



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.

\*\*\* \*\*



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



# CASE SUMMARY

PSU 48 CASE NO. 211J TYPE OF ACCIDENT Car / Car - Acute 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 four lane divided highway in the outside lane. V2 was traveling north, stopped at an intersection. V2 was attempting to turn left to travel east. As V2 crossed the westbound travel lanes, it was struck in the left side by the front of V1. The driver and passenger in V1 were transported to a local hospital emergency room where they were treated and released. The driver of V2 was transported to a trauma center and admitted for treatment. She died approximately 12 hours following the accident.

## 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	Subcompact	1992/Toyota/Corolla	Front	Moderate	None
2	Intermediate	1993/Honda/accord	Left	Severe	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	Lap/Shoulder	Chest	Contusion	1	Steering wheel
1	Passenger	Front Right	Lap only	Lower leg	Fracture	2	Glove compartment door
2	Driver	Front Left	Lap/Shoulder	Heart	laceration	5	Door surface indirect

**Body Region**

Abdomen  
Ankle-foot  
Arm (upper)  
Back-thoracolumbar spine  
Chest  
Elbow  
Face  
Forearm  
Head-skull  
Knee  
Leg (lower)  
Lower limbs(s) (whole or unknown part)  
Neck-cervical spine  
Pelvic-hip  
Shoulder  
Thigh  
Upper limb(s) (whole or unknown part)  
Whole body  
Wrist-hand

Brain  
Ears  
Eye  
Heart  
Kidneys  
Liver  
Mouth  
Noise  
Pulmonary-lungs  
Spleen  
Thyroid, other endocrine gland  
Vertebrae

**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**

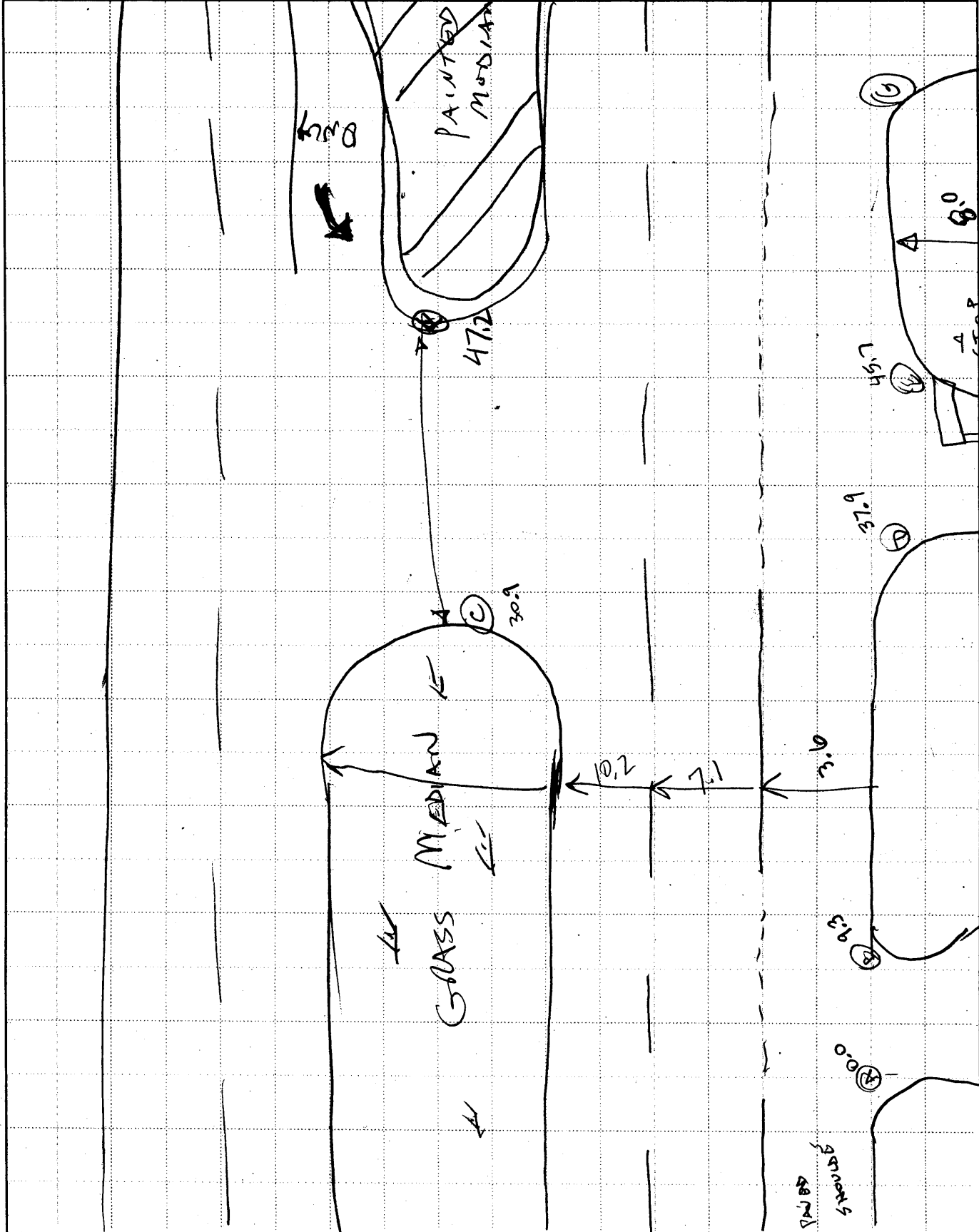
(1) Minor injury  
(2) Moderate injury  
(3) Serious injury  
(4) Severe injury  
(5) Critical injury  
(6) Maximum (untreatable)  
(7) Injured, unknown severity

**DO NOT SANITIZE THIS FORM**



# ACCIDENT COLLISION DIAGRAM

PSU No. 48 Case Number Stratum 2115 Indicate North 



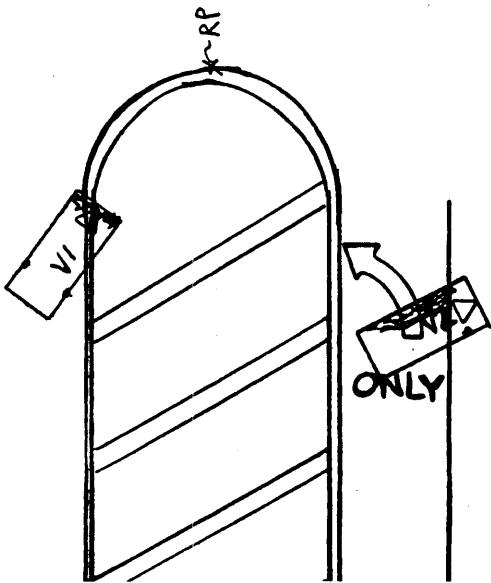
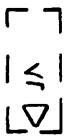


PARKING LOT

0 1 2 3 4 5  
METERS  
P48-2115

P STOP  
D STOP

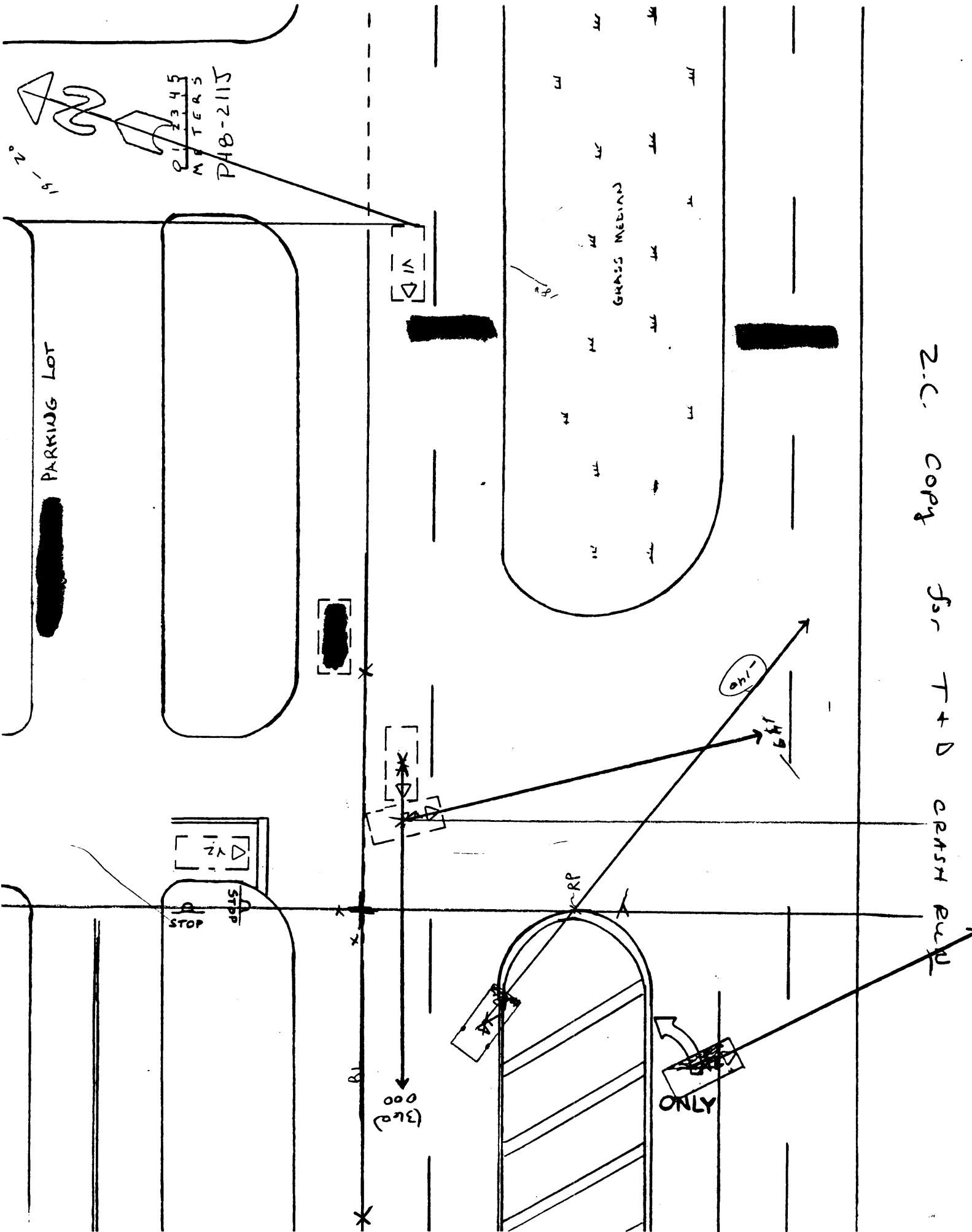
RL



GRASS MEDIAN

ONLY

2.C. Copy for T + D crash Bul









# ACCIDENT FORM

1. Primary Sampling Unit Number 48  
 2. Case Number - Stratum 211J

## IDENTIFICATION

3. Number of General Vehicle Forms Submitted 02  
 4. Date of Accident (Month, Day, Year)           19 3  
 5. Time of Accident 1308  
 Code reported military time of accident.  
 NOTE: Midnight = 2400  
 Unknown = 9999

## 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.

6. \_\_\_ SS14 Fatal AOPS 0  
 7. \_\_\_ SS15 Administrative Use 0  
 8. \_\_\_ SS16 \_\_\_\_\_ 0  
 9. \_\_\_ SS17 \_\_\_\_\_ 0  
 10. \_\_\_ SS18 \_\_\_\_\_ 0

## NUMBER OF EVENTS

11. Number of Recorded Events in This Accident 01  
 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 1</u>	13. <u>01</u>	14. <u>01</u>	15. <u>F</u>	16. <u>02</u>	17. <u>03</u>	18. <u>L</u>
19. <u>0 2</u>	20. _____	21. _____	22. _____	23. _____	24. _____	25. _____
26. <u>0 3</u>	27. _____	28. _____	29. _____	30. _____	31. _____	32. _____
33. <u>0 4</u>	34. _____	35. _____	36. _____	37. _____	38. _____	39. _____
40. <u>0 5</u>	41. _____	42. _____	43. _____	44. _____	45. _____	46. _____

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

## CODES FOR CLASS OF VEHICLE

- (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
- (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 1,020  
 Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown  
2,253 lbs X .4536 = 1,022 kgs  
 Source: \_\_\_\_\_

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

**VERRIDE/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 1 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 250 ✓  
 28. Heading Angle For Other Vehicle 147 ✓  
 ?

**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

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

- (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) 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) 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
- (88) Other nonfixed object (specify):

- 
- (89) Unknown nonfixed object

- (98) Other event (specify):

- 
- (99) Unknown event or object



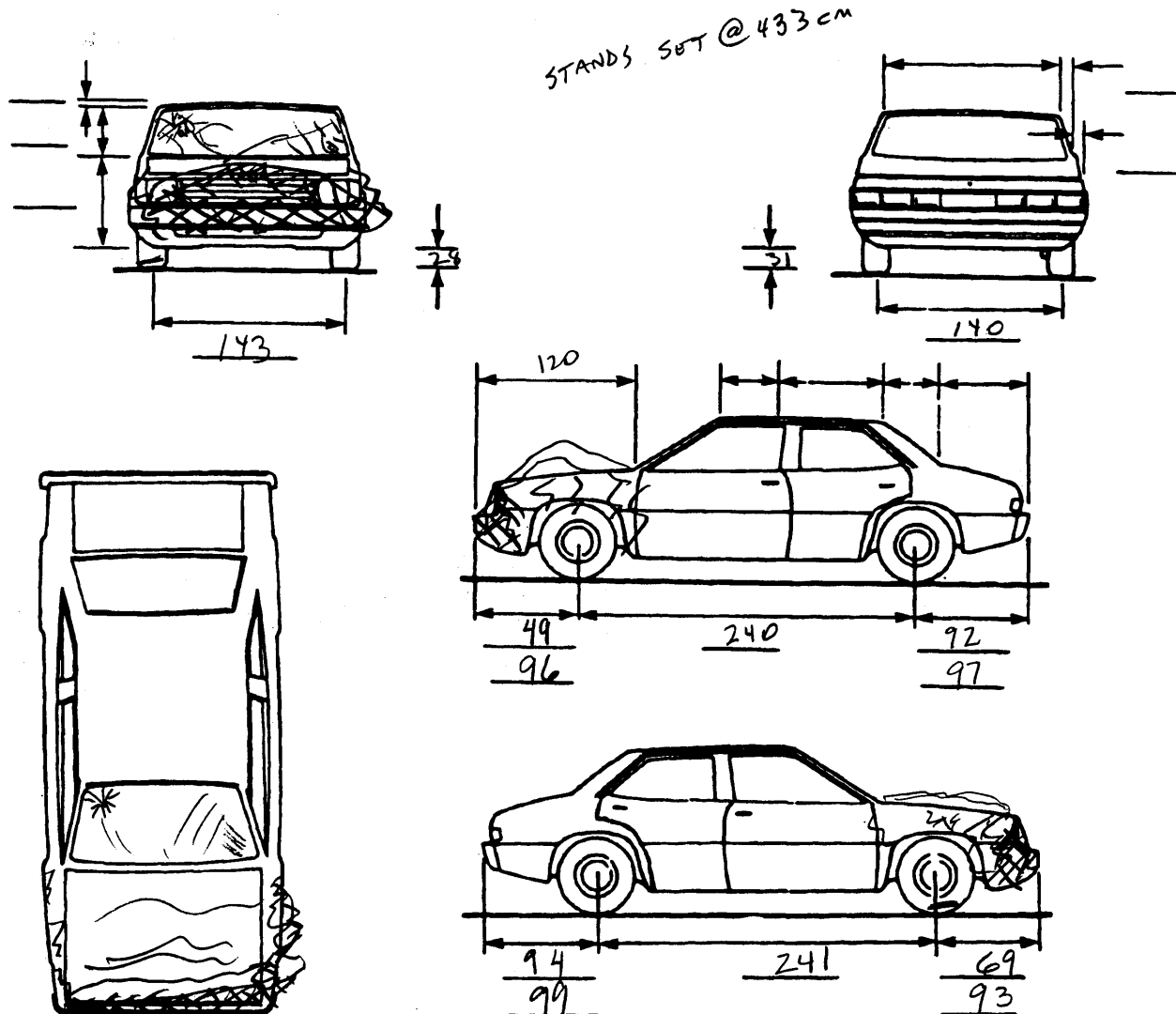
# ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	✓	<u>95.7</u>	inches	x 2.54	=	<u>243</u>	cm
Overall Length	✓	<u>170.3</u>	inches	x 2.54	=	<u>433</u>	cm
Maximum Width	✓	<u>65.2</u>	inches	x 2.54	=	<u>166</u>	cm
Curb Weight	✓	<u>2,253</u>	pounds	x .4536	=	<u>1,022</u>	kg
Average Track	✓	<u>56.3/55.3</u>	inches	x 2.54	=	<u>143/140</u>	cm
Front Overhang		_____.	inches	x 2.54	=	_____	cm
Rear Overhang		_____.	inches	x 2.54	=	_____	cm
Undeformed End Width		_____.	inches	x 2.54	=	<u>153</u>	cm
Engine Size: cyl./displ.		_____.	cc	x .001	=	_____	L
		_____.	CID	x .0164	=	<u>1.6</u>	L ✓

### VEHICLE DAMAGE SKETCH

<p><b>TIRE—WHEEL DAMAGE</b></p> <p>a. Rotation physically restricted      b. Tire deflated</p> <table style="width:100%;"> <tr> <td>RF <u>1</u></td> <td>RF <u>1</u></td> </tr> <tr> <td>LF <u>1</u></td> <td>LF <u>2</u></td> </tr> <tr> <td>RR <u>2</u></td> <td>RR <u>2</u></td> </tr> <tr> <td>LR <u>2</u></td> <td>LR <u>2</u></td> </tr> </table> <p>(1) Yes (2) No (8) NA (9) Unk.</p>	RF <u>1</u>	RF <u>1</u>	LF <u>1</u>	LF <u>2</u>	RR <u>2</u>	RR <u>2</u>	LR <u>2</u>	LR <u>2</u>	<p><b>ORIGINAL SPECIFICATIONS</b></p> <table style="width:100%;"> <tr> <td>Wheelbase</td> <td><u>243</u></td> <td>cm</td> </tr> <tr> <td>Overall Length</td> <td><u>433</u></td> <td>cm</td> </tr> <tr> <td>Maximum Width</td> <td><u>166</u></td> <td>cm</td> </tr> <tr> <td>Curb Weight</td> <td><u>1022</u></td> <td>kg</td> </tr> <tr> <td>Average Track</td> <td><u>142</u></td> <td>cm</td> </tr> <tr> <td>Front Overhang</td> <td><u>87</u></td> <td>cm</td> </tr> <tr> <td>Rear Overhang</td> <td><u>103</u></td> <td>cm</td> </tr> <tr> <td>Undeformed End Width</td> <td><u>153</u></td> <td>cm</td> </tr> <tr> <td>Engine Size: cyl./displ.</td> <td><u>4/1.6</u></td> <td>L</td> </tr> </table>	Wheelbase	<u>243</u>	cm	Overall Length	<u>433</u>	cm	Maximum Width	<u>166</u>	cm	Curb Weight	<u>1022</u>	kg	Average Track	<u>142</u>	cm	Front Overhang	<u>87</u>	cm	Rear Overhang	<u>103</u>	cm	Undeformed End Width	<u>153</u>	cm	Engine Size: cyl./displ.	<u>4/1.6</u>	L	<p><b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only)</p> <p>RF <del>0</del> <u>100</u> <u>45</u> ✓          LF <del>0</del> <u>10</u> <u>0</u> ✓          RR ± <u>00</u> °          LR ± <u>00</u> °          Within ± 5 degrees</p> <p><b>DRIVE WHEELS</b></p> <p><input checked="" type="checkbox"/> FWD    <input type="checkbox"/> RWD    <input type="checkbox"/> 4WD</p> <p>Approximate Cargo Weight <u>0</u> kg</p>
RF <u>1</u>	RF <u>1</u>																																				
LF <u>1</u>	LF <u>2</u>																																				
RR <u>2</u>	RR <u>2</u>																																				
LR <u>2</u>	LR <u>2</u>																																				
Wheelbase	<u>243</u>	cm																																			
Overall Length	<u>433</u>	cm																																			
Maximum Width	<u>166</u>	cm																																			
Curb Weight	<u>1022</u>	kg																																			
Average Track	<u>142</u>	cm																																			
Front Overhang	<u>87</u>	cm																																			
Rear Overhang	<u>103</u>	cm																																			
Undeformed End Width	<u>153</u>	cm																																			
Engine Size: cyl./displ.	<u>4/1.6</u>	L																																			
<p><b>TYPE OF TRANSMISSION</b></p> <p><input type="checkbox"/> Manual    <input checked="" type="checkbox"/> Automatic</p>																																					

**MEASUREMENTS IN CENTIMETERS**



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

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





# INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number 48  
 2. Case Number - Stratum 211J  
 3. Vehicle Number 01

## 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 1 8. RR 1 9. TG/H 0

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

### Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code 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 2 16. LF 0 17. RF 0 18. LR 0 19. RR 0  
 20. BL 0 21. Roof 8 22. Other 0

(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 2 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 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 Precrash Glazing Status

39. WS 1 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



**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. _____

**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

*No Intrusion*

**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

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

	—		=	
	—	N/A	=	
	—		=	
	—		=	
	—		=	

**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 1988-93 CDS.)

89. Blank X X X  
 (This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.)

90. Blank X X X  
 (This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.)

91. Blank X X X  
 (This variable is left blank so that numbering consistency can be maintained with the 1988-93 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

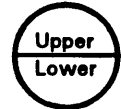
*Quarter Sections*

- (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 066,000

\_\_\_\_\_ 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

41,176 miles X 1.6093 = 66,265 kilometers

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

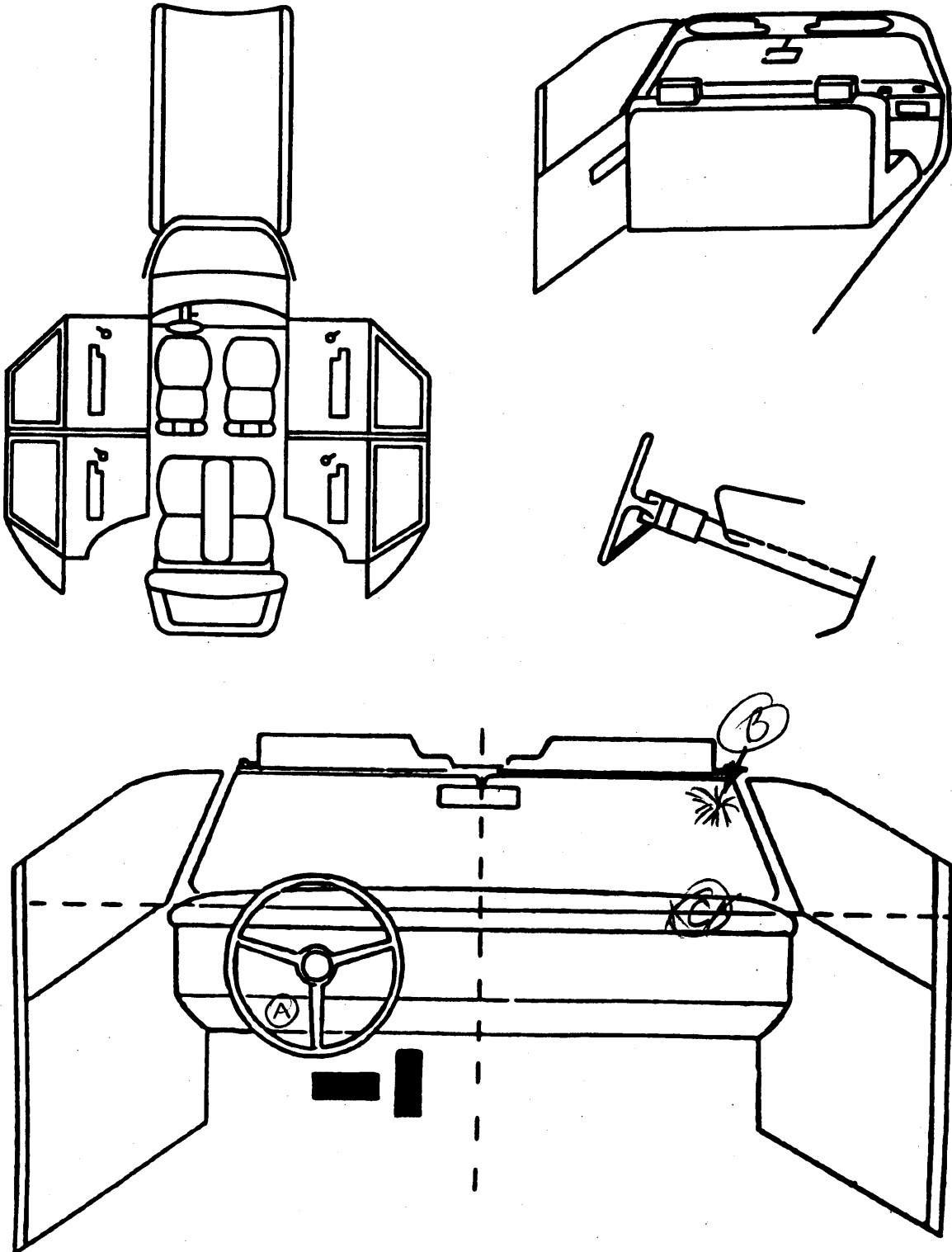
95. Instrument Panel Damage from Occupant Contact? 1 @  
 (0) No  
 (1) Yes  
 (9) Unknown

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	DASH	1	KNOE	SCUFF	2
B	W.S	2	HEAD	CRACK - HAIR	1
C	DASH	2	?	SCUFF	1
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	1	1
	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

**Did Air Bag System Fail?**

- (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	1	1
	Use	1	2
	Type	2	2
	Proper Use	1	0
	Failure Modes	1	0

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

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown
- Non-functional*
- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

**Automatic (Passive) Belt System Use**

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

**Automatic (Passive) Belt System Type**

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

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

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

**Automatic Belt Used Improperly**

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

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

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

**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	3	0	3
	Use	03 some	00	00 (some)
	Failure Modes	1	0	0
SECOND	Availability	4	3	4
	Use	00	00	00
	Failure Modes	0	0	0
THIRD	Availability			
	Use			
	Failure Modes			
OTHER	Availability			
	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) \_\_\_\_\_
- (03) Shoulder belt
- (04) Lap belt
- (05) Lap and shoulder belt
- (05) Belt used - type unknown

**(08) Other belt used (specify):**

- (12) \_\_\_\_\_
- (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) \_\_\_\_\_
- (7) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_
- (8) \_\_\_\_\_
- (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>			N/A			
<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	3	0	3
	Seat Type	01	00	01
	Seat Performance	1	0	1
	Seat Orientation	1	0	1
SECOND	Head Restraint Type/Damage	0	0	0
	Seat Type	03	03	03
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
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
- (1) 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)

National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Form

HEAD RESTRAINT AND SEAT EVALUATION

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

3

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

(9) Unknown

26. Seat Type (this Occupant Position)

01

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



# OCCUPANT INJURY FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number <u>48</u>	3. Vehicle Number <u>01</u>
2. Case Number - Stratum <u>211J</u>	4. Occupant Number <u>01</u>

## INJURY DATA

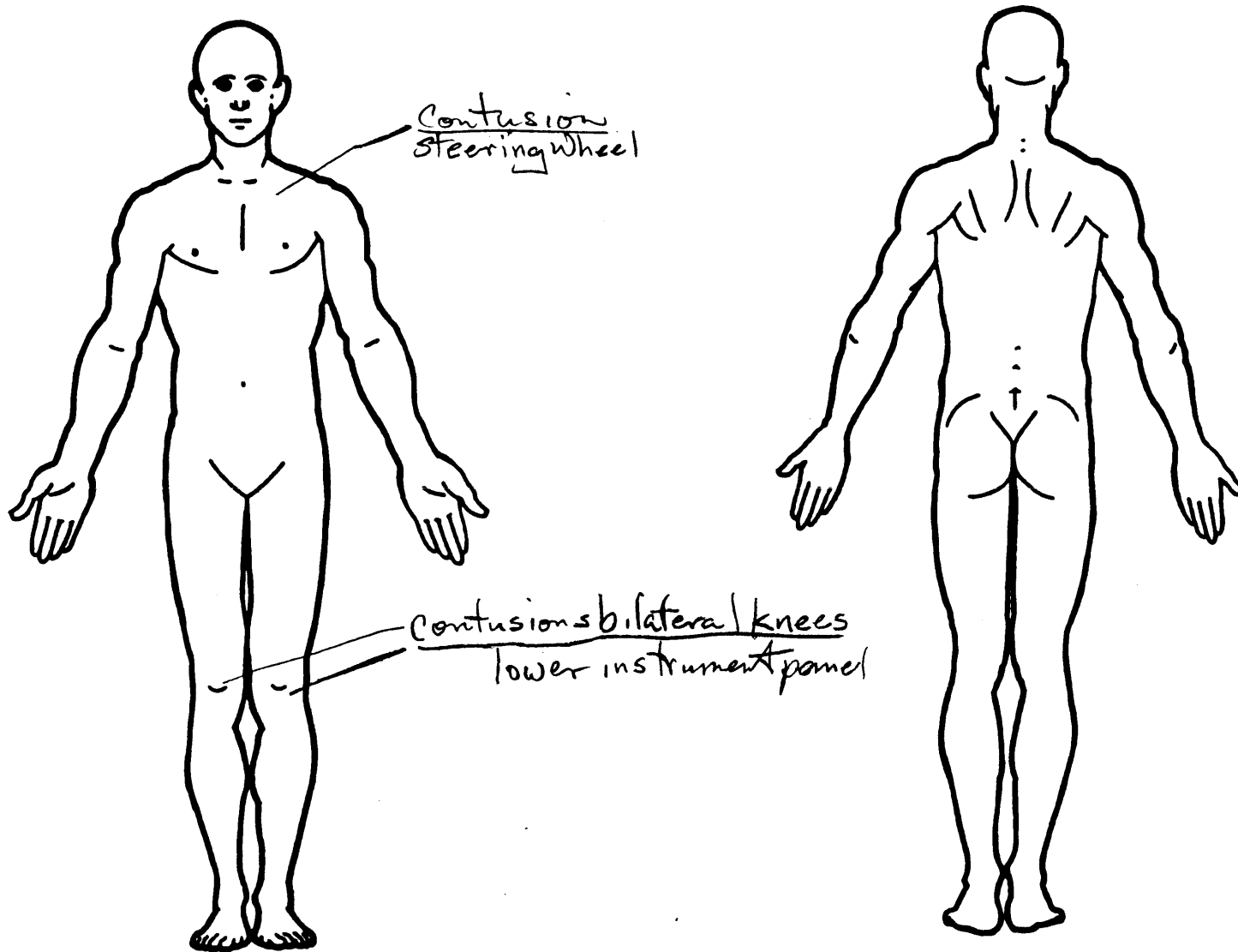
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the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

	Source of Injury Data	O.I.C.-A.I.S						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>3</u>	6. <u>4</u>	7. <u>9</u>	8. <u>04</u>	9. <u>02</u>	10. <u>1</u>	11. <u>4</u>	12. <u>06</u>	13. <u>2</u>	14. <u>1</u>	15. <u>00</u>
2nd	16. <u>3</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. <u>3</u>	28. <u>8</u>	29. <u>9</u>	30. <u>04</u>	31. <u>02</u>	32. <u>1</u>	33. <u>1</u>	34. <u>09</u>	35. <u>2</u>	36. <u>1</u>	37. <u>00</u>
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

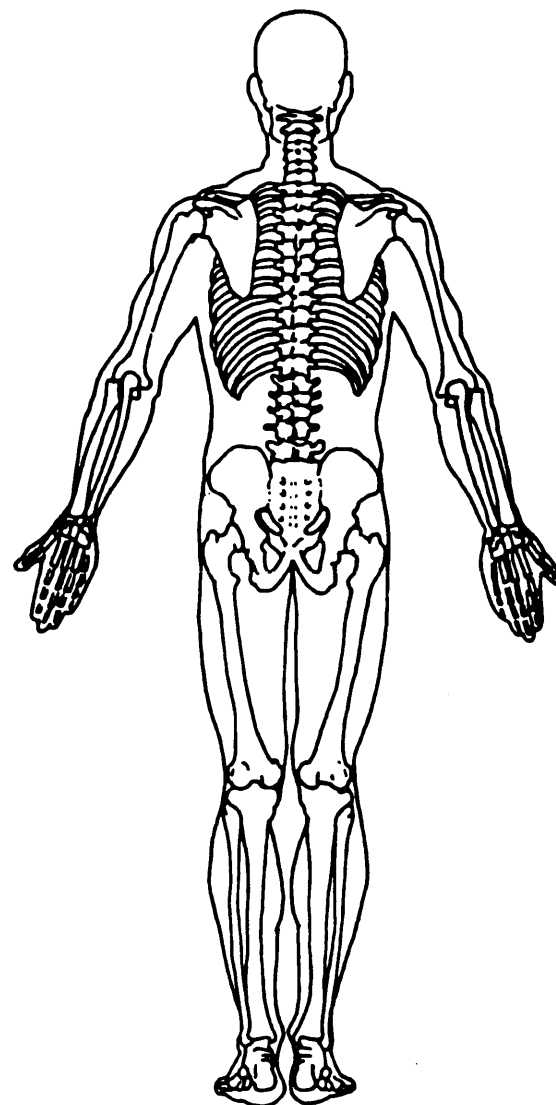
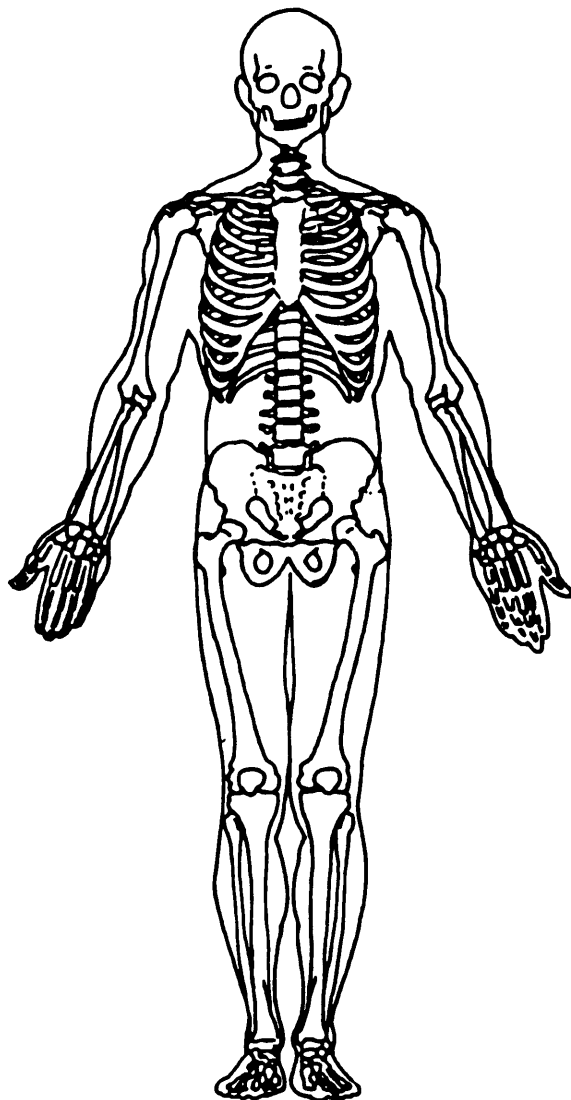
pH = \_\_\_\_\_

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

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

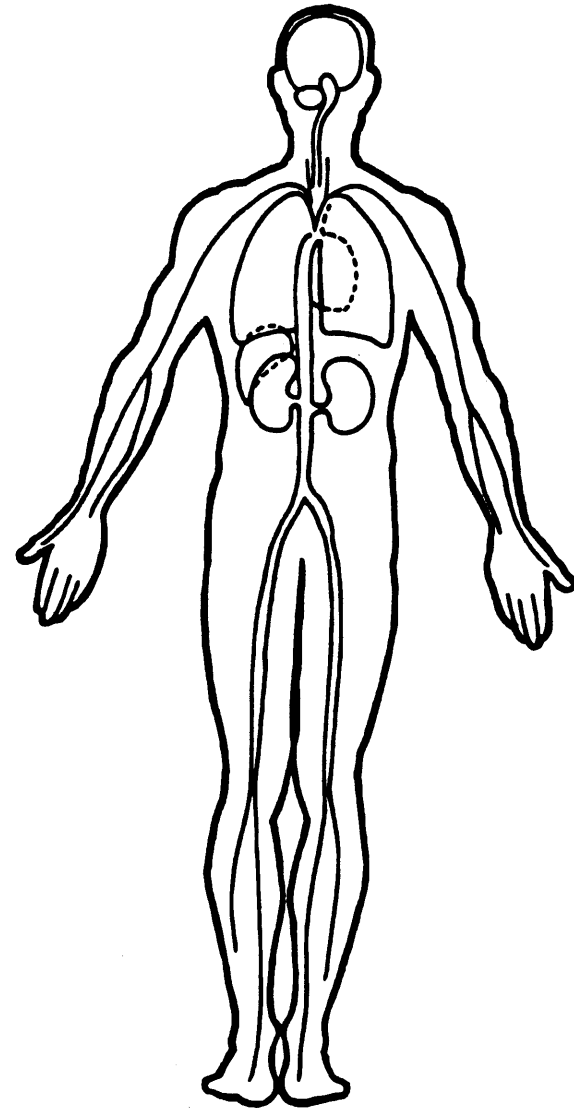
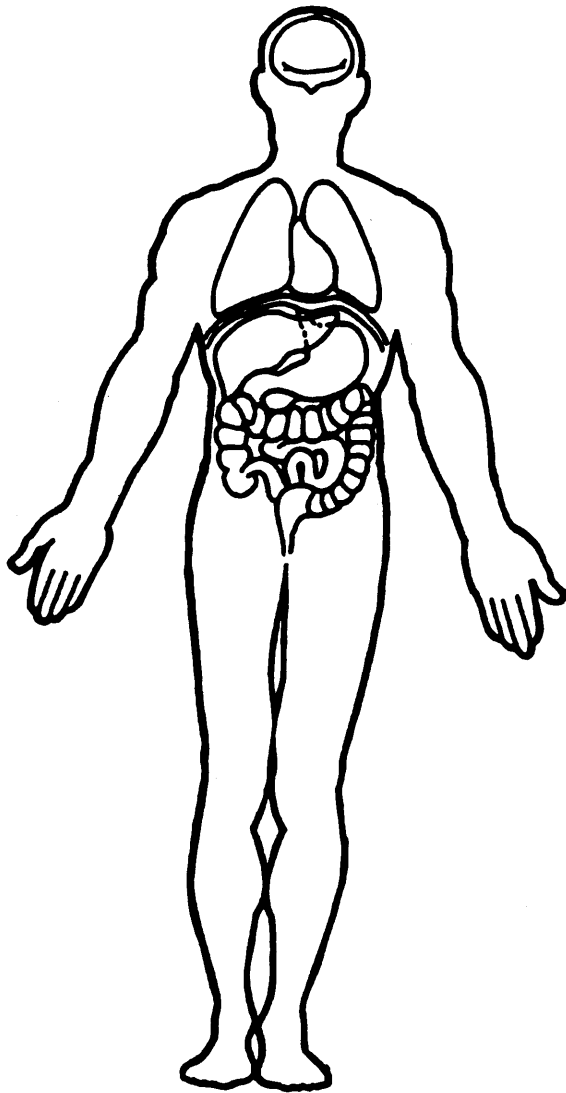
HCO<sub>3</sub> \_\_\_\_\_

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.)





HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant at This Occupant Position 3

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

26. Seat Type (this Occupant Position) 01

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



# OCCUPANT INJURY FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number <span style="float:right; margin-right: 50px;"><u>48</u></span>	3. Vehicle Number <span style="float:right;"><u>01</u></span>
2. Case Number - Stratum <span style="float:right;"><u>211J</u></span>	4. Occupant Number <span style="float:right;"><u>02</u></span>

## INJURY DATA-

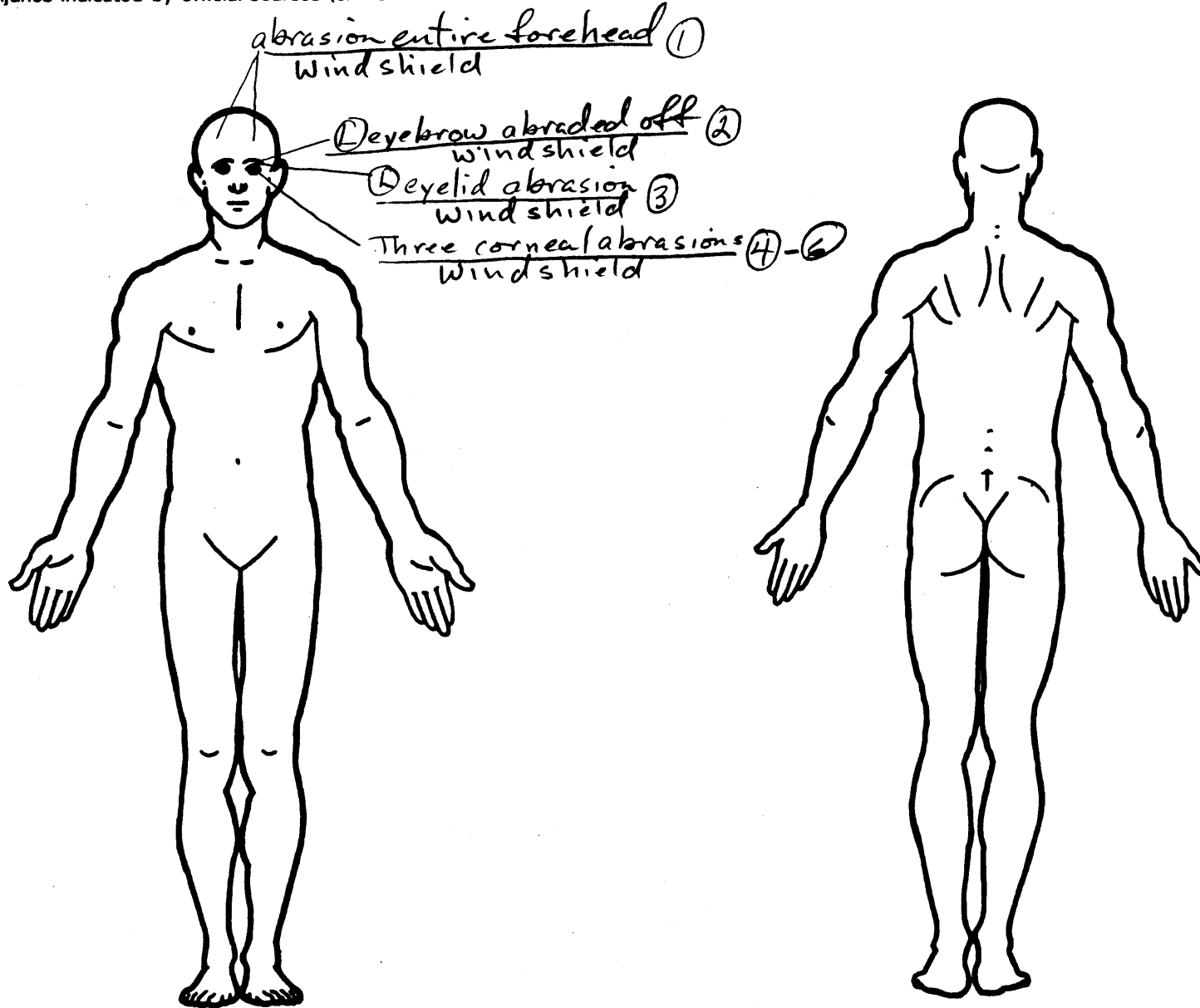
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the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

	Source of Injury Data	O.I.C.-A.I.S						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>3</u>	6. <u>2</u>	7. <u>9</u>	8. <u>02</u>	9. <u>02</u>	10. <u>1</u>	11. <u>7</u>	12. <u>01</u>	13. <u>1</u>	14. <u>1</u>	15. <u>00</u>
2nd	16. <u>3</u>	17. <u>2</u>	18. <u>9</u>	19. <u>02</u>	20. <u>02</u>	21. <u>1</u>	22. <u>7</u>	23. <u>01</u>	24. <u>1</u>	25. <u>1</u>	26. <u>00</u>
3rd	27. <u>3</u>	28. <u>2</u>	29. <u>9</u>	30. <u>72</u>	31. <u>02</u>	32. <u>1</u>	33. <u>2</u>	34. <u>01</u>	35. <u>1</u>	36. <u>1</u>	37. <u>00</u>
4th	38. <u>3</u>	39. <u>2</u>	40. <u>4</u>	41. <u>06</u>	42. <u>02</u>	43. <u>1</u>	44. <u>2</u>	45. <u>01</u>	46. <u>1</u>	47. <u>1</u>	48. <u>00</u>
5th	49. <u>3</u>	50. <u>2</u>	51. <u>4</u>	52. <u>06</u>	53. <u>02</u>	54. <u>1</u>	55. <u>2</u>	56. <u>01</u>	57. <u>1</u>	58. <u>1</u>	59. <u>00</u>
6th	60. <u>3</u>	61. <u>2</u>	62. <u>4</u>	63. <u>06</u>	64. <u>02</u>	65. <u>1</u>	66. <u>2</u>	67. <u>01</u>	68. <u>1</u>	69. <u>1</u>	70. <u>00</u>
7th	71. <u>3</u>	72. <u>8</u>	73. <u>5</u>	74. <u>34</u>	75. <u>06</u>	76. <u>2</u>	77. <u>2</u>	78. <u>12</u>	79. <u>2</u>	80. <u>1</u>	81. <u>00</u>
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
- (81) Flying glass
- (92) Other noncontact injury source (specify): \_\_\_\_\_
- (83) 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
- (08) 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, OO 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

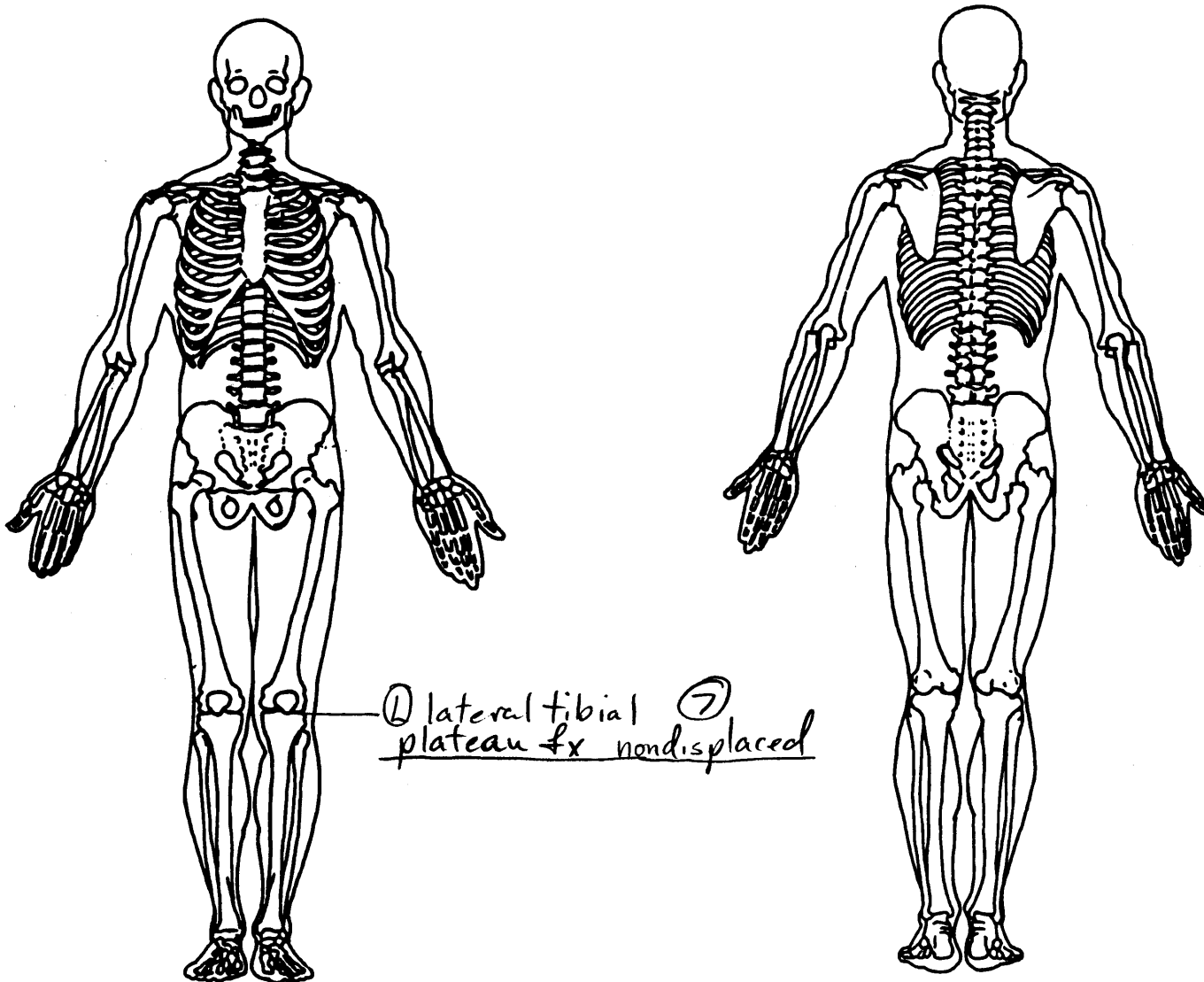
pH = \_\_\_\_

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

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

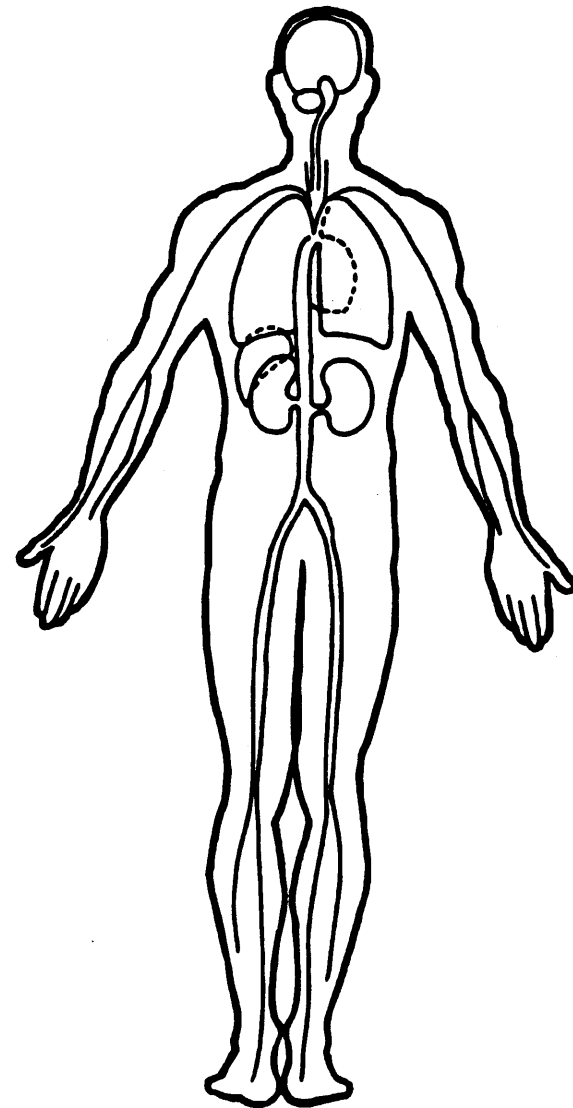
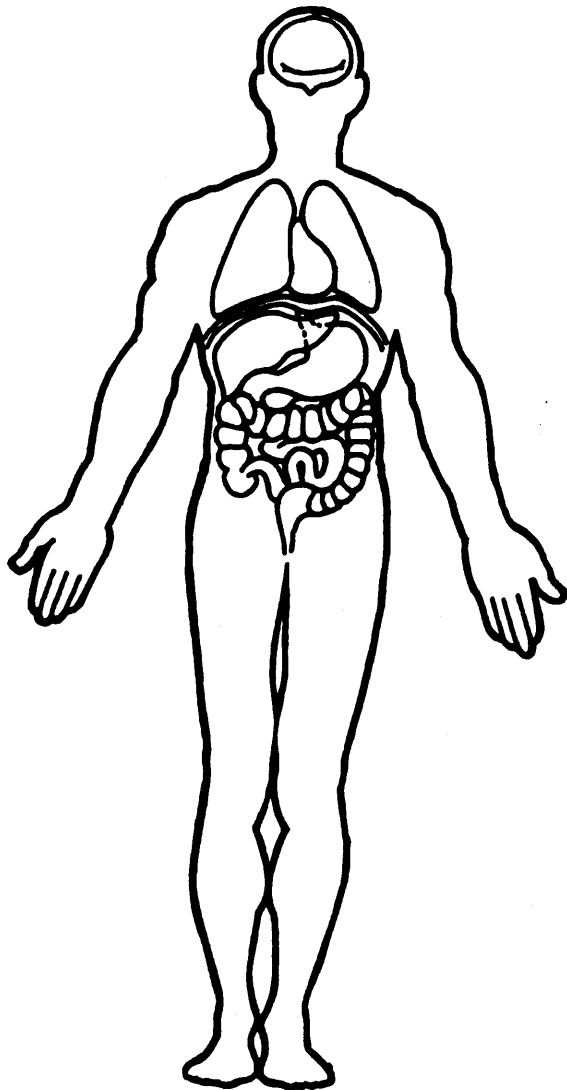
HCO<sub>3</sub> = \_\_\_\_

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 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 1,240  
Code weight to nearest 10 kilograms.  
(045) Less than 450 kilograms  
(610) 6,100 kilograms or more  
(999) Unknown

2,734 lbs X .4536 = 1,240 kgs

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

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 1 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 147

28. Heading Angle For Other Vehicle 250



**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)

10

- (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
- (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>2115</u>	

## VEHICLE IDENTIFICATION

VIN 1HGC [REDACTED] Model Year 93  
 Vehicle Make (specify): Honda Vehicle Model (specify): Accord

## 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
1	STARTS 44cm IN FRONT OF LR AXLE	STARTS 81 cm BETWEEN LR AXLE

## 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								
1	MID SIDE	192	56	360	0	5	56	43	39	0	+19
	<u>V.C.</u>			295	5	48	56	48	28	0	-19

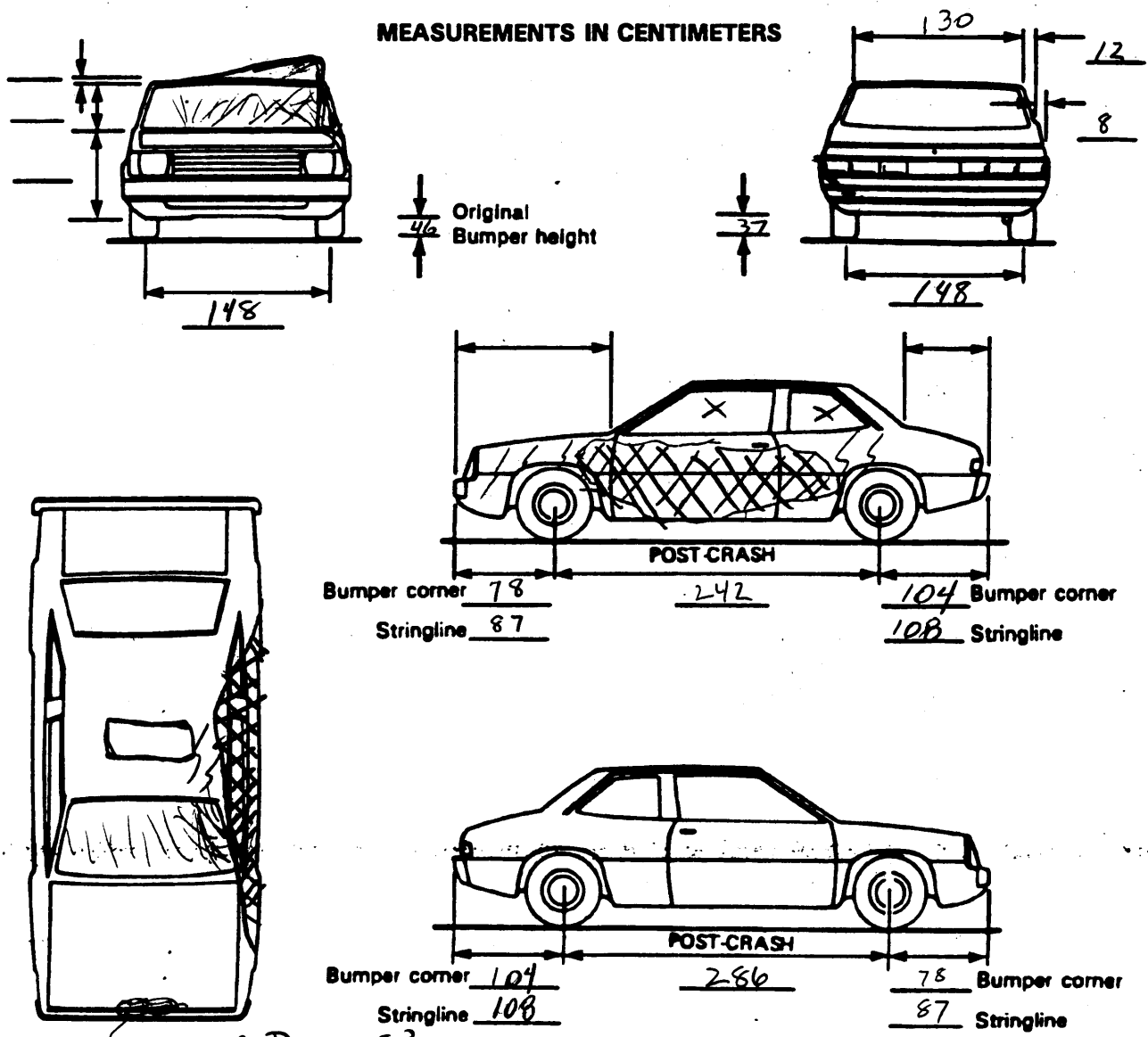
# ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	✓	107.1	inches	x 2.54	=	272	cm
Overall Length	✓	285.2	inches	x 2.54	=	730	cm
Maximum Width	✓	67.1	inches	x 2.54	=	170	cm
Curb Weight	✓	2,734	pounds	x .4536	=	1,240	kg
Average Track	✓	58.2	inches	x 2.54	=	148	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
		37-50	CID	x .0164	=	22	L ✓

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>272</u> cm</p> <p>Overall Length <u>470</u> cm</p> <p>Maximum Width <u>170</u> cm</p> <p>Curb Weight <u>1240</u> kg</p> <p>Average Track <u>148</u> cm</p> <p>Front Overhang <u>87</u> cm</p> <p>Rear Overhang <u>109</u> cm</p> <p>Undeformed End Width _____ cm</p> <p>Engine Size: cyl./displ. <u>4/2.2</u> L</p>	<p><b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only)</p> <p>RF ± <u>0</u> °</p> <p>LF ± <u>0</u> °</p> <p>RR ± <u>0</u> °</p> <p>LR ± <u>0</u> °</p> <p>Within ± 5 degrees</p> <hr/> <p><b>DRIVE WHEELS</b></p> <p><input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD</p> <p>Approximate Cargo Weight <u>0</u> kg</p>
<p><b>TYPE OF TRANSMISSION</b></p> <p><input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic</p>		

MEASUREMENTS IN CENTIMETERS



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

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





# INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number 48  
2. Case Number - Stratum 211J  
3. Vehicle Number 02

## INTEGRITY

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

Yes, Integrity Was Lost Through

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

### Door, Tailgate or Hatch Opening

5. LF 3 6. RF 3 7. LR 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 2 16. LF 6 17. RF 0 18. LR 6 19. RR 0  
20. BL 0 21. Roof 0 22. Other 0

(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 1 32. LF 2 33. RF 0 34. LR 2 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

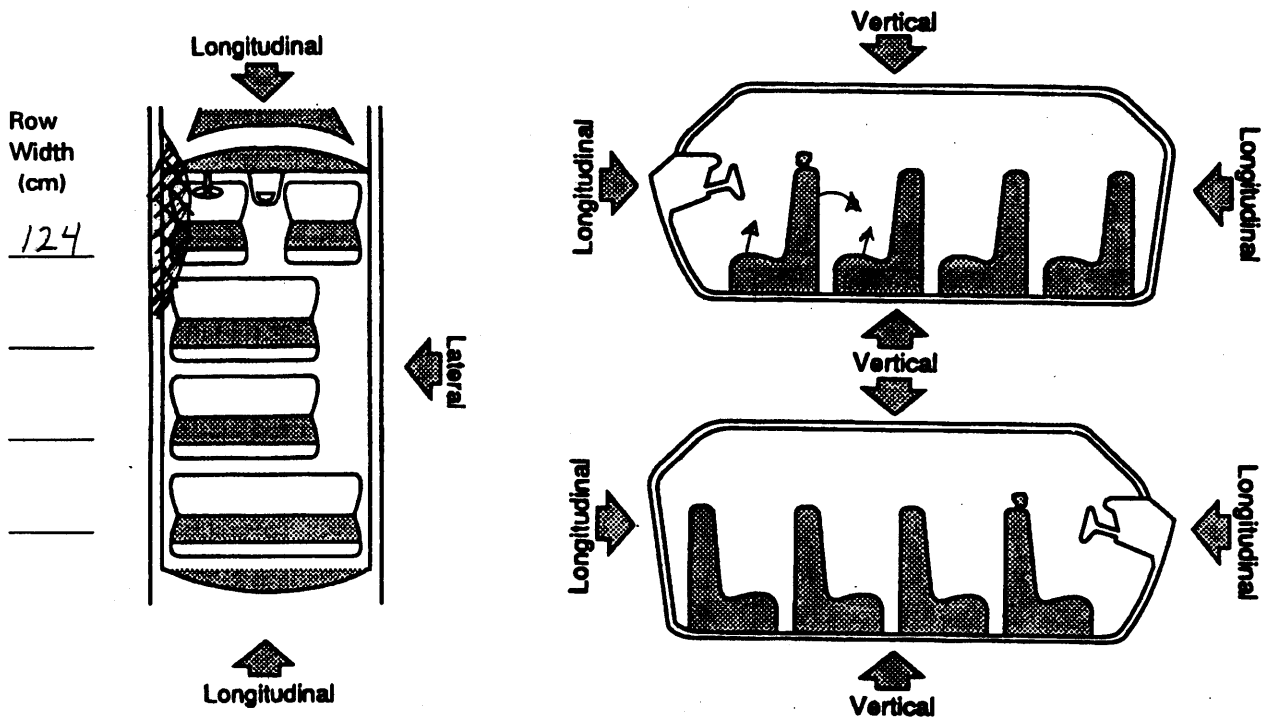
### Window Precrash Glazing Status

39. WS 1 40. LF 2 41. RF 0 42. LR 2 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



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are in Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION	
LF	DOOR PANEL	62	45	17 ⑧	LAT
	SILL	41	30	11 ⑩	LAT
	A-PILLAR	49	30	19 ⑦	LAT
	KICK PANEL	49	30	19 ⑥	LAT
	SEAT	-	-	APPROX 20 ⑨	VERT
		-	-	=	
		-	-	=	
LR	SIDE PANEL	60	29	31 ②	LAT
	B-PILLAR	60	20	40 ①	LAT
	SILL	60	30	30 ③	LAT
	FRONT SEAT BACK	-	-	APPROX 30 ④	LONG
	SEAT CUSHION	-	-	12 ⑨	VERT
		-	-	=	
		-	-	=	
		-	-	=	



**OCCUPANT AREA INTRUSION**

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

**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	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>21</u>	48. <u>07</u>	49. <u>4</u>	50. <u>3</u>
2nd	51. <u>21</u>	52. <u>28</u>	53. <u>4</u>	54. <u>3</u>
3rd	55. <u>21</u>	56. <u>17</u>	57. <u>4</u>	58. <u>3</u>
4th	59. <u>21</u>	60. <u>19</u>	61. <u>4</u>	62. <u>2</u>
5th	63. <u>11</u>	64. <u>24</u>	65. <u>3</u>	66. <u>1</u>
6th	67. <u>11</u>	68. <u>27</u>	69. <u>3</u>	70. <u>3</u>
-7th	71. <u>11</u>	72. <u>06</u>	73. <u>3</u>	74. <u>3</u>
8th	75. <u>11</u>	76. <u>10</u>	77. <u>3</u>	78. <u>3</u>
9th	79. <u>21</u>	80. <u>24</u>	81. <u>2</u>	82. <u>1</u>
10th	83. <u>11</u>	84. <u>17</u>	85. <u>2</u>	86. <u>3</u>

**LOCATION OF INTRUSION**

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

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

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

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

- (99) Unknown

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

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

	-	N/A	=	
	-		=	
	-		=	
	-		=	
	-		=	

**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 1988-93 CDS.)

89. Blank X X X  
 (This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.)

90. Blank X X X  
 (This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.)

91. Blank X X X  
 (This variable is left blank so that numbering consistency can be maintained with the 1988-93 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

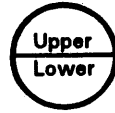
93. Location of Steering Rim/Spoke Deformation 00  
 (00) No steering rim deformation

*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 019,000

\_\_\_\_\_ 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

11,666 miles X 1.6093 = 18,774 kilometers

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

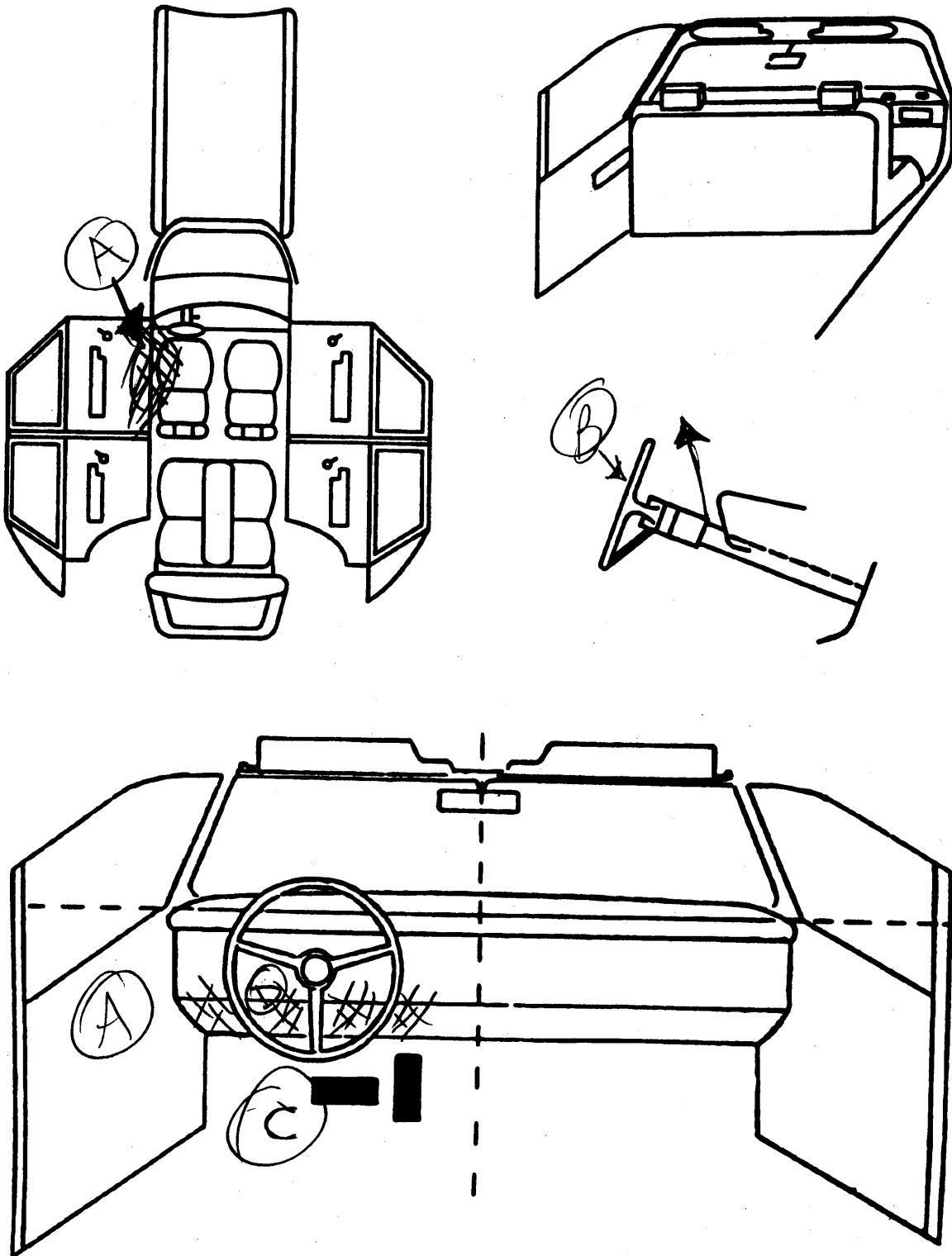
95. Instrument Panel Damage from Occupant Contact? 1  
 (0) No  
 (1) Yes  
 (9) Unknown

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

97. Did Glove Compartment Door Open During Collision(s)? 1  
 (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	DOOR	1	?	INTRUSION	1
B	SW	1	?	PUSHED UP	3
C	FLOOR/SILL	1	?	INTRUSION	2
D	DASH	1	?	DEFORMED	2
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	1	9
	Deployment	4	
	Failure	1	

**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

**Did Air Bag System Fail?**

- (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	0	0
	Type	0	0
	Proper Use	0	0
	Failure Modes	0	0

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

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

*Non-functional*

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

**Automatic (Passive) Belt System Use**

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

**Automatic (Passive) Belt System Type**

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

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

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

*Automatic Belt Used Improperly*

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

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

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

**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	04	0	4
	Use	1	00	00
	Failure Modes	1	0	0
SECOND	Availability	4	3	4
	Use	00	00	00
	Failure Modes	0	0	0
THIRD	Availability			
	Use			
	Failure Modes			
OTHER	Availability			
	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

**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>			N/A			
<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	3	5	3
	Seat Type	02	00	02
	Seat Performance	4/6	0	1
	Seat Orientation	1	0	0
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): SQUASHED BY INTRUSION.
- (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*



HEAD RESTRAINT AND SEAT EVALUATION

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

3

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

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)

4

- (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
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): SQUASHED BY INTRUSION
- \_\_\_\_\_
- (7) Combination of above (specify):  
\_\_\_\_\_
- (8) Other (specify):  
\_\_\_\_\_
- (9) Unknown



OCCUPANT INJURY FORM

1. Primary Sampling Unit Number	<u>48</u>	3. Vehicle Number	<u>02</u>
2. Case Number - Stratum	<u>21 1 J</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	O.I.C.-A.I.S						Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect				
1st	5. <u>2</u>	6. <u>4</u>	7. <u>5</u>	8. <u>02</u>	9. <u>64</u>	10. <u>4</u>	11. <u>2</u>	12. <u>20</u> <sup>door</sup>	13. <u>1</u>	14. <u>1</u>	15. <u>08</u>
2nd	16. <u>2</u>	17. <u>8</u>	18. <u>5</u>	19. <u>26</u>	20. <u>04</u>	21. <u>3</u>	22. <u>2</u>	23. <u>20</u>	24. <u>1</u>	25. <u>2</u>	26. <u>08</u>
3rd	27. <u>2</u>	28. <u>8</u>	29. <u>5</u>	30. <u>26</u>	31. <u>04</u>	32. <u>3</u>	33. <u>1</u>	34. <u>20</u>	35. <u>1</u>	36. <u>2</u>	37. <u>08</u>
4th	38. <u>2</u>	39. <u>4</u>	40. <u>4</u>	41. <u>16</u>	42. <u>06</u>	43. <u>5</u>	44. <u>4</u>	45. <u>20</u>	46. <u>1</u>	47. <u>2</u>	48. <u>08</u>
5th	49. <u>2</u>	50. <u>4</u>	51. <u>2</u>	52. <u>08</u>	53. <u>00</u>	54. <u>5</u>	55. <u>4</u>	56. <u>20</u>	57. <u>1</u>	58. <u>2</u>	59. <u>08</u>
6th	60. <u>2</u>	61. <u>4</u>	62. <u>4</u>	63. <u>10</u>	64. <u>12</u>	65. <u>5</u>	66. <u>4</u>	67. <u>20</u>	68. <u>1</u>	69. <u>2</u>	70. <u>08</u>
7th	71. <u>2</u>	72. <u>4</u>	73. <u>4</u>	74. <u>14</u>	75. <u>40</u>	76. <u>5</u>	77. <u>2</u>	78. <u>20</u>	79. <u>1</u>	80. <u>2</u>	81. <u>08</u>
8th	82. <u>2</u>	83. <u>4</u>	84. <u>4</u>	85. <u>06</u>	86. <u>04</u>	87. <u>3</u>	88. <u>8</u>	89. <u>20</u>	90. <u>1</u>	91. <u>2</u>	92. <u>08</u>
9th	93. <u>2</u>	94. <u>5</u>	95. <u>4</u>	96. <u>42</u>	97. <u>28</u>	98. <u>5</u>	99. <u>2</u>	100. <u>20</u>	101. <u>1</u>	102. <u>2</u>	103. <u>08</u>
10th	104. <u>2</u>	105. <u>5</u>	106. <u>4</u>	107. <u>16</u>	108. <u>28</u>	109. <u>5</u>	110. <u>2</u>	111. <u>20</u>	112. <u>1</u>	113. <u>2</u>	114. <u>08</u>

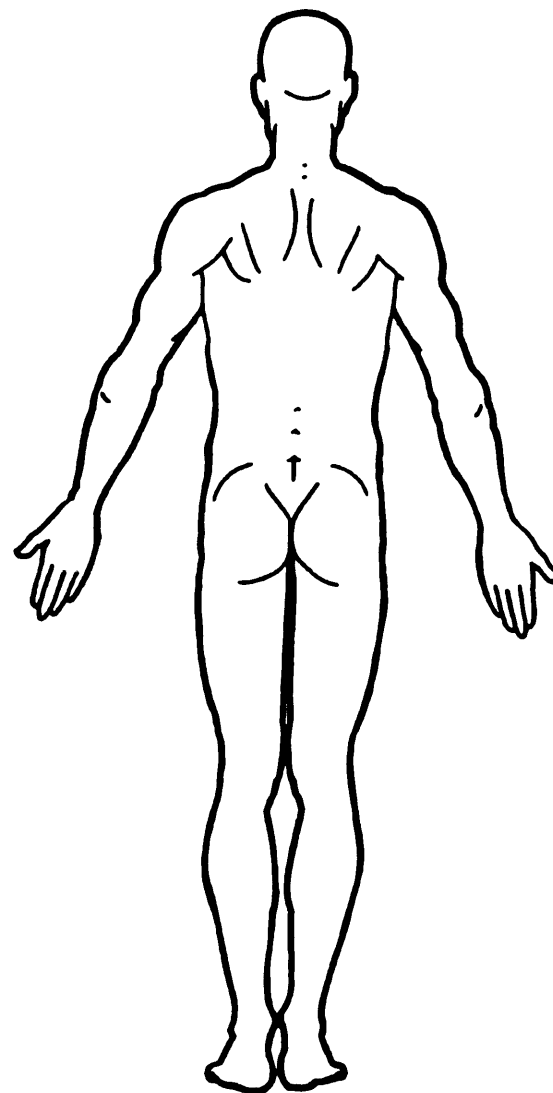
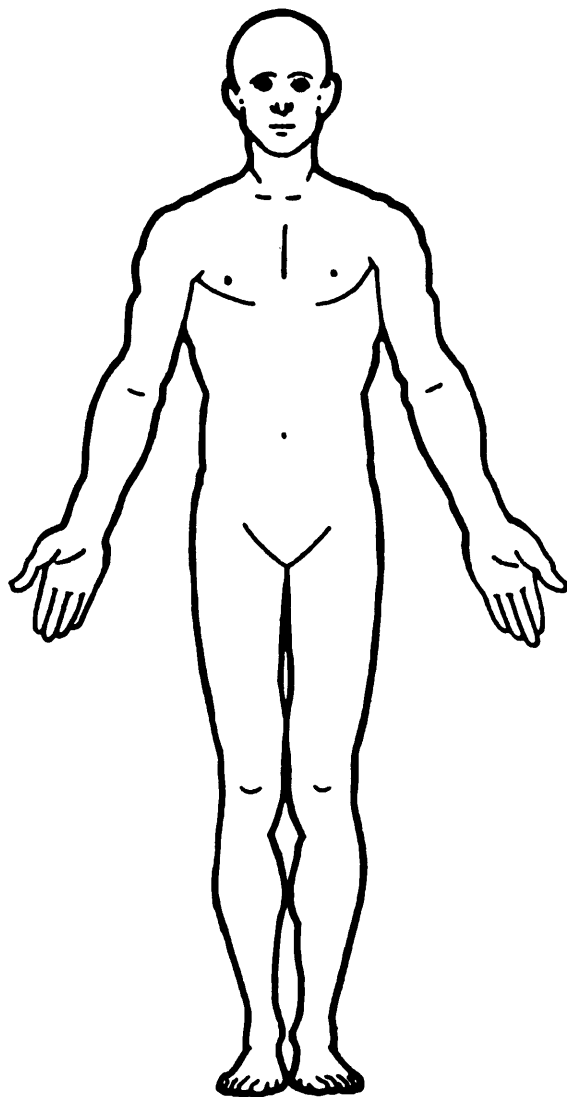
# OCCUPANT INJURY DATA

BEST AVAILABLE COPY

	Source of Injury Date	O.I.C.-A.I.S						Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect				
11th	<u>2</u>	<u>5</u>	<u>4</u>	<u>38</u>	<u>00</u>	<u>3</u>	<u>8</u>	<u>20</u>	<u>1</u>	<u>2</u>	<u>08</u>
12th	<u>2</u>	<u>5</u>	<u>2</u>	<u>14</u>	<u>08</u>	<u>4</u>	<u>2</u>	<u>20</u>	<u>1</u>	<u>2</u>	<u>08</u>
13th	—	—	—	---	---	—	—	---	—	—	---
14th	—	—	—	---	---	—	—	---	—	—	---
15th	—	—	—	---	---	—	—	---	—	—	---
16th	—	—	—	---	---	—	—	---	—	—	---
17th	—	—	—	---	---	—	—	---	—	—	---
18th	—	—	—	---	---	—	—	---	—	—	---
19th	—	—	—	---	---	—	—	---	—	—	---
20th	—	—	—	---	---	—	—	---	—	—	---
21st	—	—	—	---	---	—	—	---	—	—	---
22nd	—	—	—	---	---	—	—	---	—	—	---
23rd	—	—	—	---	---	—	—	---	—	—	---
24th	—	—	—	---	---	—	—	---	—	—	---
25th	—	—	—	---	---	—	—	---	—	—	---

## 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 = 39

Arterial Blood Gases

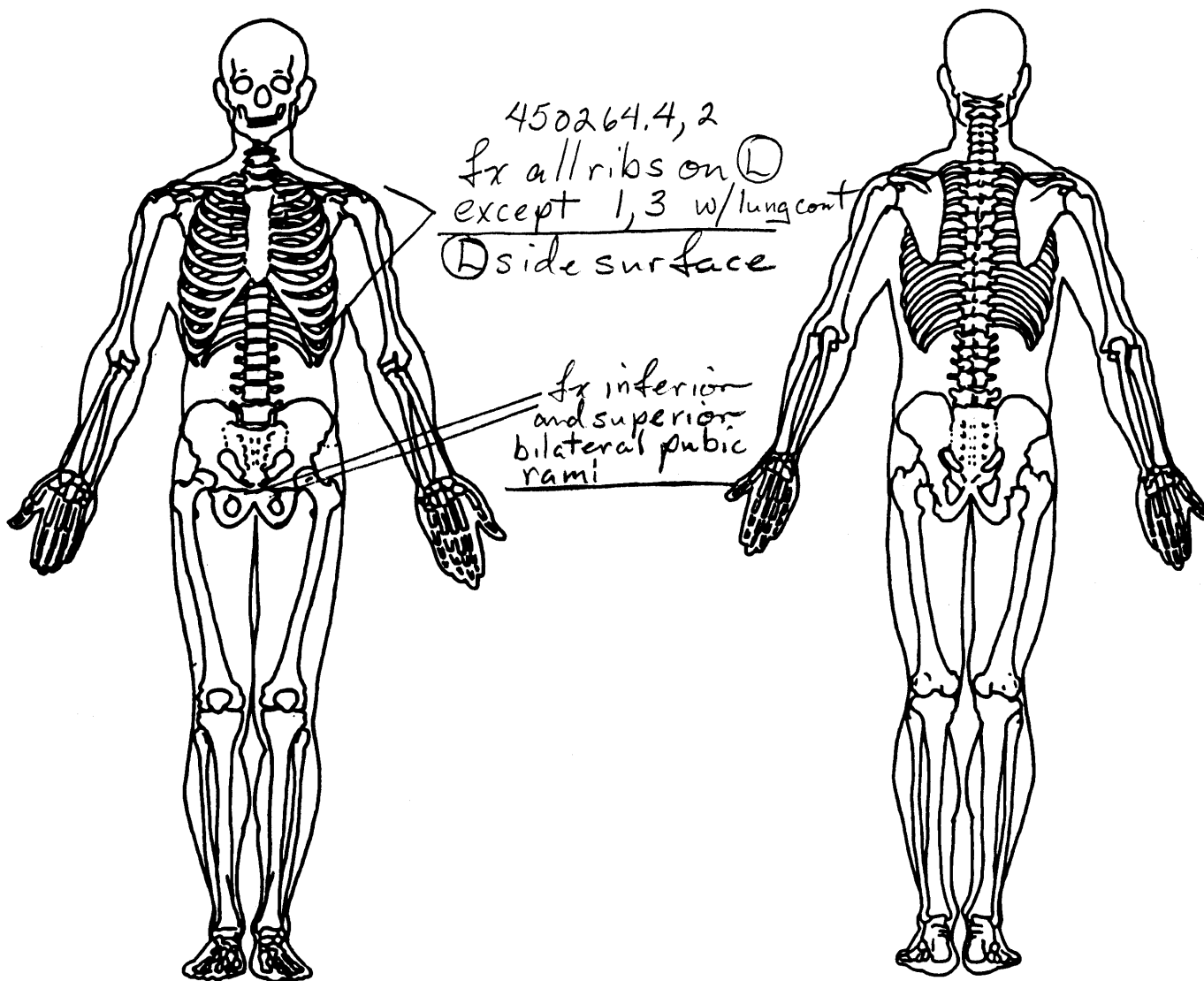
pH = 7.2

PO<sub>2</sub> = 290

PCO<sub>2</sub> = 42

HCO<sub>3</sub> = 15

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.)

puncture wound @ ventricle 441012.5,4

multiple small lacerations

Ⓛ lung  
fractured ribs 441440.5,2

laceration upper lobe

Ⓛ lung w hemo/pneuro  
fractured rib

torn diaphragm 440604.3,8

door surface

544228.5,2  
rupture spleen

door surface

Ⓛ Hemo/pneumo thorax

Contusion Ⓛ lung

under fx

521408.4,2  
Multiple  
avulsed  
lumbar  
artery

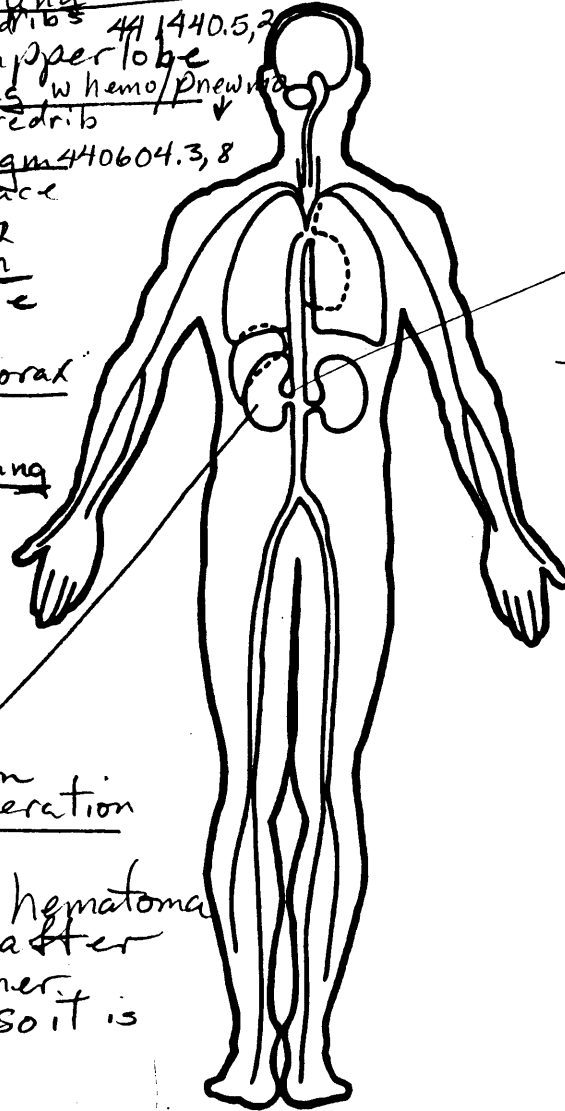
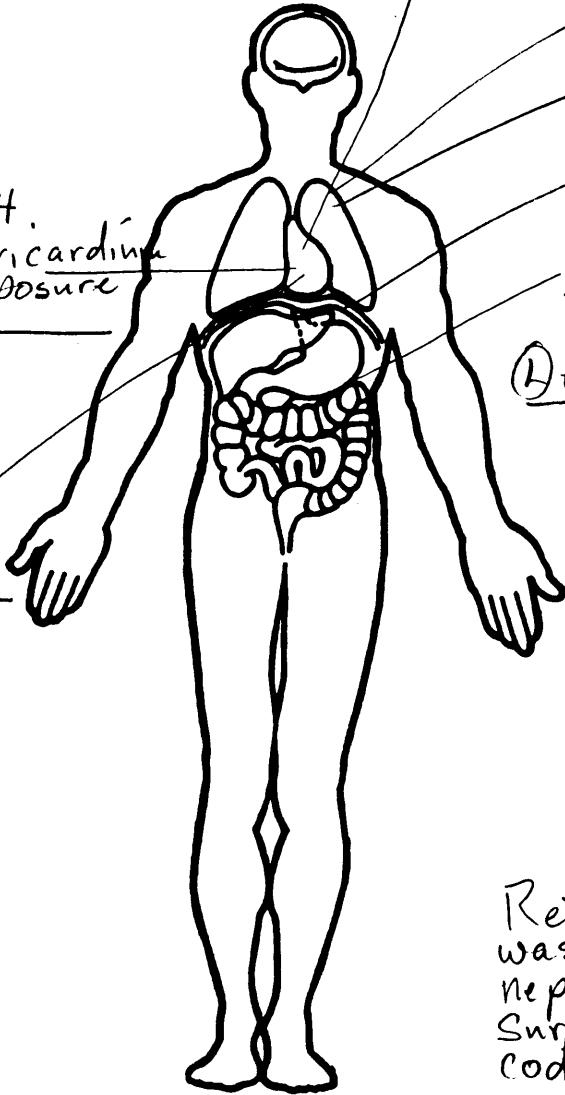
541628.5,3  
hilum avulsion  
capsular laceration

Retroperitoneal hematoma  
was oozing even after  
nephrectomy & other  
surgical repair so it is  
coded also

543800.3,8

441606.5,4  
avulsed pericardium  
complete exposure  
of heart  
rib fxs

420800.5,f  
laceration  
Ⓛ anterior  
descending  
artery  
rib fxs.





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

**CRASHPC PROGRAM SUMMARY**

(All Measurements In Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

T+D

2-C Run

Identifying Title  
48 Primary Sampling Unit  
211J Case No.-Stratum  
01 Accident Event Sequence No.  
 [REDACTED] [REDACTED] 93 Date (Month, day, year) of Run

CRASHPC Vehicle Identification

Vehicle 1	<u>1992</u>	<u>TOYOTA</u>	<u>COROLLA</u>	<u>1</u>
Vehicle 2	<u>1993</u>	<u>HONDA</u>	<u>ACCORD</u>	<u>2</u>
	Year	Make	Model	NASS Veh. No.

**GENERAL INFORMATION**

	VEHICLE 1	VEHICLE 2
Size	<u>250</u>	<u>147</u>
Weight	<u>1022</u> + <u>60</u> + <u>0</u> = <u>1142</u> kg	<u>1240</u> + <u>54</u> + <u>0</u> = <u>1294</u> kg
	Curb Occupant(s) Cargo	Curb Occupant(s) Cargo
CDC	<u>01 F D E W 2</u>	<u>1 0 L Y E W 4</u>
PDOF (-180 to +180)	<u>15</u> <u>20</u>	<u>60</u>
Stiffness	<u>9</u>	<u>-70 3 9</u>

**SCENE INFORMATION**

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

	VEHICLE 1	VEHICLE 2
Rest Position	X <u>+ 6.2</u> m Y <u>- 4.5</u> m PSI <u>- 140</u> °	X <u>8.5</u> m Y <u>- 18.5</u> m PSI <u>- 117</u> °
Impact Position	X <u>- 8</u> m Y <u>- 2</u> m PSI <u>360</u> °	X <u>- 4.8</u> m Y <u>- 2.2</u> m PSI <u>- 103</u> °
Slip Angle (-180 to +180)	<u>    </u> °	<u>    </u> °

**VEHICLE MOTION**

Sustained Contact [ ] No [ ] Yes

	VEHICLE 1	VEHICLE 2
Skidding (Rotation)	[ ] No [X] Yes	[ ] No [X] Yes
Skidding Stop Before Rest	[X] No [ ] Yes	[X] No [ ] Yes
End of Rotation Position	X <u>    </u> m Y <u>    </u> m PSI <u>    </u> °	X <u>    </u> m Y <u>    </u> m PSI <u>    </u> °
Curved Path	[X] No [ ] Yes	[X] No [ ] Yes
Point on Path	X <u>    </u> m Y <u>    </u> m	X <u>    </u> m Y <u>    </u> m
Rotation Direction	[ ] None [ ] CW [X] CCW	[ ] None [ ] CW [X] CCW
Rotation > 360°	[X] No [ ] Yes	[X] No [ ] Yes

**FRICITION INFORMATION**

**TRAJECTORY INFORMATION**

Coefficient of Friction 45  
 Rolling Resistance Option 1

Vehicle 1 Rolling Resistance  
 LF 65 RF 45  
 LR 03 RR 03

Vehicle 1  
 by Damage

Vehicle 2 Rolling Resistance  
 LF 30 RF 30  
 LR 03 RR 03

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  
 Damage Length L 153 cm  
 Crush Depths C<sub>1</sub> 45 cm  
 C<sub>2</sub> 33 cm  
 C<sub>3</sub> 29 cm  
 C<sub>4</sub> 22 cm  
 C<sub>5</sub> 16 cm  
 C<sub>6</sub> 16 cm  
 Damage Offset D ± 0 cm

VEHICLE 2  
 Damage Length L 295  
~~368~~ cm  
 Crush Depths C<sub>1</sub> 0 cm  
 C<sub>2</sub> 5 cm  
 C<sub>3</sub> 56 cm  
 C<sub>4</sub> 43 cm  
 C<sub>5</sub> 39 cm  
 C<sub>6</sub> 0 cm  
 Damage Offset D ± 19 cm

5  
 48  
 56  
 48  
 28  
 0  
 434

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.

V2

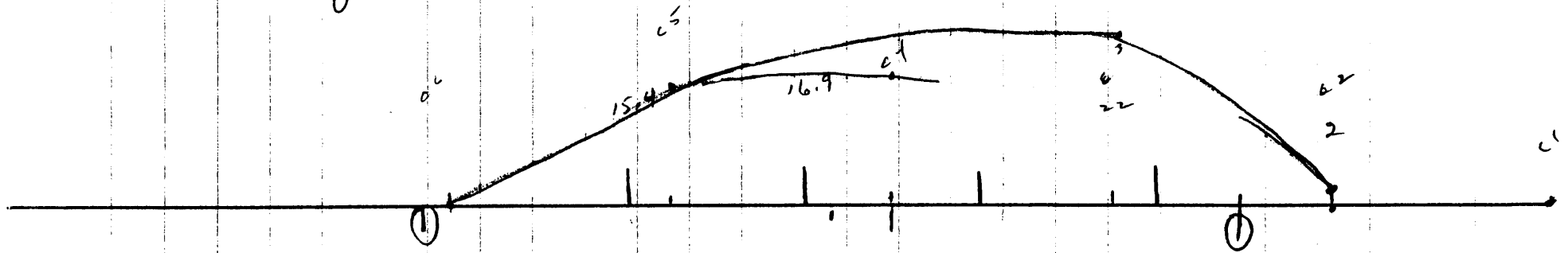
Field  
57  
U

116 new Field L  
116 : 5 = 23.2

144.9

145  
29  
116

old crash measurements



new crash values

~~57~~

Field L =  $\frac{116}{5} = 23.2$

c1	=	2	inch	-	5	cm
c2	=	19		-	48	
c3	=	22		-	56	
c4	=	19		-	48	
c5	=	11		-	28	
c6	=	0		-	0	
D	=	7.8		-	(7.8) 19	

# FINAL Z.C.

SUMMARY OF CRASHPC RESULTS USING DAMAGE

---

Run

48211j

	SPEED CHANGE (DAMAGE)	SPEED CHANGE (LINEAR MOMENTUM AND SPINOUT)	IMPACT SPEED (LINEAR MOMENTUM AND SPINOUT)
<u>VEHICLE #1</u>			
TOTAL	<u>45 KPH</u> ( 28 MPH)	<u>44 KPH</u> ( 27 MPH)	76 KPH ( 47 MPH)
LONGITUDINAL	<u>-44 KPH</u> ( -27 MPH)	<u>-43 KPH</u> ( -27 MPH)	76 KPH ( <u>47 MPH</u> )
LATITUDINAL	<u>-12 KPH</u> ( -7 MPH)	<u>-6 KPH</u> ( -4 MPH)	0 KPH ( 0 MPH)
PDOF ANGLE	<u>15 DEGREES</u>	<u>8 DEGREES</u>	
ENERGY DISSIPATED =	<u>57554 JOULES</u> ( 42444 FT-LB)		
<u>VEHICLE #2</u>			
TOTAL	<u>41 KPH</u> ( 25 MPH)	<u>39 KPH</u> ( 24 MPH)	42 KPH ( 26 MPH)
LONGITUDINAL	<u>-14 KPH</u> ( -9 MPH)	<u>-14 KPH</u> ( -9 MPH)	42 KPH ( <u>26 MPH</u> )
LATITUDINAL	<u>38 KPH</u> ( 24 MPH)	<u>37 KPH</u> ( 23 MPH)	0 KPH ( 0 MPH)
PDOF ANGLE	<u>-70 DEGREES</u>	<u>-69 DEGREES</u>	
ENERGY DISSIPATED =	<u>146328 JOULES</u> ( 107911 FT-LB)		

SCENE INFORMATION

---

	VEHICLE #1	VEHICLE #2
IMPACT X-POSITION	-8.0 M. ( -26.3 FT.)	-4.8 M. ( -15.8 FT.)
IMPACT Y-POSITION	-2.0 M. ( -6.6 FT.)	-2.2 M. ( -7.2 FT.)
IMPACT HEADING ANGLE	360 DEGREES	-103 DEGREES
REST X-POSITION	6.2 M. ( 20.3 FT.)	8.5 M. ( 27.9 FT.)
REST Y-POSITION	-4.5 M. ( -14.8 FT.)	-18.5 M. ( -60.7 FT.)
REST HEADING ANGLE	-140 DEGREES	-117 DEGREES
SIDE-SLIP ANGLE	0 DEGREES	0 DEGREES
DIRECTION OF ROTATION	CCW	CCW
AMOUNT OF ROTATION	<360	<360

COLLISION AND SEPARATION

---

	VEHICLE #1	VEHICLE #2
COLLISION		
IMPACT X-POSITION	-8.0 M. ( -26.3 FT.)	-4.8 M. ( -15.8 FT.)
IMPACT Y-POSITION	-2.0 M. ( -6.6 FT.)	-2.2 M. ( -7.2 FT.)
IMPACT HEADING ANGLE	360 DEGREES	-103 DEGREES
SEPARATION (USING SPINOUT)		
US	33 KPH ( 20 MPH)	28 KPH ( 18 MPH)
VS	-6 KPH ( -4 MPH)	37 KPH ( 23 MPH)
PSISD	-72 DEG/SEC	-33 DEG/SEC
RELATIVE VELOCITY (LINEAR MOMENTUM)		
SPEED ALONG LINE THROUGH CG	76 KPH ( 47 MPH)	7 KPH ( 4 MPH)
SPEED ORTHOGONAL TO CG LINE	5 KPH ( 3 MPH)	42 KPH ( 26 MPH)
CLOSING VELOCITY (LINEAR MOMENTUM) = 83 KPH ( 52 MPH)		

DAMAGE DATA

---

	VEHICLE #1	VEHICLE #2
SIZE CATEGORY	2	3
STIFFNESS CATEGORY	9	3
VEHICLE WEIGHT	1142 KGS ( 2518 LBS)	1274 KGS ( 2809 LBS)
CDC	01FDEW2	10LYEW4
PDOF ANGLE	11 DEGREES	-66 DEGREES
CRUSH LENGTH	153 CM. ( 60 IN.)	295 CM. ( 116 IN.)
C1	45 CM. ( 18 IN.)	5 CM. ( 2 IN.)
C2	33 CM. ( 13 IN.)	48 CM. ( 19 IN.)
C3	29 CM. ( 11 IN.)	56 CM. ( 22 IN.)
C4	22 CM. ( 9 IN.)	48 CM. ( 19 IN.)
C5	16 CM. ( 6 IN.)	28 CM. ( 11 IN.)
C6	16 CM. ( 6 IN.)	0 CM. ( 0 IN.)
D	0 CM. ( 0 IN.)	-19 CM. ( -7 IN.)
D'	-14 CM. ( -6 IN.)	-32 CM. ( -12 IN.)

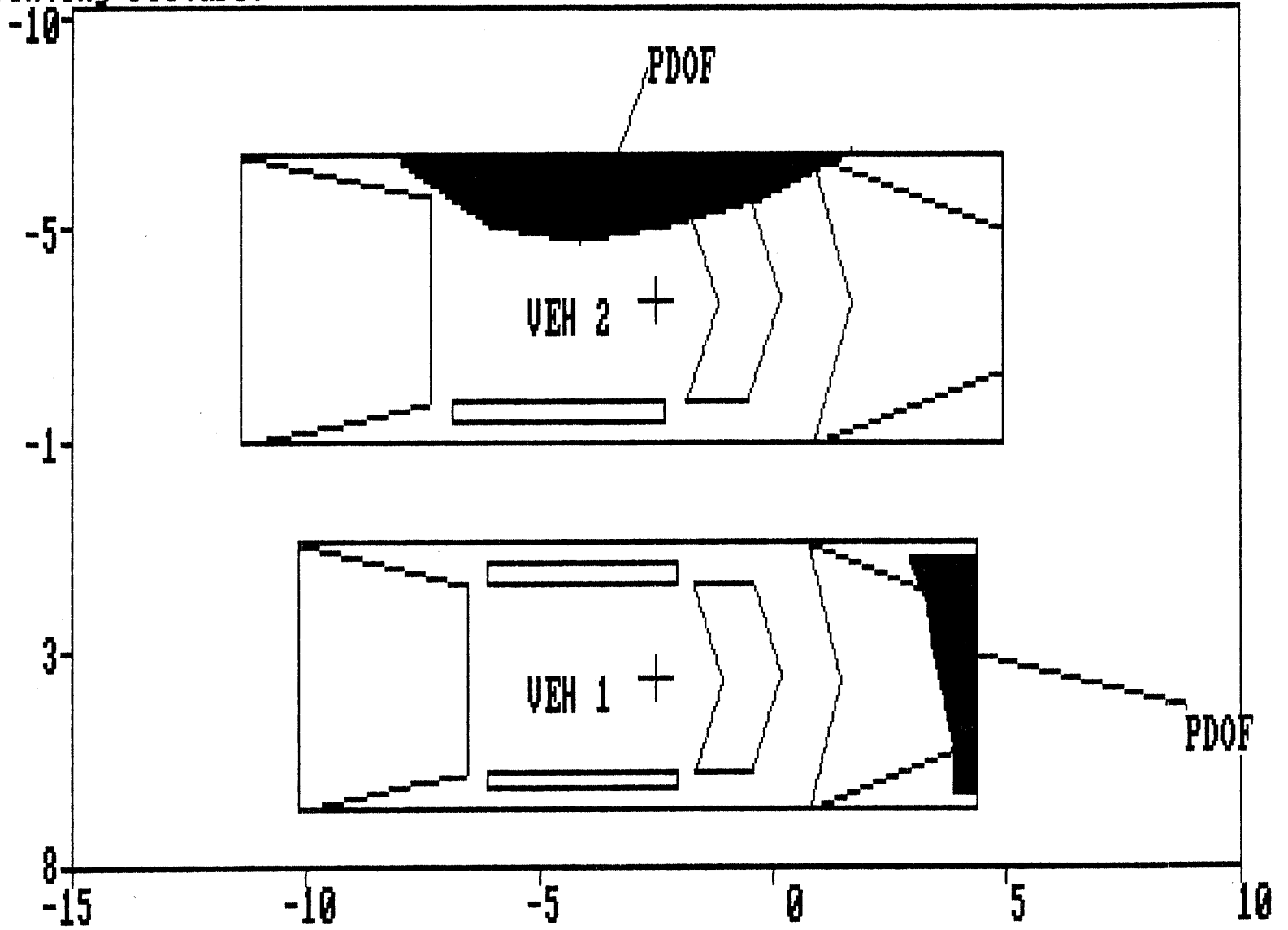
(\* INDICATES DEFAULT VALUE)

DIMENSIONS AND INERTIAL PROPERTIES

---

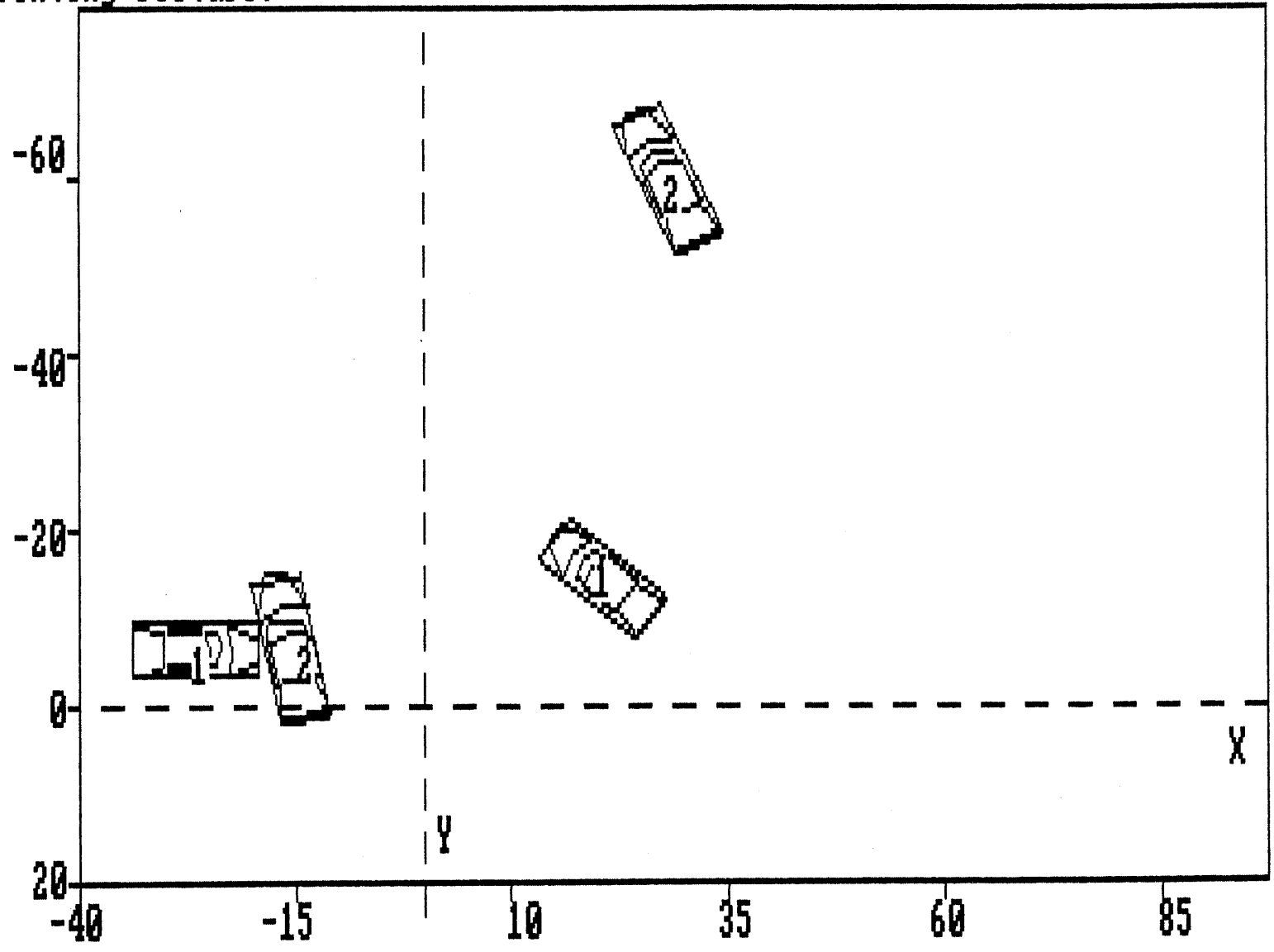
	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	118 CM. ( 46 IN.)	130 CM. ( 51 IN.)
CG TO REAR AXLE	127 CM. ( 50 IN.)	141 CM. ( 56 IN.)
TRACK	139 CM. ( 55 IN.)	150 CM. ( 59 IN.)
CG TO FRONT OF VEH	212 CM. ( 83 IN.)	228 CM. ( 90 IN.)
CG TO REAR OF VEH	-233 CM. ( -92 IN.)	-270 CM. (-106 IN.)
CG TO SIDE OF VEH	85 CM. ( 34 IN.)	92 CM. ( 36 IN.)
MOMENT OF INERTIA	8764 KGS ( 19320 LBS)	11012 KGS ( 24277 LBS)
VEHICLE MASS	3 KGS ( 7 LBS)	3 KGS ( 7 LBS)
ROLLING RESISTANCE		
LEFT FRONT WHEEL	.65	.30
RIGHT FRONT WHEEL	.50	.30
LEFT REAR WHEEL	.03	.03
RIGHT REAR WHEEL	.03	.03

COEFFICIENT OF FRICTION = .45



DAMAGE DESCRIPTION





SCENE DESCRIPTION

SUMMARY OF CRASHPC RESULTS USING DAMAGE

48211j

SPEED CHANGE  
(DAMAGE)

SPEED CHANGE  
(LINEAR MOMENTUM  
AND SPINOUT)

IMPACT SPEED  
(LINEAR MOMENTUM  
AND SPINOUT)

VEHICLE #1

TOTAL 48 KPH ( 30 MPH) 51 KPH ( 32 MPH) 84 KPH ( 52 MPH)  
 LONGITUDINAL -46 KPH ( -28 MPH) -50 KPH ( -31 MPH) 84 KPH ( 52 MPH)  
 LATITUDINAL -15 KPH ( -9 MPH) -6 KPH ( -4 MPH) 0 KPH ( 0 MPH)  
 PDOF ANGLE 19 DEGREES 7 DEGREES  
 ENERGY DISSIPATED = 59705 JOULES ( 44030 FT-LB)

VEHICLE #2

TOTAL 43 KPH ( 27 MPH) 44 KPH ( 28 MPH) 46 KPH ( 29 MPH)  
 LONGITUDINAL -22 KPH ( -14 MPH) -16 KPH ( -10 MPH) 46 KPH ( 29 MPH)  
 LATITUDINAL 37 KPH ( 23 MPH) 43 KPH ( 27 MPH) 0 KPH ( 0 MPH)  
 PDOF ANGLE -58 DEGREES -70 DEGREES  
 ENERGY DISSIPATED = 165630 JOULES ( 122146 FT-LB)

SUMMARY OF CRASHPC RESULTS USING TRAJECTORY

48211j

SPEED CHANGE  
(DAMAGE)

SPEED CHANGE  
(LINEAR MOMENTUM  
AND TRAJECTORY)

IMPACT SPEED  
(LINEAR MOMENTUM  
AND TRAJECTORY)

VEHICLE #1

TOTAL 48 KPH ( 30 MPH) 51 KPH ( 32 MPH) 84 KPH ( 52 MPH)  
 LONGITUDINAL -46 KPH ( -28 MPH) -50 KPH ( -31 MPH) 84 KPH ( 52 MPH)  
 LATITUDINAL -15 KPH ( -9 MPH) -6 KPH ( -4 MPH) 0 KPH ( 0 MPH)  
 PDOF ANGLE 19 DEGREES 7 DEGREES  
 ENERGY DISSIPATED = 59705 JOULES ( 44030 FT-LB)

VEHICLE #2

TOTAL 43 KPH ( 27 MPH) 46 KPH ( 28 MPH) 46 KPH ( 29 MPH)  
 LONGITUDINAL -22 KPH ( -14 MPH) -16 KPH ( -10 MPH) 46 KPH ( 29 MPH)  
 LATITUDINAL 37 KPH ( 23 MPH) 43 KPH ( 27 MPH) 0 KPH ( 0 MPH)  
 PDOF ANGLE -58 DEGREES -70 DEGREES  
 ENERGY DISSIPATED = 165630 JOULES ( 122146 FT-LB)

SCENE INFORMATION

	VEHICLE #1	VEHICLE #2
IMPACT X-POSITION	-8.0 M. ( -26.2 FT.)	-4.8 M. ( -15.7 FT.)
IMPACT Y-POSITION	-2.0 M. ( -6.6 FT.)	-2.2 M. ( -7.2 FT.)
IMPACT HEADING ANGLE	360 DEGREES	-103 DEGREES
REST X-POSITION	6.2 M. ( 20.3 FT.)	8.5 M. ( 27.9 FT.)
REST Y-POSITION	-4.5 M. ( -14.8 FT.)	-18.5 M. ( -60.7 FT.)
REST HEADING ANGLE	-140 DEGREES	-117 DEGREES
SIDE-SLIP ANGLE	0 DEGREES	0 DEGREES
DIRECTION OF ROTATION	CCW	CCW
AMOUNT OF ROTATION	<360	<360

COLLISION AND SEPARATION

	VEHICLE #1	VEHICLE #2
COLLISION		
IMPACT X-POSITION	-8.0 M. ( -26.2 FT.)	-4.8 M. ( -15.7 FT.)
IMPACT Y-POSITION	-2.0 M. ( -6.6 FT.)	-2.2 M. ( -7.2 FT.)
IMPACT HEADING ANGLE	360 DEGREES	-103 DEGREES
SEPARATION (USING SPINOUT)		
US	33 KPH ( 21 MPH)	31 KPH ( 19 MPH)
VS	-6 KPH ( -4 MPH)	43 KPH ( 27 MPH)
PSID	-90 DEG/SEC	-40 DEG/SEC
RELATIVE VELOCITY (LINEAR MOMENTUM)		
SPEED ALONG LINE THROUGH CG	83 KPH ( 52 MPH)	8 KPH ( 5 MPH)
SPEED ORTHOGONAL TO CG LINE	5 KPH ( 3 MPH)	46 KPH ( 28 MPH)
CLOSING VELOCITY (LINEAR MOMENTUM) =	91 KPH ( 57 MPH)	

TRAJECTORY SIMULATION RESULTS  
-----

SIMULATION TIME = 22.000 SECONDS		INTEGRATION STEP = .125 SECONDS	
		VEHICLE #1	VEHICLE #2
NUMBER OF ITERATIONS		1	1
BEST ITERATION		1	1
ERROR		1.013	6.105
PREDICTED REST POSITION	X	.0 M. ( .0 FT.)	.0 M. ( .0 FT.)
	Y	.0 M. ( .0 FT.)	.0 M. ( .0 FT.)
	ANGLE	0 DEGREES	0 DEGREES
SCENE REST POSITION	X	6.2 M. ( 20.3 FT.)	8.5 M. ( 27.9 FT.)
	Y	-4.5 M. ( -14.8 FT.)	-18.5 M. ( -60.7 FT.)
	ANGLE	-140 DEGREES	-117 DEGREES
RESIDUAL LINEAR VELOCITY		0 KPH ( 0 MPH)	0 KPH ( 0 MPH)
RESIDUAL ANGULAR VELOCITY		.00 DEG/SEC	.00 DEG/SEC

DAMAGE DATA  
-----

	VEHICLE #1	VEHICLE #2
SIZE CATEGORY	2	3
STIFFNESS CATEGORY	9	3
VEHICLE WEIGHT	1142 KGS ( 2518 LBS)	1274 KGS ( 2809 LBS)
CDC	01FDEW2	10LYEW4
PDOF ANGLE	19 DEGREES	302 DEGREES *
CRUSH LENGTH	153 CM. ( 60 IN.)	368 CM. ( 145 IN.)
C1	45 CM. ( 18 IN.)	0 CM. ( 0 IN.)
C2	33 CM. ( 13 IN.)	5 CM. ( 2 IN.)
C3	29 CM. ( 11 IN.)	56 CM. ( 22 IN.)
C4	22 CM. ( 9 IN.)	43 CM. ( 17 IN.)
C5	16 CM. ( 6 IN.)	39 CM. ( 15 IN.)
C6	16 CM. ( 6 IN.)	0 CM. ( 0 IN.)
D	0 CM. ( 0 IN.)	4 CM. ( 2 IN.)
D'	-14 CM. ( -6 IN.)	27 CM. ( 11 IN.)

(\* INDICATES DEFAULT VALUE)

DIMENSIONS AND INERTIAL PROPERTIES

---

	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	118 CM. ( 46 IN.)	130 CM. ( 51 IN.)
CG TO REAR AXLE	127 CM. ( 50 IN.)	141 CM. ( 56 IN.)
TRACK	139 CM. ( 55 IN.)	150 CM. ( 59 IN.)
CG TO FRONT OF VEH	212 CM. ( 83 IN.)	228 CM. ( 90 IN.)
CG TO REAR OF VEH	-233 CM. ( -92 IN.)	-270 CM. (-106 IN.)
CG TO SIDE OF VEH	85 CM. ( 34 IN.)	92 CM. ( 36 IN.)
MOMENT OF INERTIA	8762 KGS ( 19318 LBS)	11011 KGS ( 24274 LBS)
VEHICLE MASS	3 KGS ( 7 LBS)	3 KGS ( 7 LBS)

ROLLING RESISTANCE

LEFT FRONT WHEEL	1.00	.30
RIGHT FRONT WHEEL	1.00	.30
LEFT REAR WHEEL	.03	.03
RIGHT REAR WHEEL	.03	.03

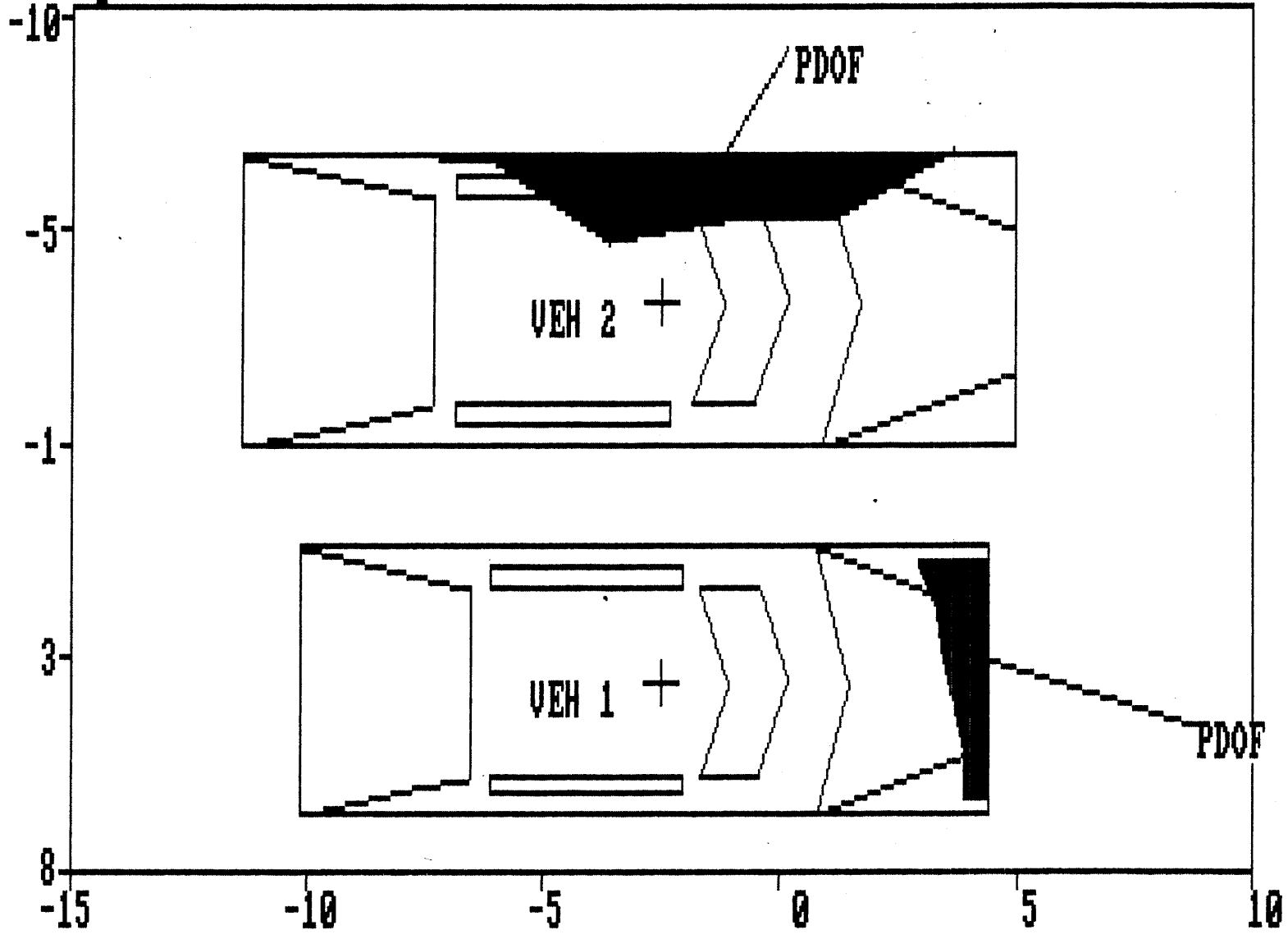
COEFFICIENT OF FRICTION = .50

DAMAGE DATA

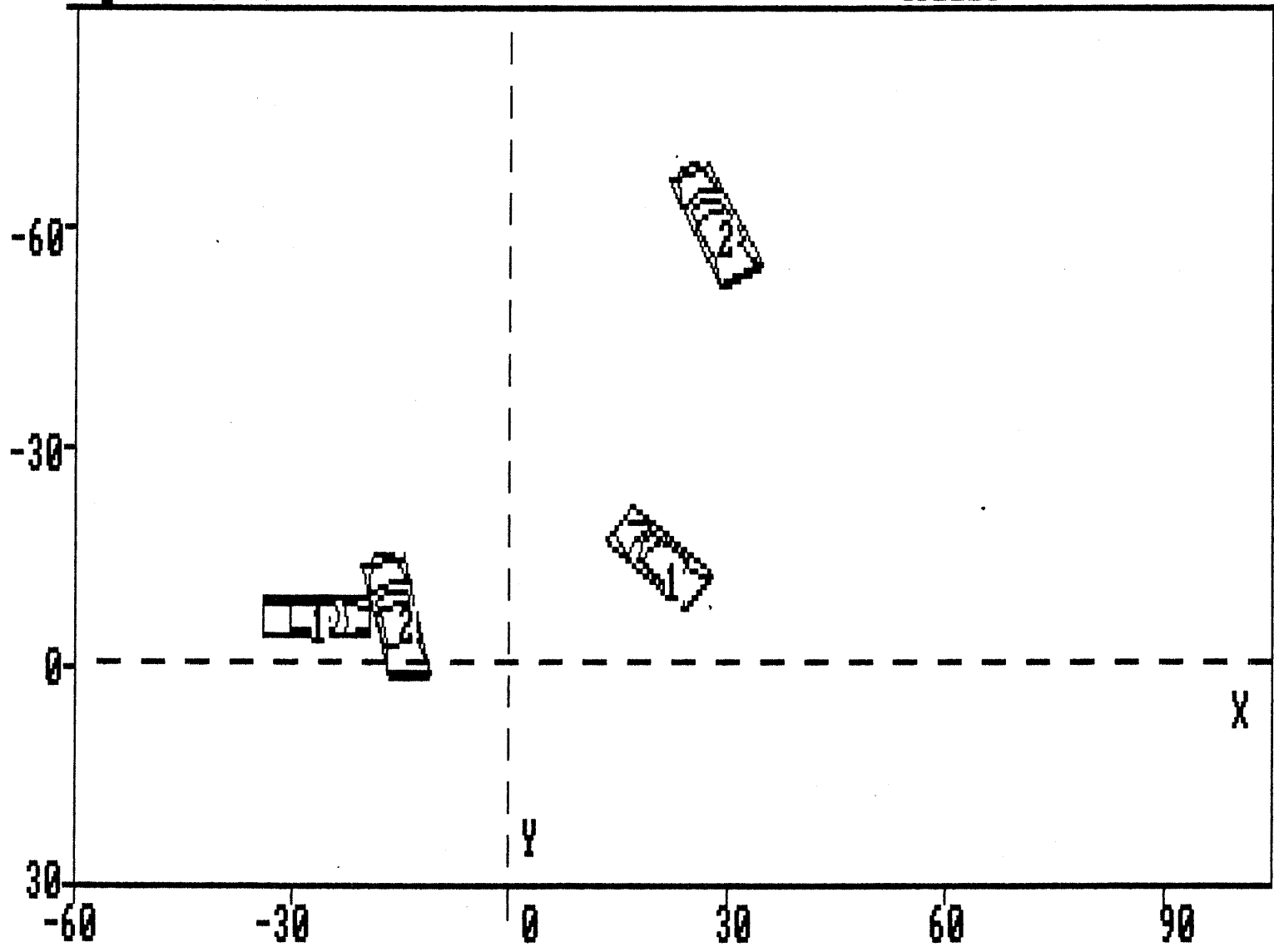
---

	VEHICLE #1	VEHICLE #2
SIZE CATEGORY	2	3
STIFFNESS CATEGORY	9	3
VEHICLE WEIGHT	1142 KGS ( 2518 LBS)	1274 KGS ( 2809 LBS)
CDC	01FDEW2	10LYEW4
PDOF ANGLE	19 DEGREES	302 DEGREES *
CRUSH LENGTH	153 CM. ( 60 IN.)	368 CM. ( 145 IN.)
C1	45 CM. ( 18 IN.)	0 CM. ( 0 IN.)
C2	33 CM. ( 13 IN.)	5 CM. ( 2 IN.)
C3	29 CM. ( 11 IN.)	56 CM. ( 22 IN.)
C4	22 CM. ( 9 IN.)	43 CM. ( 17 IN.)
C5	16 CM. ( 6 IN.)	39 CM. ( 15 IN.)
C6	16 CM. ( 6 IN.)	0 CM. ( 0 IN.)
D	0 CM. ( 0 IN.)	4 CM. ( 2 IN.)
D'	-14 CM. ( -6 IN.)	27 CM. ( 11 IN.)

(\* INDICATES DEFAULT VALUE)



DAMAGE DESCRIPTION



SCENE DESCRIPTION

Team



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

# CRASHPC PROGRAM SUMMARY

(All Measurements in Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

Identifying Title <u>48</u>	<u>211J</u>	<u>01</u>	<u>93</u>
Primary Sampling Unit	Case No.-Stratum	Accident Event Sequence No.	Date (Month, day, year) of Run

CRASHPC Vehicle Identification				
Vehicle 1	<u>1992</u>	<u>TOYOTA</u>	<u>COROLLA</u>	<u>1</u>
Vehicle 2	<u>1993</u>	<u>HONDA</u>	<u>ACCORD</u>	<u>2</u>
	Year	Make	Model	NASS Veh. No.

## GENERAL INFORMATION

	VEHICLE 1	VEHICLE 2
Size	<u>250</u>	<u>147</u>
Weight	<u>1022</u> + <u>60</u> + <u>0</u> = <u>1142</u> kg	<u>1240</u> + <u>54</u> + <u>0</u> = <u>1294</u> kg
	Curb Occupant(s) Cargo	Curb Occupant(s) Cargo
CDC	<u>01 F D E W 2</u>	<u>1 0 L Y E W 4</u>
PDOF (-180 to +180)	<u>± 20°</u>	<u>± -60°</u>
Stiffness	<u>9</u>	<u>9</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
Skidding (Rotation)	[ ] No <input checked="" type="checkbox"/> Yes	[ ] No <input checked="" type="checkbox"/> Yes
Skidding Stop Before Rest	<input checked="" type="checkbox"/> No [ ] Yes	<input checked="" type="checkbox"/> No [ ] Yes
End of Rotation Position	X _____ m Y _____ m PSI _____ °	X _____ m Y _____ m PSI _____ °
Curved Path	<input checked="" type="checkbox"/> No [ ] Yes	<input checked="" type="checkbox"/> No [ ] Yes
Point on Path	X _____ m Y _____ m	X _____ m Y _____ m
Rotation Direction	[ ] None [ ] CW <input checked="" type="checkbox"/> CCW	[ ] None [ ] CW <input checked="" type="checkbox"/> CCW
Rotation >360°	<input checked="" type="checkbox"/> No [ ] Yes	<input checked="" type="checkbox"/> No [ ] Yes



**FRICITION INFORMATION**

Coefficient of Friction  
Rolling Resistance Option

*wet* ~~0.65~~  
.50 +

Vehicle 1 Rolling Resistance

LF 1 . 0 RF 1 . 0  
LR 0 . 3 RR 0 . 3

Vehicle 2 Rolling Resistance

LF 3 . 0 RF 3 . 0  
LR 0 . 3 RR 0 . 3

**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 1 5 3 cm

Damage Length L 3 6 8 cm

Crush Depths  
C<sub>1</sub> 4 5 cm  
C<sub>2</sub> 3 3 cm  
C<sub>3</sub> 2 9 cm  
C<sub>4</sub> 2 2 cm  
C<sub>5</sub> 1 6 cm  
C<sub>6</sub> 1 6 cm

Crush Depths  
C<sub>1</sub> 0 cm  
C<sub>2</sub> 5 cm  
C<sub>3</sub> 5 6 cm  
C<sub>4</sub> 4 3 cm  
C<sub>5</sub> 3 9 cm  
C<sub>6</sub> 0 cm

Damage Offset D ± 0 cm

Damage Offset D ± 19 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.

Team

SUMMARY OF CRASHPC RESULTS USING DAMAGE

P48 211J

SPEED CHANGE  
(DAMAGE)

VEHICLE #1  
 TOTAL 47 KPH ( 29 MPH)  
 LONGITUDINAL -45 KPH ( -28 MPH)  
 LATITUDINAL -16 KPH ( -10 MPH)  
 PDOF ANGLE 20 DEGREES  
 ENERGY DISSIPATED = 60806 JOULES ( 44842 FT-LB)

VEHICLE #2  
 TOTAL 42 KPH ( 26 MPH)  
 LONGITUDINAL -21 KPH ( -13 MPH)  
 LATITUDINAL 35 KPH ( 23 MPH)  
 PDOF ANGLE -60 DEGREES  
 ENERGY DISSIPATED = 160551 JOULES ( 118400 FT-LB)

OUT

DAMAGE DATA

	VEHICLE #1	VEHICLE #2
SIZE CATEGORY	2	3
STIFFNESS CATEGORY	9	3
VEHICLE WEIGHT	1142 KGS ( 2518 LBS)	1294 KGS ( 2853 LBS)
CDC	01FDEW2	10LYEW4
PDOF ANGLE	20 DEGREES	-60 DEGREES
CRUSH LENGTH	153 CM. ( 60 IN.)	368 CM. ( 145 IN.)
C1	45 CM. ( 18 IN.)	0 CM. ( 0 IN.)
C2	33 CM. ( 13 IN.)	5 CM. ( 2 IN.)
C3	29 CM. ( 11 IN.)	56 CM. ( 22 IN.)
C4	22 CM. ( 9 IN.)	43 CM. ( 17 IN.)
C5	16 CM. ( 6 IN.)	39 CM. ( 15 IN.)
C6	16 CM. ( 6 IN.)	0 CM. ( 0 IN.)
D	0 CM. ( 0 IN.)	19 CM. ( 7 IN.)
D'	-14 CM. ( -6 IN.)	42 CM. ( 16 IN.)

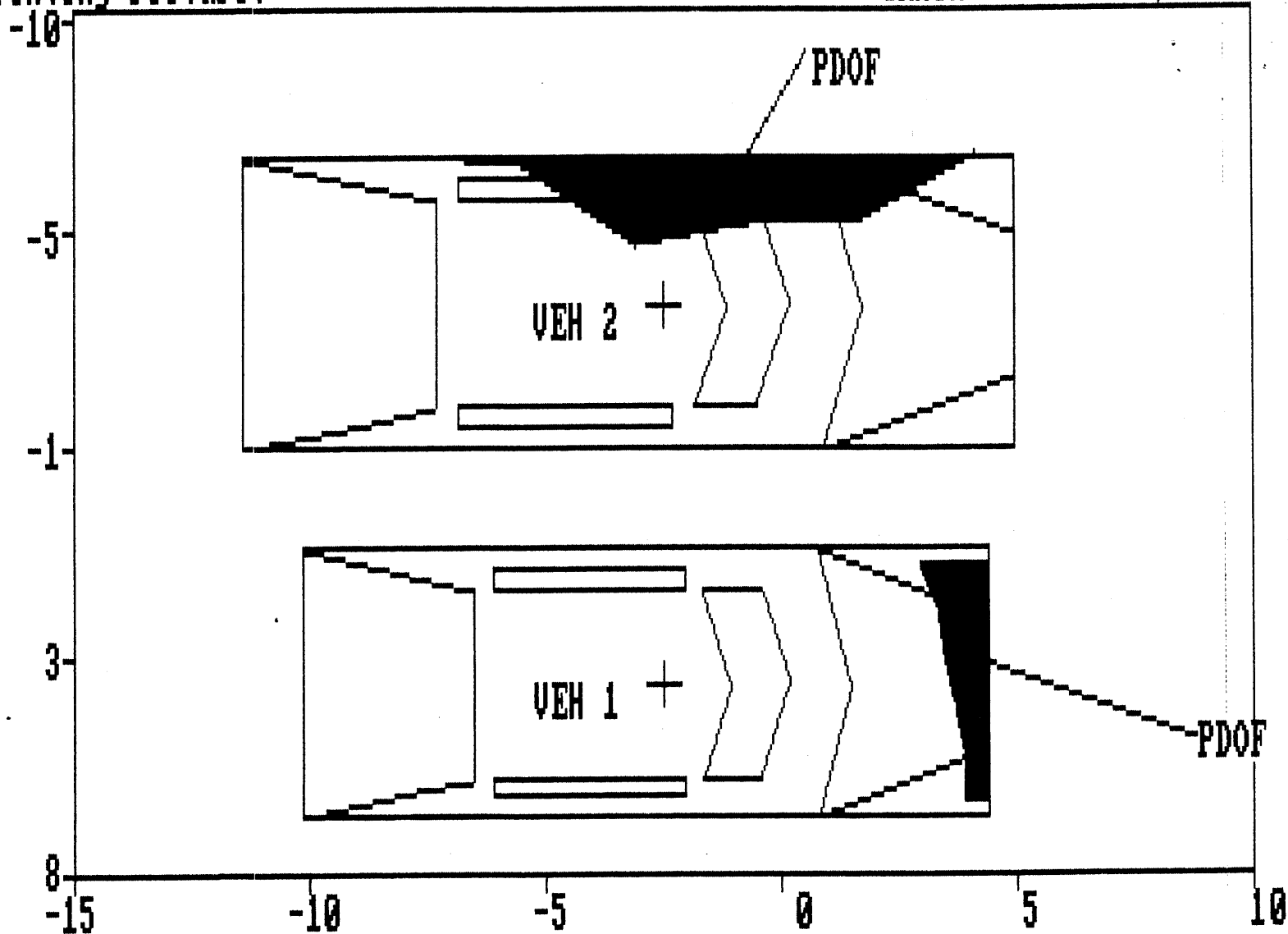
DIMENSIONS AND INERTIAL PROPERTIES

---

	VEHICLE #1	VEHICLE #2
CG TO FRONT AXLE	118 CM. ( 46 IN.)	130 CM. ( 51 IN.)
CG TO REAR AXLE	127 CM. ( 50 IN.)	141 CM. ( 56 IN.)
TRACK	139 CM. ( 55 IN.)	150 CM. ( 59 IN.)
CG TO FRONT OF VEH	212 CM. ( 83 IN.)	228 CM. ( 90 IN.)
CG TO REAR OF VEH	-233 CM. ( -92 IN.)	-270 CM. (-106 IN.)
CG TO SIDE OF VEH	85 CM. ( 34 IN.)	92 CM. ( 36 IN.)
MOMENT OF INERTIA	8762 KGS ( 19318 LBS)	11184 KGS ( 24655 LBS)
VEHICLE MASS	3 KGS ( 7 LBS)	3 KGS ( 7 LBS)

Printing Picture:

CRASH



DAMAGE DESCRIPTION



OCCUPANT ASSESSMENT Vehicle: 2 Occupant: 1

11

INTRA ERRORS

OHH1281 2 \*\*\*\*\* THIS VEHICLE IS INICATED AS HAVING AN AIRBAG. \*\*\*\*\*  
HH1282 \*\*\*\*\* CHECK YOUR DATA AND IF CORRECT, NOTIFY YOUR ZONE \*\*\*\*\*  
HH1283 AIR BAG AVAILABILITY/FUNCTION OA21 equals 1-3.

0

OCCUPANT INJURY Vehicle: 2 Occupant: 1

11

INTRA ERRORS

OTT0821 2 If a PARTIAL INJURY CODE (OI06+OI07+OI08)(n) equals 5202, 5212,  
TT0822 5214, 5216, 5410, 5416, 5428, 6506 or 8526, then no other INJURY  
TT0823 CODE should exist with (OI06+OI07+OI08+OI09+OI10)(p) equal to  
TT0824 5438003.

01

INTER ERRORS

OMM0141 2 \*\*\*\*\* THIS CASE SHOWS AN AIR BAG NON DEPLOYMENT \*\*\*\*\*  
MM0142 \*\*\*\*\* WITH CONDITIONS OF DOF AND DELTA V WHICH WOULD \*\*\*\*\*  
MM0143 \*\*\*\*\* NORMALLY CAUSE DEPLOYMENT. CHECK YOUR DATA AND \*\*\*\*\*  
MM0144 \*\*\*\*\* IF CORRECT, NOTIFY YOUR ZONE CENTER. \*\*\*\*\*  
MM0145 AIR BAG DEPLOYMENT OA22 equals 4 and ((LONGITUDINAL DELTA V GV31  
MM0146 equals 99 and 1st DIRECTION OF FORCE EV06 equals (10, 11, 12,  
MM0147 01, or 02)(mod 20) and 1st DEFORMATION EXTENT EV11 is greater  
MM0148 than 01) or LONGITUDINAL DELTA V GV31 is less than -8). GV=02 OA=01

PSU48

ERROR SUMMARY SCREEN

00/00/94

CASE 211J

CURRENT VERSION: 6.02

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





PSU 48-211J (1993) #1





PSU 48-211J (1993) #2



PSU 48-211J (1993) #3



PSU 48-211J (1993) #4



PSU 48-211J (1993) #5



PSU 48-211J (1993) #6



PSU 48-211J (1993) #7



PSU 48-211J (1993) #8



PSU 48-211J (1993) #9





PSU 48-211J (1993) #10



PSU 48-211J (1993) #11



PSU 48-211J (1993) #12



PSU 48-211J (1993) #13



PSU 48-211J (1993) #14



PSU 48-211J (1993) #15



PSU 48-211J (1993) #16



**PSU 48-211J (1993) #17**





PSU 48-211J (1993) #18



PSU 48-211J (1993) #19



PSU 48-211J (1993) #20



FSU 48-211J (1993) #21



PSU 48-211J (1993) #22



PSU 48-211J (1993) #23



PSU 48-211J (1993) #24



P-SU 48-211J (1993) #25





PSU 48-211J (1993) #26



PSU 48-211J (1993) #27



**PSU 48-211J (1993) #28**



**PSU 48-211J (1993) #29**



PSU 48-211J (1993) #30



FSU 48-211J (1993) #31



PSU 48-211J (1993) #32



PSU 48-211J (1993) #33





PSU 48-211J (1993) #34



PSU 48-211J (1993) #35



PSU 48-211J (1993) #36



PSU 48-211J (1993) #37



PSU 48-211J (1993) #38



PSU 48-211J (1993) #39



PSU 48-211J (1993) #40



PSU 48-211J (1993) #41





PSU 48-211J (1993) #42



PSU 48-211J (1993) #43



PSU 48-211J (1993) #44



**PSU 48-211J (1993) #45**  
**Best Available**



**PSU 48-211J (1993) #46**  
**Best Available**



PSU 48-211J (1993) #47



PSU 48-211J (1993) #48



**FSU 48-211J (1993) #49**





**PSU 48-211J (1993) #50**



PSU 48-211J (1993) #51



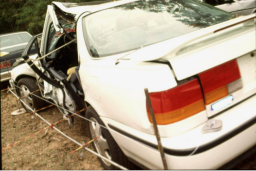
FSU 48-211J (1993) #52



PSU 48-211J (1993) #53



PSU 48-211J (1993) #54



PSU 48-211J (1993) #55



PSU 48-211J (1993) #56



PSU 48-211J (1993) #57





PSU 48-211J (1993) #58



PSU 48-211J (1993) #59



PSU 48-211J (1993) #60



PSU 48-211J (1993) #61



PSU 48-211J (1993) #62



PSU 48-211J (1993) #63



PSU 48-211J (1993) #64



PSU 48-211J (1993) #85





PSU 48-211J (1993) #66



PSU 48-211J (1993) #67



PSU 48-211J (1993) #68



PSU 48-211J (1993) #89



PSU 48-211J (1993) #70



PSU 48-211J (1993) #71



PSU 48-211J (1993) #72



PSU 48-211J (1993) #73





PSU 48-211J (1993) #74



PSU 48-211J (1993) #75



PSU 48-211J (1993) #76



PSU 48-211J (1993) #77



PSU 48-211J (1993) #78



PSU 48-211J (1993) #79