



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 48 CASE NO. 203K TYPE OF ACCIDENT Light Truck/Light Truck/Light Truck  
Right Angle

### 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.)

V1 was traveling West on a multi-lane undivided roadway in the right lane. V2 and V3 were going South on a one-way intersecting street with five lanes. V2 was in the third lane and V3 was in the fourth lane a little behind V2. As V2 came into the intersection it was struck in the left front door area by the front of V1. V2 then rolled over four-quarter turns to final rest in the roadway. V1 rotated 180 degrees and was struck in the left door by the front of V3. V1 and V3 came to rest in the intersection. All three vehicles were towed from the scene. The unrestrained driver of V2 was hospitalized for injuries.

### 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	
1	Pickup	90/Chevrolet/1500	Front	Light	None
2	Pickup	84/Mazda/B2000	Left	Moderate	None
3	Pickup	85/Chevrolet/S-10	Front	Light	None

**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
1	Driver	Front Left	None	NECK	STRAIN	1	INERTIAL FORCES
1	Passenger	Front Right	None	N/A	N/A	N/A	N/A
2	Driver	Front Right	None	SPLEEN	LAC.	4	(L) DOOR/INTRUSION
3	Driver	Front Left	Lap/Shoulder	CHEST	CONTUSION	1	SEAT BELT

**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**

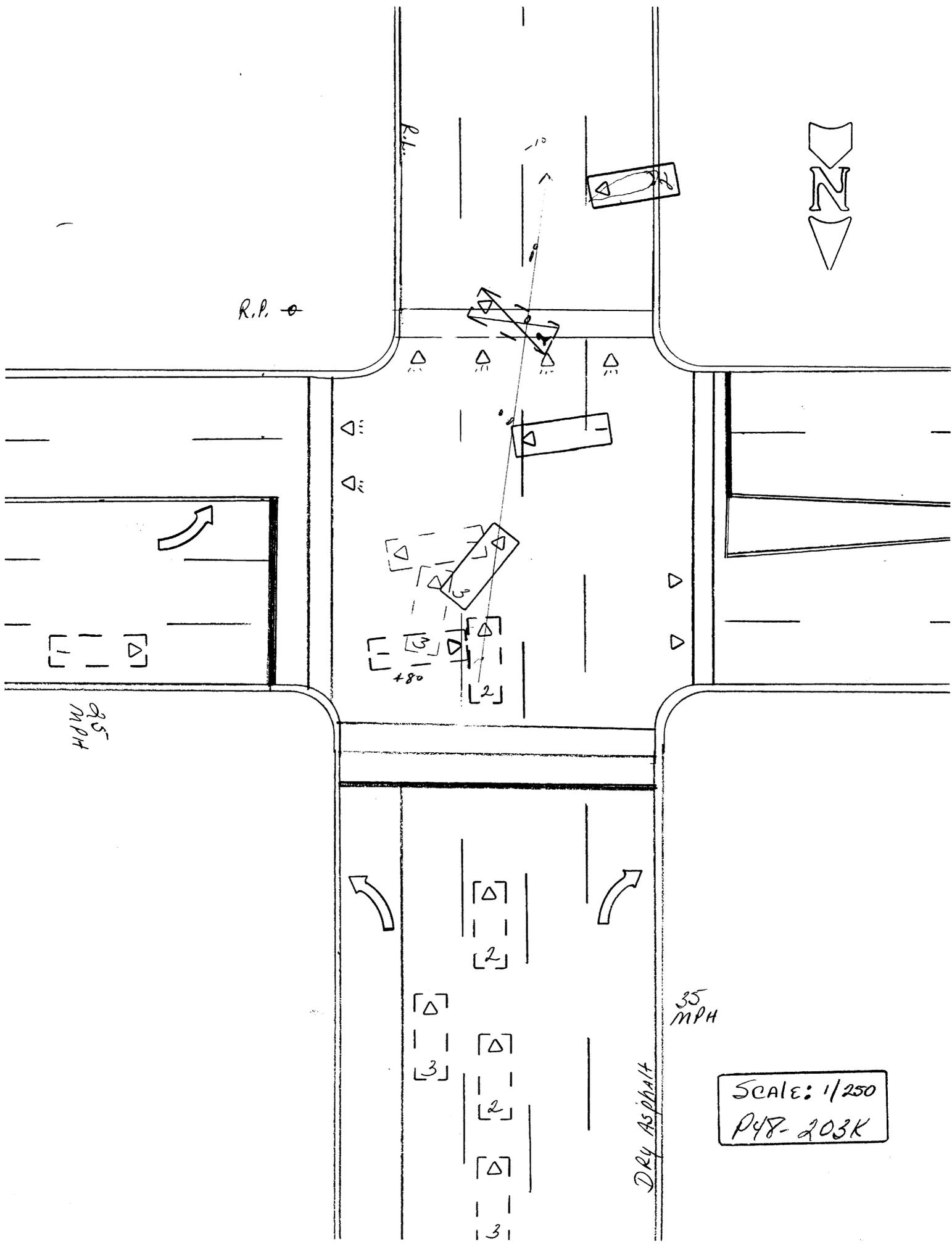
Abrasion  
Amputation  
Avulsion  
Burn  
Concussion  
Contusion  
Crush  
Detachment, separation  
Dislocation

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**



R.P. 0



85  
MPH

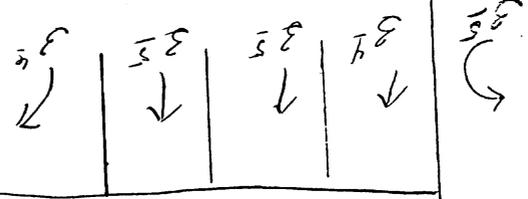
35  
MPH

DRY ASPHALT

SCALE: 1/250  
P48-203K

1 of 2  
203K  
Field  
Sketch

SOUTH



BEST AVAILABLE

STREET

STREET

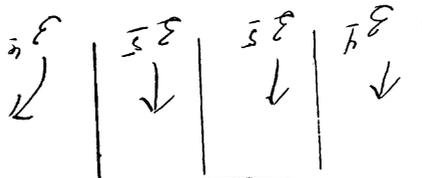
2

38  
61

R.L.

W

2 of 2

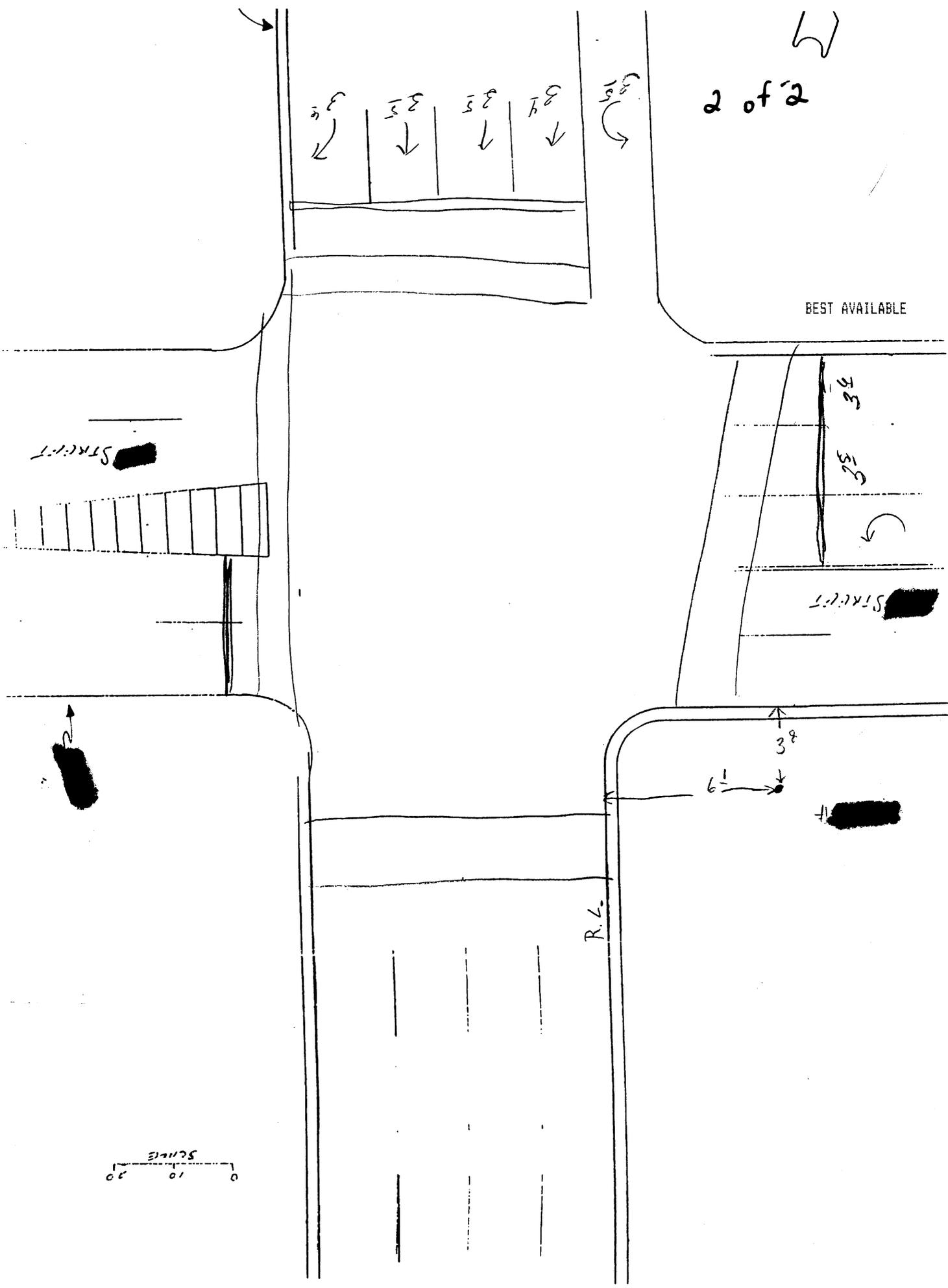
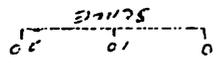


BEST AVAILABLE

STREET

STREET

R.L.





# ACCIDENT COLLISION MEASUREMENT TABLE

Primary Sampling Unit Number 48

Case Number—Stratum 203K

### ACCIDENT COLLISION DIAGRAM

#### LEVEL I PHYSICAL EVIDENCE ABSENT

To be accomplished when there is no physical evidence present at the scene:

- \* approximate vehicle orientation at impact and final rest
- \* applicable road/roadway delineation (e.g., curbs/edge lines, lane markings, median markings, pavement markings, etc.)
- \* applicable traffic controls (e.g., speed limit)
- \* north arrow placed on diagram
- \* sketch required

#### LEVEL II PHYSICAL EVIDENCE PRESENT

In addition to the level I tasks noted above, the following must be accomplished when

#### LEVEL II (Cont'd)

physical evidence is present:

- \* document 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
- \* roadway surface type and condition of applicable roadways
- \* grade measurements for all applicable roadways and at location of rollover initiation
- \* 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 275 180 171

Surface Type Asphalt Asphalt Asphalt

Surface Condition dry dry dry

Grade (v/h) Measurement (between impact and final rest) 0 0 0

Grade (v/h) Measurement (at location of rollover initiation) \_\_\_\_\_

Reference Point: Utility pole ON SE CORNER of intersection

Reference line: EAST ROADWAY EDGE of [redacted] Blvd. S.

Item	Distance and Direction from Reference Point	Distance and Direction from Reference Line
Gauge #1	1 <sup>2</sup> - 6 <sup>4</sup> N	6 <sup>1</sup> - 5 <sup>7</sup> W ✓
2	5 <sup>7</sup> - 5 <sup>8</sup> N	5 <sup>5</sup> - ✓
3	0 <sup>2</sup> - 0 <sup>6</sup> ✓	7 <sup>0</sup> - 6 <sup>9</sup> ✓
4	2 <sup>9</sup> - 3 <sup>0</sup> S	7 <sup>2</sup> - 7 <sup>3</sup> ✓
5	0 <sup>1</sup> - 3 <sup>3</sup> S	7 <sup>3</sup> - 7 <sup>4</sup> ✓
Fluid Spill V3	1 <sup>4</sup> - 7 <sup>1</sup> N	10 <sup>5</sup> - 14 <sup>0</sup> ✓





# ACCIDENT FORM

1. Primary Sampling Unit Number 48  
2. Case Number - Stratum 203K

## SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS14-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

## IDENTIFICATION

3. Number of General Vehicle Forms Submitted 03  
4. Date of Accident (Month, Day, Year)                       19 4  
5. Time of Accident 0013  
Code reported military time of accident.  
NOTE: Midnight = 2400  
Unknown = 9999

6. \_\_\_SS15 Administrative Use 0  
7. \_\_\_SS16 Pedestrian Crash Data Study 0  
8. \_\_\_SS17 Impact Fires 0  
9. \_\_\_SS18 \_\_\_\_\_ 0  
10. \_\_\_SS19 \_\_\_\_\_ 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 on the right.

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</u> <u>1</u>	13. <u>01</u>	14. <u>15</u>	15. <u>F</u>	16. <u>02</u>	17. <u>15</u>	18. <u>L</u>
19. <u>0</u> <u>2</u>	20. <u>02</u>	21. <u>15</u>	22. <u>T</u>	23. <u>31</u>	24. <u>00</u>	25. <u>N</u>
26. <u>0</u> <u>3</u>	27. <u>01</u>	28. <u>15</u>	29. <u>L</u>	30. <u>03</u>	31. <u>15</u>	32. <u>F</u>
33. <u>0</u> <u>4</u>	34. _____	35. _____	36. _____	37. _____	38. _____	39. _____
40. <u>0</u> <u>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

- (00) Not a motor vehicle
- (01) Subcompact/mini (wheelbase < 254 cm)
- (02) Compact (wheelbase ≥ 254 but < 265 cm)
- (03) Intermediate (wheelbase ≥ 265 but < 278 cm)
- (04) Full size (wheelbase ≥ 278 but < 291 cm)
- (05) Largest (wheelbase ≥ 291 cm)
- (09) Unknown passenger car size
- (11) Compact utility vehicle
- (12) Large utility vehicle (≤ 4,500 kgs GVWR)
- (13) Passenger van (≤ 4,500 kgs GVWR)
- (14) Other van (≤ 4,500 kgs GVWR)
- (15) Pickup truck (≤ 4,500 kgs GVWR)
- (18) Other truck (≤ 4,500 kgs GVWR)
- (19) Unknown light truck type
- (20) School bus
- (21) Other bus
- (22) Truck (> 4,500 kgs GVWR)
- (23) Tractor without trailer
- (24) Tractor-trailer(s)
- (25) Motored cycle
- (28) Other vehicle
- (99) Unknown

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

#### CDS APPLICABLE AND OTHER VEHICLES

- (O) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back
- (T) Top
- (U) Undercarriage
- (9) Unknown

#### TDC APPLICABLE VEHICLES

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

### CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

(01-30) – Vehicle Number

#### Noncollision

- (31) Overturn – rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify):

- (35) 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

- (71) Motor vehicle 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

**OCCUPANT RELATED**

16. Driver Presence in Vehicle 1  
 (0) Driver not present  
 (1) Driver present  
 (9) Unknown

17. Number of Occupants This Vehicle 02  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown

18. Number of Occupant Forms Submitted 02

24. Rollover 0  
 (0) No rollover (no overturning)

*Rollover (primarily about the longitudinal axis)*  
 (1) Rollover, 1 quarter turn only  
 (2) Rollover, 2 quarter turns  
 (3) Rollover, 3 quarter turns  
 (4) Rollover, 4 or more quarter turns (specify):  
 \_\_\_\_\_

(5) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (9) Rollover (overturn), details unknown

**VEHICLE WEIGHT ITEMS**

19. Vehicle Curb Weight 1,890  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown

4,159 lbs X .4536 = 1,889 kgs

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

20. Vehicle Cargo Weight 0000  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown

\_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

**OVERRIDE/UNDERRIDE (THIS VEHICLE)**

25. Front Override/Underride (this Vehicle) 0

26. Rear Override/Underride (this Vehicle) 0

(0) No override/underride, or not an end-to-end impact

*Override (see specific CDC)*  
 (1) 1st CDC  
 (2) 2nd CDC  
 (3) Other not automated CDC (specify):  
 \_\_\_\_\_

*Underride (see specific CDC)*  
 (4) 1st CDC  
 (5) 2nd CDC  
 (6) Other not automated CDC (specify):  
 \_\_\_\_\_

(7) Medium/heavy truck or bus override  
 (9) Unknown

**RECONSTRUCTION DATA**

21. Towed Trailing Unit 0  
 (0) No towed unit  
 (1) Yes--towed trailing unit  
 (9) Unknown

22. Documentation of Trajectory Data for This Vehicle 0  
 (0) No  
 (1) Yes

23. Post Collision Condition of Tree or Pole (For Highest Delta V) 0  
 (0) Not collision (for highest delta V) with tree or pole  
 (1) Not damaged  
 (2) Cracked/sheared  
 (3) Tilted < 45 degrees  
 (4) Tilted ≥ 45 degrees  
 (5) Uprooted tree  
 (6) Separated pole from base  
 (7) Pole replaced  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown

**HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V**

Values: (000)-(359) Code actual value  
 (997) Noncollision  
 (998) Impact with object  
 (999) Unknown

27. Heading Angle For This Vehicle 275

28. Heading Angle For Other Vehicle 180

Category	Configuration	ACCIDENT TYPES (Includes Intent)											
I Single Driver	A Right Roadside Departure	01 DRIVE OFF ROAD	02 CONTROL/ TRACTION LOSS	03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN							
	B Left Roadside Departure	06 DRIVE OFF ROAD	07 CONTROL/ TRACTION LOSS	08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN							
	C Forward Impact	11 PARKED VEH.	12 STA. OBJECT	13 PEDESTRIAN/ ANIMAL	14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN						
II Same Trafficway Same Direction	D Rear-End	20 STOPPED 21, 22, 23	22 SLOWER 26, 26, 27	24 DECEL. 28, 29, 31	25 AVOID COLLISION WITH VEH.	26 AVOID COLLISION WITH VEH.	27 AVOID COLLISION WITH VEH.	28 AVOID COLLISION WITH VEH.	29 AVOID COLLISION WITH VEH.	30 AVOID COLLISION WITH VEH.	31 AVOID COLLISION WITH VEH.	(EACH - 32) SPECIFICS OTHER	(EACH - 33) SPECIFICS UNKNOWN
	E Forward Impact	34 CONTROL/ TRACTION LOSS	35 CONTROL/ TRACTION LOSS	36 CONTROL/ TRACTION LOSS	37 CONTROL/ TRACTION LOSS	38 AVOID COLLISION WITH VEH.	39 AVOID COLLISION WITH VEH.	40 AVOID COLLISION WITH VEH.	41 AVOID COLLISION WITH VEH.	(EACH - 42) SPECIFICS OTHER	(EACH - 43) SPECIFICS UNKNOWN		
	F Sideswipe Angle	44	45	46	47	(EACH - 48) SPECIFICS OTHER	(EACH - 49) SPECIFICS UNKNOWN						
III Same Trafficway Opposite Direction	G Head-On	50 LATERAL MOVE	51 LATERAL MOVE	(EACH - 62) SPECIFICS OTHER	(EACH - 63) SPECIFICS UNKNOWN								
	H Forward Impact	54 CONTROL/ TRACTION LOSS	55 CONTROL/ TRACTION LOSS	56 CONTROL/ TRACTION LOSS	57 CONTROL/ TRACTION LOSS	58 AVOID COLLISION WITH VEH.	59 AVOID COLLISION WITH VEH.	60 AVOID COLLISION WITH VEH.	61 AVOID COLLISION WITH VEH.	(EACH - 62) SPECIFICS OTHER	(EACH - 63) SPECIFICS UNKNOWN		
	I Sideswipe Angle	64 LATERAL MOVE	65 LATERAL MOVE	(EACH - 66) SPECIFICS OTHER	(EACH - 67) SPECIFICS UNKNOWN								
IV Change Trafficway Vehicle Turning	J Turn Across Path	68 INITIAL OPPOSITE DIRECTIONS	69 INITIAL OPPOSITE DIRECTIONS	70 INITIAL SAME DIRECTIONS	71 INITIAL SAME DIRECTIONS	72 INITIAL SAME DIRECTIONS	73 INITIAL SAME DIRECTIONS	(EACH - 74) SPECIFICS OTHER	(EACH - 75) SPECIFICS UNKNOWN				
	K Turn Into Path	77 TURN INTO SAME DIRECTION	78 TURN INTO SAME DIRECTION	79 TURN INTO OPPOSITE DIRECTIONS	80 TURN INTO OPPOSITE DIRECTIONS	81 TURN INTO OPPOSITE DIRECTIONS	82 TURN INTO OPPOSITE DIRECTIONS	(EACH - 84) SPECIFICS OTHER	(EACH - 85) SPECIFICS UNKNOWN				
V Intersecting Paths (Vehicle Damage)	L Straight Paths	87	88	89	(EACH - 90) SPECIFICS OTHER	(EACH - 91) SPECIFICS UNKNOWN							
VI Miscellaneous	M Backing Etc.	82 BACKING VEH.	83 OTHER VEH. OR OBJECT	96 Other Accident Type	99 Unknown Accident Type	00 No Impact							

**OTHER DATA**

56. Driver's Zip Code [REDACTED]

- (00000) Driver not present
- (00001) Driver not a resident of U.S. or territories
- Code actual 5-digit zip code
- (99999) Unknown

57. Driver's Race/Ethnic Origin 1

- (0) Driver not present
- (1) White (non-Hispanic)
- (2) Black (non-Hispanic)
- (3) White (Hispanic)
- (4) Black (Hispanic)
- (5) American Indian, Eskimo or Aleut
- (6) Asian or Pacific Islander
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

58. Vehicle Special Use (This Trip) 0

- (0) No special use
- (1) Taxi
- (2) Vehicle used as school bus
- (3) Vehicle used as other bus
- (4) Military
- (5) Police
- (6) Ambulance
- (7) Fire truck or car
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**ROLLOVER DATA**

If GV07 (Body Type) ≠ 1-49, leave GV59-GV63 blank.  
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.  
 If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type 0

- (0) No rollover
- (1) Trip-over
- (2) Flip-over
- (3) Turn-over
- (4) Climb-over
- (5) Fall-over
- (6) Bounce-over
- (7) Collision with another vehicle
- (8) Other rollover initiation type specify): \_\_\_\_\_
- (9) Unknown rollover initiation type

60. 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
- (9) Unknown

61. Rollover Initiation Object Contacted 00

62. 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): \_\_\_\_\_
- (8) Non-contact rollover forces (specify): \_\_\_\_\_
- (9) Unknown

63. Direction of Initial Roll 0

- (0) No rollover
- (1) Roll right - primarily about the longitudinal axis
- (2) Roll left - primarily about the longitudinal axis
- (5) End-over-end (i.e., primarily about the lateral axis)
- (9) Unknown roll direction

**PRECRASH DATA**

64. Pre-Event Movement (Prior to Recognition of Critical Event) 01

- (01) Going straight
- (02) Slowing or stopping in traffic lane
- (03) Starting in traffic lane
- (04) Stopped in traffic lane
- (05) Passing or overtaking another vehicle
- (06) Disabled or parked in travel lane
- (07) Leaving a parking position
- (08) Entering a parking position
- (09) Turning right
- (10) Turning left
- (11) Making a U-turn
- (12) Backing up (other than for parking position)
- (13) Negotiating a curve
- (14) Changing lanes
- (15) Merging
- (16) Successful avoidance maneuver to a previous critical event
- (97) Other (specify): \_\_\_\_\_
- (98) No driver present
- (99) Unknown

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

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

### Noncollision

- (31) Turn-over — fall-over
- (33) 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

- (71) Motor vehicle 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>48</u>	3. Vehicle Number <u>01</u>
2. Case Number - Stratum <u>203K</u>	

## VEHICLE IDENTIFICATION

VIN UNABLE TO READ Model Year ?  
 Vehicle Make (specify): Chevrolet Vehicle Model (specify): 1500

## LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
01	<u>beg @ RF BC</u>	<u>Entire front bumper</u>
02	<u>beg 90cm behind LF Axle</u>	<u>beg 116cm behind LF Axle</u>

## 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 and document on the vehicle diagram the location of maximum crush.

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

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

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

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage		Field L	C <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	<u>front bumper</u>	84	C6	170	16	7	3	5	13	29	
	<u>free space</u>				13	5	3	3	5	13	
	<u>Actual crush</u>	84		170	3	2	0	2	6	16	+47
02	<u>Ⓞ side</u>	105	C4	132	5	10	24	33	19	5	-5

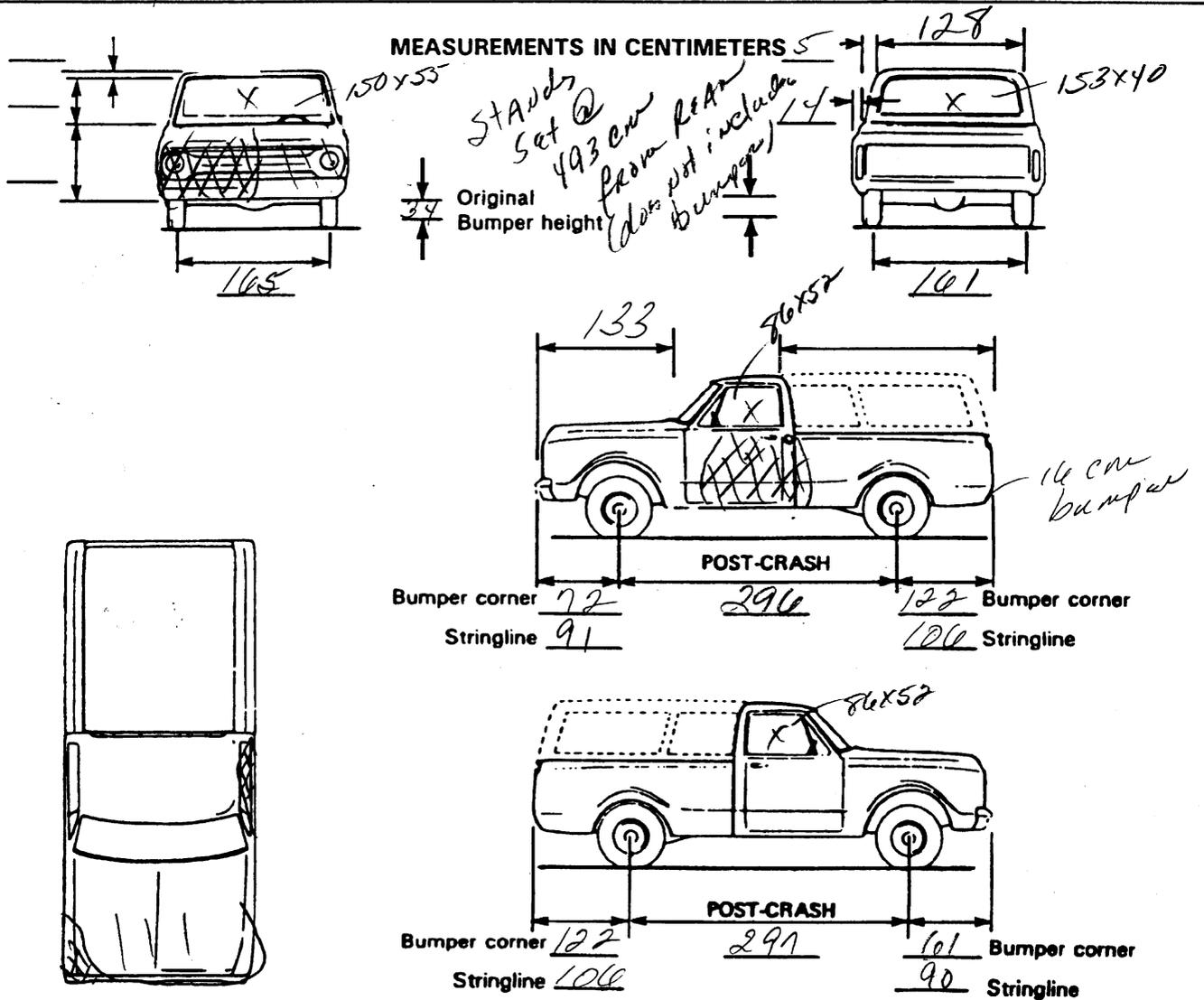
## ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>117.5</u>	inches	x 2.54	=	<u>298.4</u>	cm
Overall Length	<u>194.1</u>	inches	x 2.54	=	<u>493.0</u>	cm
Maximum Width	<u>76.4</u>	inches	x 2.54	=	<u>194.0</u>	cm
Curb Weight	<u>4,159</u>	pounds	x .4536	=	<u>1,886.5</u>	kg
Average Track	— — —	inches	x 2.54	=	— — —	cm
Front Overhang	<u>34.9</u>	inches	x 2.54	=	<u>88.0</u>	cm
Rear Overhang	<u>46.5</u>	inches	x 2.54	=	<u>118.1</u>	cm
Undeformed End Width	— — —	inches	x 2.54	=	— — —	cm
Engine Size: cyl./displ.	— — —	cc	x .001	=	— . —	L
	— — —	CID	x .0164	=	— . —	L

*There was no fire damage  
 associated with this accident.  
 Vehicle was inside of  
 a body shop that burned  
 on [REDACTED] 194.*

### VEHICLE DAMAGE SKETCH

<p><b>TIRE—WHEEL DAMAGE</b></p> <p>a. Rotation physically restricted      b. Tire deflated</p> <p>RF <u>2</u>                                      RF <u>2</u>          LF <u>2</u>                                      LF <u>2</u>          RR <u>2</u>                                      RR <u>2</u>          LR <u>2</u>                                      LR <u>2</u></p> <p>(1) Yes (2) No (8) NA (9) Unk.</p>	<p><b>ORIGINAL SPECIFICATIONS</b></p> <p>Wheelbase <u>298</u> cm          Overall Length <u>493</u> cm          Maximum Width <u>194</u> cm          Curb Weight <u>1887</u> kg          Average Track <u>—</u> cm          Front Overhang <u>87</u> cm          Rear Overhang <u>118</u> cm          Undeformed End Width <u>178</u> cm          Engine Size: cyl./displ. <u>V8-5.7</u> L</p>	<p><b>WHEEL STEER ANGLES</b>          (For locked front wheels or displaced rear axles only)</p> <p>RF ± <u>—</u> °          LF ± <u>—</u> °          RR ± <u>—</u> °          LR ± <u>—</u> °</p> <p>Within ± 5 degrees</p>
<p><b>TYPE OF TRANSMISSION</b></p> <p><input type="checkbox"/> Manual      <input checked="" type="checkbox"/> Automatic</p>	<p><b>DRIVE WHEELS</b></p> <p><input type="checkbox"/> FWD    <input checked="" type="checkbox"/> RWD    <input type="checkbox"/> 4WD</p> <p>Approximate Cargo Weight <u>0</u> kg</p>	



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

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



**COLLISION DEFORMATION CLASSIFICATION**

HIGHEST DELTA "V"

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

Second Highest Delta "V"

12. <u>03</u>	13. <u>03</u>	14. <u>LO</u> <u>09</u>	15. <u>L</u>	16. <u>Z</u>	17. <u>E</u>	18. <u>W</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>178</u>	<u>003</u>	<u>002</u>	<u>000</u>	<u>002</u>	<u>006</u>	<u>016</u>	<u>047</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>132</u>	<u>005</u>	<u>010</u>	<u>024</u>	<u>033</u>	<u>019</u>	<u>005</u>	<u>0005</u>

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

0

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

1

28. Original Wheelbase Code to the nearest centimeter (999) Unknown

298

117.5 inches X 2.54 = 298.4 centimeters

29. 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

30. Fire Occurrence

- (0) No fire
- Yes, fire occurred
- (1) Minor
- (2) Major
- (9) Unknown

*Not from this Accident*

0

31. Origin of Fire

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

0

- (9) Unknown

32. Type of Fuel Tank-1

1

33. Type of Fuel Tank-2

- (0) No fuel tank (electrical vehicle)
- (1) Metallic
- (2) Non-metallic
- (9) Unknown

0

34. Fuel Tank-1 Location

5

35. Fuel Tank-2 Location

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

36. Fuel Tank-1 Filler Cap Location

4

37. Fuel Tank-2 Filler Cap Location

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

38. Fuel Tank-1 Damage

*TANK IS INTACT*

1

39. Fuel Tank-2 Damage

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

40. Location of Fuel System-1 Leakage 1

41. Location of Fuel System-2 Leakage 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

42. Fuel Type-1 01

43. 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

44. 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 AND WAS NOT AN AOPS \*\*\*  
 (I.E., GV09 = 0 OR 9 AND GV36 = 0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



# INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number 48  
 2. Case Number - Stratum 203K  
 3. Vehicle Number DL

## INTEGRITY

4. Passenger Compartment Integrity 99  
 (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):

*Post crash  
fire  
damage*

(99) Unknown

Door, Tailgate or Hatch Opening

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

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

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code 0

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

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

Door, Tailgate or Hatch Came Open During Collision

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

## GLAZING

Glazing Damage from Impact Forces

15. WS 9 16. LF 9 17. RF 9 18. LR 8 19. RR 8  
 20. BL 9 21. Roof 8 22. Other 8

*fire  
damage*

- (0) 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
- (8) No glazing
- (9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 9 24. LF 9 25. RF 9 26. LR 0 27. RR 0  
 28. BL 9 29. Roof 0 30. Other 0

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

If No Glazing Damage *And* No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As 0

Type of Window/Windshield Glazing

31. WS 9 32. LF 9 33. RF 9 34. LR 0 35. RR 0  
 36. BL 9 37. Roof 0 38. Other 0

- (0) No glazing contact and no damage, or no glazing
- (1) AS-1 - Laminated
- (2) AS-2 - Tempered
- (3) AS-3 - Tempered-tinted
- (4) AS-14 - Glass/Plastic
- (8) Other (specify):
- (9) Unknown

Window Precrash Glazing Status

39. WS 9 40. LF 9 41. RF 9 42. LR 0 43. RR 0  
 44. BL 9 45. Roof 0 46. Other 0

- (0) No glazing contact and no damage, or no glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (9) Unknown



**OCCUPANT AREA INTRUSION**

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

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>11</u>	48. <u>10</u>	49. <u>2</u>	50. <u>3</u>
2nd	51. <u>12</u>	52. <u>19</u>	53. <u>1</u>	54. <u>3</u>
3rd	55. <u>12</u>	56. <u>24</u>	57. <u>1</u>	58. <u>3</u>
4th	59. <u>13</u>	60. <u>24</u>	61. <u>1</u>	62. <u>3</u>
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) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify):

CONSOLE

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

*Exterior Components*

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

**LOCATION OF INTRUSION**

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

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

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

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

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

(99) Unknown

**MAGNITUDE OF INTRUSION**

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

**DOMINANT CRUSH DIRECTION**

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

# STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	-	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

	-		=	
--	---	--	---	--

	-		=	
--	---	---	---	--

	-		=	
--	---	--	---	--

	-		=	
--	---	--	---	--

Large empty rectangular area for recording data.

**STEERING COLUMN**

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. Blank X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

89. Blank X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

90. Blank X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

91. Blank X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

92. 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

93. 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

**INSTRUMENT PANEL**

94. Odometer Reading 999,000

- \_\_\_\_\_ kilometers—Code to the nearest 1,000 kilometers
- (000) No odometer
- (001) Less than 1,500 kilometers
- (500) 499,500 kilometers or more
- (999) Unknown

*DAMAGED by FIRE*

\_\_\_\_\_ miles X 1.6093 = \_\_\_\_\_ kilometers

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

95. Instrument Panel Damage from Occupant Contact? 9

- (0) No
- (1) Yes
- (9) Unknown

96. Knee Bolsters Deformed from Occupant Contact? 8

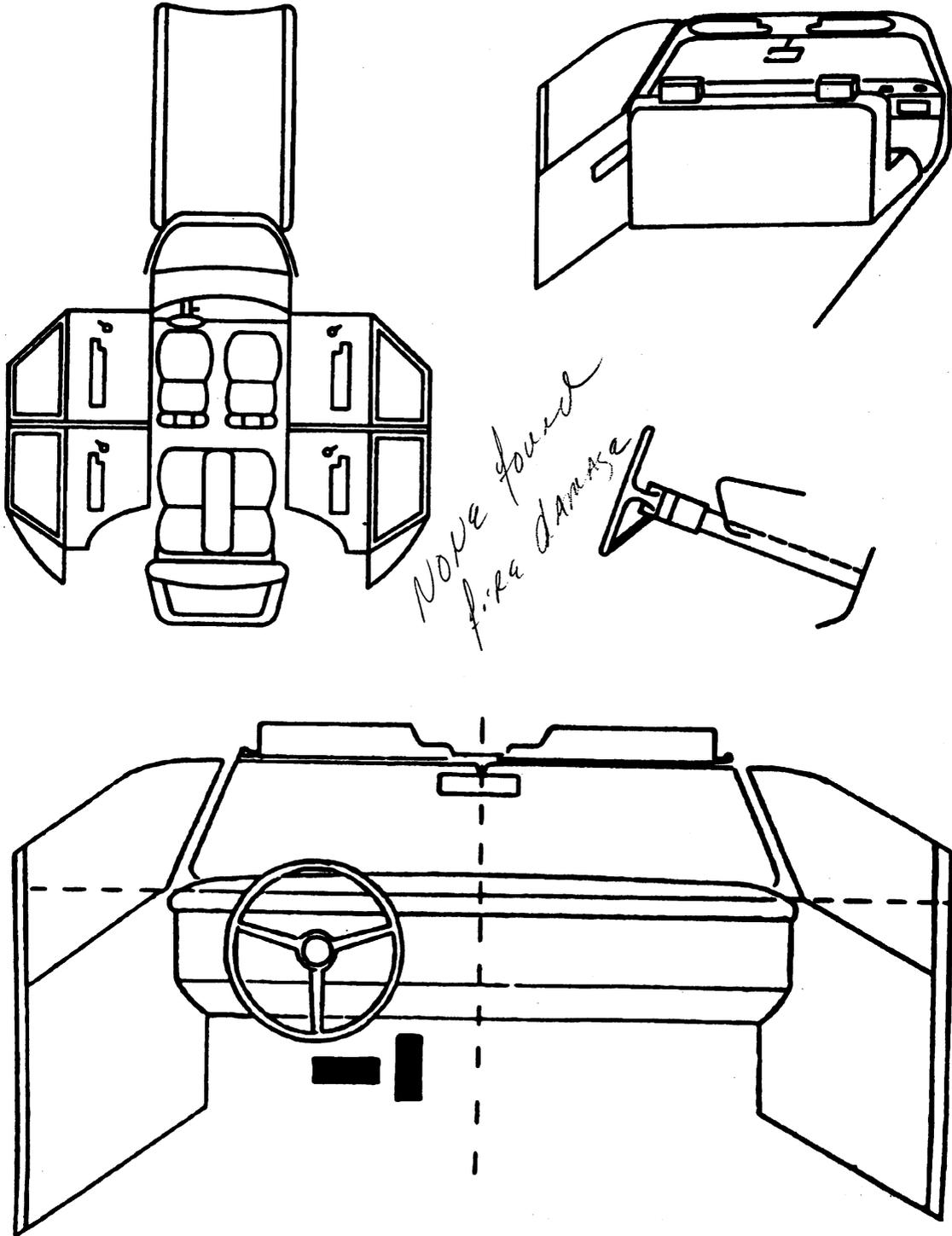
- (0) No
- (1) Yes
- (8) Not present
- (9) Unknown

97. Did Glove Compartment Door Open During Collision(s)? 0

- (0) No
- (1) Yes
- (8) Not present
- (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				<i>None</i>	
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

**CODES FOR INTERIOR COMPONENTS**

**FRONT**

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

**LEFT SIDE**

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_
- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_
- (28) Left side window sill

**RIGHT SIDE**

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_
- (38) Right side window sill

**INTERIOR**

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

- (46) Other occupants (specify): \_\_\_\_\_

- (47) Interior loose objects
- (48) Child safety seat (specify): \_\_\_\_\_
- (49) Other interior object (specify): \_\_\_\_\_

**ROOF**

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

**FLOOR**

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

**REAR**

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (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

		Left	Right
F I R S T	Availability/Function	0	0
	Deployment		
	Failure		

**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**

- (0) Not equipped/not available  
 (1) Air bag deployed during accident (as a result of impact)  
 (2) Air bag deployed inadvertently just prior to accident  
 (3) Air bag deployed, accident sequence undetermined  
 (4) Nondeployed  
 (5) Unknown if deployed  
 (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (9) Unknown

**Are There Indications of Air Bag System Failure?**

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

### AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	0	0
	Use		
	Type		
	Proper Use		
	Failure Modes		

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

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

*Non-functional*

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

**Automatic (Passive) Belt System Use**

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

**Automatic (Passive) Belt System Type**

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

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

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

*Automatic Belt Used Improperly*

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

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

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

**MANUAL RESTRAINTS**

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

If a Child safety seat is present, encode the data on the back of this page.

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

		Left	Center	Right
FIRST	Availability	4	3	4
	Evidence of usage	99	99	99
	Used in this crash?	9	9	9
	Proper Use	9	9	9
	Failure Modes	9	9	9
SECOND	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			

**Manual (Active) Belt System Availability**

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

*Integral Belt Partially Destroyed*

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

**Manual (Active) Belt System Use**

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): \_\_\_\_\_
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify): \_\_\_\_\_
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

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

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

*Belt Used Improperly*

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

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

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

## 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.

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

- 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)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**HEAD RESTRAINTS/SEAT EVALUATION**

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

		Left	Center	Right
FIRST	Head Restraint Type/Damage	0	0	0
	Seat Type	02	00	02
	Seat Performance	4	0	1
	Seat Orientation	1	0	1
SECOND	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

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

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

**Seat Type (this Occupant Position)**

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

**Seat Performance (this Occupant Position)**

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

**Seat Orientation (this Occupant Position)**

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

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

*NONE*

**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 in vehicle interior diagram)



# OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number 48  
 2. Case Number - Stratum 203K  
 3. Vehicle Number 01  
 4. Occupant Number 01

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 25  
 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  
 (9) Unknown

7. Occupant's Height 165  
 Code actual height to the nearest centimeter.  
 (999) Unknown  
65 inches X 2.54 = 165.1 centimeters

8. Occupant's Weight 059  
 Code actual weight to the nearest kilogram.  
 (999) Unknown  
130 pounds X .4536 = 58.9 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) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0

15. Medium Status (Immediately Prior To Impact)

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

0

13. Ejection Area

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

0

16. Entrapment

- (NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)
- (0) Not entrapped
  - (1) Entrapped
  - (9) Unknown

0

14. Ejection Medium

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

0

## RESTRAINT SYSTEM EVALUATION

17. 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 \_\_\_\_\_

18. 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

19. 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 \_\_\_\_\_

20. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used
- (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 \_\_\_\_\_

21. Air Bag System Availability/Function 0

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

*Non-functional*

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

(3) Air bag not reinstalled \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 0

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

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 0

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown \_\_\_\_\_

(9) Police indicated "unknown"

## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant at This Occupant Position 0

- (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

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

27. Seat Performance (this Occupant Position) 6

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

CHILD SAFETY SEAT

28. 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

29. Type of Child Safety Seat 0  
 (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

30. 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

31. Child Safety Seat Harness Usage 00

32. Child Safety Seat Shield Usage 00

33. Child Safety Seat Tether Usage 00

Note: Options below applicable to Variables OA31-OA33.  
 (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**

34. 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

35. 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
- (8) Treatment - other (specify):  
\_\_\_\_\_
- (9) Unknown

36. 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

37. 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

38. 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

**STOP - GO TO VARIABLE 44 ON PAGE 7**

**VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**

39. 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

40. 1st Medically Reported Cause of Death 00

41. 2nd Medically Reported Cause of Death 00

42. 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

43. 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

**AUTOMATIC BELT SYSTEM**

44. 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

45. 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

46. Automatic (Passive) Belt System Type 0

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

47. 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

48. 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

49. 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

Check the Primary Source Used In Determining Belt Use.

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

- [ ] Unknown if belt used

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO [ ] YES [ ]

UPDATE CANDIDATE?

NO [X] YES [ ]

**STOP - VARIABLES 50 THROUGH 53 ARE COMPLETED BY THE ZONE CENTER**

**TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 01  
 (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

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

52. Arterial Blood Gases (ABG) -  $\text{HCO}_3$  01  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the  $\text{HCO}_3$   
 (96) ABGs reported,  $\text{HCO}_3$  unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

**BELT USE DETERMINATION**

53. Primary Source of Belt Use Determination L  
 (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>48</u>	3. Vehicle Number <u>01</u>
2. Case Number - Stratum <u>203K</u>	4. Occupant Number <u>01</u>

## INJURY DATA

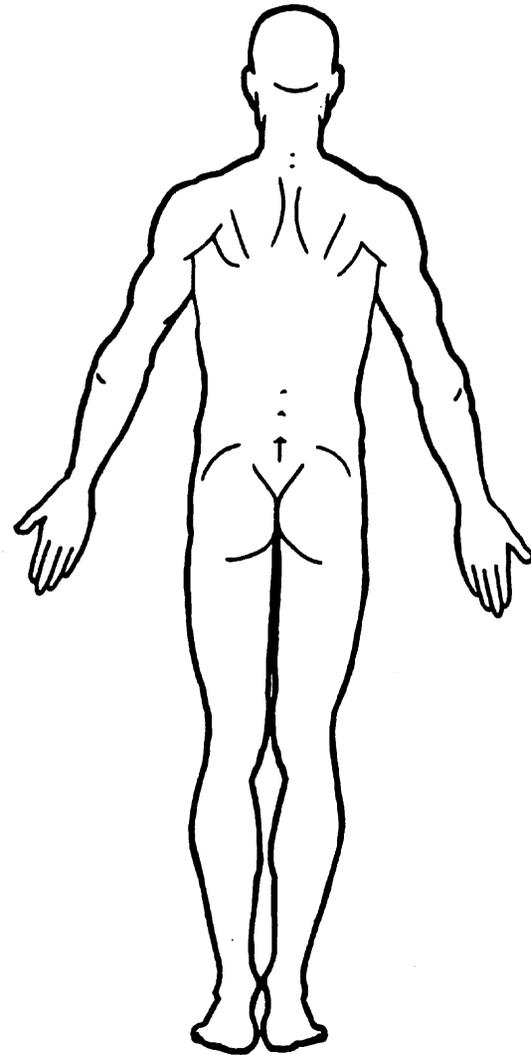
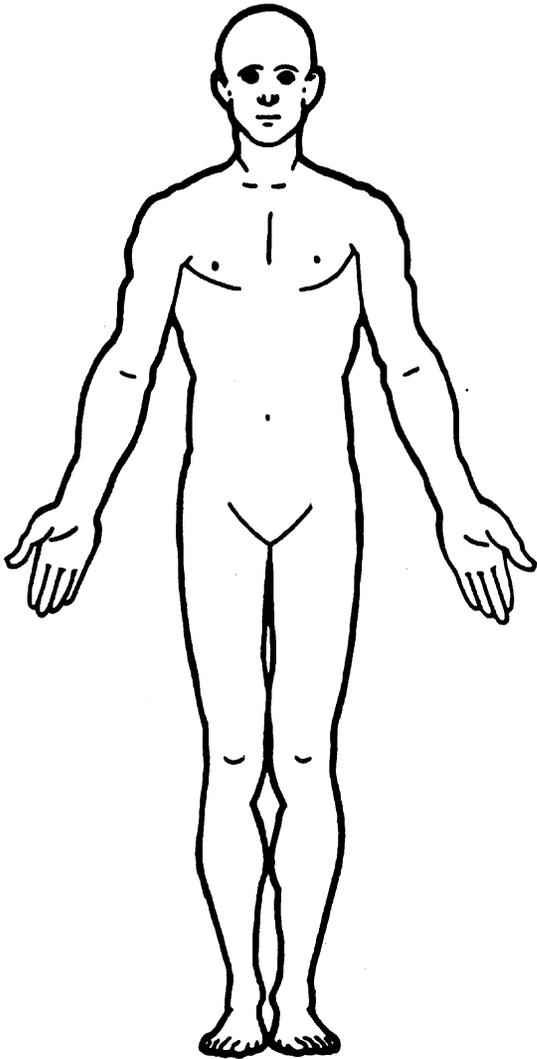
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the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

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



## 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.)



## SOURCE OF INJURY DATA

### OFFICIAL

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

### UNOFFICIAL

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

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_
- (28) Left side window sill

### RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_

- (38) Right side window sill

### INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar or door frame attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify): \_\_\_\_\_
- (47) Interior loose objects
- (48) Child safety seat (specify): \_\_\_\_\_
- (49) Other interior object (specify): \_\_\_\_\_

### ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

### FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

### REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): \_\_\_\_\_

### EXTERIOR OF OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): \_\_\_\_\_
- (68) Unknown exterior objects

### EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): \_\_\_\_\_

- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): \_\_\_\_\_

- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): \_\_\_\_\_

- (83) Unknown exterior of other motor vehicle

### OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify): \_\_\_\_\_
- (86) Unknown vehicle or object

### NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): INERTIAL FORCES
- (93) Air bag exhaust gases
- (97) Injured, unknown source

### INJURY SOURCE CONFIDENCE LEVEL

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

### DIRECT/INDIRECT INJURY

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

## INJURY SOURCE

### FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

### LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_

## OCCUPANT INJURY CLASSIFICATION

### Body Region

- (1) Head
- (2) Face
- (3) Neck
- (4) Thorax
- (5) Abdomen
- (6) Spine
- (7) Upper Extremity
- (8) Lower Extremity
- (9) Unspecified

### Type of Anatomic Structure

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes muscles/ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

### Specific Anatomic Structure

- Whole Area
- (02) Skin - Abrasion
  - (04) Skin - Contusion
  - (06) Skin - Laceration
  - (08) Skin - Avulsion
  - (10) Amputation
  - (20) Burn
  - (30) Crush
  - (40) Degloving
  - (50) Injury - NFS
  - (90) Trauma, other than mechanical
- Head - LOC
- (02) Length of LOC
  - (04, 06, 08) Level of Consciousness
  - (10) Concussion

### Spine

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

### Vessels, Nerves, Organs, Bones

Joints are assigned consecutive two digit numbers beginning with 02

### Level of Injury

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.

### 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

### Aspect

- (1) Right
- (2) Left
- (3) Bilateral
- (4) Central
- (5) Anterior
- (6) Posterior
- (7) Superior
- (8) Inferior
- (9) Unknown
- (0) Whole region

# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

No

Yes

Blood Alcohol  
Level (mg/dl)

BAL = \_\_\_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_\_\_

Units of Blood  
Given

Units = \_\_\_\_\_

Arterial Blood  
Gases

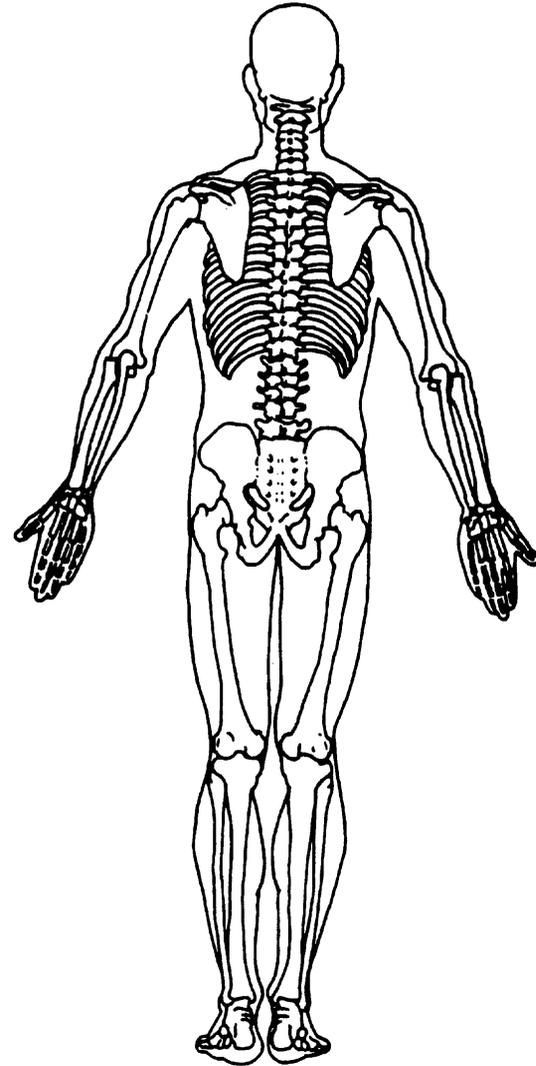
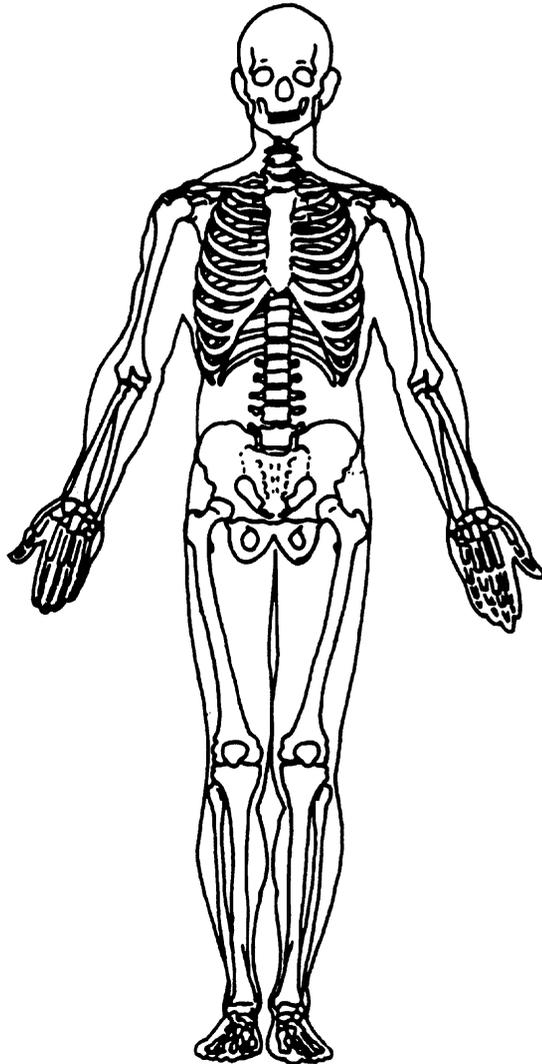
pH = \_\_\_\_

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

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

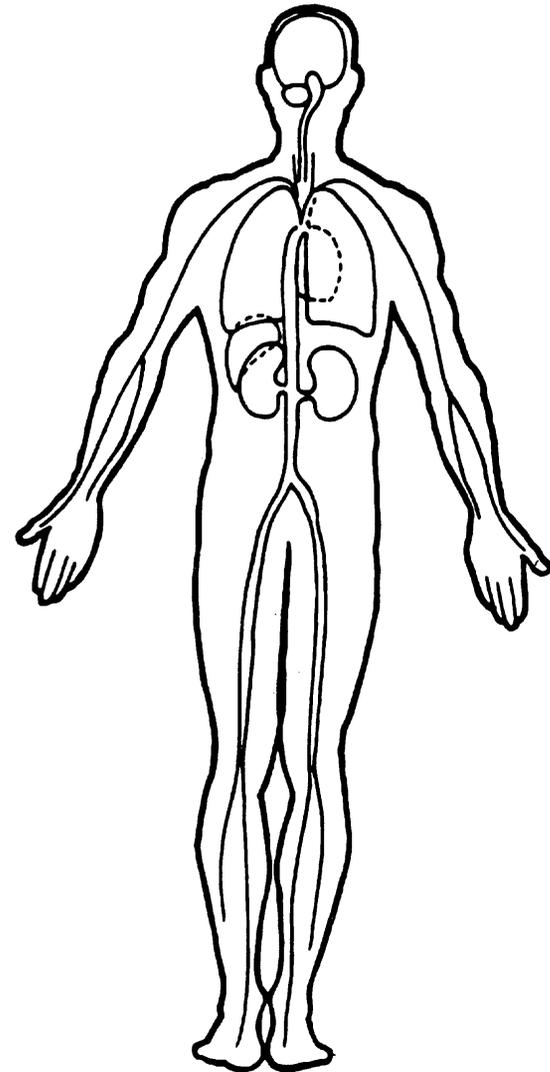
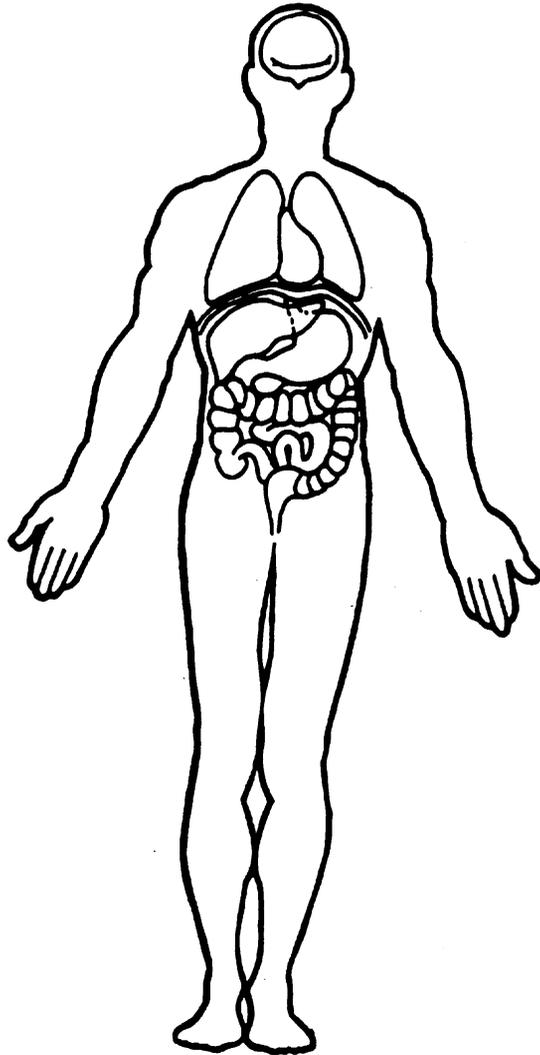
HCO<sub>3</sub> \_\_\_\_\_

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.)





# OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number 48  
 2. Case Number - Stratum 203K  
 3. Vehicle Number 01  
 4. Occupant Number 02

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 25  
 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  
 (9) Unknown

7. Occupant's Height 178  
 Code actual height to the nearest  
 centimeter.  
 (999) Unknown  
70 inches X 2.54 = 177.8 centimeters

8. Occupant's Weight 079  
 Code actual weight to the nearest  
 kilogram.  
 (999) Unknown  
175 pounds X .4536 = 79.3 kilograms

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

## OCCUPANT'S SEATING

10. Occupant's Seat Position 13  
*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 7  
 (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

- (NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)
- (0) Not entrapped
  - (1) Entrapped
  - (9) Unknown

## RESTRAINT SYSTEM EVALUATION

17. 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 \_\_\_\_\_

18. 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 \_\_\_\_\_

19. 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 \_\_\_\_\_

20. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used
- (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 \_\_\_\_\_

21. Air Bag System Availability/Function 0

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

*Non-functional*

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

(3) Air bag not reinstalled \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 0

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

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 0

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown \_\_\_\_\_

(9) Police indicated "unknown" \_\_\_\_\_

## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant  
at This Occupant Position 0

- (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

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

27. 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**

28. 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

29. Type of Child Safety Seat 0  
 (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

30. 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

31. Child Safety Seat Harness Usage 00

32. Child Safety Seat Shield Usage 00

33. Child Safety Seat Tether Usage 00

Note: Options below applicable to  
 Variables OA31-OA33.  
 (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**

34. 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

35. 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
- (8) Treatment - other (specify):
- (9) Unknown

36. 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

37. 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

38. 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

**STOP - GO TO VARIABLE 44 ON PAGE 7**

**VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**

39. 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

40. 1st Medically Reported Cause of Death 00

41. 2nd Medically Reported Cause of Death 00

42. 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

43. 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

**AUTOMATIC BELT SYSTEM**

44. 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

45. 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

46. Automatic (Passive) Belt System Type 0  
 (0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

47. 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

48. 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

49. 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

Check the Primary Source Used In Determining Belt Use.

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

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION? NO [ ] YES [ ]

UPDATE CANDIDATE? NO [X] YES [ ]

**STOP - VARIABLES 50 THROUGH 53 ARE COMPLETED BY THE ZONE CENTER**

**TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 00  
 (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

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

52. Arterial Blood Gases (ABG) -  $\text{HCO}_3$  00  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the  $\text{HCO}_3$   
 (96) ABGs reported,  $\text{HCO}_3$  unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

**BELT USE DETERMINATION**

53. 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>48</u>
CASE NUMBER	<u>203K</u>
VEHICLE NUMBER	<u>01</u>
OCCUPANT NUMBER	<u>02</u>

# OCCUPANT INJURY FORM

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

ENTIRE FORM

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

**OCCUPANT RELATED**

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

- 24. Rollover 4  
 (0) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
 (1) Rollover, 1 quarter turn only  
 (2) Rollover, 2 quarter turns  
 (3) Rollover, 3 quarter turns  
 (4) Rollover, 4 or more quarter turns (specify):  
4 qtr. turns.  
 (5) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (9) Rollover (overturn), details unknown

**VEHICLE WEIGHT ITEMS**

- 19. Vehicle Curb Weight 1,140  
 Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown  
2,514 lbs X .4536 = 1,140 kgs  
 Source: [REDACTED]
- 20. Vehicle Cargo Weight 0,000  
 Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown  
 \_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

**OVERRIDE/UNDERRIDE (THIS VEHICLE)**

- 25. Front Override/Underride (this Vehicle) 0
- 26. Rear Override/Underride (this Vehicle) 0  
 (0) No override/underride, or not an end-to-end impact  
*Override (see specific CDC)*  
 (1) 1st CDC  
 (2) 2nd CDC  
 (3) Other not automated CDC (specify):  
 \_\_\_\_\_  
*Underride (see specific CDC)*  
 (4) 1st CDC  
 (5) 2nd CDC  
 (6) Other not automated CDC (specify):  
 \_\_\_\_\_  
 (7) Medium/heavy truck or bus override  
 (9) Unknown

**RECONSTRUCTION DATA**

- 21. Towed Trailing Unit 0  
 (0) No towed unit  
 (1) Yes--towed trailing unit  
 (9) Unknown
- 22. Documentation of Trajectory Data for This Vehicle 0  
 (0) No  
 (1) Yes
- 23. Post Collision Condition of Tree or Pole (For Highest Delta V) 0  
 (0) Not collision (for highest delta V) with tree or pole  
 (1) Not damaged  
 (2) Cracked/sheared  
 (3) Tilted < 45 degrees  
 (4) Tilted ≥ 45 degrees  
 (5) Uprooted tree  
 (6) Separated pole from base  
 (7) Pole replaced  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown

**HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V**

- Values: (000)-(359) Code actual value  
 (997) Noncollision  
 (998) Impact with object  
 (999) Unknown
- 27. Heading Angle For This Vehicle 180
  - 28. Heading Angle For Other Vehicle 275

Category	Configuration	ACCIDENT TYPES (Includes Intent)									
I Single Driver	A Right Roadside Departure	01 DRIVE OFF ROAD	02 CONTROL/ TRACTION LOSS	03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN					
	B Left Roadside Departure	06 DRIVE OFF ROAD	07 CONTROL/ TRACTION LOSS	08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN					
	C Forward Impact	11 PARKED VEH.	12 STA. OBJECT	13 PEDESTRIAN/ ANIMAL	14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN				
II Same Trafficway Same Direction	D Rear-End	20 STOPPED 21, 22, 23	22 SLOWER 24, 25, 26, 27	28 DECCEL. 29, 30, 31	30 AVOID COLLISION WITH VEH.	(EACH - 32) SPECIFICS OTHER	(EACH - 33) SPECIFICS UNKNOWN				
	E Forward Impact	34 CONTROL/ TRACTION LOSS	35 CONTROL/ TRACTION LOSS	36 AVOID COLLISION WITH VEH.	37 AVOID COLLISION WITH OBJECT	38 CONTROL/ TRACTION LOSS	39 AVOID COLLISION WITH VEH.	40 AVOID COLLISION WITH OBJECT	41 CONTROL/ TRACTION LOSS	(EACH - 42) SPECIFICS OTHER	(EACH - 43) SPECIFICS UNKNOWN
	F Sideswipe Angle	44 LATERAL MOVE	45 LATERAL MOVE	46 LATERAL MOVE	47 LATERAL MOVE	(EACH - 48) SPECIFICS OTHER	(EACH - 49) SPECIFICS UNKNOWN				
III Same Trafficway Opposite Direction	G Head-On	50 LATERAL MOVE	51 LATERAL MOVE	(EACH - 52) SPECIFICS OTHER	(EACH - 53) SPECIFICS UNKNOWN						
	H Forward Impact	54 CONTROL/ TRACTION LOSS	55 CONTROL/ TRACTION LOSS	56 AVOID COLLISION WITH VEH.	57 AVOID COLLISION WITH OBJECT	58 CONTROL/ TRACTION LOSS	59 AVOID COLLISION WITH VEH.	60 AVOID COLLISION WITH OBJECT	61 CONTROL/ TRACTION LOSS	(EACH - 62) SPECIFICS OTHER	(EACH - 63) SPECIFICS UNKNOWN
	I Sideswipe Angle	64 LATERAL MOVE	65 LATERAL MOVE	(EACH - 66) SPECIFICS OTHER	(EACH - 67) SPECIFICS UNKNOWN						
IV Change Trafficway Vehicle Turning	J Turn Across Path	68 INITIAL OPPOSITE DIRECTIONS	69 INITIAL OPPOSITE DIRECTIONS	70 INITIAL SAME DIRECTIONS	71 INITIAL SAME DIRECTIONS	72 INITIAL SAME DIRECTIONS	73 INITIAL SAME DIRECTIONS	(EACH - 74) SPECIFICS OTHER	(EACH - 75) SPECIFICS UNKNOWN		
	K Turn Into Path	77 TURN INTO SAME DIRECTION	78 TURN INTO SAME DIRECTION	79 TURN INTO OPPOSITE DIRECTIONS	80 TURN INTO OPPOSITE DIRECTIONS	81 TURN INTO OPPOSITE DIRECTIONS	82 TURN INTO OPPOSITE DIRECTIONS	(EACH - 84) SPECIFICS OTHER	(EACH - 85) SPECIFICS UNKNOWN		
V Intersecting Paths (Vehicle Damage)	L Straight Paths	87 STRAIGHT PATHS	88 STRAIGHT PATHS	(EACH - 89) SPECIFICS OTHER	(EACH - 90) SPECIFICS UNKNOWN						
VI Miscellaneous	M Backing Etc.	92 BACKING VEH.	93 OTHER VEH. OR OBJECT	98 Other Accident Type	99 Unknown Accident Type	00 No Impact					

**OTHER DATA**

56. Driver's Zip Code [REDACTED]

- (00000) Driver not present
- (00001) Driver not a resident of U.S. or territories  
Code actual 5-digit zip code
- (99999) Unknown

57. Driver's Race/Ethnic Origin 1

- (0) Driver not present
- (1) White (non-Hispanic)
- (2) Black (non-Hispanic)
- (3) White (Hispanic)
- (4) Black (Hispanic)
- (5) American Indian, Eskimo or Aleut
- (6) Asian or Pacific Islander
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

58. Vehicle Special Use (This Trip) 0

- (0) No special use
- (1) Taxi
- (2) Vehicle used as school bus
- (3) Vehicle used as other bus
- (4) Military
- (5) Police
- (6) Ambulance
- (7) Fire truck or car
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**ROLLOVER DATA**

If GV07 (Body Type) ≠ 1-49, leave GV59-GV63 blank.  
If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.  
If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type 2

- (0) No rollover
- (1) Trip-over
- (2) Flip-over
- (3) Turn-over
- (4) Climb-over
- (5) Fall-over
- (6) Bounce-over
- (7) Collision with another vehicle
- (8) Other rollover initiation type specify): \_\_\_\_\_
- (9) Unknown rollover initiation type

60. 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
- (9) Unknown

61. Rollover Initiation Object Contacted 01

62. Location on Vehicle Where Initial Principal Tripping Force Is Applied 2

- (0) No rollover
- (1) Wheels/tires
- (2) Side plane
- (3) End plane
- (4) Undercarriage
- (5) Other location on vehicle (specify): \_\_\_\_\_
- (8) Non-contact rollover forces (specify): \_\_\_\_\_
- (9) Unknown

63. Direction of Initial Roll 1

- (0) No rollover
- (1) Roll right - primarily about the longitudinal axis
- (2) Roll left - primarily about the longitudinal axis
- (5) End-over-end (i.e., primarily about the lateral axis)
- (9) Unknown roll direction

**PRECRASH DATA**

64. Pre-Event Movement (Prior to Recognition of Critical Event) 01

- (01) Going straight
- (02) Slowing or stopping in traffic lane
- (03) Starting in traffic lane
- (04) Stopped in traffic lane
- (05) Passing or overtaking another vehicle
- (06) Disabled or parked in travel lane
- (07) Leaving a parking position
- (08) Entering a parking position
- (09) Turning right
- (10) Turning left
- (11) Making a U-turn
- (12) Backing up (other than for parking position)
- (13) Negotiating a curve
- (14) Changing lanes
- (15) Merging
- (16) Successful avoidance maneuver to a previous critical event
- (97) Other (specify): \_\_\_\_\_
- (98) No driver present
- (99) Unknown

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

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

### Noncollision

- (31) Turn-over — fall-over
- (33) 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

- (71) Motor vehicle 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>48</u>	3. Vehicle Number <u>02</u>
2. Case Number - Stratum <u>203K</u>	

#### VEHICLE IDENTIFICATION

VIN JM2UC121AE0 XXXXXXXXXX Model Year 84  
 Vehicle Make (specify): MAZDA Vehicle Model (specify): B2000

#### LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
01	beg 32 behind LF Axle	beg 9cm behind LF Axle
02	Rollover	No CL

#### 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 and document on the vehicle diagram the location of maximum crush.

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

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

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

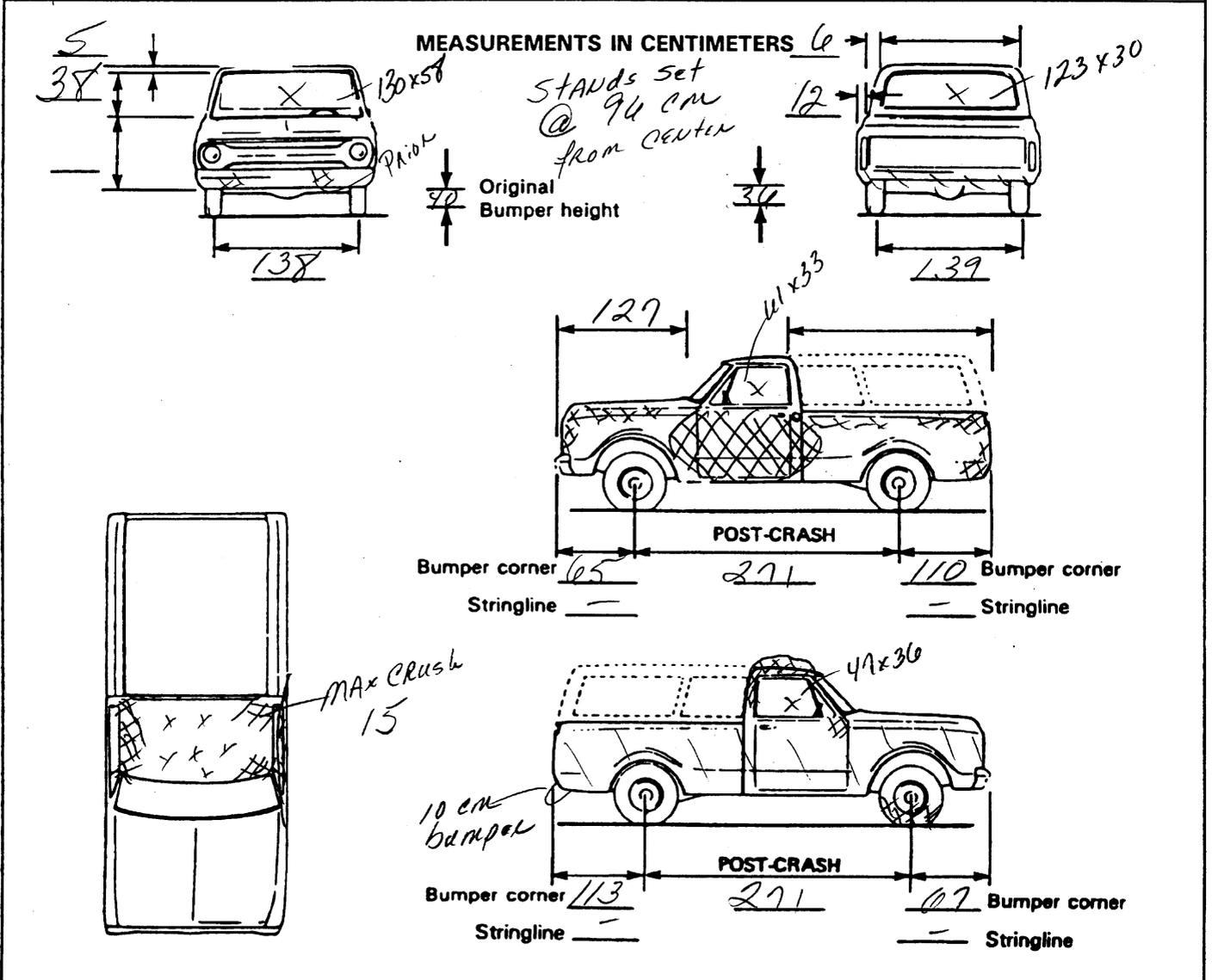
Specific Impact Number	Plane of Impact C-Measurements	Direct Damage		Field L	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	±D
		Width (CDC)	Max Crush								
01	Side	172	C4	229	18	22	26	8	28	19	
	door opening Adj				-	-	+4	+29	-	-	
	S/L Adj				-14	16	16	16	14	16	
	Free space				2	2	2	2	2	0	
	Actual Crush	172	13	229	0	4	12	13	10	1	+18
02	top		15								

# ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>106.9</u>	inches	x 2.54	=	<u>271.5</u>	cm
Overall Length	<u>179.5</u>	inches	x 2.54	=	<u>455.9</u>	cm
Maximum Width	_ _ _ . _	inches	x 2.54	=	_ _ _ . _	cm
Curb Weight	<i>Ship. Wt.</i> <u>2,414</u>	pounds	x .4536	=	<sup>+45</sup> <u>1,139.9</u>	kg
Average Track	_ _ _ . _	inches	x 2.54	=	_ _ _ . _	cm
Front Overhang	_ _ _ . _	inches	x 2.54	=	_ _ _ . _	cm
Rear Overhang	_ _ _ . _	inches	x 2.54	=	_ _ _ . _	cm
Undeformed End Width	_ _ _ . _	inches	x 2.54	=	_ _ _ . _	cm
Engine Size: cyl./displ.	_ _ _ . _	cc	x .001	=	_ . _	L
	_ _ _ . _	CID	x .0164	=	_ . _	L

**VEHICLE DAMAGE SKETCH**

<p><b>TIRE—WHEEL DAMAGE</b></p> <p>a. Rotation physically restricted      b. Tire deflated</p> <p>RF <u>2</u>      RF <u>2</u>                  LF <u>2</u>      LF <u>2</u>                  RR <u>2</u>      RR <u>2</u>                  LR <u>2</u>      LR <u>2</u></p> <p>(1) Yes (2) No (8) NA (9) Unk.</p>	<p><b>ORIGINAL SPECIFICATIONS</b></p> <p>Wheelbase <u>272</u> cm                  Overall Length <u>456</u> cm                  Maximum Width <u>160</u> cm                  Curb Weight <u>1140</u> kg                  Average Track <u>—</u> cm                  Front Overhang <u>80</u> cm                  Rear Overhang <u>106</u> cm                  Undeformed End Width <u>156</u> cm                  Engine Size: cyl./displ. <u>4 cyl. 2.0</u> L</p>	<p><b>WHEEL STEER ANGLES</b>                  (For locked front wheels or displaced rear axles only)</p> <p>RF ± <u>—</u> °                  LF ± <u>—</u> °                  RR ± <u>—</u> °                  LR ± <u>—</u> °</p> <p>Within ± 5 degrees</p>
<p><b>TYPE OF TRANSMISSION</b></p> <p><input checked="" type="checkbox"/> Manual      <input type="checkbox"/> Automatic</p>	<p><b>DRIVE WHEELS</b></p> <p><input type="checkbox"/> FWD    <input checked="" type="checkbox"/> RWD    <input type="checkbox"/> 4WD</p>	<p><b>Approximate Cargo Weight</b> <u>0</u> kg</p>



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

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



**COLLISION DEFORMATION CLASSIFICATION**

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>01</u>	6. <u>10</u> <u>11</u>	7. <u>L</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <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>P</u>	17. <u>D</u>	18. <u>0</u>	19. <u>03</u>
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**CRUSH PROFILE IN CENTIMETERS**

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

HIGHEST DELTA "V"

20. L	21. C <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>229</u>	<u>000</u>	<u>004</u>	<u>012</u>	<u>013</u>	<u>010</u>	<u>001</u>	<u>⊕ 018</u>

Second Highest Delta "V"

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

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

0

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

1

28. Original Wheelbase Code to the nearest centimeter (999) Unknown

272

1069 inches X 2.54 = 271.5 centimeters

<p>29. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? <u>0</u></p> <p>(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</p>	<p>34. Fuel Tank-1 Location <u>5</u></p> <p>35. Fuel Tank-2 Location <u>0</u></p> <p>(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</p>
<p>30. Fire Occurrence <u>0</u></p> <p>(0) No fire</p> <p>Yes, fire occurred                  (1) Minor                  (2) Major                  (9) Unknown</p>	<p>36. Fuel Tank-1 Filler Cap Location <u>4</u></p> <p>37. Fuel Tank-2 Filler Cap Location <u>0</u></p> <p>(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</p>
<p>31. Origin of Fire <u>0</u></p> <p>(0) No fire                  (1) Vehicle exterior (front, side, back, top)                  (2) Exhaust system                  (3) Fuel tank (and other fuel retention system parts)                  (4) Engine compartment                  (5) Cargo/trunk compartment                  (6) Instrument panel                  (7) Passenger compartment area                  (8) Other location (specify): _____                  (9) Unknown</p>	<p>38. Fuel Tank-1 Damage <u>1</u></p> <p>39. Fuel Tank-2 Damage <u>0</u></p> <p>(0) No fuel tank                  (1) No damage to fuel tank                  (2) Deformed, no seam failure                  (3) Deformed, with a seam failure                  (4) Punctured                  (5) Lacerated (ripped)                  (6) Abraded (scraped)                  (7) Filler neck separation from the fuel tank                  (8) Other damage (specify): _____                  (9) Unknown</p>
<p>32. Type of Fuel Tank-1 <u>1</u></p>	
<p>33. Type of Fuel Tank-2 <u>0</u></p> <p>(0) No fuel tank (electrical vehicle)                  (1) Metallic                  (2) Non-metallic                  (9) Unknown</p>	

40. Location of Fuel System-1 Leakage 1

41. Location of Fuel System-2 Leakage 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 \_\_\_\_\_

42. Fuel Type-1 01

43. 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

44. 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 AND WAS NOT AN AOPS \*\*\*  
 (I.E., GV09=0 OR 9 AND GV36=0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



# INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number 48  
 2. Case Number - Stratum 203K  
 3. Vehicle Number 02

## INTEGRITY

4. Passenger Compartment Integrity 98  
 (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):  
WS, LF, RF, Side windows,  
 (99) Unknown backlight

Door, Tailgate or Hatch Opening Prd open  
 5. LF 3 6. RF 3 7. LR 0 8. RR 0 9. TG/H 0

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

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code 0  
 10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

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

Door, Tailgate or Hatch Came Open During Collision

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

## GLAZING

Glazing Damage from Impact Forces

15. WS 4 16. LF 6 17. RF 0 18. LR 8 19. RR 8  
 20. BL 4 21. Roof 8 22. Other 0

(0) No glazing damage from impact forces in bed of code  
 (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  
 (8) No glazing  
 (9) Unknown if damaged

Glazing Damage from Occupant Contact

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

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

If No Glazing Damage **And** No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As 0

## Type of Window/Windshield Glazing

31. WS 1 32. LF 2 33. RF 2 34. LR 0 35. RR 0  
 36. BL 2 37. Roof 0 38. Other 0

(0) No glazing contact and no damage, or no glazing  
 (1) AS-1 - Laminated  
 (2) AS-2 - Tempered  
 (3) AS-3 - Tempered-tinted  
 (4) AS-14 - Glass/Plastic  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown

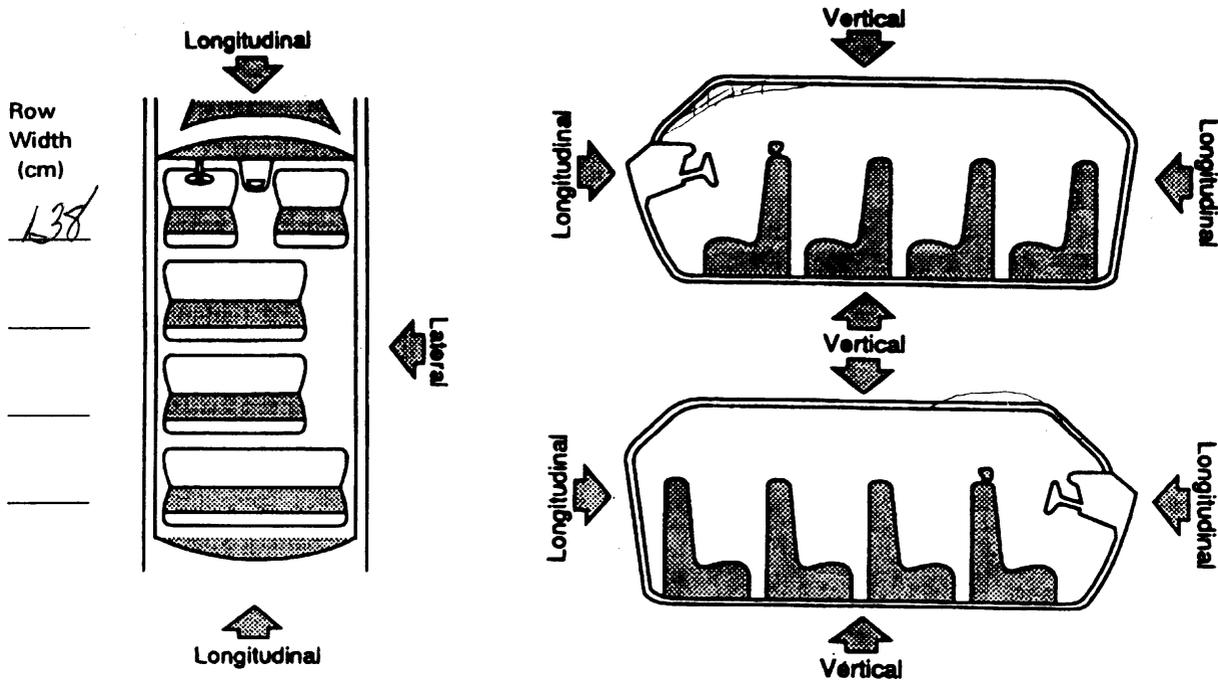
## Window Precrash Glazing Status

39. WS 1 40. LF 2 41. RF 2 42. LR 0 43. RR 0  
 44. BL 1 45. Roof 0 46. Other 0

(0) No glazing contact and no damage, or no glazing  
 (1) Fixed  
 (2) Closed  
 (3) Partially opened  
 (4) Fully opened  
 (9) Unknown

# INTRUSION WORKSHEET

Note: Sketch intruded areas



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION	
<del>11 *</del>	<del>B' Pillar</del>	<del>78</del>	<del>63</del>	<del>= 15</del>	<del>(4) Front</del>
}	Roof side rail	78	63	= 15	(4)
	A' Pillar	71	68	= 3	(8)
	front header	43	32	= 11	(5)
	Roof	75	64	= 19	(3)
	back header	32	25	= 7	(6)
	door panel	62	42	= 20	(1) LAT
	kick panel	64	61	= 5	(7) LAT
* B' Pillar	62	42	= 20	(2) LAT	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	

**OCCUPANT AREA INTRUSION**

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

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>11</u>	48. <u>10</u>	49. <u>3</u>	50. <u>3</u>
2nd	51. <u>11</u>	52. <u>07</u>	53. <u>3</u>	54. <u>3</u>
3rd	55. <u>11</u>	56. <u>12</u>	57. <u>3</u>	58. <u>1</u>
4th	59. <u>11</u>	60. <u>13</u>	61. <u>3</u>	62. <u>1</u>
5th	63. <u>11</u>	64. <u>15</u>	65. <u>2</u>	66. <u>1</u>
6th	67. <u>11</u>	68. <u>18</u>	69. <u>1</u>	70. <u>1</u>
7th	71. <u>11</u>	72. <u>27</u>	73. <u>1</u>	74. <u>3</u>
8th	75. <u>11</u>	76. <u>06</u>	77. <u>1</u>	78. <u>1</u>
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) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify): \_\_\_\_\_

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

*Exterior Components*

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

**LOCATION OF INTRUSION**

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

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

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

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

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

- (99) Unknown

**MAGNITUDE OF INTRUSION**

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

**DOMINANT CRUSH DIRECTION**

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

# STEERING RIM SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

	—		=	
--	---	--	---	--

	—		=	
--	---	---	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

--	--	--	--	--

**STEERING COLUMN**

87. Steering Column Type

- (1) Fixed column
- (2) Tilt column
- (3) Telescoping column
- (4) Tilt and telescoping column
- (8) Other column type (specify): \_\_\_\_\_
- (9) Unknown

1

88. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

X X

89. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

X X X

90. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

X X X

91. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

X X X

92. Steering Rim/Spoke Deformation

- 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

00

93. 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

**INSTRUMENT PANEL**

94. Odometer Reading

177,000

\_\_\_\_\_ kilometers—Code to the nearest 1,000 kilometers

- (000) No odometer
- (001) Less than 1,500 kilometers
- (500) 499,500 kilometers or more
- (999) Unknown

109975 miles x 1.6093 = 176988 kilometers

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

95. Instrument Panel Damage from Occupant Contact?

- (0) No
- (1) Yes
- (9) Unknown

0

96. Knee Bolsters Deformed from Occupant Contact?

- (0) No
- (1) Yes
- (8) Not present
- (9) Unknown

8

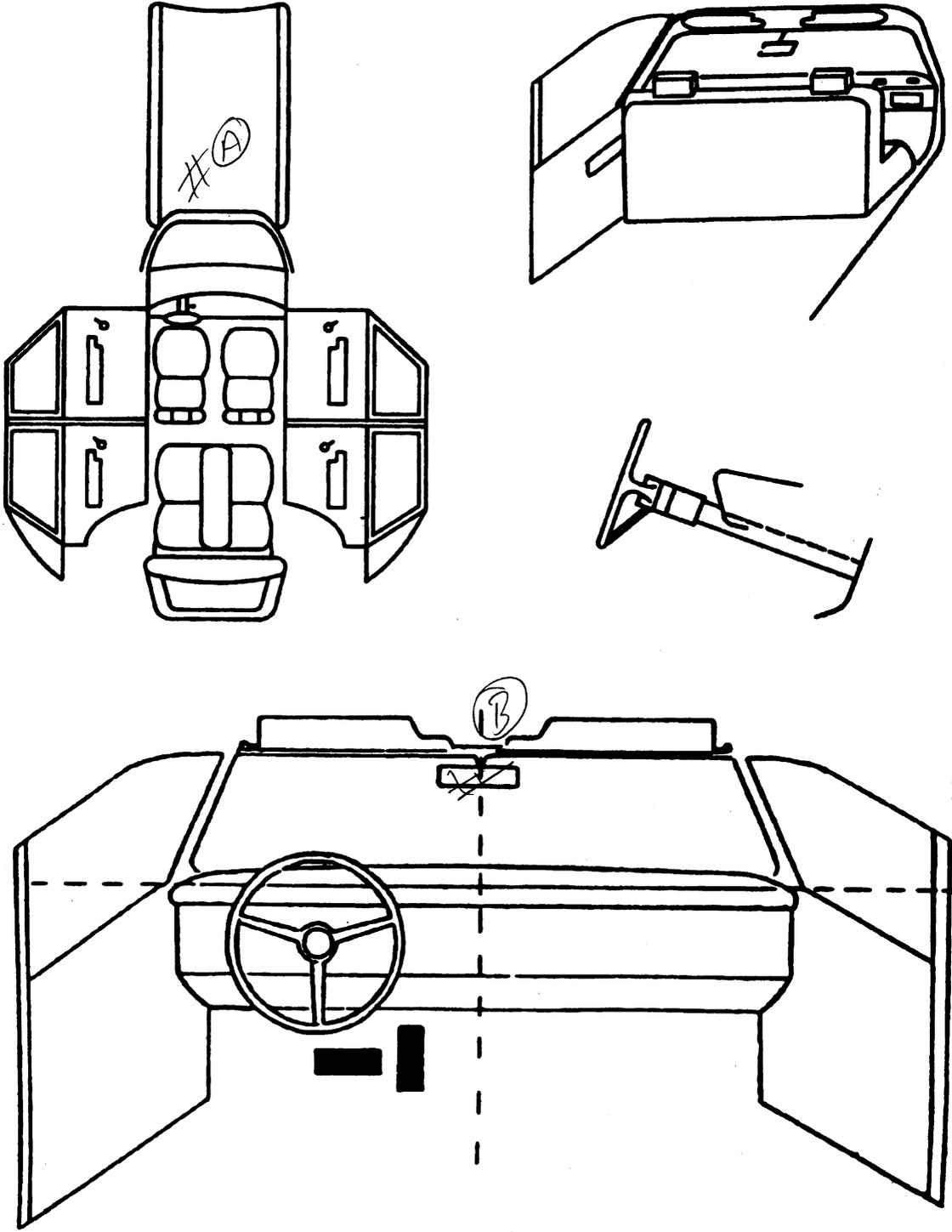
97. Did Glove Compartment Door Open During Collision(s)?

- (0) No
- (1) Yes
- (8) Not present
- (9) Unknown

0

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	54	1	HEAD	SMUDGE	2
B	02	1	HAND	DISPLACED	2
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

**CODES FOR INTERIOR COMPONENTS**

**FRONT**

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

**LEFT SIDE**

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

- (23) Left B-pillar

- (24) Other left pillar (specify): \_\_\_\_\_

- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.

- (27) Other left side object (specify): \_\_\_\_\_

- (28) Left side window sill

**RIGHT SIDE**

- (30) Right side interior surface, excluding hardware or armrests

- (31) Right side hardware or armrest

- (32) Right A (A1/A2)-pillar

- (33) Right B-pillar

- (34) Other right pillar (specify): \_\_\_\_\_

- (35) Right side window glass or frame

- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.

- (37) Other right side object (specify): \_\_\_\_\_

- (38) Right side window sill

**INTERIOR**

- (40) Seat, back support

- (41) Belt restraint webbing/buckle

- (42) Belt restraint B-pillar attachment point

- (43) Other restraint system component (specify): \_\_\_\_\_

- (44) Head restraint system

- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

- (46) Other occupants (specify): \_\_\_\_\_

- (47) Interior loose objects

- (48) Child safety seat (specify): \_\_\_\_\_

- (49) Other interior object (specify): \_\_\_\_\_

**ROOF**

- (50) Front header

- (51) Rear header

- (52) Roof left side rail

- (53) Roof right side rail

- (54) Roof or convertible top

**FLOOR**

- (56) Floor (including toe pan)

- (57) Floor or console mounted transmission lever, including console

- (58) Parking brake handle

- (59) Foot controls including parking brake

**REAR**

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.

- (62) Other rear object (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

		Left	Right
F I R S T	Availability/Function	0	0
	Deployment		
	Failure		

**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**

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

**Are There Indications of Air Bag System Failure?**

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

### AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	0	0
	Use		
	Type		
	Proper Use		
	Failure Modes		

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

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

*Non-functional*

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

**Automatic (Passive) Belt System Use**

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

**Automatic (Passive) Belt System Type**

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

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

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

*Automatic Belt Used Improperly*

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

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

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

**MANUAL RESTRAINTS**

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

If a Child safety seat is present, encode the data on the back of this page.

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

*Wedges behind B' Pillar*

		Left	Center	Right
FIRST	Availability	4	3	4
	Evidence of usage	49	00	04
	Used in this crash?	0	0	0
	Proper Use	0	0	0
	Failure Modes	0	0	0
SECOND	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			

**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

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

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

*Belt Used Improperly*

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

**Manual (Active) Belt 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

**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

## 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.

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

**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)

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### HEAD RESTRAINTS/SEAT EVALUATION

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

		Left	Center	Right
FIRST	Head Restraint Type/Damage	0	0	0
	Seat Type	05	05	05
	Seat Performance	4	1	1
	Seat Orientation	1	1	1
SECOND	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

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

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

**Seat Type (this Occupant Position)**

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

**Seat Performance (this Occupant Position)**

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

**Seat Orientation (this Occupant Position)**

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

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

*NONE*

**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 in vehicle interior diagram)



# OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number 48  
 2. Case Number - Stratum 203K  
 3. Vehicle Number 02  
 4. Occupant Number 01

## 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

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 25  
 Code actual age at time of accident.  
 (00) Less than one year old (specify by month): \_\_\_\_\_  
 (97) 97 years and older  
 (99) Unknown

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

6. Occupant's Sex 1  
 (1) Male  
 (2) Female  
 (9) Unknown

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

7. Occupant's Height 191  
 Code actual height to the nearest  
 centimeter.  
 (999) Unknown

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

75 inches X 2.54 = 190.5 centimeters

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

8. Occupant's Weight 079  
 Code actual weight to the nearest  
 kilogram.  
 (999) Unknown  
175 pounds X .4536 = 79.3 kilograms

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

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

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

## EJECTION/ENTRAPMENT

12. Ejection 2

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

13. Ejection Area 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

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

## RESTRAINT SYSTEM EVALUATION

17. 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 \_\_\_\_\_

18. 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 \_\_\_\_\_

19. 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 \_\_\_\_\_

20. Manual (Active) Belt Failure Modes During Accident 0

(0) No manual belt used

(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 \_\_\_\_\_

21. Air Bag System Availability/Function 0

(0) Not equipped/not available

(1) Air bag

*Non-functional*

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

(3) Air bag not reinstalled \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Air Bag System Deployment 0

(0) Not equipped/not available

(1) Air bag deployed during accident (as a result of impact)

(2) Air bag deployed inadvertently just prior to accident

(3) Air bag deployed, accident sequence undetermined

(4) Nondeployed

(5) Unknown if deployed

(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)

(9) Unknown \_\_\_\_\_

23. Are There Indications of Air Bag System Failure? 0

(0) Not equipped/not available

(1) No

(2) Yes (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

(0) None used

(1) Police did not indicate restraint use

(2) Shoulder belt

(3) Lap belt

(4) Lap and shoulder belt

(5) Belt used, type not specified

(6) Child safety seat

(7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown \_\_\_\_\_

(9) Police indicated "unknown"

HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant at This Occupant Position 0
- (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

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

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

## CHILD SAFETY SEAT

28. 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

29. Type of Child Safety Seat 0  
 (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

30. 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

31. Child Safety Seat Harness Usage 00

32. Child Safety Seat Shield Usage 00

33. Child Safety Seat Tether Usage 00

Note: Options below applicable to  
 Variables OA31-OA33.

(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**

34. 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

35. Treatment - Mortality 3

- (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
- (8) Treatment - other (specify):  
\_\_\_\_\_
- (9) Unknown

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

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

37. Hospital Stay 05

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

*Per Medical Record*

38. Working Days Lost 15

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

**STOP - GO TO VARIABLE 44 ON PAGE 7**

**VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**

39. Time to Death 00

- 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

40. 1st Medically Reported Cause of Death 00

41. 2nd Medically Reported Cause of Death 00

42. 3rd Medically Reported Cause of Death 00

- 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

43. Number of Recorded Injuries for This Occupant 06

- 6 Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

**AUTOMATIC BELT SYSTEM**

44. 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

45. 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

46. Automatic (Passive) Belt System Type 0

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

47. 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

48. 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

49. 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

Check the Primary Source Used In Determining Belt Use.

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

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO  YES

UPDATE CANDIDATE?

NO  YES

**STOP - VARIABLES 50 THROUGH 53 ARE COMPLETED BY THE ZONE CENTER**

**TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 02  
 (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

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

52. Arterial Blood Gases (ABG) -  $\text{HCO}_3$  01  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the  $\text{HCO}_3$   
 (96) ABGs reported,  $\text{HCO}_3$  unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

**BELT USE DETERMINATION**

53. Primary Source of Belt Use Determination L  
 (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>48</u>	3. Vehicle Number <u>02</u>
2. Case Number - Stratum <u>203K</u>	4. Occupant Number <u>01</u>

## INJURY DATA

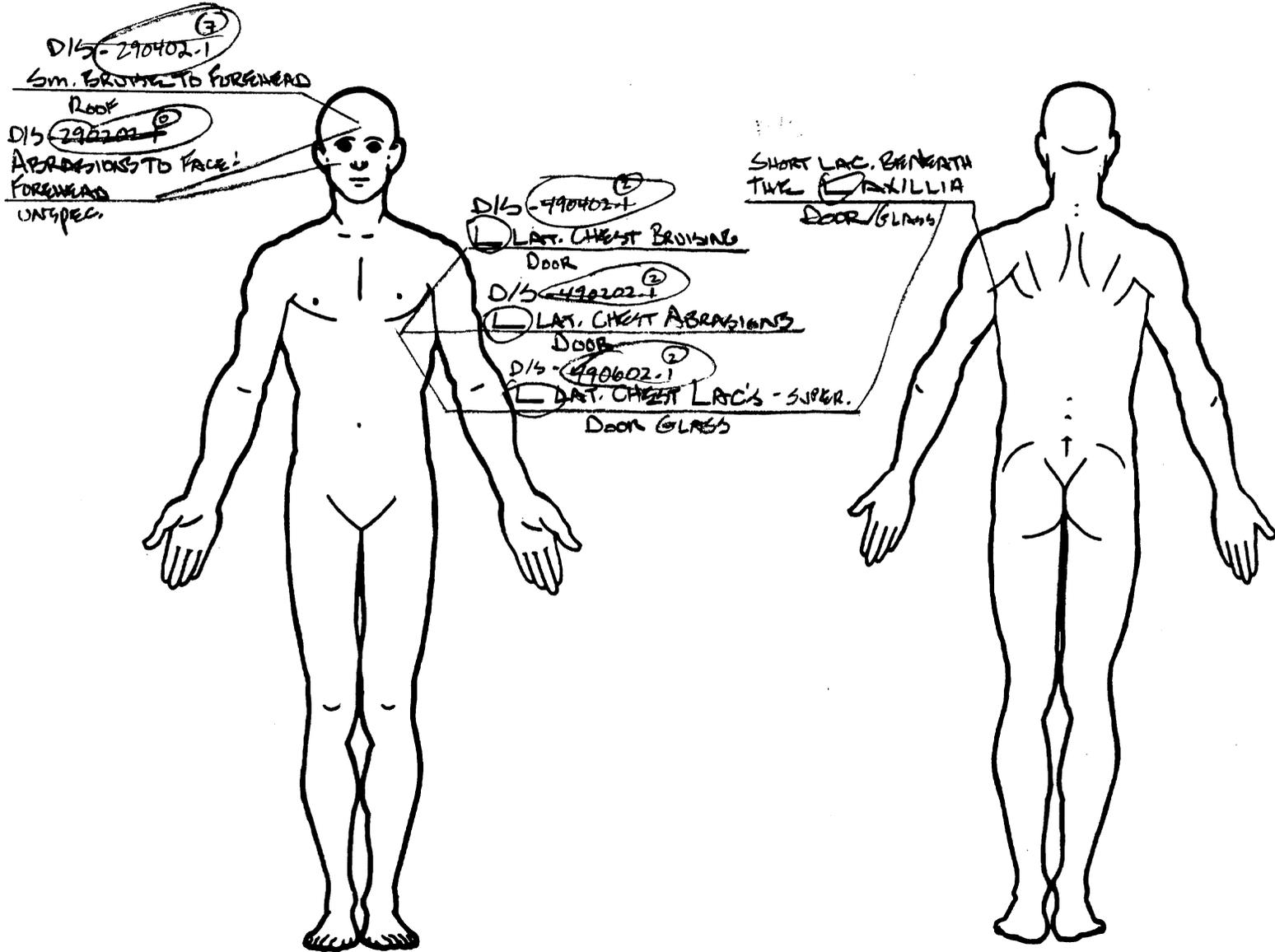
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the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

	Source of Injury Data	A.I.S. - 90					Injury Source	Injury Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number	
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity					Aspect
1st	5. <u>2</u>	6. <u>5</u>	7. <u>4</u>	8. <u>42</u>	9. <u>26</u>	10. <u>4</u>	11. <u>2</u>	12. <u>20</u>	13. <u>2</u>	14. <u>1</u>	15. <u>01</u>
2nd	16. <u>2</u>	17. <u>2</u>	18. <u>9</u>	19. <u>04</u>	20. <u>02</u>	21. <u>1</u>	22. <u>7</u>	23. <u>54</u>	24. <u>2</u>	25. <u>1</u>	26. <u>03</u>
3rd	27. <u>2</u>	28. <u>2</u>	29. <u>9</u>	30. <u>02</u>	31. <u>02</u>	32. <u>1</u>	33. <u>0</u>	34. <u>54</u>	35. <u>3</u>	36. <u>1</u>	37. <u>03</u>
4th	38. <u>2</u>	39. <u>4</u>	40. <u>9</u>	41. <u>04</u>	42. <u>02</u>	43. <u>1</u>	44. <u>2</u>	45. <u>20</u>	46. <u>2</u>	47. <u>1</u>	48. <u>01</u>
5th	49. <u>2</u>	50. <u>4</u>	51. <u>9</u>	52. <u>02</u>	53. <u>02</u>	54. <u>1</u>	55. <u>2</u>	56. <u>20</u>	57. <u>2</u>	58. <u>1</u>	59. <u>01</u>
6th	60. <u>2</u>	61. <u>4</u>	62. <u>9</u>	63. <u>06</u>	64. <u>02</u>	65. <u>1</u>	66. <u>2</u>	67. <u>20</u>	68. <u>2</u>	69. <u>1</u>	70. <u>01</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. ___



# 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.)



**SOURCE OF INJURY DATA**

**OFFICIAL**

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

**UNOFFICIAL**

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

**INJURY SOURCE**

**FRONT**

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

**LEFT SIDE**

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_

- (28) Left side window sill

**RIGHT SIDE**

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_

- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_

- (38) Right side window sill

**INTERIOR**

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar or door frame attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify): \_\_\_\_\_
- (47) Interior loose objects
- (48) Child safety seat (specify): \_\_\_\_\_
- (49) Other interior object (specify): \_\_\_\_\_

**ROOF**

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

**FLOOR**

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

**REAR**

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): \_\_\_\_\_

**EXTERIOR of OCCUPANT'S VEHICLE**

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): \_\_\_\_\_
- (68) Unknown exterior objects

**EXTERIOR OF OTHER MOTOR VEHICLE**

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): \_\_\_\_\_

- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): \_\_\_\_\_

- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): \_\_\_\_\_

- (83) Unknown exterior of other motor vehicle

**OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT**

- (84) Ground
- (85) Other vehicle or object (specify): \_\_\_\_\_
- (86) Unknown vehicle or object

**NONCONTACT INJURY**

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): \_\_\_\_\_
- (93) Air bag exhaust gases
- (97) Injured, unknown source

**INJURY SOURCE CONFIDENCE LEVEL**

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

**DIRECT/INDIRECT INJURY**

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

**OCCUPANT INJURY CLASSIFICATION**

**Body Region**

- (1) Head
- (2) Face
- (3) Neck
- (4) Thorax
- (5) Abdomen
- (6) Spine
- (7) Upper Extremity
- (8) Lower Extremity
- (9) Unspecified

**Type of Anatomic Structure**

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes muscles/ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

**Specific Anatomic Structure**

- Whole Area**
- (02) Skin - Abrasion
  - (04) Skin - Contusion
  - (06) Skin - Laceration
  - (08) Skin - Avulsion
  - (10) Amputation
  - (20) Burn
  - (30) Crush
  - (40) Degloving
  - (50) Injury - NFS
  - (90) Trauma, other than mechanical
- Head - LOC**
- (02) Length of LOC
  - (04, 06, 08) Level of Consciousness
  - (10) Concussion

**Spine**

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

Vessels, Nerves, Organs, Bones, Joints are assigned consecutive two digit numbers beginning with 02

**Level of Injury**

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.

**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

**Aspect**

- (1) Right
- (2) Left
- (3) Bilateral
- (4) Central
- (5) Anterior
- (6) Posterior
- (7) Superior
- (8) Inferior
- (9) Unknown
- (0) Whole region

# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

No

Yes

Blood Alcohol Level (mg/dl)

BAL = <.10

Glasgow Coma Scale Score

GCSS = ?

Units of Blood Given

Units = ?

Arterial Blood Gases

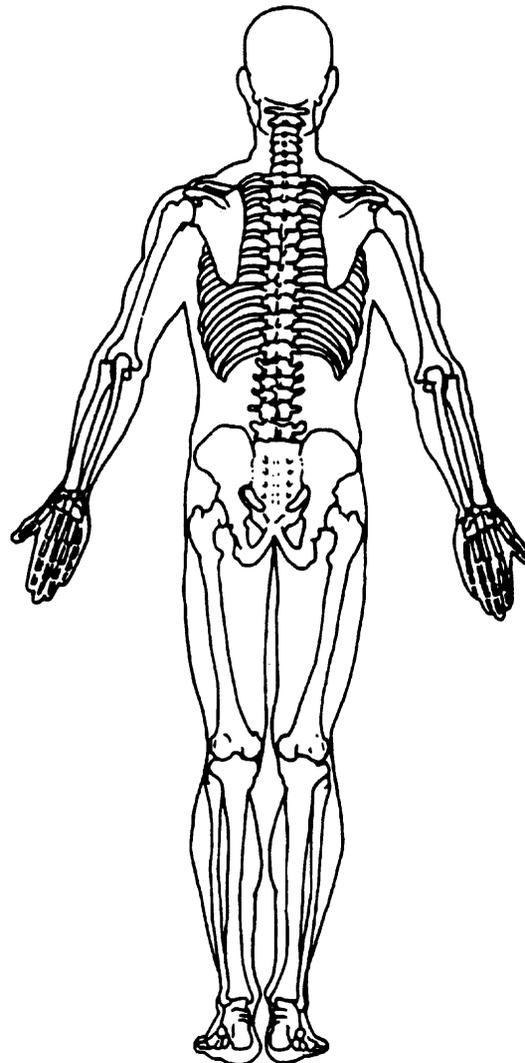
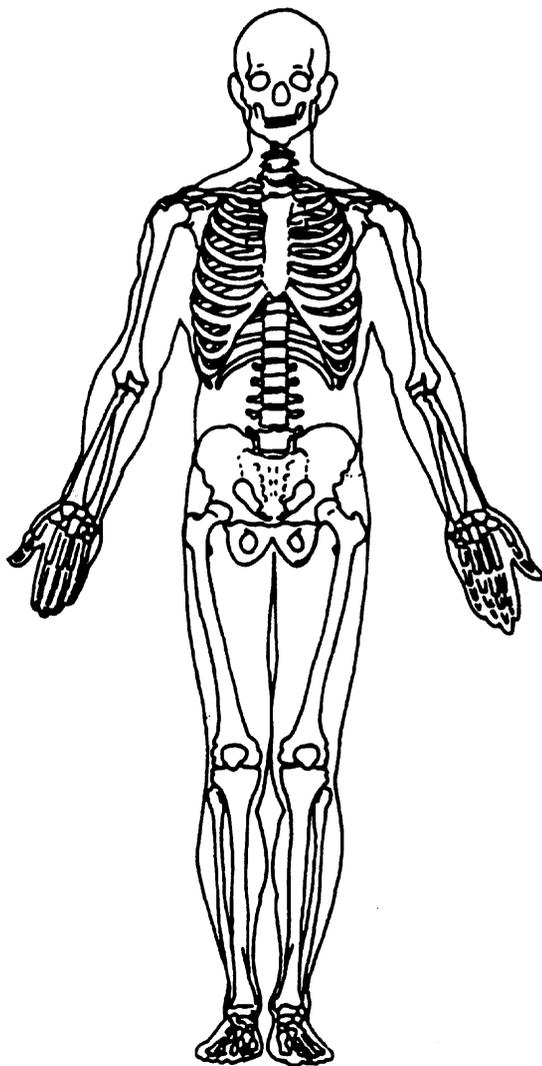
pH = ?

PO<sub>2</sub> = ?

PCO<sub>2</sub> = ?

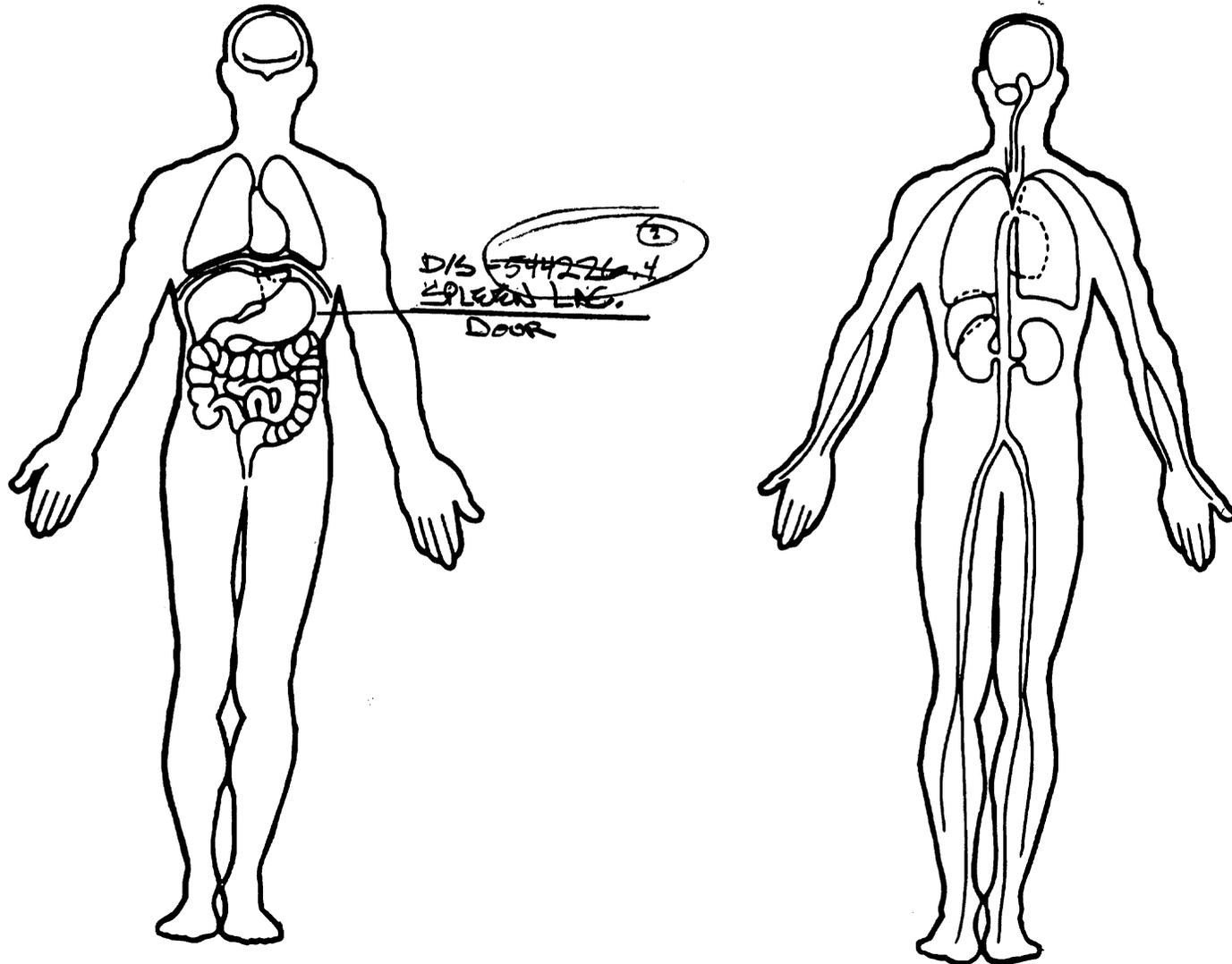
HCO<sub>3</sub> = ?

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.)



OCCUPANT RELATED

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

- 24. Rollover 0  
 (0) No rollover (no overturning)  
  
*Rollover (primarily about the longitudinal axis)*  
 (1) Rollover, 1 quarter turn only  
 (2) Rollover, 2 quarter turns  
 (3) Rollover, 3 quarter turns  
 (4) Rollover, 4 or more quarter turns (specify):  
 \_\_\_\_\_  
  
 (5) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (9) Rollover (overturn), details unknown

VEHICLE WEIGHT ITEMS

- 19. Vehicle Curb Weight 1,160 0  
 Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown  
  
2,567 lbs X .4536 = 1,164.8 kgs  
 Source: '85 [REDACTED]
- 20. Vehicle Cargo Weight 003 0  
 Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown  
  
75 lbs X .4536 = 34 kgs

OVERRIDE/UNDERRIDE (THIS VEHICLE)

- 25. Front Override/Underride (this Vehicle) 0
- 26. Rear Override/Underride (this Vehicle) 0  
 (0) No override/underride, or not an end-to-end impact  
  
*Override (see specific CDC)*  
 (1) 1st CDC  
 (2) 2nd CDC  
 (3) Other not automated CDC (specify):  
 \_\_\_\_\_  
  
*Underride (see specific CDC)*  
 (4) 1st CDC  
 (5) 2nd CDC  
 (6) Other not automated CDC (specify):  
 \_\_\_\_\_  
  
 (7) Medium/heavy truck or bus override  
 (9) Unknown

RECONSTRUCTION DATA

- 21. Towed Trailing Unit 0  
 (0) No towed unit  
 (1) Yes--towed trailing unit  
 (9) Unknown
- 22. Documentation of Trajectory Data for This Vehicle 0  
 (0) No  
 (1) Yes
- 23. Post Collision Condition of Tree or Pole (For Highest Delta V) 0  
 (0) Not collision (for highest delta V) with tree or pole  
 (1) Not damaged  
 (2) Cracked/sheared  
 (3) Tilted < 45 degrees  
 (4) Tilted ≥ 45 degrees  
 (5) Uprooted tree  
 (6) Separated pole from base  
 (7) Pole replaced  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

- Values: (000)-(359) Code actual value  
 (997) Noncollision  
 (998) Impact with object  
 (999) Unknown
- 27. Heading Angle For This Vehicle 171
- 28. Heading Angle For Other Vehicle 261

Category	Configuration	ACCIDENT TYPES (Includes Intent)							
I Single Driver	A Right Roadside Departure	01 DRIVE OFF ROAD	02 CONTROL/ TRACTION LOSS	03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN			
	B Left Roadside Departure	06 DRIVE OFF ROAD	07 CONTROL/ TRACTION LOSS	08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN			
	C Forward Impact	11 PARKED VEH.	12 STA. OBJECT	13 PEDESTRIAN/ ANIMAL	14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN		
II Same Trafficway Same Direction	D Rear-End	20 STOPPED 21, 22, 23	22 SLOWER 24, 25, 27	24 DECEL. 26, 30, 31	25 AVOID COLLISION WITH VEH.	26 AVOID COLLISION WITH OBJECT	(EACH - 32) SPECIFICS OTHER	(EACH - 33) SPECIFICS UNKNOWN	
	E Forward Impact	34 CONTROL/ TRACTION LOSS	35 CONTROL/ TRACTION LOSS	36 AVOID COLLISION WITH VEH.	37 AVOID COLLISION WITH OBJECT	38 AVOID COLLISION WITH VEH.	39 AVOID COLLISION WITH OBJECT	(EACH - 42) SPECIFICS OTHER	(EACH - 43) SPECIFICS UNKNOWN
	F Sideswipe Angle	44	45	46	47	(EACH - 48) SPECIFICS OTHER	(EACH - 49) SPECIFICS UNKNOWN		
III Same Trafficway Opposite Direction	G Head-On	50 LATERAL MOVE	51 LATERAL MOVE	(EACH - 52) SPECIFICS OTHER	(EACH - 53) SPECIFICS UNKNOWN				
	H Forward Impact	54 CONTROL/ TRACTION LOSS	55 CONTROL/ TRACTION LOSS	56 AVOID COLLISION WITH VEH.	57 AVOID COLLISION WITH OBJECT	58 AVOID COLLISION WITH VEH.	59 AVOID COLLISION WITH OBJECT	(EACH - 62) SPECIFICS OTHER	(EACH - 63) SPECIFICS UNKNOWN
	I Sideswipe Angle	64 LATERAL MOVE	65 LATERAL MOVE	(EACH - 66) SPECIFICS OTHER	(EACH - 67) SPECIFICS UNKNOWN				
IV Change Trafficway Vehicle Turning	J Turn Across Path	68 INITIAL OPPOSITE DIRECTIONS	69 INITIAL SAME DIRECTIONS	70 INITIAL SAME DIRECTIONS	71 INITIAL SAME DIRECTIONS	72 INITIAL SAME DIRECTIONS	73 INITIAL SAME DIRECTIONS	(EACH - 74) SPECIFICS OTHER	(EACH - 75) SPECIFICS UNKNOWN
	K Turn Into Path	77 TURN INTO SAME DIRECTION	78 TURN INTO SAME DIRECTION	79 TURN INTO OPPOSITE DIRECTIONS	80 TURN INTO OPPOSITE DIRECTIONS	81 TURN INTO OPPOSITE DIRECTIONS	82 TURN INTO OPPOSITE DIRECTIONS	(EACH - 84) SPECIFICS OTHER	(EACH - 85) SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Damage)	L Straight Paths	87	88	(EACH - 89) SPECIFICS OTHER	(EACH - 90) SPECIFICS UNKNOWN				
VI Miscellaneous	M Backing Etc.	82 BACKING VEH.	83 OTHER VEH. OR OBJECT	98 Other Accident Type	99 Unknown Accident Type	00 No Impact			

**OTHER DATA**

56. Driver's Zip Code

- (00000) Driver not present
- (00001) Driver not a resident of U.S. or territories  
Code actual 5-digit zip code
- (99999) Unknown

57. Driver's Race/Ethnic Origin

- (0) Driver not present
- (1) White (non-Hispanic)
- (2) Black (non-Hispanic)
- (3) White (Hispanic)
- (4) Black (Hispanic)
- (5) American Indian, Eskimo or Aleut
- (6) Asian or Pacific Islander
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

58. Vehicle Special Use (This Trip)

- (0) No special use
- (1) Taxi
- (2) Vehicle used as school bus
- (3) Vehicle used as other bus
- (4) Military
- (5) Police
- (6) Ambulance
- (7) Fire truck or car
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**ROLLOVER DATA**

If GV07 (Body Type) ≠ 1-49, leave GV59-GV63 blank.  
If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.  
If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type

- (0) No rollover
- (1) Trip-over
- (2) Flip-over
- (3) Turn-over
- (4) Climb-over
- (5) Fall-over
- (6) Bounce-over
- (7) Collision with another vehicle
- (8) Other rollover initiation type specify): \_\_\_\_\_
- (9) Unknown rollover initiation type

60. Location of Rollover Initiation

- (0) No rollover
- (1) On roadway
- (2) On shoulder—paved
- (3) On shoulder—unpaved
- (4) On roadside or divided trafficway median
- (9) Unknown

61. Rollover Initiation Object Contacted

00

62. 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): \_\_\_\_\_
- (8) Non-contact rollover forces (specify): \_\_\_\_\_
- (9) Unknown

63. Direction of Initial Roll

0

- (0) No rollover
- (1) Roll right - primarily about the longitudinal axis
- (2) Roll left - primarily about the longitudinal axis
- (5) End-over-end (i.e., primarily about the lateral axis)
- (9) Unknown roll direction

**PRECRASH DATA**

64. Pre-Event Movement (Prior to Recognition of Critical Event)

01

- (01) Going straight
- (02) Slowing or stopping in traffic lane
- (03) Starting in traffic lane
- (04) Stopped in traffic lane
- (05) Passing or overtaking another vehicle
- (06) Disabled or parked in travel lane
- (07) Leaving a parking position
- (08) Entering a parking position
- (09) Turning right
- (10) Turning left
- (11) Making a U-turn
- (12) Backing up (other than for parking position)
- (13) Negotiating a curve
- (14) Changing lanes
- (15) Merging
- (16) Successful avoidance maneuver to a previous critical event
- (97) Other (specify): \_\_\_\_\_
- (98) No driver present
- (99) Unknown

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

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

### Noncollision

- (31) Turn-over — fall-over
- (33) 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

- (71) Motor vehicle not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify):

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

- (98) Other event (specify):

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



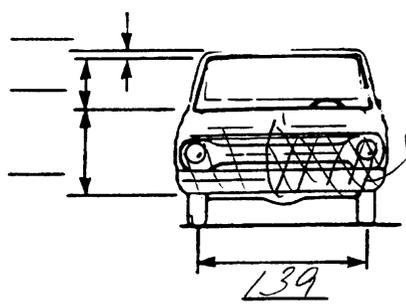
# ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>108.3</u>	inches x 2.54 =	<u>275.0</u> cm
Overall Length	<u>178.2</u>	inches x 2.54 =	<u>452.6</u> cm
Maximum Width	<u>64.7</u>	inches x 2.54 =	<u>164.3</u> cm
Curb Weight	<u>2,567</u>	pounds x .4536 =	<u>1,164.8</u> kg
Average Track	_ _ _ . _	inches x 2.54 =	_ _ _ . _ cm
Front Overhang	<u>30.6</u>	inches x 2.54 =	<u>77.7</u> cm
Rear Overhang	<u>39.3</u>	inches x 2.54 =	<u>99.8</u> cm
Undeformed End Width	_ _ _ . _	inches x 2.54 =	_ _ _ . _ cm
Engine Size: cyl./displ.	_ _ _ . _	cc x .001 =	_ . _ L
	<u>1.9</u>	CID x .0164 =	_ . _ L

03

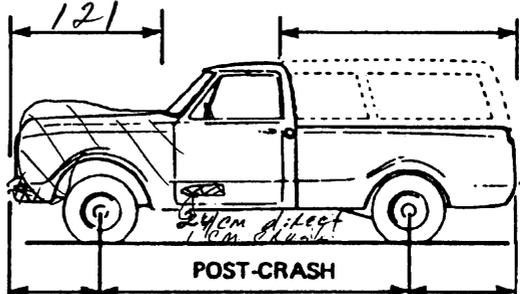
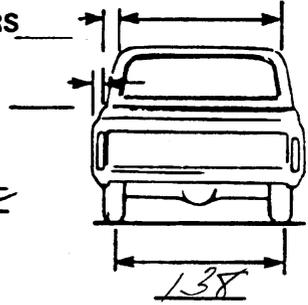
**VEHICLE DAMAGE SKETCH**

<p><b>TIRE—WHEEL DAMAGE</b></p> <p>a. Rotation physically restricted</p> <p>RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u></p> <p>b. Tire deflated</p> <p>RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u></p> <p>(1) Yes (2) No (8) NA (9) Unk.</p>	<p><b>ORIGINAL SPECIFICATIONS</b></p> <p>Wheelbase <u>275</u> cm</p> <p>Overall Length <u>453</u> cm</p> <p>Maximum Width <u>164</u> cm</p> <p>Curb Weight <u>1165</u> kg</p> <p>Average Track <u>—</u> cm</p> <p>Front Overhang <u>78</u> cm</p> <p>Rear Overhang <u>100</u> cm</p> <p>Undeformed End Width <u>154 (REAR)</u> cm</p> <p>Engine Size: cyl./displ. <u>4 cyl. 2.5</u> L</p>	<p><b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only)</p> <p>RF ± <u>—</u> ° LF ± <u>—</u> ° RR ± <u>—</u> ° LR ± <u>—</u> °</p> <p>Within ± 5 degrees</p>
<p><b>TYPE OF TRANSMISSION</b></p> <p><input checked="" type="checkbox"/> Manual    <input type="checkbox"/> Automatic</p>	<p><b>DRIVE WHEELS</b></p> <p><input type="checkbox"/> FWD    <input checked="" type="checkbox"/> RWD    <input type="checkbox"/> 4WD</p> <p>Approximate Cargo Weight <u>—</u> kg</p>	



**MEASUREMENTS IN CENTIMETERS**

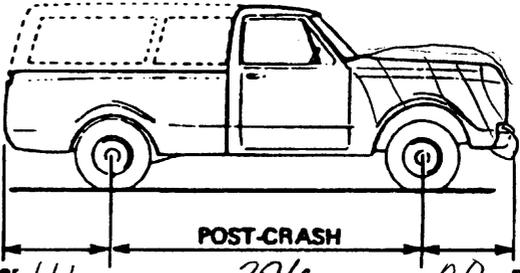
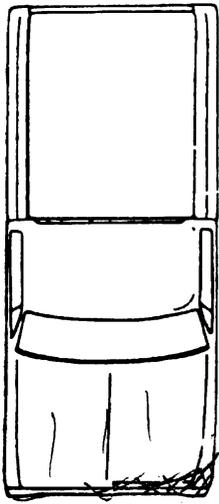
stands set @ 450 cm from REAR (does not include bumper)



POST-CRASH

Bumper corner 58    275    112 Bumper corner

Stringline 78          100 Stringline



POST-CRASH

Bumper corner 111    276    70 Bumper corner

Stringline 99          78 Stringline

**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>12</u>	7. <u>F</u>	8. <u>Y</u>	9. <u>E</u>	10. <u>W</u>	11. <u>01</u>

Second Highest Delta "V"

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

**CRUSH PROFILE IN CENTIMETERS**

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

HIGHEST DELTA "V"

20. L	21. C <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>154</u>	<u>015</u>	<u>011</u>	<u>013</u>	<u>006</u>	<u>000</u>	<u>002</u>	<u>+0033</u>

Second Highest Delta "V"

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

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

0

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

0  
*LF wheel Rubbing*

28. Original Wheelbase \_\_\_\_\_ Code to the nearest centimeter (999) Unknown

275

1083 inches X 2.54 = 275 centimeters

<p>29. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? <u>0</u></p> <p>(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</p>	<p>34. Fuel Tank-1 Location <u>5</u></p> <p>35. Fuel Tank-2 Location <u>0</u></p> <p>(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</p>
<p>30. Fire Occurrence <u>0</u></p> <p>(0) No fire</p> <p>Yes, fire occurred  (1) Minor  (2) Major  (9) Unknown</p>	<p>36. Fuel Tank-1 Filler Cap Location <u>4</u></p> <p>37. Fuel Tank-2 Filler Cap Location <u>0</u></p> <p>(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</p>
<p>31. Origin of Fire <u>0</u></p> <p>(0) No fire  (1) Vehicle exterior (front, side, back, top)  (2) Exhaust system  (3) Fuel tank (and other fuel retention system parts)  (4) Engine compartment  (5) Cargo/trunk compartment  (6) Instrument panel  (7) Passenger compartment area  (8) Other location (specify): _____  (9) Unknown</p>	<p>38. Fuel Tank-1 Damage <u>1</u></p> <p>39. Fuel Tank-2 Damage <u>0</u></p> <p>(0) No fuel tank  (1) No damage to fuel tank  (2) Deformed, no seam failure  (3) Deformed, with a seam failure  (4) Punctured  (5) Lacerated (ripped)  (6) Abraded (scraped)  (7) Filler neck separation from the fuel tank  (8) Other damage (specify): _____  (9) Unknown</p>
<p>32. Type of Fuel Tank-1 <u>1</u></p>	
<p>33. Type of Fuel Tank-2 <u>0</u></p> <p>(0) No fuel tank (electrical vehicle)  (1) Metallic  (2) Non-metallic  (9) Unknown</p>	

40. Location of Fuel System-1 Leakage   1
41. Location of Fuel System-2 Leakage   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 \_\_\_\_\_

42. Fuel Type-1   0     1  

43. Fuel Type-2   0     0  

- 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

44. 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 AND WAS NOT AN AOPS \*\*\*  
 (I.E., GV09 = 0 OR 9 AND GV36 = 0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



# INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number 48  
2. Case Number - Stratum 203K  
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 1 6. RF 1 7. LR 0 8. RR 0 9. TG/H 0

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

(9) Unknown

### Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code 0

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

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

Door, Tailgate or Hatch Came Open During Collision

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

(9) Unknown

## GLAZING

### Glazing Damage from Impact Forces

15. WS 0 16. LF 0 17. RF 0 18. LR 8 19. RR 8  
20. BL 0 21. Roof 8 22. Other 8

- (0) 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
- (8) No glazing
- (9) Unknown if damaged

### Glazing Damage from Occupant Contact

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

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

### If No Glazing Damage *And* No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As 0

### Type of Window/Windshield Glazing

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

- (0) No glazing contact and no damage, or no glazing
- (1) AS-1 - Laminated
- (2) AS-2 - Tempered
- (3) AS-3 - Tempered-tinted
- (4) AS-14 - Glass/Plastic
- (8) Other (specify):
- (9) Unknown

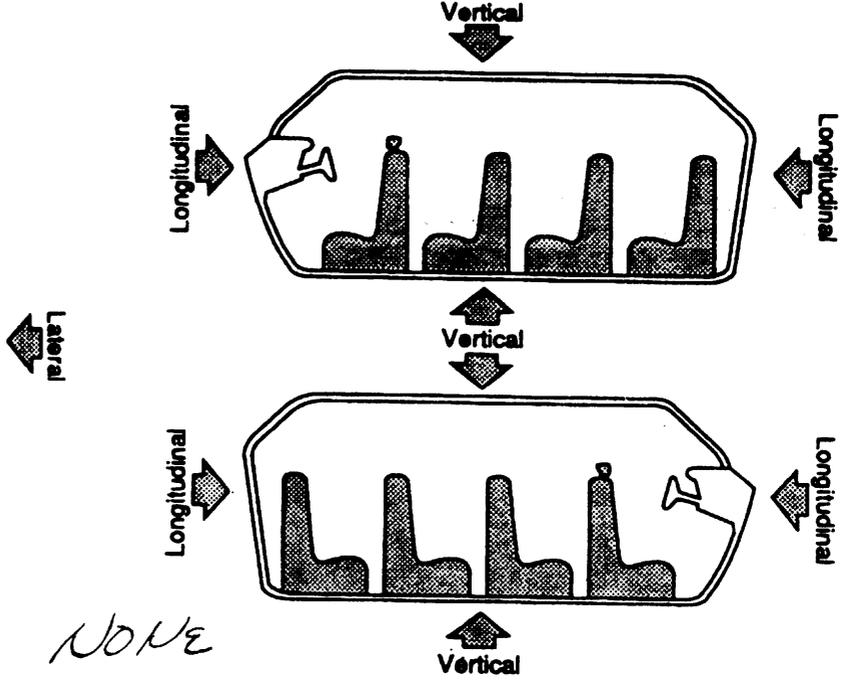
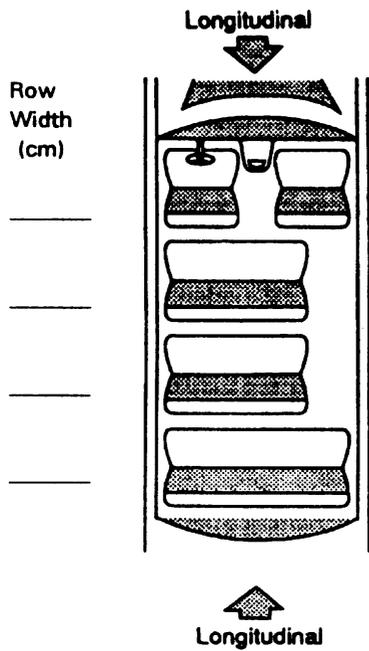
### Window Pre-crash Glazing Status

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

- (0) No glazing contact and no damage, or no glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (9) Unknown

# INTRUSION WORKSHEET

Note: Sketch intruded areas



NONE

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

**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) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify): \_\_\_\_\_

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

*Exterior Components*

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

**LOCATION OF INTRUSION**

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

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

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

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

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

- (99) Unknown

*None*

**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
------------------	---	--------------	---	-------------

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

--	--	--	--	--

**STEERING COLUMN**

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

88. Blank   X  X    
 (This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

89. Blank   X  X  X    
 (This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

90. Blank   X  X  X    
 (This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

91. Blank   X  X  X    
 (This variable is left blank so that numbering consistency can be maintained with the 1988-94 CDS.)

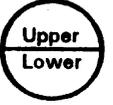
92. Steering Rim/Spoke Deformation   00    
 \_\_\_\_\_ Code actual measured deformation to the nearest centimeter  
 (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

93. 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

**INSTRUMENT PANEL**

94. Odometer Reading   159,000    
 \_\_\_\_\_ kilometers—Code to the nearest 1,000 kilometers  
 (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

  62.502   miles X 1.6093 =   158,755   kilometers

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

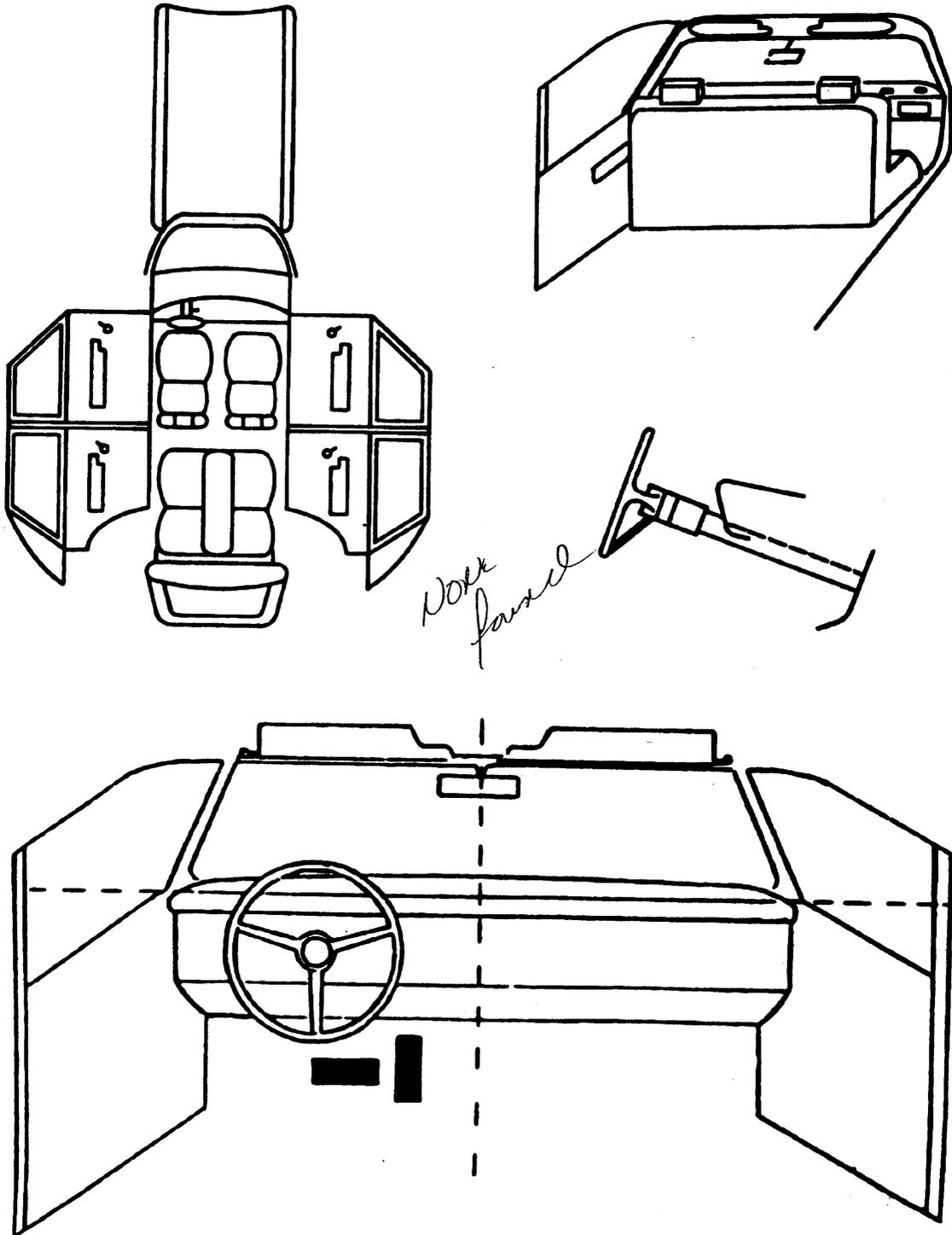
95. Instrument Panel Damage from Occupant Contact?   0    
 (0) No  
 (1) Yes  
 (9) Unknown

96. Knee Bolsters Deformed from Occupant Contact?   8    
 (0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

97. Did Glove Compartment Door Open During Collision(s)?   0    
 (0) No  
 (1) Yes  
 (8) Not present  
 (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				<i>None</i>	
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

**CODES FOR INTERIOR COMPONENTS**

**FRONT**

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

**LEFT SIDE**

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_

- (28) Left side window sill

**RIGHT SIDE**

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_

- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_

- (38) Right side window sill

**INTERIOR**

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

- (46) Other occupants (specify): \_\_\_\_\_

- (47) Interior loose objects

- (48) Child safety seat (specify): \_\_\_\_\_

- (49) Other interior object (specify): \_\_\_\_\_

**ROOF**

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

**FLOOR**

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

**REAR**

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (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

		Left	Right
<b>F I R S T</b>	Availability/Function	0	0
	Deployment		
	Failure		

**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**

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

**Are There Indications of Air Bag System Failure?**

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

### AUTOMATIC BELTS

		Left	Right
<b>F I R S T</b>	Availability/Function	0	0
	Use		
	Type		
	Proper Use		
	Failure Modes		

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

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

*Non-functional*

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

**Automatic (Passive) Belt System Use**

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

**Automatic (Passive) Belt System Type**

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

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

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

*Automatic Belt Used Improperly*

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

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

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

**MANUAL RESTRAINTS**

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

If a Child safety seat is present, encode the data on the back of this page.

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

		Left	Center	Right
FIRST	Availability	4	3	4
	Evidence of usage	04	03 (slight)	04 (slight)
	Used in this crash?	4	0	0
	Proper Use	1	0	0
	Failure Modes	1	0	0
SECOND	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			

**Manual (Active) Belt System Availability**

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

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown

**Manual (Active) Belt System Use**

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): \_\_\_\_\_
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify): \_\_\_\_\_
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

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

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

*Belt Used Improperly*

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

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

(9) Unknown

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

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

## 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.

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

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

**HEAD RESTRAINTS/SEAT EVALUATION**

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

		Left	Center	Right
FIRST	Head Restraint Type/Damage	0	0	0
	Seat Type	05	05	05
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
SECOND	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

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

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

- (9) Unknown

**Seat Type (this Occupant Position)**

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

- (10) Box mounted seat (i.e., van type)
- (99) Unknown

**Seat Performance (this Occupant Position)**

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

- (7) Combination of above (specify): \_\_\_\_\_

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

- (9) Unknown

**Seat Orientation (this Occupant Position)**

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

- (9) Unknown

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

*None*

**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 in vehicle interior diagram)



# OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number 48  
 2. Case Number - Stratum 203K  
 3. Vehicle Number 03  
 4. Occupant Number 01

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 29  
 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  
 (9) Unknown

7. Occupant's Height 170  
 Code actual height to the nearest centimeter.  
 (999) Unknown  
67 inches X 2.54 = 170.1 centimeters

8. Occupant's Weight 004  
 Code actual weight to the nearest kilogram.  
 (999) Unknown  
140 pounds X .4536 = 63.5 kilograms

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

## OCCUPANT'S SEATING

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

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

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

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

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

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

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

## EJECTION/ENTRAPMENT

12. Ejection 0

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

13. Ejection Area 0

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

14. Ejection Medium 0

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

15. Medium Status (Immediately Prior To Impact) 0

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

16. Entrapment 0

- (NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)
- (0) Not entrapped
  - (1) Entrapped
  - (9) Unknown

## RESTRAINT SYSTEM EVALUATION

17. 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 \_\_\_\_\_

18. 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 \_\_\_\_\_

19. 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 \_\_\_\_\_

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

- (0) No manual belt used
- (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 \_\_\_\_\_

21. Air Bag System Availability/Function 0

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

*Non-functional*

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

(3) Air bag not reinstalled \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 0

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

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown \_\_\_\_\_

(9) Police indicated "unknown" \_\_\_\_\_

HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant at This Occupant Position

0

- (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

26. Seat Type (this Occupant Position)

05

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

27. 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

28. 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

29. Type of Child Safety Seat 0  
 (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

30. 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

31. Child Safety Seat Harness Usage 00

32. Child Safety Seat Shield Usage 00

33. Child Safety Seat Tether Usage 00

Note: Options below applicable to  
 Variables OA31-OA33.  
 (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**

34. 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

35. 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
- (8) Treatment - other (specify):
- (9) Unknown

36. 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

37. 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

38. 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

**STOP - GO TO VARIABLE 44 ON PAGE 7**

**VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**

39. 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

40. 1st Medically Reported Cause of Death 00

41. 2nd Medically Reported Cause of Death 00

42. 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

43. Number of Recorded Injuries for This Occupant 02

- Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

**AUTOMATIC BELT SYSTEM**

44. 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

45. 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

46. Automatic (Passive) Belt System Type 0

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

47. 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

48. 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

49. 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

Check the Primary Source Used In Determining Belt Use.

- Not equipped/not available/destroyed or rendered inoperative
- Vehicle inspection
- Official injury data
- Driver/occupant interview
- Other (specify):

- Unknown if belt used

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO [ ] YES [ ]

UPDATE CANDIDATE?

NO  YES [ ]

**STOP - VARIABLES 50 THROUGH 53 ARE COMPLETED BY THE ZONE CENTER**

**TRAUMA DATA**

50. Glasgow Coma Scale (GCS) Score 01  
 (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
51. Was the Occupant Given Blood? 1  
 (1) No - blood not given  
 (2) Yes - blood given  
 (specify units): \_\_\_\_\_  
 (9) Unknown if blood given
52. Arterial Blood Gases (ABG) -  $\text{HCO}_3$  01  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the  $\text{HCO}_3$   
 (96) ABGs reported,  $\text{HCO}_3$  unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

**BELT USE DETERMINATION**

53. 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>48</u>	3. Vehicle Number <u>03</u>
2. Case Number - Stratum <u>203K</u>	4. Occupant Number <u>01</u>

## INJURY DATA

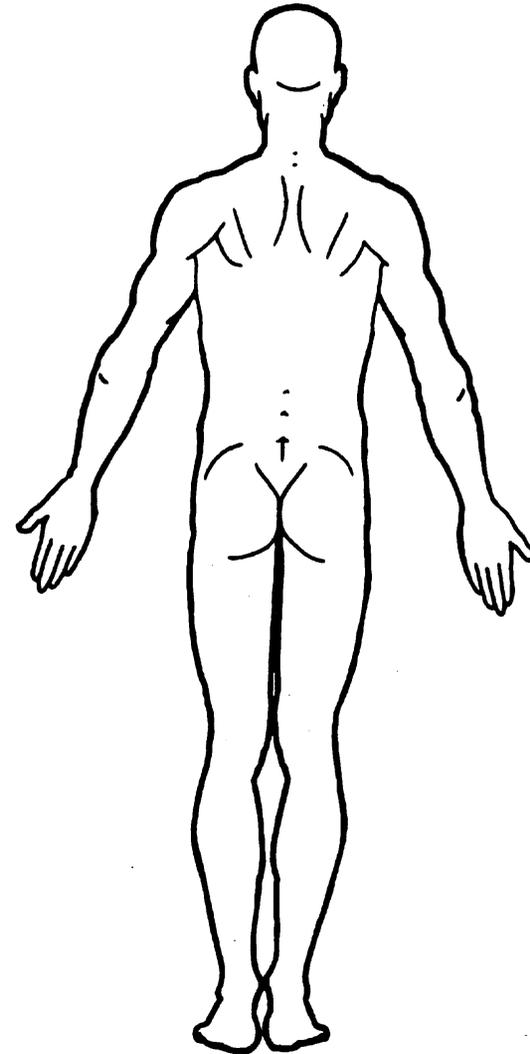
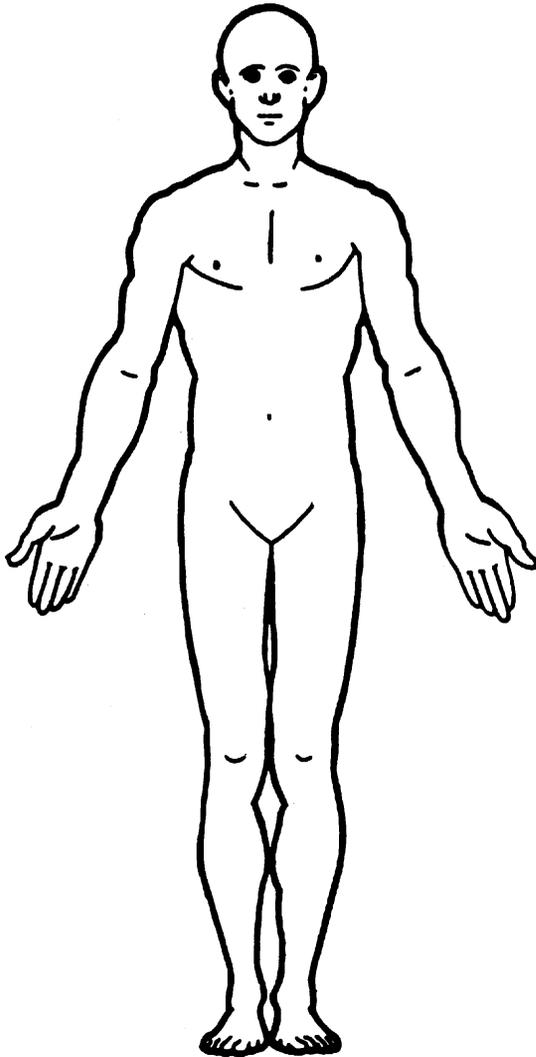
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the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

	A.I.S. - 90										
	Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number
1st	5. <u>7</u>	6. <u>7</u>	7. <u>9</u>	8. <u>04</u>	9. <u>02</u>	10. <u>1</u>	11. <u>2</u>	12. <u>41</u>	13. <u>2</u>	14. <u>1</u>	15. <u>00</u>
2nd	16. <u>7</u>	17. <u>8</u>	18. <u>9</u>	19. <u>04</u>	20. <u>02</u>	21. <u>1</u>	22. <u>2</u>	23. <u>09</u>	24. <u>2</u>	25. <u>1</u>	26. <u>00</u>
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. ___



## 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.)



**SOURCE OF INJURY DATA**

**OFFICIAL**

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

**UNOFFICIAL**

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

**INJURY SOURCE**

**FRONT**

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

**LEFT SIDE**

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_

- (28) Left side window sill

**RIGHT SIDE**

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_

- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_

- (38) Right side window sill

**INTERIOR**

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar or door frame attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify): \_\_\_\_\_
- (47) Interior loose objects
- (48) Child safety seat (specify): \_\_\_\_\_
- (49) Other interior object (specify): \_\_\_\_\_

**ROOF**

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

**FLOOR**

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

**REAR**

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): \_\_\_\_\_

**EXTERIOR of OCCUPANT'S VEHICLE**

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): \_\_\_\_\_
- (68) Unknown exterior objects

**EXTERIOR of OTHER MOTOR VEHICLE**

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): \_\_\_\_\_

- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify) \_\_\_\_\_

- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): \_\_\_\_\_

- (83) Unknown exterior of other motor vehicle

**OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT**

- (84) Ground
- (85) Other vehicle or object (specify) \_\_\_\_\_

- (86) Unknown vehicle or object

**NONCONTACT INJURY**

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): \_\_\_\_\_
- (93) Air bag exhaust gases
- (97) Injured, unknown source

**INJURY SOURCE CONFIDENCE LEVEL**

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

**DIRECT/INDIRECT INJURY**

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

**OCCUPANT INJURY CLASSIFICATION**

**Body Region**

- (1) Head
- (2) Face
- (3) Neck
- (4) Thorax
- (5) Abdomen
- (6) Spine
- (7) Upper Extremity
- (8) Lower Extremity
- (9) Unspecified

**Type of Anatomic Structure**

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes muscles/ ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

**Specific Anatomic Structure**

- Whole Area
- (02) Skin - Abrasion
- (04) Skin - Contusion
- (06) Skin - Laceration
- (08) Skin - Avulsion
- (10) Amputation
- (20) Burn
- (30) Crush
- (40) Degloving
- (50) Injury - NFS
- (90) Trauma, other than mechanical

- Head - LOC
- (02) Length of LOC
- (04, 06, 08) Level of Consciousness
- (10) Concussion

Spine

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

Vessels, Nerves, Organs, Bones, Joints are assigned consecutive two digit numbers beginning with 02

**Level of Injury**

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.

**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

**Aspect**

- (1) Right
- (2) Left
- (3) Bilateral
- (4) Central
- (5) Anterior
- (6) Posterior
- (7) Superior
- (8) Inferior
- (9) Unknown
- (0) Whole region

# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

No

Yes

Blood Alcohol  
Level (mg/dl)

BAL = \_\_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_\_

Units of Blood  
Given

Units = \_\_\_\_

Arterial Blood  
Gases

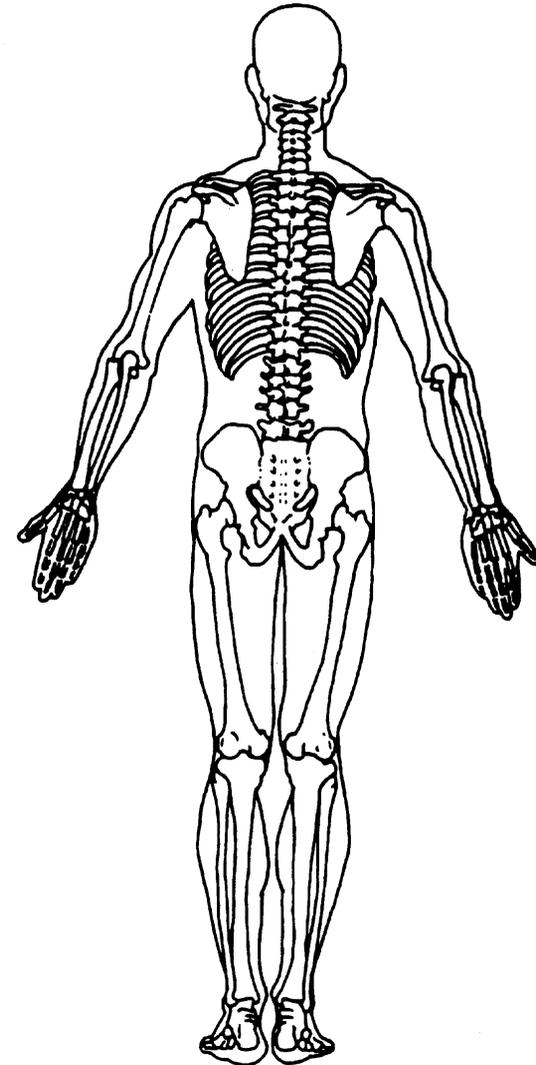
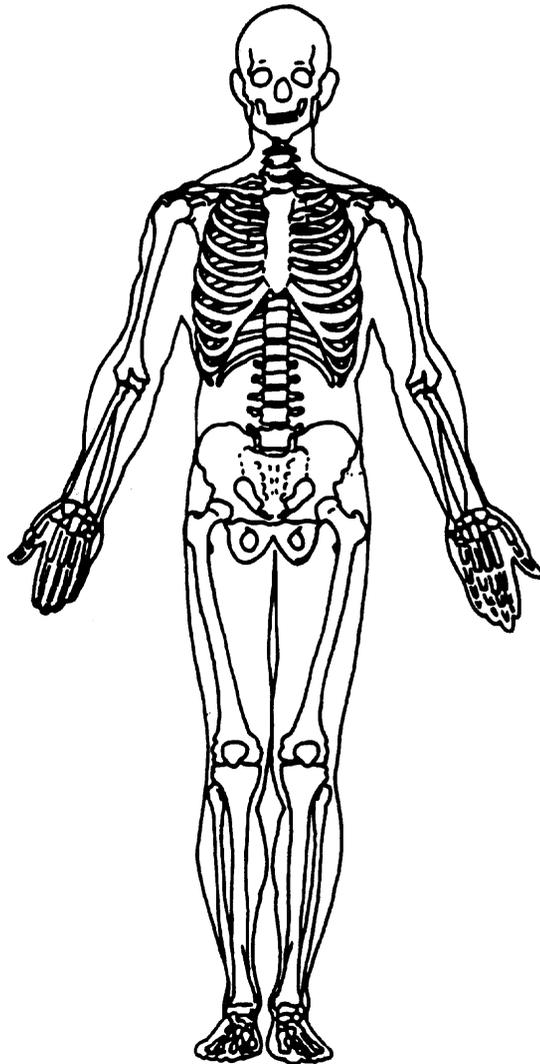
pH = \_\_\_\_

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

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

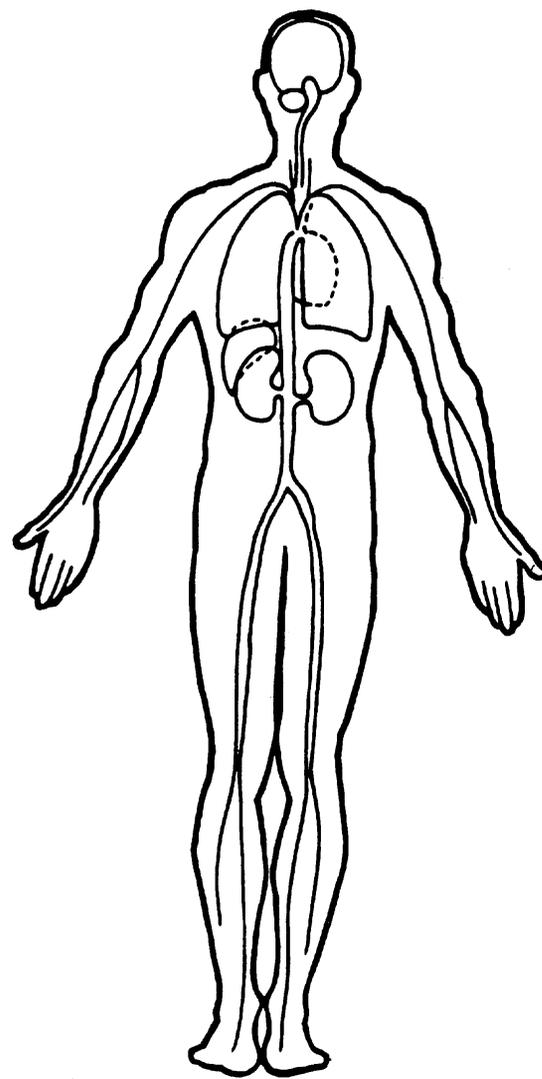
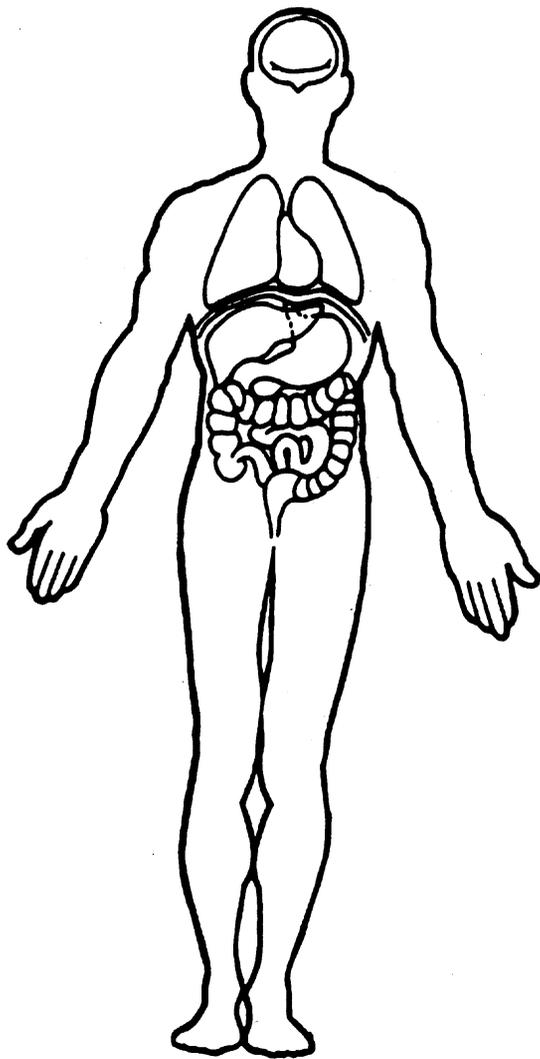
HCO<sub>3</sub> \_\_\_\_

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.)





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

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

Rolling Resistance Option \_\_\_\_\_

Vehicle 1 Rolling Resistance

    LF \_\_\_\_\_ RF \_\_\_\_\_

    LR \_\_\_\_\_ RR \_\_\_\_\_

Vehicle 2 Rolling Resistance

    LF \_\_\_\_\_ RF \_\_\_\_\_

    LR \_\_\_\_\_ RR \_\_\_\_\_

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

Vehicle 1 Steer Angles

    LF \_\_\_\_\_ °      RF \_\_\_\_\_ °

    LR \_\_\_\_\_ °      RR \_\_\_\_\_ °

Vehicle 2 Steer Angles

    LF \_\_\_\_\_ °      RF \_\_\_\_\_ °

    LR \_\_\_\_\_ °      RR \_\_\_\_\_ °

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

First Point

X \_\_\_\_\_ m      Y \_\_\_\_\_ m

Second Point

X \_\_\_\_\_ m      Y \_\_\_\_\_ m

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

**DAMAGE INFORMATION**

	VEHICLE 1		VEHICLE 2
Damage Length	L <u>178</u> cm	Damage Length	L <u>229</u> cm
Crush Depths	C <sub>1</sub> <u>003</u> cm	Crush Depths	C <sub>1</sub> <u>000</u> cm
	C <sub>2</sub> <u>002</u> cm		C <sub>2</sub> <u>004</u> cm
	C <sub>3</sub> <u>000</u> cm		C <sub>3</sub> <u>012</u> cm
	C <sub>4</sub> <u>002</u> cm		C <sub>4</sub> <u>013</u> cm
	C <sub>5</sub> <u>006</u> cm		C <sub>5</sub> <u>010</u> cm
	C <sub>6</sub> <u>016</u> cm		C <sub>6</sub> <u>001</u> cm
Damage Offset	D <u>047</u> cm	Damage Offset	D <u>018</u> cm

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

Model Year: \_\_\_\_\_

Make: \_\_\_\_\_

Model: \_\_\_\_\_

VIN: \_\_\_\_\_

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

Complete and ATTACH the appropriate vehicle damage sketch and dimensions to the Form.

# FINAL RUN E2

## SUMMARY OF CRASHPC RESULTS USING DAMAGE

---

### CRASH3 RECONSTRUCTION

	SPEED CHANGE (DAMAGE)
VEHICLE #1	
TOTAL	14 KPH ( 9 MPH)
LONGITUDINAL	-5 KPH ( -3 MPH)
LATITUDINAL	-13 KPH ( -8 MPH)
PDOF ANGLE	70 DEGREES
ENERGY DISSIPATED =	50248 JOULES ( 37056 FT-LB)
VEHICLE #2	
TOTAL	23 KPH ( 15 MPH)
LONGITUDINAL	-22 KPH ( -14 MPH)
LATITUDINAL	8 KPH ( 5 MPH)
PDOF ANGLE	-20 DEGREES
ENERGY DISSIPATED =	23577 JOULES ( 17387 FT-LB)

DAMAGE DATA

---

	VEHICLE #1	VEHICLE #2
SIZE CATEGORY	4	3
STIFFNESS CATEGORY	8	3
VEHICLE WEIGHT	2025 KGS ( 4464 LBS)	1219 KGS ( 2687 LBS)
CDC	02FZEW1	11LDEW2
PDOF ANGLE	70 DEGREES	-20 DEGREES
CRUSH LENGTH	178 CM. ( 70 IN.)	229 CM. ( 90 IN.)
C1	3 CM. ( 1 IN.)	0 CM. ( 0 IN.)
C2	2 CM. ( 1 IN.)	4 CM. ( 2 IN.)
C3	0 CM. ( 0 IN.)	12 CM. ( 5 IN.)
C4	2 CM. ( 1 IN.)	13 CM. ( 5 IN.)
C5	6 CM. ( 2 IN.)	10 CM. ( 4 IN.)
C6	16 CM. ( 6 IN.)	1 CM. ( 0 IN.)
D	47 CM. ( 19 IN.)	18 CM. ( 7 IN.)
D*	85 CM. ( 34 IN.)	30 CM. ( 12 IN.)

(\* INDICATES DEFAULT VALUE)

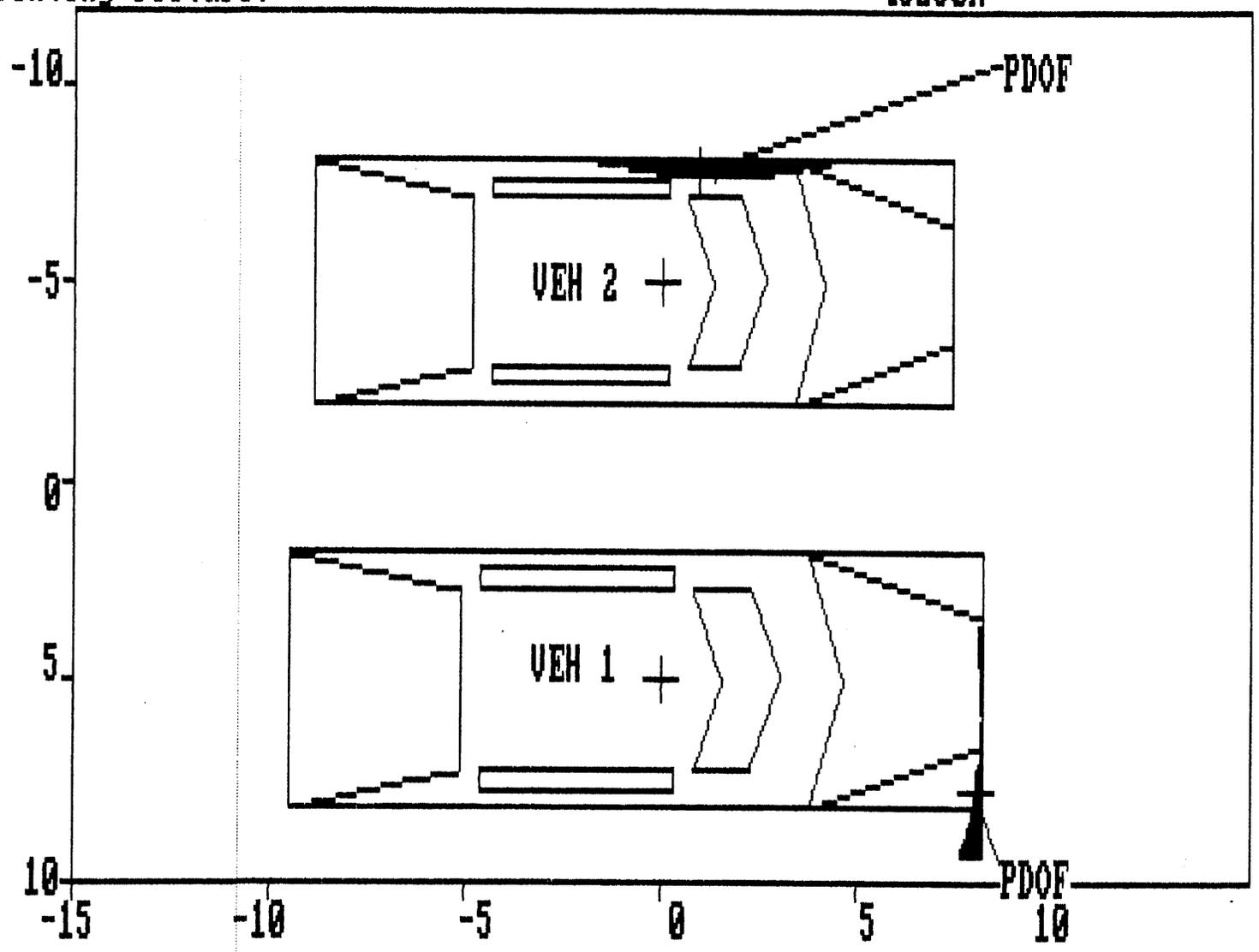
DIMENSIONS AND INERTIAL PROPERTIES

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	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	139 CM. ( 55 IN.)	130 CM. ( 51 IN.)
CG TO REAR AXLE	150 CM. ( 59 IN.)	141 CM. ( 56 IN.)
TRACK	157 CM. ( 62 IN.)	150 CM. ( 59 IN.)
CG TO FRONT OF VEH	251 CM. ( 99 IN.)	228 CM. ( 90 IN.)
CG TO REAR OF VEH	-290 CM. (-114 IN.)	-270 CM. (-106 IN.)
CG TO SIDE OF VEH	98 CM. ( 39 IN.)	92 CM. ( 36 IN.)
MOMENT OF INERTIA	19697 KGS ( 43424 LBS)	10536 KGS ( 23226 LBS)
VEHICLE MASS	5 KGS ( 12 LBS)	3 KGS ( 7 LBS)

Printing Picture:

48230K



DAMAGE DESCRIPTION

SUMMARY OF CRASHPC RESULTS USING DAMAGE

---

203K

SPEED CHANGE  
(DAMAGE)

VEHICLE #1

TOTAL 15 KPH ( 9 MPH)  
LONGITUDINAL -13 KPH ( -8 MPH)  
LATITUDINAL -8 KPH ( -5 MPH)  
PDOF ANGLE 30 DEGREES  
ENERGY DISSIPATED = 33499 JOULES ( 24704 FT-LB)

VEHICLE #2

TOTAL 25 KPH ( 15 MPH)  
LONGITUDINAL -12 KPH ( -8 MPH)  
LATITUDINAL 22 KPH ( 13 MPH)  
PDOF ANGLE -60 DEGREES  
ENERGY DISSIPATED = 15716 JOULES ( 11590 FT-LB)

DAMAGE DATA  
-----

	VEHICLE #1	VEHICLE #2
SIZE CATEGORY	4	3
STIFFNESS CATEGORY	8	3
VEHICLE WEIGHT	2025 KGS ( 4464 LBS)	1219 KGS ( 2687 LBS)
CDC	01FZEW1	10LDEW2
PDOF ANGLE	30 DEGREES	-60 DEGREES
CRUSH LENGTH	178 CM. ( 70 IN.)	229 CM. ( 90 IN.)
C1	3 CM. ( 1 IN.)	0 CM. ( 0 IN.)
C2	2 CM. ( 1 IN.)	4 CM. ( 2 IN.)
C3	0 CM. ( 0 IN.)	12 CM. ( 5 IN.)
C4	2 CM. ( 1 IN.)	13 CM. ( 5 IN.)
C5	6 CM. ( 2 IN.)	10 CM. ( 4 IN.)
C6	16 CM. ( 6 IN.)	1 CM. ( 0 IN.)
D	47 CM. ( 19 IN.)	18 CM. ( 7 IN.)
D'	85 CM. ( 34 IN.)	30 CM. ( 12 IN.)

(\* INDICATES DEFAULT VALUE)

DIMENSIONS AND INERTIAL PROPERTIES

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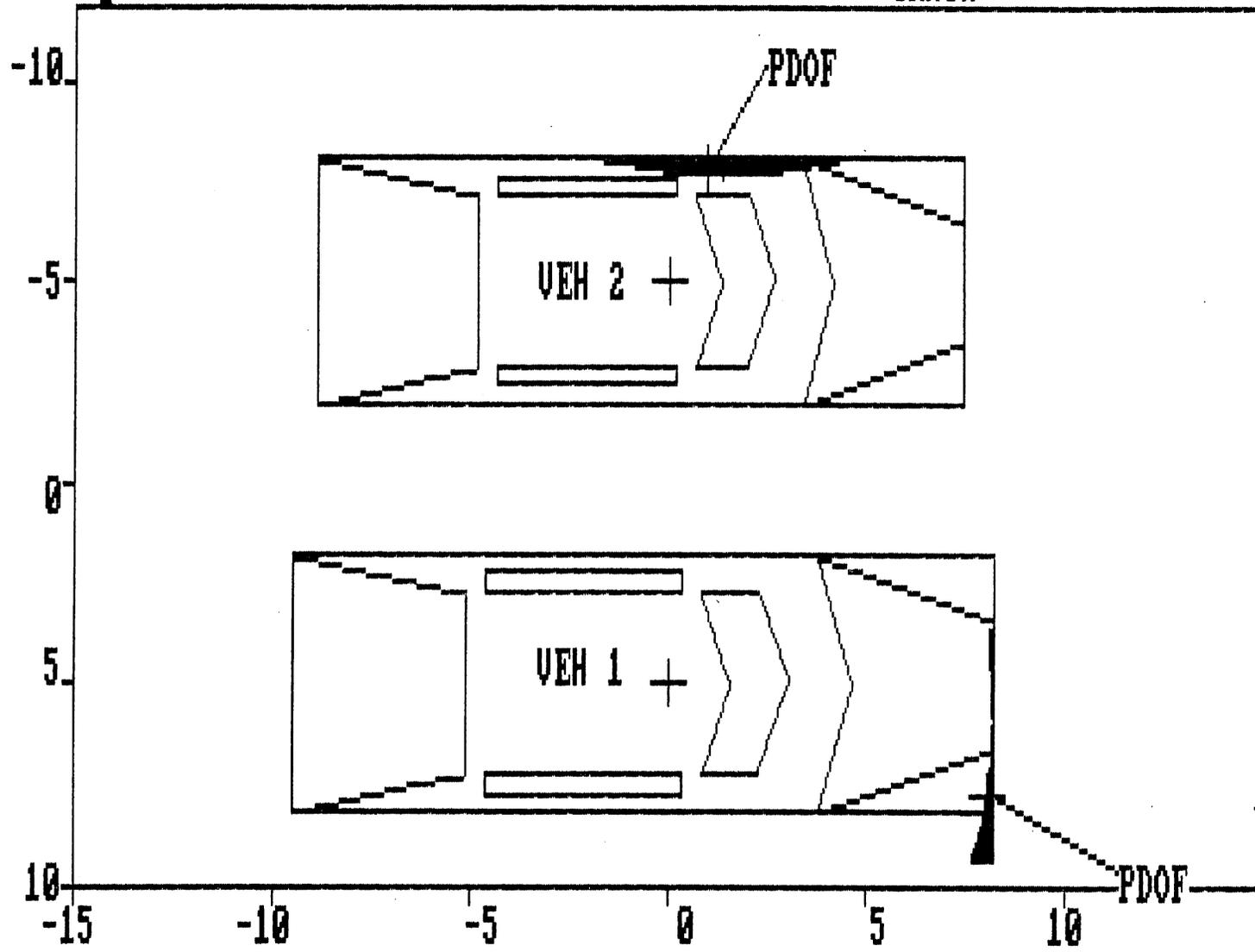
VEHICLE #1

VEHICLE #2

CG TO FRONT AXLE	139 CM. ( 55 IN.)	130 CM. ( 51 IN.)
CG TO REAR AXLE	150 CM. ( 59 IN.)	141 CM. ( 56 IN.)
TRACK	157 CM. ( 62 IN.)	150 CM. ( 59 IN.)
CG TO FRONT OF VEH	251 CM. ( 99 IN.)	228 CM. ( 90 IN.)
CG TO REAR OF VEH	-290 CM. (-114 IN.)	-270 CM. (-106 IN.)
CG TO SIDE OF VEH	98 CM. ( 39 IN.)	92 CM. ( 36 IN.)
MOMENT OF INERTIA	19697 KGS ( 43424 LBS)	10536 KGS ( 23226 LBS)
VEHICLE MASS	5 KGS ( 12 LBS)	3 KGS ( 7 LBS)

Printing Picture:

CRASH



DAMAGE DESCRIPTION



# CRASHPC PROGRAM SUMMARY

(All Measurements In Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

Identifying Title <u>48</u>	<u>203K</u>	<u>02</u>	<u>94</u>
Primary Sampling Unit	Case No.-Stratum	Accident Event Sequence No.	Date (Month, day, year) of Run

CRASHPC Vehicle Identification				
Vehicle 1	<u>1990</u>	<u>Chevrolet</u>	<u>1500</u>	<u>1</u>
Vehicle 2	<u>1985</u>	<u>Chevrolet</u>	<u>5-10</u>	<u>3</u>
	Year	Make	Model	NASS Veh. No.

## GENERAL INFORMATION

	VEHICLE 1	VEHICLE 2
Size	<u>4</u>	<u>3</u>
Weight	<u>1587 + 138 + 0 = 2025</u> kg	<u>1165 + 64 + 34 = 1263</u> kg
	Curb Occupant(s) Cargo	Curb Occupant(s) Cargo
CDC	<u>10LZEW3</u>	<u>12FYEW1</u>
PDOF (-180 to +180)	<u>0 70</u> °	<u>0 10</u> °
Stiffness	<u>-80 4</u>	<u>0 8</u>

## SCENE INFORMATION

Rest and Impact Positions  No, Go To Damage Information  Yes

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

## VEHICLE MOTION

Sustained Contact  No  Yes

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

**FRICITION INFORMATION**

Coefficient of Friction . \_\_\_\_\_

Rolling Resistance Option \_\_\_\_\_

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

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

**TRAJECTORY INFORMATION**

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

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

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

Terrain Boundary [ ] No [ ] Yes

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

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

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

**DAMAGE INFORMATION**

	VEHICLE 1		VEHICLE 2
Damage Length	L <u>132</u> cm	Damage Length	L <u>154</u> cm
Crush Depths	C <sub>1</sub> <u>5</u> cm	Crush Depths	C <sub>1</sub> <u>15</u> cm
	C <sub>2</sub> <u>10</u> cm		C <sub>2</sub> <u>11</u> cm
	C <sub>3</sub> <u>24</u> cm		C <sub>3</sub> <u>13</u> cm
	C <sub>4</sub> <u>33</u> cm		C <sub>4</sub> <u>6</u> cm
	C <sub>6</sub> <u>19</u> cm		C <sub>6</sub> <u>0</u> cm
	C <sub>6</sub> <u>5</u> cm		C <sub>6</sub> <u>2</u> cm
Damage Offset	D <u>5</u> cm	Damage Offset	D <u>33</u> cm

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

Model Year: \_\_\_\_\_  
 Make: \_\_\_\_\_  
 Model: \_\_\_\_\_  
 VIN: \_\_\_\_\_

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

Complete and ATTACH the appropriate vehicle damage sketch and dimensions to the Form.

# FINAL RUN E2

## SUMMARY OF CRASHPC RESULTS USING DAMAGE

---

### CRASH3 RECONSTRUCTION

	SPEED CHANGE (DAMAGE)
VEHICLE #1	
TOTAL	14 KPH ( 9 MPH)
LONGITUDINAL	-2 KPH ( -2 MPH)
LATITUDINAL	14 KPH ( 9 MPH)
PDOF ANGLE	-80 DEGREES
ENERGY DISSIPATED =	17059 JOULES ( 12580 FT-LB)
VEHICLE #2	
TOTAL	23 KPH ( 14 MPH)
LONGITUDINAL	-23 KPH ( -14 MPH)
LATITUDINAL	0 KPH ( 0 MPH)
PDOF ANGLE	0 DEGREES
ENERGY DISSIPATED =	28072 JOULES ( 20702 FT-LB)

DAMAGE DATA

---

	VEHICLE #1	VEHICLE #2
SIZE CATEGORY	4	3
STIFFNESS CATEGORY	4	8
VEHICLE WEIGHT	2025 KGS ( 4464 LBS)	1263 KGS ( 2784 LBS)
CDC	10LZEW3	12FYEW1
PDOF ANGLE	-80 DEGREES	0 DEGREES
CRUSH LENGTH	132 CM. ( 52 IN.)	154 CM. ( 61 IN.)
C1	5 CM. ( 2 IN.)	15 CM. ( 6 IN.)
C2	10 CM. ( 4 IN.)	11 CM. ( 4 IN.)
C3	24 CM. ( 9 IN.)	13 CM. ( 5 IN.)
C4	33 CM. ( 13 IN.)	6 CM. ( 2 IN.)
C5	19 CM. ( 7 IN.)	0 CM. ( 0 IN.)
C6	5 CM. ( 2 IN.)	2 CM. ( 1 IN.)
D	-5 CM. ( -2 IN.)	-33 CM. ( -13 IN.)
D'	0 CM. ( 0 IN.)	-60 CM. ( -24 IN.)

(\* INDICATES DEFAULT VALUE)

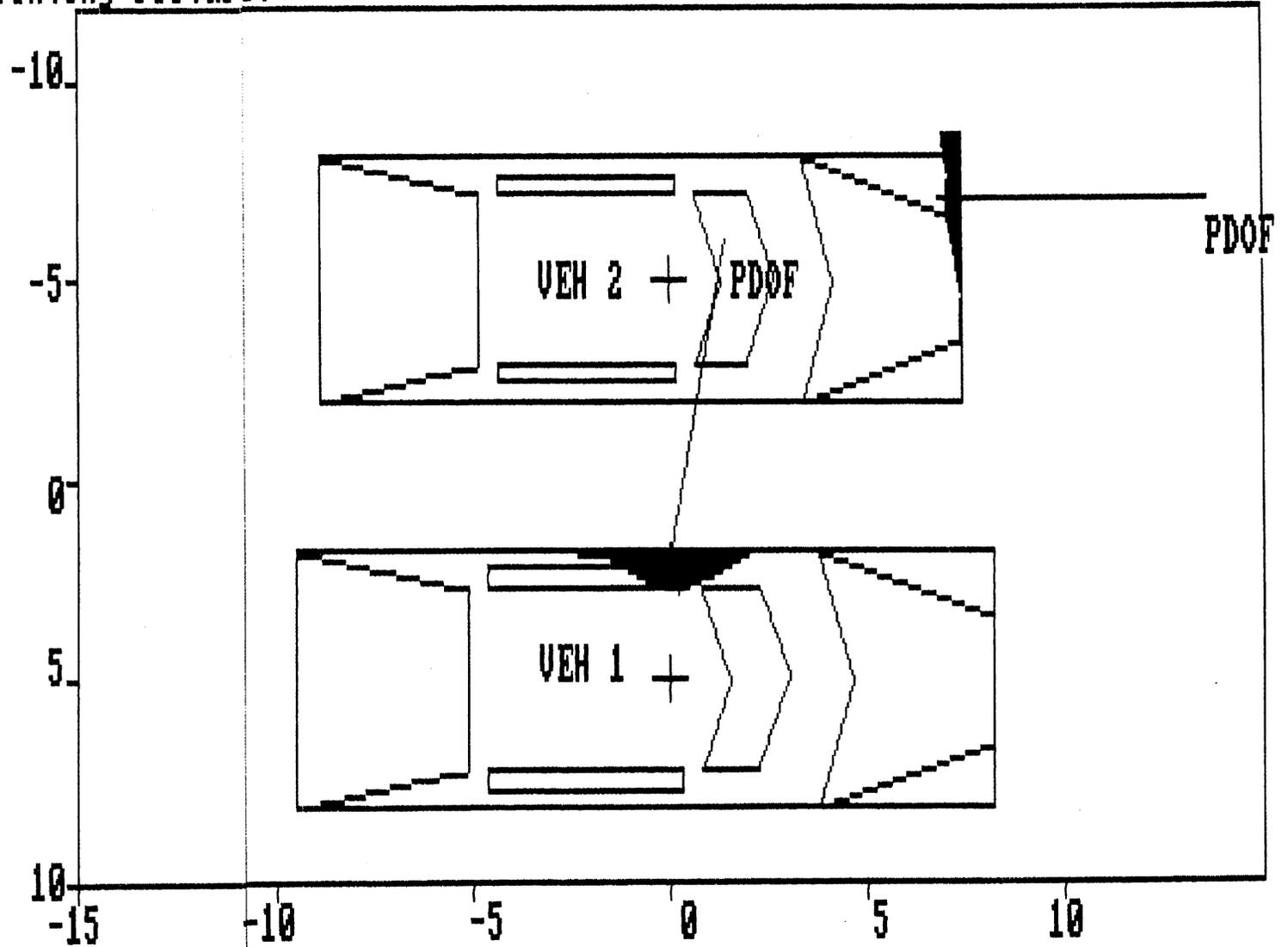
DIMENSIONS AND INERTIAL PROPERTIES

---

	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	139 CM. ( 55 IN.)	130 CM. ( 51 IN.)
CG TO REAR AXLE	150 CM. ( 59 IN.)	141 CM. ( 56 IN.)
TRACK	157 CM. ( 62 IN.)	150 CM. ( 59 IN.)
CG TO FRONT OF VEH	251 CM. ( 99 IN.)	228 CM. ( 90 IN.)
CG TO REAR OF VEH	-290 CM. (-114 IN.)	-270 CM. (-106 IN.)
CG TO SIDE OF VEH	98 CM. ( 39 IN.)	92 CM. ( 36 IN.)
MOMENT OF INERTIA	19697 KGS ( 43424 LBS)	10916 KGS ( 24065 LBS)
VEHICLE MASS	5 KGS ( 12 LBS)	3 KGS ( 7 LBS)

Printing Picture:

48203K2



DAMAGE DESCRIPTION

SUMMARY OF CRASHPC RESULTS USING DAMAGE

---

203K

	SPEED CHANGE (DAMAGE)
VEHICLE #1	
TOTAL	15 KPH ( 9 MPH)
LONGITUDINAL	-5 KPH ( -3 MPH)
LATITUDINAL	14 KPH ( 9 MPH)
PDOF ANGLE	-70 DEGREES
ENERGY DISSIPATED =	18735 JOULES ( 13816 FT-LB)
VEHICLE #2	
TOTAL	24 KPH ( 15 MPH)
LONGITUDINAL	-24 KPH ( -15 MPH)
LATITUDINAL	4 KPH ( 3 MPH)
PDOF ANGLE	-10 DEGREES
ENERGY DISSIPATED =	28945 JOULES ( 21346 FT-LB)

DAMAGE DATA  
-----

	VEHICLE #1	VEHICLE #2
SIZE CATEGORY	4	3
STIFFNESS CATEGORY	4	8
VEHICLE WEIGHT	2025 KGS ( 4464 LBS)	1263 KGS ( 2784 LBS)
CDC	10LZEW3	12FYEW1
PDOF ANGLE	-70 DEGREES	-10 DEGREES
CRUSH LENGTH	132 CM. ( 52 IN.)	154 CM. ( 61 IN.)
C1	5 CM. ( 2 IN.)	15 CM. ( 6 IN.)
C2	10 CM. ( 4 IN.)	11 CM. ( 4 IN.)
C3	24 CM. ( 9 IN.)	13 CM. ( 5 IN.)
C4	33 CM. ( 13 IN.)	6 CM. ( 2 IN.)
C5	19 CM. ( 7 IN.)	0 CM. ( 0 IN.)
C6	5 CM. ( 2 IN.)	2 CM. ( 1 IN.)
D	-5 CM. ( -2 IN.)	-33 CM. ( -13 IN.)
D'	0 CM. ( 0 IN.)	-60 CM. ( -24 IN.)

(\* INDICATES DEFAULT VALUE)

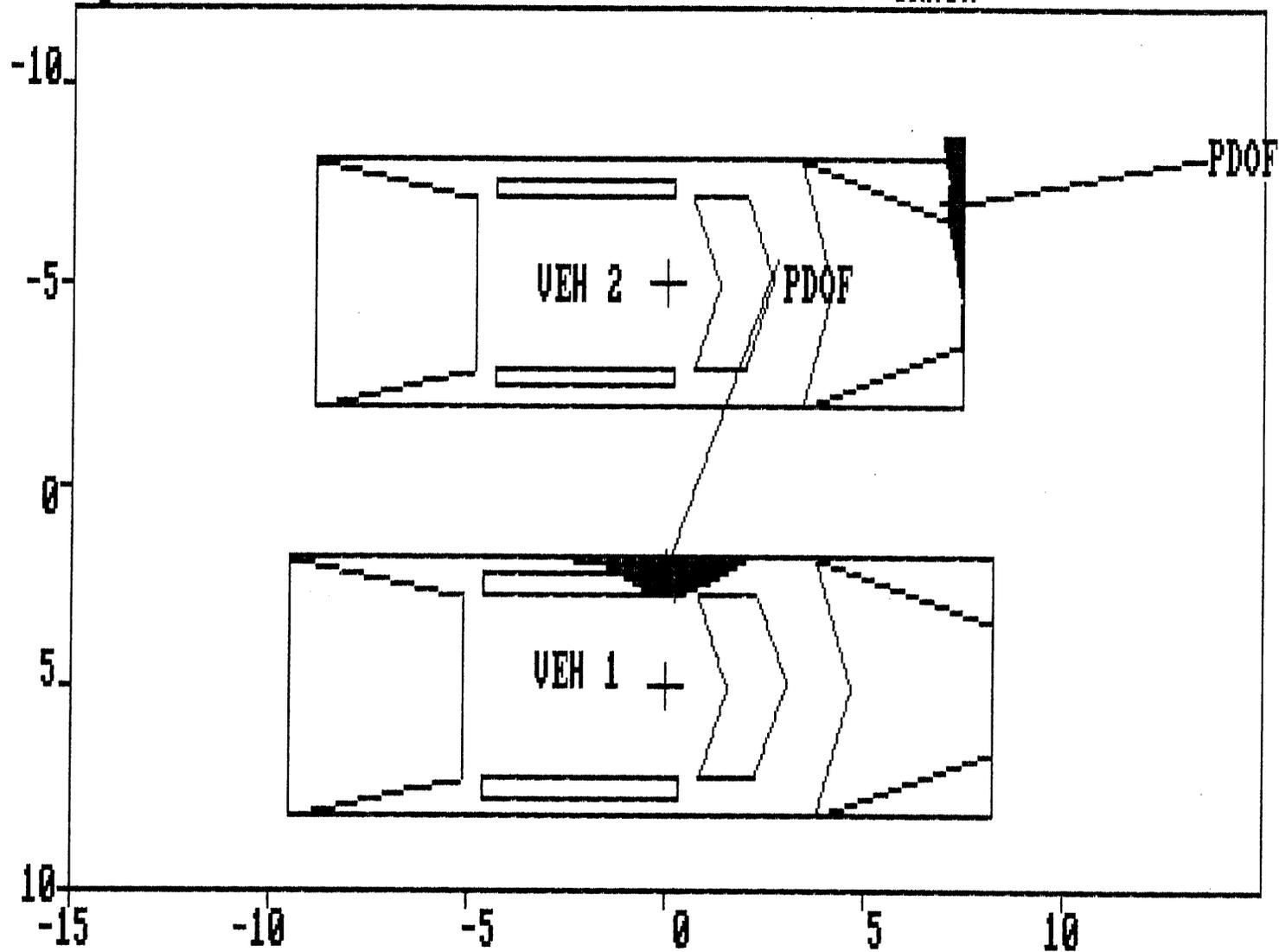
DIMENSIONS AND INERTIAL PROPERTIES

---

	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	139 CM. ( 55 IN.)	130 CM. ( 51 IN.)
CG TO REAR AXLE	150 CM. ( 59 IN.)	141 CM. ( 56 IN.)
TRACK	157 CM. ( 62 IN.)	150 CM. ( 59 IN.)
CG TO FRONT OF VEH	251 CM. ( 99 IN.)	228 CM. ( 90 IN.)
CG TO REAR OF VEH	-290 CM. (-114 IN.)	-270 CM. (-106 IN.)
CG TO SIDE OF VEH	98 CM. ( 39 IN.)	92 CM. ( 36 IN.)
MOMENT OF INERTIA	19697 KGS ( 43424 LBS)	10916 KGS ( 24065 LBS)
VEHICLE MASS	5 KGS ( 12 LBS)	3 KGS ( 7 LBS)

Printing Picture:

CRASH



DAMAGE DESCRIPTION



GENERAL VEHICLE Vehicle: 2

11

INTRA ERRORS

OGG0421 2 If ROLLOVER GV24 equals 1-9, then BASIS FOR DELTA V GV29 should  
GG0422 equal 4 or 5.

0

PSU48

ERROR SUMMARY SCREEN

██████████/94

CASE 203K

CURRENT VERSION: 7.00

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







PSU 48-203K (1994) #1



PSU 48-203K (1994) #2



PSU 48-203K (1994) #3



PSU 48-203K (1994) #4



PSU 46-203K (1994) #5



PSU 48-203K (1994) #6



PSU 48-203K (1994) #7



PSU 48-203K (1994) #8



PSU 48-203K (1994) #9



**PSU 48-203K (1994) #10**



PSU 48-203K (1994) #11



PSU 48-203K (1994) #12



PSU 48-203K (1994) #13



PSU 48-203K (1994) #14



PSU 48-203K (1994) #15



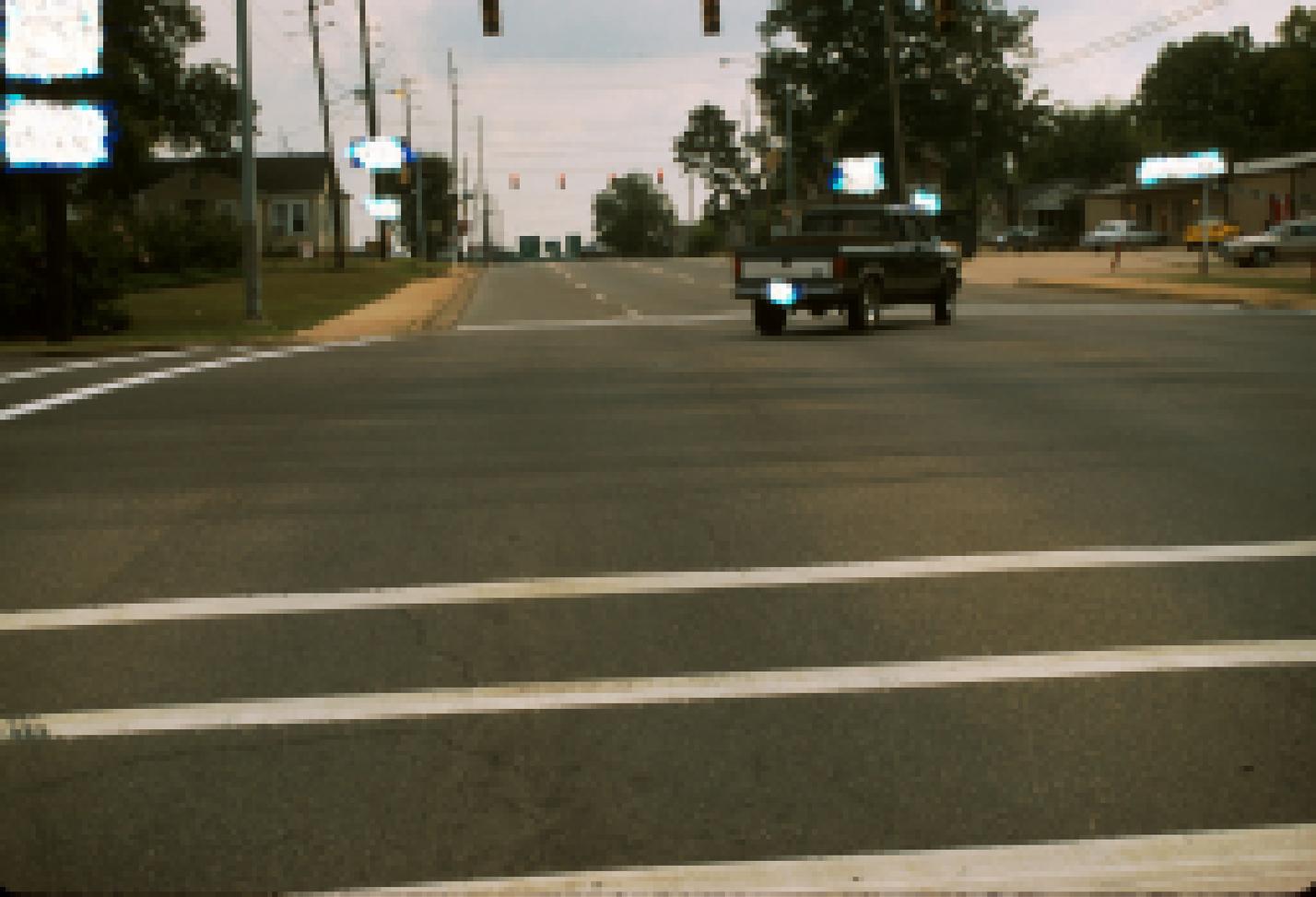
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PSU 48-203K (1994) #17



PSU 48-203K (1994) #18



PSU 48-203K (1994) #19



PSU 48-203K (1994) #20



PSU 48-203K (1994) #21



PSU 48-203K (1994) #22



**PSU 48-203K (1994) #23**  
**Best Available**



**PSU 48-203K (1994) #24**



**PSU 48-203K (1994) #25**



**PSU 48-203K (1994) #26**  
**Best Available**



**PSU 48-203K (1994) #27**  
**Best Available**



**PSU 48-203K (1994) #28**



**PSU 48-203K (1994) #29**  
**Best Available**



**PSU 48-203K (1994) #30**  
**Best Available**



**PSU 48-203K (1994) #31**  
**Best Available**



**PSU 48-203K (1994) #32  
Best Available**



**PSU 48-203K (1994) #33**  
**Best Available**



PSU 48-203K (1994) #34



**PSU 48-203K (1994) #35**  
**Best Available**



**PSU 48-203K (1994) #36**  
**Best Available**



**PSU 48-203K (1994) #37**  
**Best Available**



PSU 48-203K (1994) #38



**PSU 48-203K (1994) #39**  
**Best Available**



**PSU 48-203K (1994) #40**  
**Best Available**



**PSU 48-203K (1994) #41  
Best Available**



**PSU 48-203K (1994) #42  
Best Available**



**PSU 48-203K (1994) #43**  
**Best Available**



**FSU 46-203K (1994) #44**



**PSU 48-203K(1994) #45**



PSU 48-203K (1994) #46



PSU 48-203K (1994) #47



PSU 48-203K (1994) #48



**PSU 48-203K (1994) #48**



**PSU 48-203K (1994) #50**



PSU 48-203K (1994) #51



**PSU 48-203K (1994) #52**



**PSU 48-203K (1994) #53**



PSU 48-203K (1994) #54



PSU 48-203K (1994) #55



**PSU 48-203K (1994) #56**



**PSU 48-203K (1994) #57**



**PSU 48-203K (1994) #58**



**PSU 48-203K (1994) #59**  
**Best Available**



**PSU 48-203K (1994) #60**  
**Best Available**



PSU 48-203K (1994) #61



**PSU 48-203K (1994) #62**



**PSU 48-203K (1994) #63**  
**Best Available**



PSU 48-203K (1994) #64



**PSU 48-203K (1994) #65**



PSU 48-203K (1994) #66



**PSU 48-203K (1994) #67**



**PSU 48-203K (1994) #68**



PSU 48-203K (1994) #69



**PSU 48-203K (1994) #70**



**PSU 48-203K (1994) #71**  
**Best Available**



**PSU 48-203K (1994) #72**



PSU 48-203K (1994) #73



**PSU 48-203K (1994) #74**



PSU 48-203K (1994) #75



**PSU 48-203K (1994) #76**



**PSU 48-203K (1994) #77**



**PSU 48-203K(1994) #78**



**PSU 48-203K (1994) #79**



**PSU 48-203K (1994) #80**  
**Best Available**



**PSU 48-203K (1994) #81**  
**Best Available**



FSU 48-203K (1994) #62



**PSU 48-203K (1994) #83**  
**Best Available**



**PSU 48-203K (1994) #84**  
**Best Available**



PSU 48-203K (1994) #85



PSU 48-203K (1994) #86



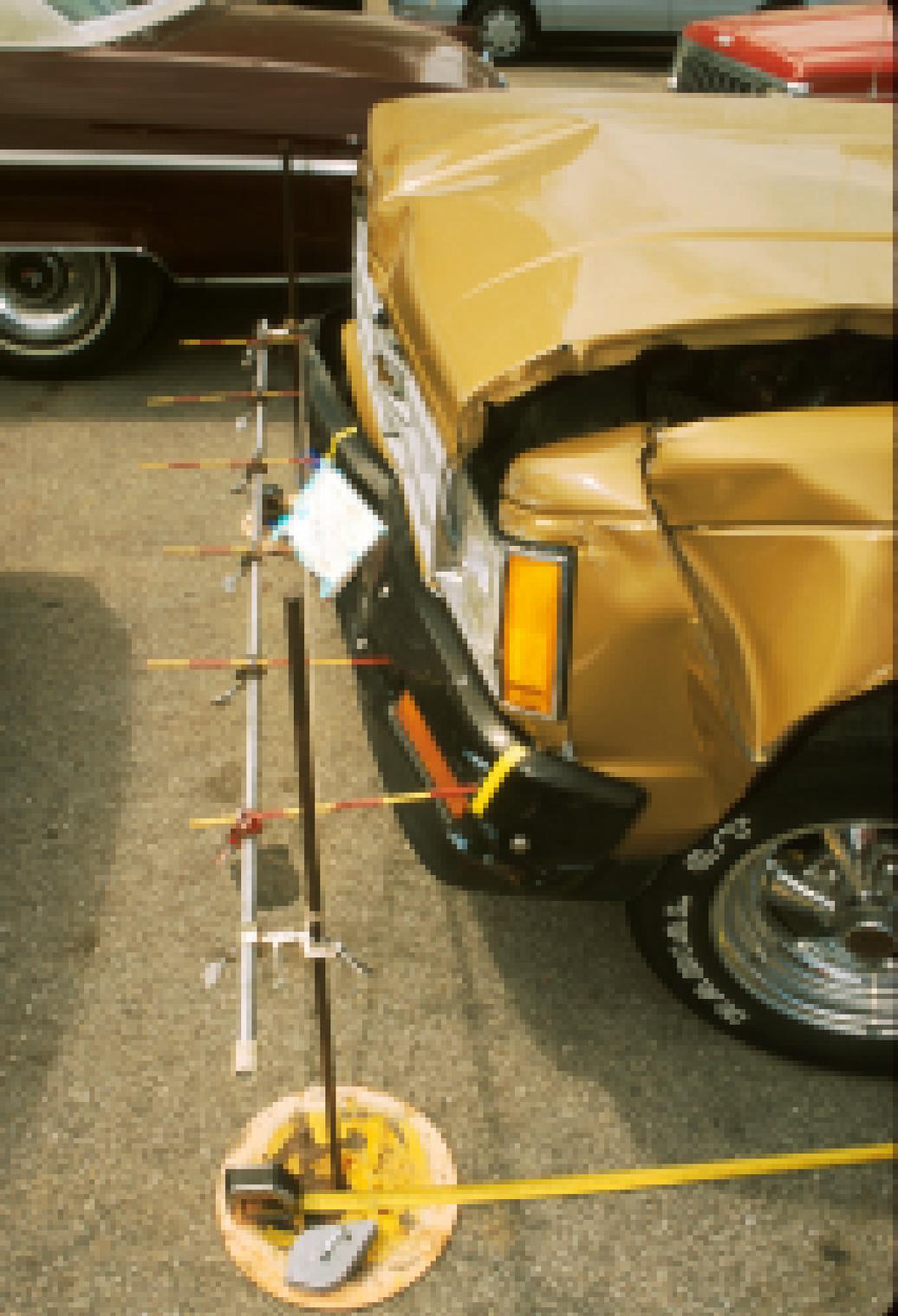
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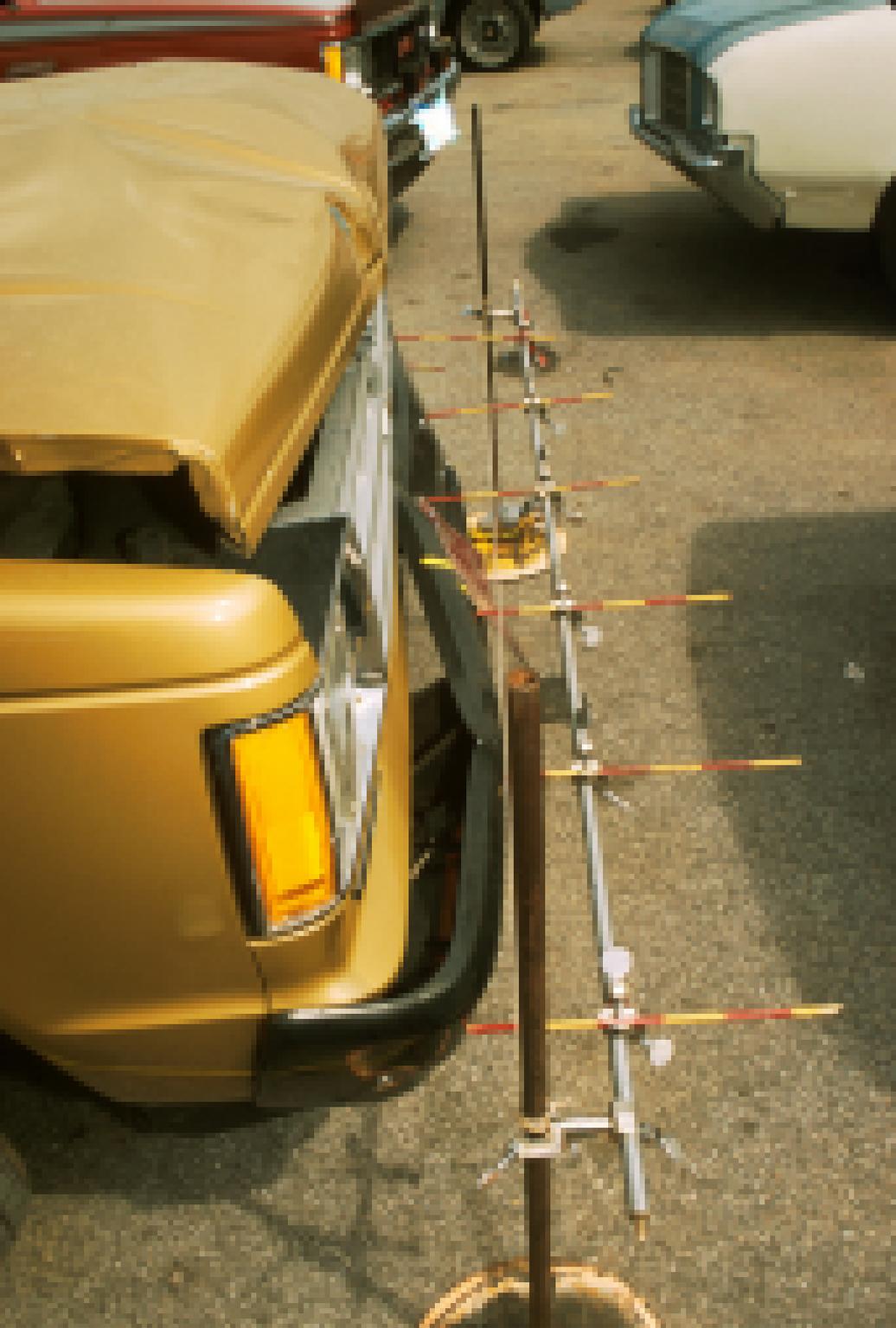
**PSU 48-203K (1994) #68**  
**Best Available**



**PSU 48-203K (1994) #89**  
**Best Available**



**PSU 48-203K (1994) #90**  
**Best Available**



PSU 48-203K (1994) #91



**PSU 48-203K (1994) #92**  
**Best Available**



**PSU 48-203K (1994) #93**  
**Best Available**



**PSU 48-203K (1994) #94**  
**Best Available**



**PSU 48-203K (1994) #95**  
**Best Available**



PSU 48-203K (1994) #96



**PSU 48-203K (1994) #97**  
**Best Available**



**PSU 48-203K (1994) #98**  
**Best Available**



**PSU 48-203K (1994) #99**  
**Best Available**



**PSU 48-203K (1994) #100**  
**Best Available**



**PSU 48-203K (1994) #101**  
**Best Available**



**PSU 48-203K (1994) #102**  
**Best Available**



**PSU 48-203K (1994) #103**  
**Best Available**



**PSU 48-203K (1994) #104**

**Best Available**



PSU-48-203K (1994) #105



PSU 48-203K (1994) #106



**PSU 48-203K (1994) #107**



PSU 48-203K (1984) #108



PSU 48-203K (1994) #109



**PSU 48-203K (1994) #110**



**PSU 48-203K (1994) #111**



**PSU 48-203K (1994) #112**



PSU 48-203K (1994) #113



**PSU 48-203K (1994) #114**



PSU 48-203K (1994) #115



PSU 48-203K (1994) #116



PSU 48-203K (1994) #117



PSU 48-203K (1994) #118