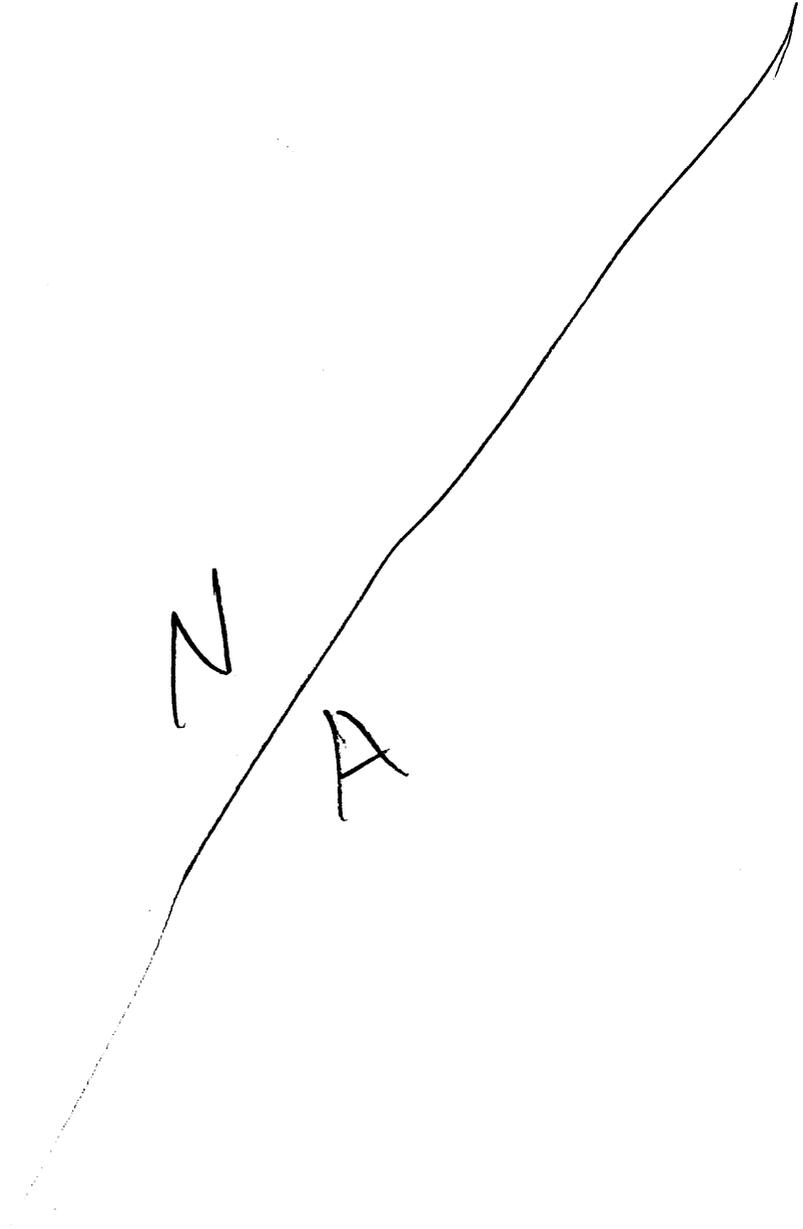
2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

A

**"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 on the next 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
<b>F I R S T</b>	A-Head Restraint Type/Damage	3	0	3
	B-Seat Type	02	00	02
	C-Seat Orientation	1	0	1
	D-Seat Track Position	6	0	5
	E-Seat Back Incline Pre/Post Impact	01	00	01
	F-Seat Performance	1	0	1
<b>S E C O N D</b>	A-Head Restraint Type/Damage	0	0	0
	B-Seat Type	03	03	03
	C-Seat Orientation	1	1	1
	D-Seat Track Position	1	1	1
	E-Seat Back Incline Pre/Post Impact	01	01	01
	F-Seat Performance	1	1	1
<b>T H I R D</b>	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
<b>O T H E R</b>	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

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

*None*

## HEAD RESTRAINTS/SEAT EVALUATION

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

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

**B-Seat Type (this Occupant Position)**

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

**C-Seat Orientation (this Occupant Position)**

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

**D-Seat Track Adjusted Position Prior To Impact**

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

**Adjustable Seat Track**

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

**E-Seat Back Incline Prior and Post Impact**

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

**Upright prior to impact**

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

**Slightly reclined prior to impact**

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

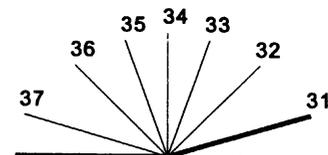
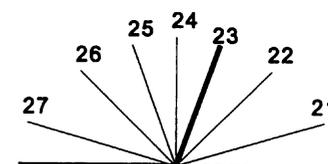
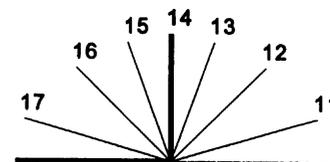
**Completely reclined prior to impact**

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

- (99) Unknown

**F-Seat Performance (this Occupant Position)**

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

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

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			N/A			
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat
  - (0) No child safety seat
  - (1) Infant seat
  - (2) Toddler seat
  - (3) Convertible seat
  - (4) Booster seat
  - (7) Other type child safety seat (specify): \_\_\_\_\_
  - (8) Unknown child safety seat type
  - (9) Unknown if child safety seat used
  
2. Child Safety Seat Orientation
  - (00) No child safety seat
  - Designed for Rear Facing for This Age/Weight
    - (01) Rear facing
    - (02) Forward facing
    - (08) Other orientation (specify): \_\_\_\_\_
  - (09) Unknown orientation
  - Designed for Forward Facing for This Age/Weight
    - (11) Rear facing
    - (12) Forward facing
    - (18) Other orientation (specify): \_\_\_\_\_
  - (19) Unknown orientation
  - Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
    - (21) Rear facing
    - (22) Forward facing
    - (28) Other orientation (specify): \_\_\_\_\_
  - (29) Unknown orientation
  - (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage
4. Child Safety Seat Shield Usage
5. Child Safety Seat Tether Usage
  - Note: Options Below Are Used for Variables 3-5.
  - (00) No child safety seat
  - Not Designed with Harness/Shield/Tether
    - (01) After market harness/shield/tether added, not used
    - (02) After market harness/shield/tether used
    - (03) Child safety seat used, but no after market harness/shield/tether added
    - (09) Unknown if harness/shield/tether added or used
  - Designed With Harness/Shield/Tether
    - (11) Harness/shield/tether not used
    - (12) Harness/shield/tether used
    - (19) Unknown if harness/shield/tether used
  - Unknown If Designed With Harness/Shield/Tether
    - (21) Harness/shield/tether not used
    - (22) Harness/shield/tether used
    - (29) Unknown if harness/shield/tether used
  - (99) Unknown if child safety seat used
6. Child Safety Seat Make/Model
  - (Specify make/model and occupant number)
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_

**EJECTION/ENTRAPMENT DATA**

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

**EJECTION** No [  ] Yes [  ]

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

**Ejection**

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

**Ejection Area**

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

(7) Roof

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

(9) Unknown

**Ejection Medium**

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

(5) Integral structure

- (8) Other medium (specify): \_\_\_\_\_

(9) Unknown

**Medium Status (Immediately Prior to Impact)**

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

**ENTRAPMENT** No [  ] Yes [  ]

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

(Note on vehicle interior sketch)



# OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number 78  
 2. Case Number - Stratum 176C  
 3. Vehicle Number 03  
 4. Occupant Number 01

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 26  
 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 L  
 (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 168  
 Code actual height to the nearest  
 centimeter.  
 (999) Unknown  
66 inches X 2.54 = 167.6 centimeters

8. Occupant's Weight 077  
 Code actual weight to the nearest  
 kilogram.  
 (999) Unknown  
170 pounds X .4536 = 77.1 kilograms

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

## OCCUPANT'S SEATING

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

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

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

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

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

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

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

## EJECTION/ENTRAPMENT

12. Ejection 0

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

13. Ejection Area 0

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

14. Ejection Medium 0

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

15. Medium Status (Immediately Prior To Impact) 0

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

16. Entrapment 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 4

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

## BELT SYSTEM FUNCTION

- |   |   |
|---|---|
| <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):<br/> _____</p> <p>(9) Unknown</p>  | <p>22. Manual Shoulder Belt Upper Anchorage Adjustment <u>1</u></p> <p>(0) No manual shoulder belt<br/> (1) No upper anchorage adjustment for manual 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>00</u></p> <p>(00) None used, not available, or belt removed/destroyed<br/> (01) Inoperative (specify):<br/> _____</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):<br/> _____</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/> _____</p> <p>(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>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/> _____</p> <p>(3) Automatic belt use unknown<br/> (9) Unknown</p>  |
| <p>20. Proper Use of Manual (Active) Belts <u>0</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):<br/> _____</p> <p>(8) Other improper use of manual belt system (specify):<br/> _____</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):<br/> _____</p> |
| <p>21. Manual (Active) Belt Failure Modes During Accident <u>0</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):<br/> _____</p> <p>(6) Broken retractor<br/> (7) Combination of above (specify):<br/> _____</p> <p>(8) Other manual belt failure (specify):<br/> _____</p> <p>(9) Unknown</p>   | <p>(8) Other improper use of automatic belt system (specify):<br/> _____</p> <p>(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):<br/> _____</p> <p>(6) Broken retractor<br/> (7) Combination of above (specify):<br/> _____</p> <p>(8) Other automatic belt failure (specify):<br/> _____</p> <p>(9) Unknown</p>  |

**POLICE REPORTED RESTRAINT USE**

**AIR BAG SYSTEM FUNCTION**

28. Police Reported Belt Use 4
- (0) None used
  - (1) Police did not indicate belt use
  - (2) Shoulder belt
  - (3) Lap belt
  - (4) Lap and shoulder belt
  - (5) Belt used, type not specified
  - (6) Child safety seat
  - (7) Automatic belt
  - (8) Other type belt, (specify):
- 
- (9) Police indicated "unknown"
- 
29. Police Reported Air Bag Availability/Function 1
- (0) No air bag available
  - (1) Police did not indicate air bag availability/function
  - (2) Deployed
  - (3) Not deployed
  - (4) Unknown if deployed
  - (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

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

30. Frontal Air Bag System Availability/Function (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 + 000  
- 000

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

**HEAD RESTRAINT AND SEAT EVALUATION**

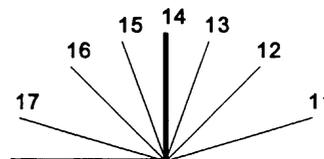
49. Head Restraint Type/Damage by Occupant at This Occupant Position 3
- (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown
50. Seat Type (this Occupant Position) 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 01

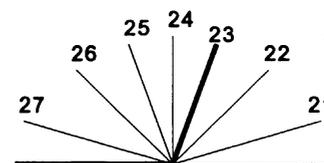
- (00) Occupant not seated or no seat  
 (01) Not adjustable

***Upright prior to impact***

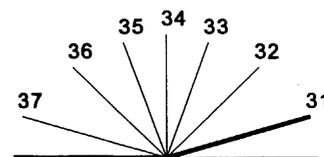
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

***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

<p>55. Child Safety Seat Make/Model <u>000</u>            (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</p>	<p>58. Child Safety Seat Harness Usage <u>00</u>            59. Child Safety Seat Shield Usage <u>00</u>            60. Child Safety Seat Tether Usage <u>00</u></p>
<p>56. Type of Child Safety Seat <u>0</u>            (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</p>	<p>Note: Options below applicable to:            Variables OA58-OA60.            (00) No child safety seat   <i>Not Designed With Harness/Shield/Tether</i>            (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</p>
<p>57. Child Safety Seat Orientation <u>00</u>            (00) No child safety seat   <i>Designed for Rear Facing for This Age/Weight</i>            (01) Rear facing            (02) Forward facing            (08) Other orientation (specify):            _____            (09) Unknown orientation   <i>Designed For Forward Facing for This Age/Weight</i>            (11) Rear facing            (12) Forward facing            (18) Other orientation (specify):            _____            (19) Unknown orientation   <i>Unknown Design or Orientation For This            Age/Weight, or Unknown Age/Weight</i>            (21) Rear facing            (22) Forward facing            (28) Other orientation (specify):            _____            (29) Unknown orientation             (99) Unknown if child safety seat used</p>	<p><i>Designed With Harness/Shield/Tether</i>            (11) Harness/shield/tether not used            (12) Harness/shield/tether used            (19) Unknown if harness/shield/tether used   <i>Unknown If Designed With Harness/Shield/Tether</i>            (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</p>

**INJURY CONSEQUENCES**

61. Injury Severity (Police Rating) 0

- (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 0

- (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) 0

- (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 00

- 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

**EMERGENCY RESPONSE INFORMATION**

EMS Notification  
 (1) Not notified  
 (2) Notified  
 (9) Unknown

ROAD VEHICLE  
 AIR VEHICLE

EMS Type

- (01) Fire department
- (02) Rescue squad
- (03) Police department
- (04) Trauma unit
- (05) Disaster unit
- (06) Ambulance service unit
- (07) Hospital
- (08) Mortuaries/funeral homes
- (98) Other, specify: \_\_\_\_\_
- (99) Unknown

FIRST UNIT      TRANSPORTING UNIT  
 \_\_\_\_\_  
 ROAD VEHICLE  
 AIR VEHICLE

EMS Notification Time (first unit)  
 (9999) Unknown

ROAD VEHICLE  
 AIR VEHICLE

EMS Arrival Time (first unit)  
 (9998) EMS cancelled or did not arrive  
 (9999) Unknown

ROAD VEHICLE  
 AIR VEHICLE

EMS Departure Time To Treatment Facility (transporting unit)  
 (9997) EMS arrived, provided treatment, but did not transport  
 (9998) EMS arrived, but was not used  
 (9999) Unknown

ROAD VEHICLE  
 AIR VEHICLE

EMS Care

- (01) No care administered
- (02) First aid
- (03) Resuscitation
- (04) CPR
- (05) Emergency cardiac care
- (06) Life support system monitoring (blood pressure, pulse rate, respiration, EKG)
- (07) Emergency burn care
- (08) Combination of above, specify: \_\_\_\_\_
- (98) Other, specify: \_\_\_\_\_
- (99) Unknown

ON-SCENE      DURING TRANSPORT  
 \_\_\_\_\_  
 ROAD VEHICLE  
 AIR VEHICLE

EMS Arrival Time At Treatment Facility  
 (9999) Unknown

ROAD VEHICLE  
 AIR VEHICLE

**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 0068. 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 00

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 (at Medical Facility) 00

- (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> 00

- (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

PSU NUMBER	<u>78</u>
CASE NUMBER	<u>176C</u>
VEHICLE NUMBER	<u>03</u>
OCCUPANT NUMBER	<u>01</u>

# OCCUPANT INJURY FORM

*THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:*

ENTIRE FORM

PAGE NUMBER (S) \_\_\_\_\_



# SMASH PROGRAM SUMMARY

(All Measurements In Metric)

## Identifying Title

78      176C      01      [REDACTED] 97  
Primary Sampling Unit      Case No.-Stratum      Accident Event Sequence No.      Date (Month, day, year) of Run

## GENERAL INFORMATION

VEHICLE 1		VEHICLE 2	
NASS Vehicle Number	<u>01</u>	NASS Vehicle Number	<u>02</u>
Year	<u>1994</u>	Year	<u>1994</u>
Make	<u>Mercury</u>	Make	<u>FORD</u>
Model	<u>TOPAZ 4 dr</u>	Model	<u>F150 RANGER Supercab 4x2</u>
Body Style	<u>01 4S</u>	Body Style	<u>PU</u>
CDC	<u>DR DREW 3</u>	CDC	<u>MISSING</u>
Damaged Side	<u>R</u>	Damaged Side	<u>F</u>
PDOF	<u>+20 90°</u>	PDOF	<u>-70± 000°</u>
Heading Angle	<u>± 000°</u>	Heading Angle	<u>± 270°</u>

## VEHICLE SPECIFICATIONS

VEHICLE 1		VEHICLE 2	
Wheelbase	<u>254</u> cm	Wheelbase	<u>125"</u> <u>318</u> cm
Overall Length	<u>450</u> cm	Overall Length	<u>198"</u> <u>503</u> cm
Overall Width	<u>173</u> cm	Overall Width	<u>69.4"</u> <u>176</u> cm
Weight		Weight	<u>3209</u>
<u>1174</u> + <u>54</u> + <u>0</u> = <u>1228</u> kg		<u>1456</u> + <u>84</u> + <u>0</u> = <u>1540</u> kg	
<small>Curb      Occupant(s)      Cargo</small>		<small>Curb      Occupant(s)      Cargo</small>	
Engine Displacement	<u>3.0</u> L	Engine Displacement	<u>3.0</u> L
Drive System	<u>FWD</u>	Drive System	<u>RWD</u>
Size	<u>2</u>	Size	<u>4</u>
Stiffness	<u>2</u>	Stiffness	<u>8</u>

## DAMAGE INFORMATION

VEHICLE 1		VEHICLE 2	
Damage known?	<u>Y</u>	Damage known?	<u>N</u>
Damage Length	<u>234</u> cm	Damage Length	_____ cm
Damage Offset	<u>033</u> cm	Damage Offset	± _____ cm
Crush Depth:		Crush Depth:	
C1	<u>0</u> cm	C1	_____ cm
C2	<u>13</u> cm	C2	_____ cm
C3	<u>22</u> cm	C3	_____ cm
C4	<u>18</u> cm	C4	_____ cm
C5	<u>12</u> cm	C5	_____ cm
C6	<u>1</u> cm	C6	_____ cm

### SCENE INFORMATION

		Rest and Impact Positions <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes			
	VEHICLE 1			VEHICLE 2	
Rest	X _____ . ____ m	Rest	X _____ . ____ m		
Position	Y _____ . ____ m	Position	Y _____ . ____ m		
	PSI _____ °		PSI _____ °		
Impact	X _____ . ____ m	Impact	X _____ . ____ m		
Position	Y _____ . ____ m	Position	Y _____ . ____ m		
	PSI _____ °		PSI _____ °		
Slip Angle (-180 to +180)	_____ °	Slip Angle (-180 to +180)	_____ °		

### VEHICLE MOTION

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

### FRICITION INFORMATION

Coefficient of Friction _____	
Rolling Resistance Option _____ <u>1</u>	
Vehicle 1 Rolling Resistance	Vehicle 2 Rolling Resistance
LF _____ RF _____	LF _____ RF _____
LR _____ RR _____	LR _____ RR _____

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

Model Year: _____ Make: _____ Model: _____ VIN: _____	The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.  <div style="background-color: #cccccc; padding: 5px; border: 1px solid black;"> <p style="text-align: center; margin: 0;"><b><u>Complete and ATTACH the appropriate damage sketch and dimensions to the form.</u></b></p> </div>
--	---

Summary of Results Using Damage

78176c

Speed Change  
(ROLDMISS)

Vehicle #1

Total 16 km/h ( 10 mph)  
 Longitudinal -15 km/h ( -10 mph)  
 Latitudinal -6 km/h ( -3 mph)  
 PDOF Angle 20 °  
 Energy Dissipated = 36085 Joules ( 26611 Ft-Lb)  
 Barrier Equivalent Speed = 23.2 km/h ( 14.4 mph)  
 Calculated using size and stiffness categories.

Vehicle #2

Total 13 km/h ( 8 mph)  
 Longitudinal -4 km/h ( -3 mph)  
 Latitudinal 12 km/h ( 8 mph)  
 PDOF Angle -70 °  
 Energy Dissipated = 17351 Joules ( 12795 Ft-Lb)  
 Barrier Equivalent Speed = 9.2 km/h ( 5.7 mph)  
 Calculated using size and stiffness categories.

General Information

	Vehicle #1	Vehicle #2
Year	1994	1994
Make	Mercury	Ford
Model	Topaz	ranger
CDC	01RDEW3	MISSING
Side Damaged	R	F
PODF Angle	20 °	-70 °
Heading Angle	0 °	270 °

Calculation method:	Size and Stiffness	Size and Stiffness
Size Category	2	4
Stiffness Category	2	8
Vehicle Weight	1228 kgs ( 2707 lbs)	1540 kgs ( 3395 lbs)

Damage Information

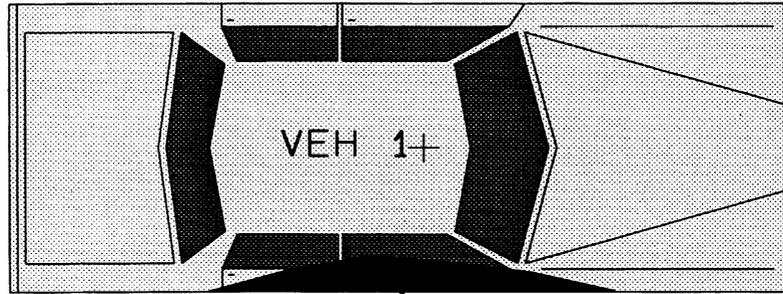
Vehicle Damage Known	Vehicle #1		Vehicle #2	
	Yes		No	
Crush Length	234.0 cm	( 92 in)	0.0 cm	( 0 in)
C1	0.0 cm	( 0 in)	0.0 cm	( 0 in)
C2	13.0 cm	( 5 in)	0.0 cm	( 0 in)
C3	22.0 cm	( 9 in)	0.0 cm	( 0 in)
C4	18.0 cm	( 7 in)	0.0 cm	( 0 in)
C5	12.0 cm	( 5 in)	0.0 cm	( 0 in)
C6	1.0 cm	( 0 in)	0.0 cm	( 0 in)
D	-32.9 cm	( -13 in)	0.0 cm	( 0 in)
D'	-34.6 cm	( -14 in)	0.0 cm	( 0 in)

Vehicle Dimensions

	Vehicle #1		Vehicle #2	
Length	449.5 cm	( 177 in)	503.0 cm	( 198 in)
Width	173.4 cm	( 68 in)	176.0 cm	( 69 in)
Wheelbase	253.8 cm	( 100 in)	318.0 cm	( 125 in)
Weight	1228 kgs	( 2707 lbs)	1540 kgs	( 3395 lbs)
CG to Front of Veh	211.6 cm	( 83 in)	251.0 cm	( 99 in)
Engine Displacement	3.0 liters		3.0 liters	
Moment of Inertia	224325 kgs	( 19855 lbs)	352010 kgs	( 31157 lbs)
Vehicle Mass	1228 kgs	( 7.0 lb-s <sup>2</sup> /in)	1540 kgs	( 8.8 lb-s <sup>2</sup> /in)

1994 Ford ranger  
Vehicle number 2 is missing.

1994 Mercury Topaz



PDOF

78176c

1997



78176C00000066            9.04 0000000003-VEHICLES - INTERSECTION  
78176C000000171            9.04 000000000  
  
78176C000000271            9.04 000000000  
  
78176C000000371            9.04 000000000V-1 was northbound on a 5-lane, urban, level,  
bituminous roadway approaching  
78176C000000471            9.04 000000000  
  
78176C000000571            9.04 000000000an intersection controlled by traffic signals.  
V-2 was westbound on an  
78176C000000671            9.04 000000000  
  
78176C000000771            9.04 000000000intersecting 3-lane bituminous roadway, stoppe  
d. V-2 entered the  
78176C000000871            9.04 000000000  
  
78176C000000971            9.04 000000000intersection as V-1 crossed in front. The fro  
nt of V-2 struck the right side  
78176C000001071            9.04 000000000  
  
78176C000001171            9.04 000000000of V-1 causing V-1 to rapidly rotate clockwise  
while entering the southbound  
78176C000001271            9.04 000000000  
  
78176C000001371            9.04 000000000lanes of traffic. V-1 began to overturn and w  
hile overturning, struck  
78176C000001471            9.04 000000000  
  
78176C000001571            9.04 000000000southbound V-3 on the left front and side. V-  
1 came to final rest on the  
78176C000001671            9.04 000000000  
  
78176C000001771            9.04 000000000top, upside down. V-2 was driven to the roads  
ide and parked by the driver,  
78176C000001871            9.04 000000000  
  
78176C000001971            9.04 000000000facing west. V-3 came to final rest in the #1  
southbound lane facing south.  
78176C000002071            9.04 000000000  
  
78176C000002171            9.04 000000000All 3 vehicles were towed and only the driver  
of V-1 was transported.  
78176C00000181            9.04 000000000  
  
78176C00000281            9.04 000000000



GENERAL VEHICLE Vehicle: 1

11

INTRA ERRORS

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

011

INTER ERRORS

OCT0111 2 If INTRUDING COMPONENT IV48(n) and INJURY SOURCE OI12(p) are  
CT0112 related as shown in Table A-15, the INTRUSION NUMBER OI15(p)  
CT0113 should not equal 00. GV=01 OA=01 OI=06

01

PSU78

ERROR SUMMARY SCREEN

CASE 176C

CURRENT VERSION: 9.04

██████████ 97

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

0







PSU 78-178C (1996) #1



PSU 78-176C (1998) #2



**PSU 78-176C (1996) #3**



**PSU 78-176C (1996) #4**



**PSU 78-176C (1996) #5**



PSU 78-176C (1996) #6



**PSU 78-178C (1996) #7**



**PSU 78-176C (1996) #8**



**PSU 78-176C (1996) #9**



**PSU 78-176C (1996) #10**



PSU 78-176C (1996) #11



PSU 78-176C (1996) #12



PSU 78-176C (1996) #13



**PSU 78-178C (1996) #14**



**PSU 78-176C (1996) #15**



PSU 78-176C (1996) #16



PSU 78-176C (1998) #17



PSU 78-176C (1996) #18



PSU 78-176C (1998) #19



**PSU 78-176C (1996) #20**



PSU 78-176C (1996) #21



PSU 78-176C (1996) #22



**PSU 78-176C (1996) #23**



PSU 78-176C (1996) #24



**PSU 78-176C (1996) #25**



**PSU 78-176C (1996) #26**



**PSU 78-176C (1996) #27**



**PSU 78-176C (1996) #28**



PSU 78-176C (1996) #29



**PSU 78-176C (1996) #30**



**PSU 78-176C (1996) #31  
Best Available**



**PSU 78-176C (1996) #32**  
**Best Available**



**PSU 78-176C (1996) #33**  
**Best Available**



**PSU 78-176C (1996) #34**  
**Best Available**



**PSU 78-176C (1996) #35**  
**Best Available**



**PSU 78-176C (1996) #36**  
**Best Available**



**PSU 78-178C (1996) #37**  
**Best Available**



**PSU 78-176C (1996) #38**



**PSU 78-176C (1996) #39**  
**Best Available**



**PSU 78-176C (1996) #40**  
**Best Available**



**PSU 78-176C (1996) #41**  
**Best Available**



**PSU 78-176C (1996) #42**  
**Best Available**



PSU 78-176C (1996) #43



**PSU 78-176C (1996) #44**  
**Best Available**



**PSU 78-176C (1996) #45**  
**Best Available**



**PSU 78-176C (1996) #46**  
**Best Available**



**PSU 78-176C (1996) #47**



**PSU 78-176C (1996) #48**



**PSU 78-176C (1996) #49**  
**Best Available**



**PSU 78-176C (1996) #50**  
**Best Available**



**PSU 78-176C (1996) #51**  
**Best Available**



**PSU 78-176C (1996) #52**  
**Best Available**



**PSU 78-176C (1996) #53**  
**Best Available**



**PSU 78-176C (1996) #54**  
**Best Available**



**PSU 78-176C (1996) #55**  
**Best Available**



**PSU 78-176C (1996) #56**  
**Best Available**



**PSU 78-176C (1996) #57**  
**Best Available**



**PSU 78-178C (1996) #58**  
**Best Available**



**PSU 78-176C (1996) #59**  
**Best Available**



**PSU 78-176C (1996) #60**  
**Best Available**



**PSU 78-176C (1996) #61**  
**Best Available**



**PSU 78-176C (1996) #62**  
**Best Available**



**PSU 78-176C (1996) #63**  
**Best Available**



**PSU 78-176C (1996) #64**  
**Best Available**



PSU 78-176C (1998) #65



**PSU 78-176C (1996) #66**



**PSU 78-176C (1996) #67**



**PSU 78-176C (1998) #68**



**PSU 78-176C (1996) #69**



**PSU 78-178C (1996) #70**



**PSU 78-176C (1996) #71**



PSU 78-176C (1996) #72



PSU 78-176C (1996) #73



**PSU 78-176C (1996) #74**



**PSU 78-176C (1996) #75**



**PSU 78-176C (1996) #76**



**PSU 78-176C (1996) #77**



**PSU 78-176C (1996) #78**



PSU 78-176C (1996) #79



PSU 78-176C (1996) #80



**PSU 78-176C (1996) #81**



**PSU 78-176C (1996) #82**



**PSU 78-176C (1996) #83**  
**Best Available**



**PSU 78-176C (1996) #84**  
**Best Available**



**PSU 78-176C (1996) #85**  
**Best Available**



**PSU 78-176C (1996) #86**  
**Best Available**



**PSU 78-176C (1986) #87  
Best Available**



**PSU 78-176C (1996) #88**  
**Best Available**



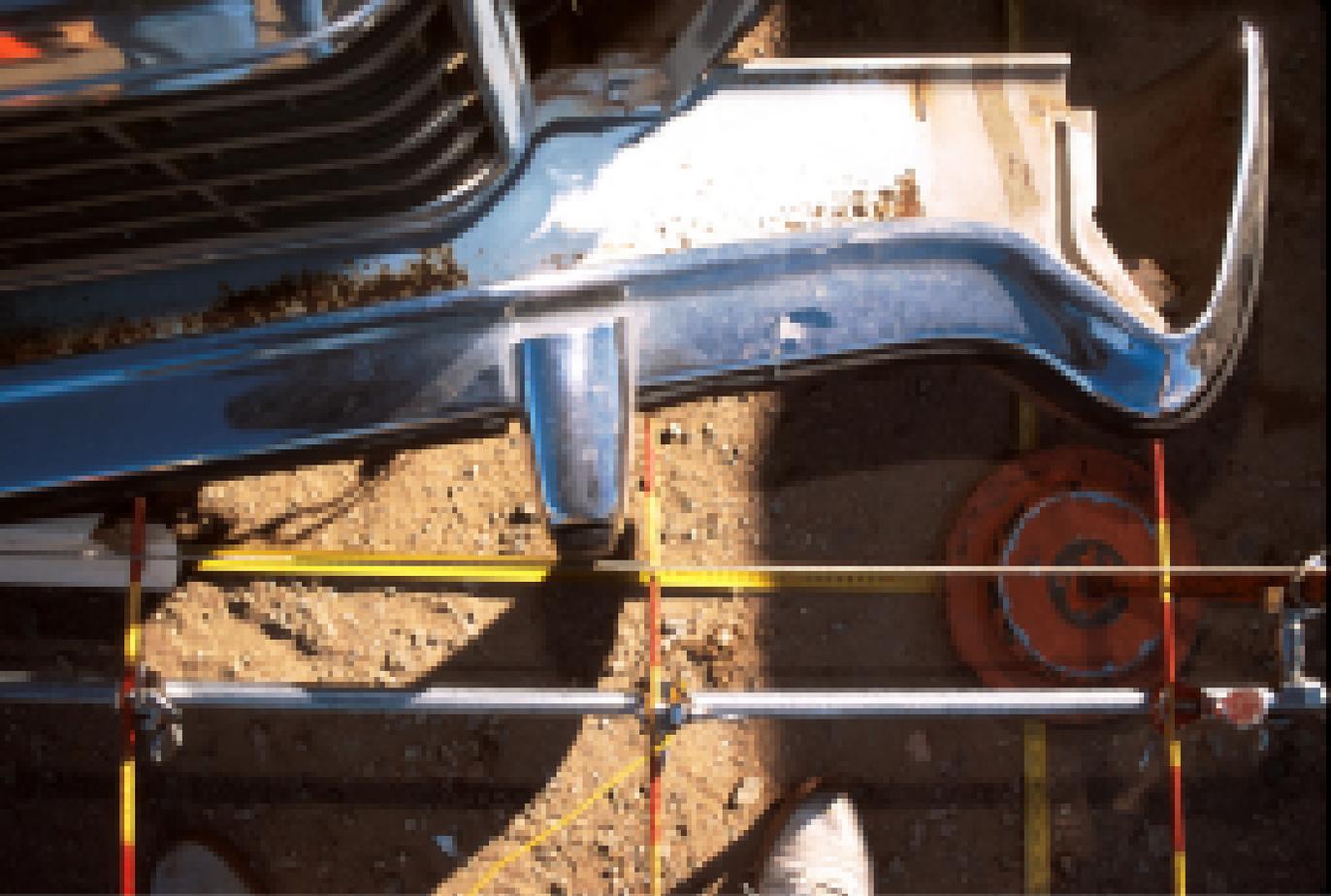
**PSU 78-176C (1996) #89**  
**Best Available**



**PSU 78-176C (1996) #90**  
**Best Available**



**PSU 78-176C (1996) #91**  
**Best Available**



**PSU 78-176C (1996) #92**  
**Best Available**



**PSU 78-176C (1996) #93  
Best Available**



**PSU 78-176C (1996) #94**  
**Best Available**



**PSU 78-176C (1996) #95**  
**Best Available**



**PSU 78-176C (1998) #98**  
**Best Available**



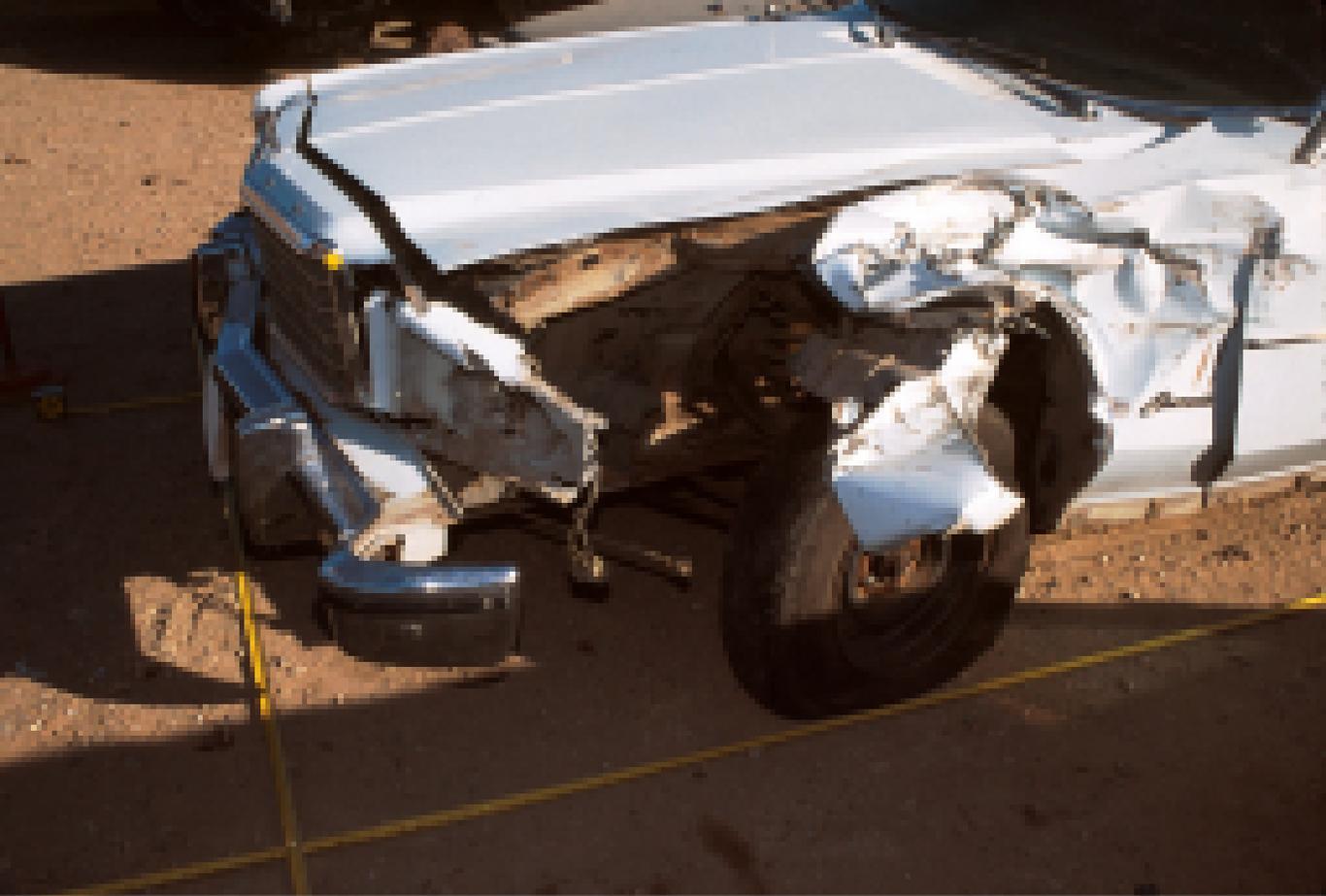
**PSU 78-176C (1996) #97**  
**Best Available**



**PSU 78-176C (1996) #98**  
**Best Available**



**PSU 78-176C (1996) #99**  
**Best Available**



**PSU 78-176C (1996) #100**  
**Best Available**



**PSU 78-176C (1996) #101  
Best Available**



**PSU 78-176C (1996) #102**  
**Best Available**



**PSU 78-176C (1996) #103**  
**Best Available**



**PSU 78-176C (1996) #104**



PSU 78-176C (1988) #105



PSU 78-178C (1996) #108



**PSU 78-176C (1996) #107**



**PSU 78-176C (1986) #108**  
**Best Available**



**PSU 78-176C (1996) #109**  
**Best Available**



**PSU 78-176C (1988) #110**



**PSU 78-176C (1995) #111**  
**Best Available**



**PSU 78-176C (1996) #112**

**Best Available**



**PSU 78-176C (1996) #113**



**PSU 78-176C (1996) #114**



**PSU 78-176C (1996) #115**



**PSU 78-178C (1996) #116**



**PSU 78-176C (1996) #117**



PSU 78-176C (1996) #118



**PSU 78-176C (1996) #119**



PSU 78-176C (1998) #120



PSU 78-176C (1996) #121



**PSU 78-176C (1996) #122**



**PSU 78-176C (1996) #123**



PSU 78-176C (1998) #124



PSU 78-176C (1996) #125



**PSU 78-176C (1996) #126**



**PSU 78-176C (1996) #127**



**PSU 78-176C (1996) #128**



**PSU 78-176C (1998) #129**



**PSU 78-176C (1996) #130**



**PSU 78-176C (1996) #131**



**PSU 78-176C (1996) #132**



**PSU 78-176C (1996) #133**