



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

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

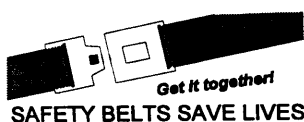
Dear Crash Data Researchers/Users:

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

**DYNAMIC SCIENCE, INC.**  
**In-Depth Accident Investigation**

**Contract DTNH22-87-C-47169**  
**Case DSI-93-AB-014**

**[REDACTED] 1993**

## TECHNICAL SUMMARY

CONTRACTOR: Dynamic Science, Inc.  
CONTRACT NUMBER: DTNH-22-87-C-47169  
CASE NUMBER: DSI-93-AB-014

[REDACTED]

This two vehicle accident occurred on [REDACTED] 1993 at [REDACTED] hours in [REDACTED] Nevada. The weather was clear, the road surface was dry and free of defects. Traffic was heavy. The bituminous road was straight and level with an estimated co-efficient of friction of .80.

Vehicle 1, a 1993 Toyota Corolla four-door driven by a 17 year old female, was travelling east on a four-lane divided roadway approaching a four-leg intersection. The driver was wearing the available 3-point manual lap/shoulder restraint. Seated in the right front seating position was a 14 year old male. The right front seated male was wearing the lap/shoulder restraint.

Vehicle 2, a 1974 Chevrolet C-series pickup driven by a male, was travelling westbound and had entered the turn lane in preparation for a left hand turn--from westbound to northbound.

Vehicle 2 began a left hand turn across the path of Vehicle 1. The front of Vehicle 1 struck the right side of Vehicle 2. The airbag in Vehicle 1 deployed at this time. Vehicle 1 continued travelling forward with a slight deflection. Vehicle 2 was pushed sideways and came into contact with a metal pole on the corner of the intersection where it came to rest. Vehicle 1 came to rest in the intersection facing southeast.

The restrained driver of Vehicle 1 sustained moderate injuries consisting of a retinal tear, minor nasal fracture, abrasions to her face and lower legs, and muscle strains; maximum AIS = AIS-1. The driver was transported from the scene to a local trauma center, treated, and then released. The driver has lost partial vision in one eye and has been treated by a variety of eye care professionals. The restrained right front occupant sustained a minor contusion across the mid-section. He had recently had a hernia operation and there was some concern about complications. He was transported and held overnight for observation. The status of the driver of Vehicle 2 is not known.

Vehicles 1 and 2 were towed from the scene due to damage.

*This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no responsibility for the contents or use thereof.*

*The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the National Highway Traffic Safety Administration.*

*The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.*

*Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.*



**DYNAMIC SCIENCE, INC.  
ACCIDENT INVESTIGATION  
CASE NUMBER: DSI-93-AB-014**

Accident Data . . . . .	1
Ambience . . . . .	1
Roadway . . . . .	2
Traffic Controls . . . . .	2
Vehicles . . . . .	3
Vehicle Damage and Velocity Estimates . . . . .	4
Collision Sequence . . . . .	5
Occupant Kinematics . . . . .	5
Emergency Rescue Response . . . . .	6
Safety Standards . . . . .	6
Airbag System . . . . .	6
Airbag Views . . . . .	7
Driver's Seat Measurements . . . . .	9
Occupant Data . . . . .	10
Injuries . . . . .	12
Accident Schematic . . . . .	13
Photo Index and Photos . . . . .	14
Slide Index and Slides . . . . .	15

Appendices:

- A. NASS Field Forms

Dynamic Science, Inc.  
In-Depth Investigation  
Case Number: DSI-93-AB-14

**ACCIDENT DATA:**

Location:	Nevada
Area/Type:	Urban
Date:	██████/93
Accident Type:	Vehicle v. Vehicle / Front to Side

**INJURY SEVERITY:**

Vehicle 1:	Driver, AIS-1 R/F Occupant, AIS-1
Vehicle 2:	Unknown

**AMBIENCE:**

Viewing Conditions:	Excellent
Cloud Cover:	Clear
Precipitation:	Dry
Temperature:	Unknown

**ROADWAY:**

	<u>Vehicle 1</u>	<u>Vehicle 2</u>
Type:	4-lane divided	4-lane divided
Width:	6.5m (21.5 ft)	3.8m (12.5 ft) m)
Traffic Density:	Heavy	Heavy
Median:	Yes	Yes
Edge:	Concrete curb	Concrete curb
Surface:	Bituminous	Bituminous
Reported Defects:	None	None
Co-efficient of Friction:	.80	.80
Vertical Alignment:	Level	Level
Horizontal Alignment:	Straight	Straight

**TRAFFIC CONTROLS:**

Signals:	None	None
Signs:	None applicable	None applicable
Speed Limit:	56 KPH (35 MPH)	56 KPH (35 MPH) <sup>1</sup>

Markings:	Botts dots separating travel lanes on left. Solid white line to right creating bike lane. The bike lane line was partially eradicated.	Botts dots on right.
-----------	--	----------------------

<sup>1</sup> Not marked at scene. Limit is per local police department.

Dynamic Science, Inc.  
In-Depth Investigation  
Case Number: DSI-93-AB-14

**VEHICLES:**

	<u>Vehicle 1</u>	<u>Vehicle 2</u>
Description:	1993 Toyota Corolla DX 4-door	1974 Chevrolet pickup
Odometer:	658 miles (1059 km)	Unknown
Engine:	4 cyl. / EFI	Unknown
Active Restraints:	Manual lap/torso	Unknown
Passive Restraints:	Airbag	None
Reported Defects:	None	Unknown
Cargo:	None	Unknown
Windshield Damage:	None	Unknown
Fleet:	None	Unknown
Tow Status:	Towed due to damage	Towed due to damage

Dynamic Science, Inc.  
In-Depth Investigation  
Case Number: DSI-93-AB-14

**VEHICLE DAMAGE:**

Object Struck:	Vehicle 2	Vehicle 1
Event Number:	01	01
CDC:	12FDEW2	Unknown
Maximum Crush:	12.8 in. (33 cm)	Unknown

**VEHICLE VELOCITY ESTIMATES:**

	<b>VEHICLE 1</b>	<b>VEHICLE 2</b>
<b>Impact Speed:</b> (estimated)	56 KPH (35 MPH)	16-24 KPH (10-15 MPH)
<b>Total Delta V:</b>	29.7 KPH (18.5 MPH)	19.9 KPH (12.3 MPH)
<b>Longitudinal Delta V:</b>	-29.3 KPH (-18.2 MPH)	-5.1 KPH (-3.2 MPH)
<b>Lateral Delta V:</b>	5.1 KPH (3.2 MPH)	-19.2 KPH (-11.9 MPH)
<b>Energy Dissipation:</b>	39,718 joules (29,298 ft-lb)	29,482 joules (21,747 ft-lb)

Calculations based upon: Missing Vehicle Algorithm

### **COLLISION SEQUENCE:**

**Pre-Crash:** This two-vehicle accident occurred during the afternoon hours of a summer weekday on a seven-lane, divided, bituminous paved, urban, roadway in ██████ Nevada. The weather was clear, the road surface was dry and free of defects. There were no viewing restrictions and the traffic density was heavy. There are no posted speed limit signs in the immediate area but the ██████ Police Department indicated that the speed limit would be 56 KPH (35 MPH).

The roadway configuration is generally east-west as it intersects a north-south two-lane roadway. The major road consists of three eastbound lanes, plus a turn lane, separated from three westbound lanes, plus a turn lane, by a raised concrete median. The lanes in both directions are separated by raised, botts dots. The north and south edges of the roadway consist of raised concrete curbs. There are no controls for east-west traffic but there are stop signs for the north-south lanes.

Vehicle 1 was travelling east approaching the four-leg intersection at an estimated speed of 56 KPH (35 MPH). Vehicle 2 was travelling westbound and had entered the turn lane in preparation for a left hand turn - from west to north.

**Crash:** Vehicle 2 began making the left hand turn. The front of Vehicle 1 struck the right side of Vehicle 2.

The CDC for Vehicle 1 was 12FDEW2 and the Delta V was computed as 30 KPH (18 MPH). The CDC for Vehicle 2 is not known. The computed Delta V is 19 KPH (12 MPH).

**Post Crash:** At impact with Vehicle 2, Vehicle 1 was deflected slightly in a clockwise direction. There was a second, sideslapping type collision between the left side of Vehicle 1 and the right side of Vehicle 2. Vehicle 2 was pushed sideways into a metal pole on the southeast corner of the intersection.

### **Driver**

**Kinematics:** The 17 year old female driver of Vehicle 1 was seated in a bucket seat in a normal, upright seated position. The driver is 135 cm (59 in) in height and weighs 41 kg (90 lb). The seat had been adjusted to the forwardmost position, and the seat back was in a normal, upright position. Post-crash, the seat was

Dynamic Science, Inc.  
In-Depth Investigation  
Case Number: DSI-93-AB-14

jammed in the forwardmost position and could not be moved. It appears that it is this driver's practice to sit close to the steering wheel. Based on seat belt inspection, occupant contact points, and interviewee statements, the driver was wearing the available three-point manual lap/shoulder safety restraints.

The driver was projected forward, upward, and slightly to the left. At impact, the airbag deployed and the driver came into contact with it, resulting in a variety of facial abrasions. The driver's knees came into contact with the lower instrument panel.

#### Scene

Clearance: The restrained driver of Vehicle 1 sustained moderate injuries consisting of a retinal tear, minor nasal fracture, abrasions to her face and lower legs, and muscle strains; maximum AIS = AIS-1. The driver was transported from the scene to a [REDACTED], treated, and then released. The driver has lost partial vision in one eye and has been treated by a variety of eye care professionals. The restrained right front occupant sustained a minor contusion across the mid-section. He had recently had a hernia operation and there was some concern about complications. He was transported to an area [REDACTED] and held overnight for observation. Vehicle 1 was towed from the scene due to damage sustained in this accident.

#### Safety

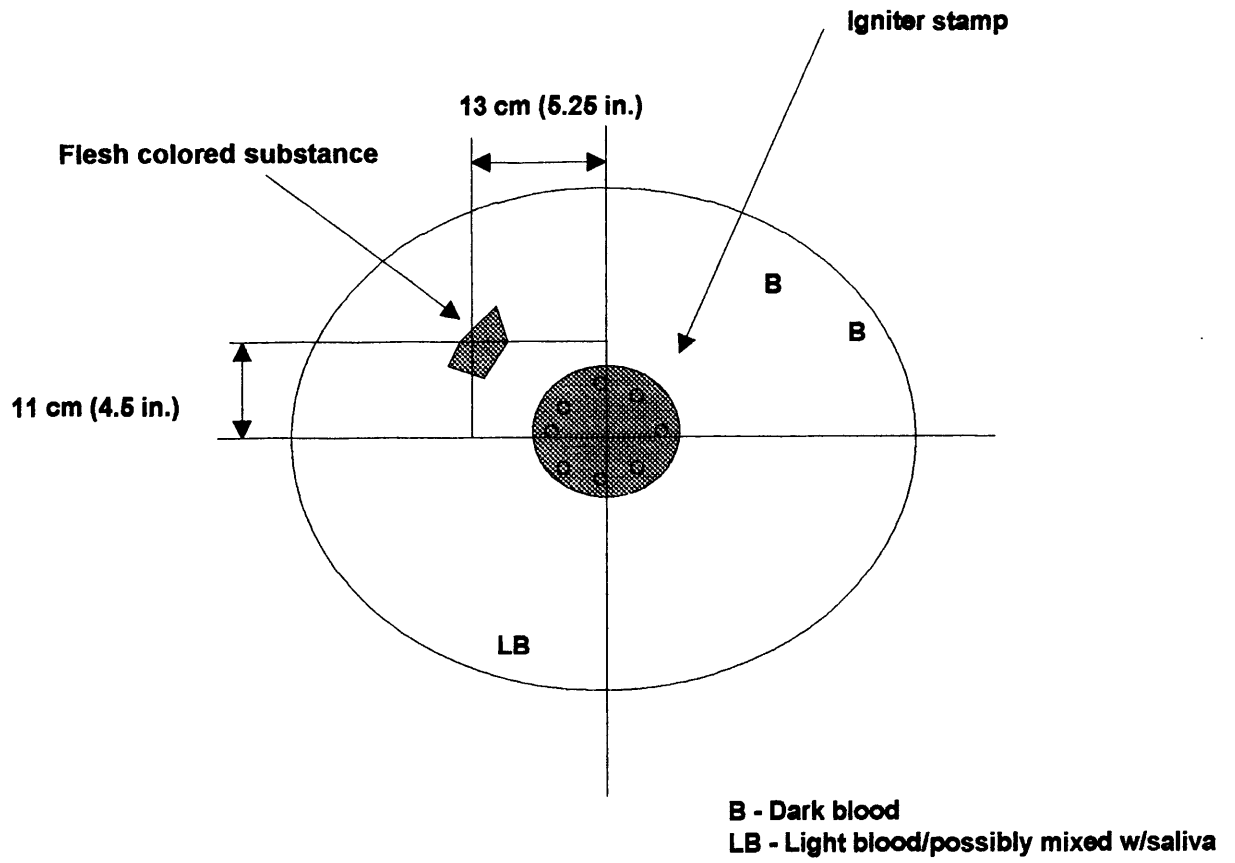
Standards: There were no violations of the Federal Motor Vehicle Safety Standards found during the on-site vehicle inspection.

#### Airbag System:

Vehicle 1 was equipped with a driver's side supplement restraint system.

# Airbag - Frontal View

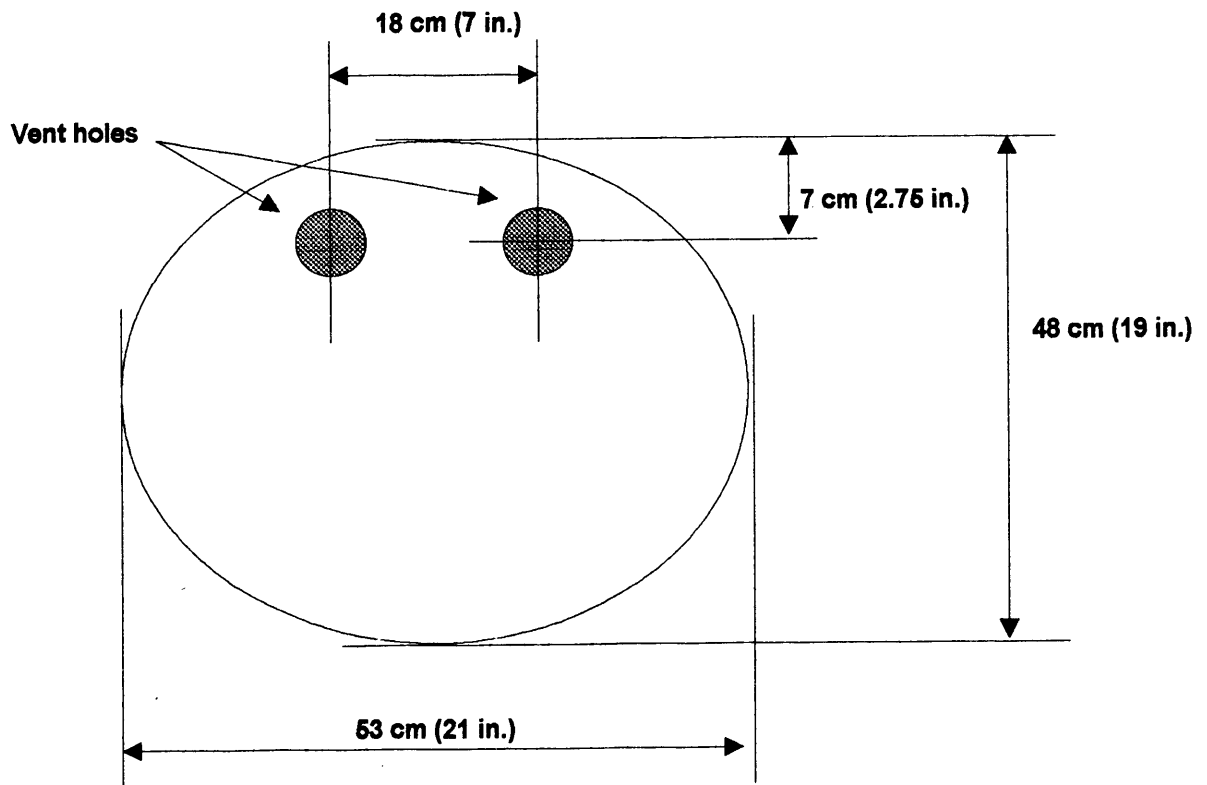
---



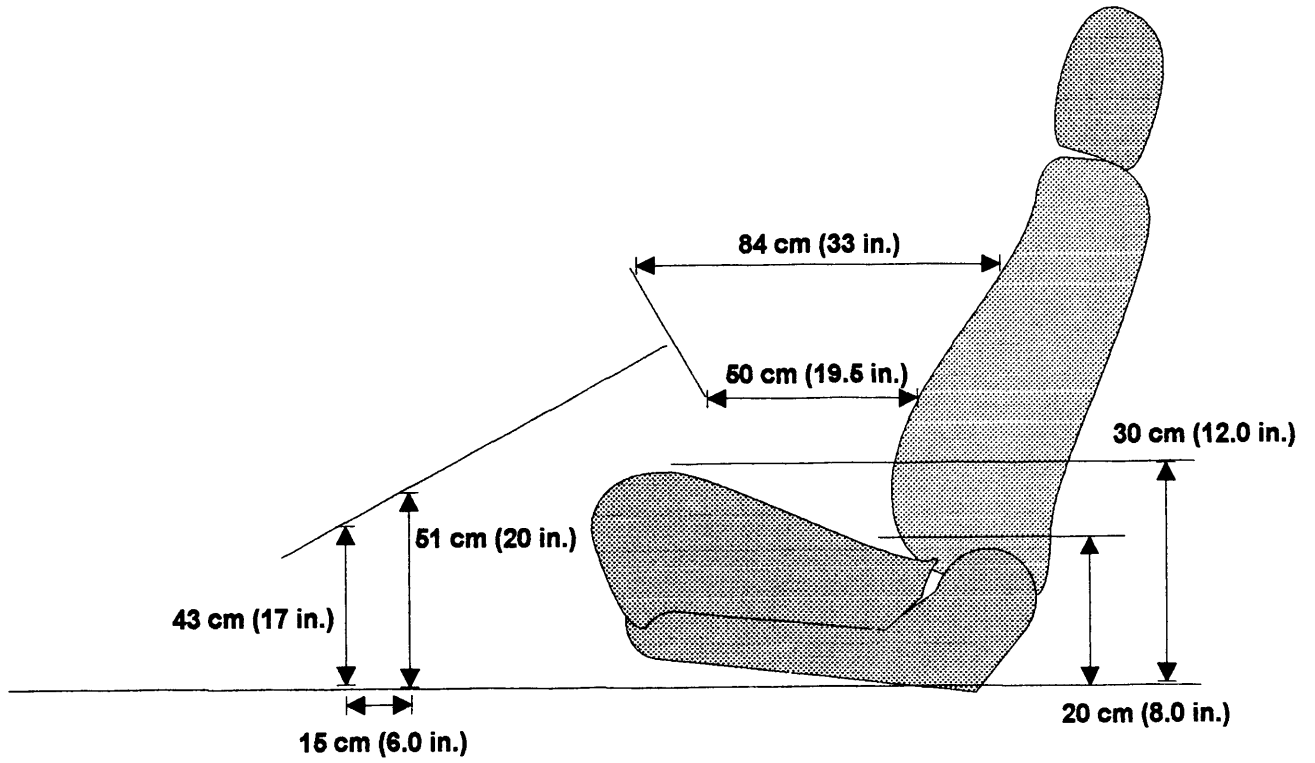


# Airbag - Rear View

---



# OCCUPANT SEAT MEASUREMENTS



Dynamic Science, Inc.  
In-Depth Investigation  
Case Number: DSI-93-AB-14

**DRIVER AND OTHER OCCUPANTS:**

Vehicle 1

	<u>Driver</u>	<u>Occupant 1</u>
Age/Sex:	17/Female	14/Male
Seated Position:	Left front	Right front
Height:	59 in. (150 cm)	150 cm (59 in)
Weight:	41 kg (90 lb)	29 kg (65 lb)
Occupation:	Student	Student
Physical Limitations:	None	None
Body Posture:	Normal, upright	Unknown
Hand Position:	At 10/2 o'clock position	Unknown
Foot Position:	Right on accelerator/ left on floorboard	Unknown
Restraint Usage:	Manual lap/shoulder	Manual lap/shoulder
Additional Occupants:	Yes	None

Dynamic Science, Inc.  
In-Depth Investigation  
Case Number: DSI-93-AB-14

**DRIVER AND OTHER OCCUPANTS:**  
(continued)

Vehicle 2

	<u>Driver</u>
Age/Sex:	Unk/Male
Seated Position:	Left front
Height:	Unknown
Weight:	Unknown
Occupation:	Unknown
Physical Limitations:	Unknown
Body Posture:	Unknown
Hand Position:	Unknown
Foot Position:	Unknown
Restraint Usage:	Unknown
Additional Occupants:	None

Dynamic Science, Inc.  
 In-Depth Investigation  
 Case Number: DSI-93-AB-14

**INJURIES:**

Vehicle 1

	<u>Injury</u>	<u>OIC Code</u>	<u>ICD-9</u>	<u>Source</u>
Driver	Contused R breast	490402.1,1	922.0	Shoulder restraint
	Strained R arm	740402.1,1	840.9	Steering wheel rim
	Strained L arm	740402.1,2	840.9	Steering wheel rim
	Abrasion, nose	290202.1,4	910.0	Airbag
	Abrasion, lips	290202.1,8	910.0	Airbag
	Abrasion, chin	290202.1/8	910.0	Airbag
	Fracture, nose	251000.1,4	802.0	Airbag
	Retinal tear	241000.1,2	871.4	Airbag
	Contused R. Knee	890402.1,1	924.11	Instrumental Panel
	Contused L. Knee	890402.1,2	924.11	Instrumental Panel
RF Occ	Contused abdomen	590402.1,4	922.2	Restraint

Vehicle 2

	<u>Injury</u>	<u>OIC Code</u>	<u>ICD-9</u>	<u>Source</u>
Driver	Unknown			

DSI-93-AB-14

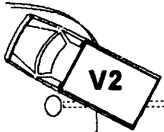


North

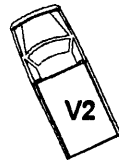
Scale 1" = 20'



Spill



Impact 2



## PHOTO INDEX

Case number: DSI-93-AB-14

PHOTO #	VEHICLE #	DIRECTION OF PICTURE	SUBJECT MATTER
1-3	1	East	Approach of Vehicle 1 to area of impact.
4	1	East	Area of impact (note spill).
5	1	West	Looking back view along path of Vehicle 1.
6-7	2	West	Approach of Vehicle 2 to area of impact.
8	2	SW	Area of impact.
9-10	2	East	Path of Vehicle 2 from impact to second impact with pole and final rest.
11-16	1	CCW	Exterior views of Vehicle 1.
17-30	1	---	Interior views of Vehicle 1.



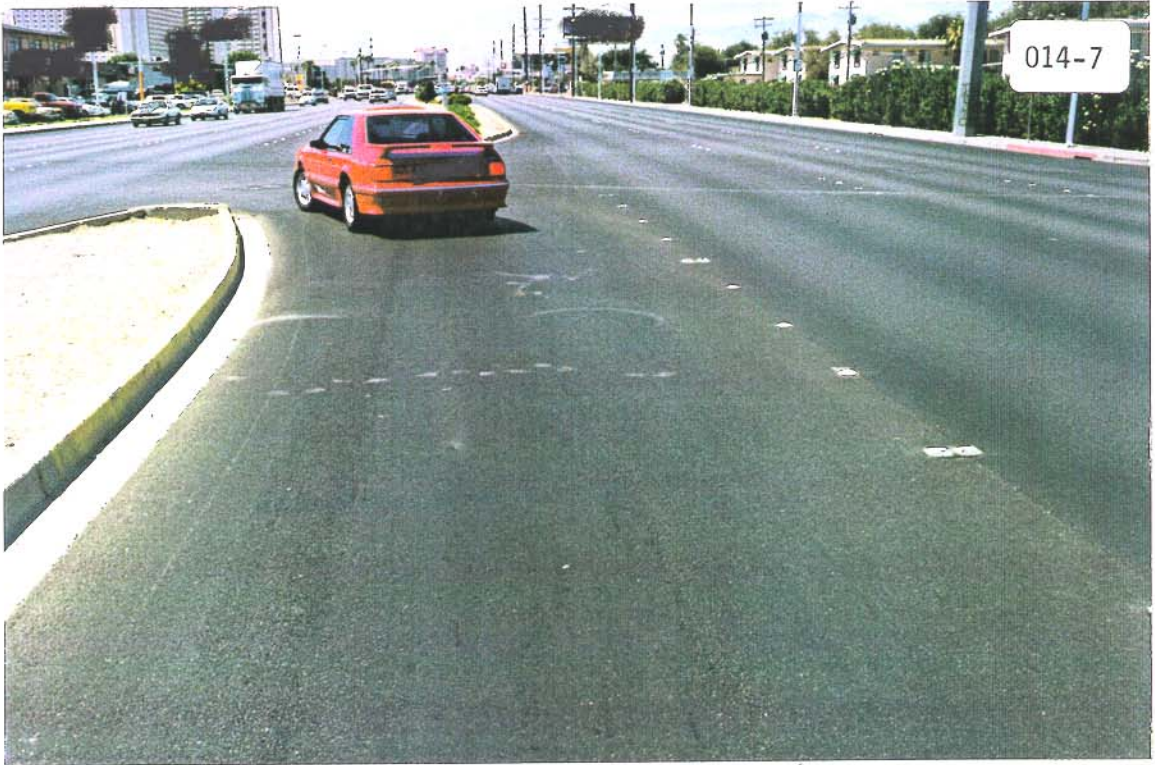










































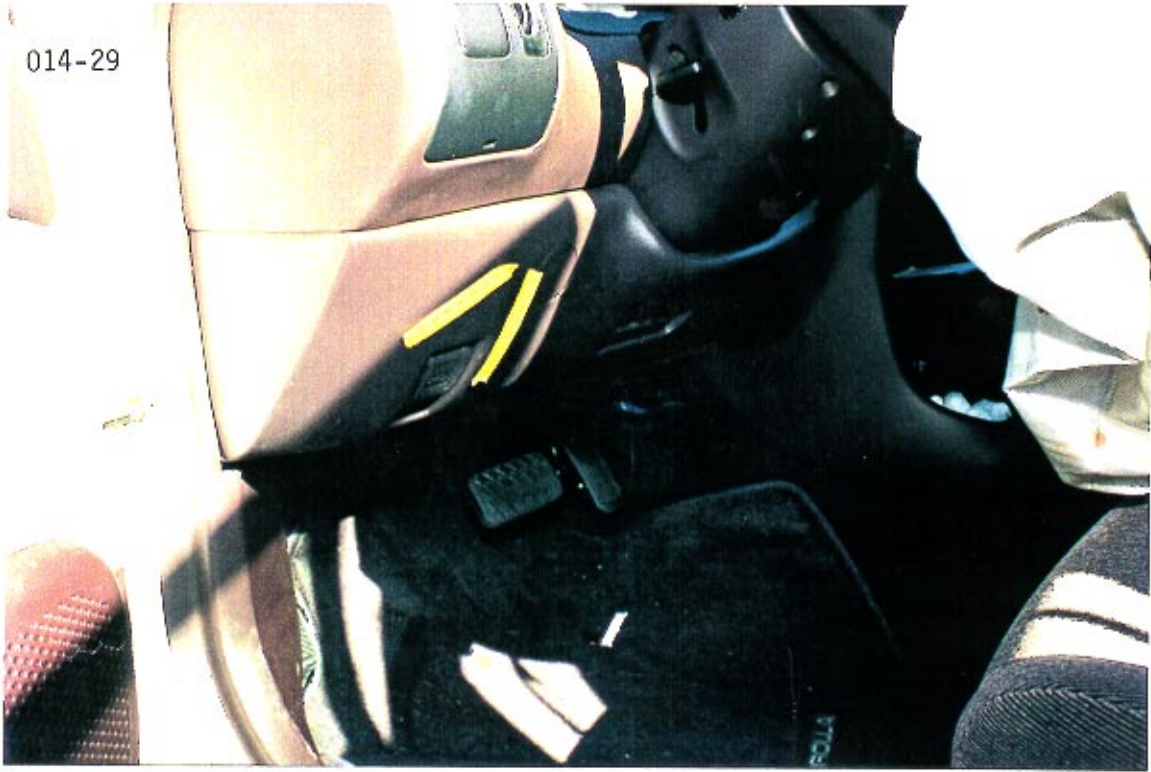








014-29



014-30



## SLIDE INDEX

Case number: DSI-93-AB-14

SLIDE #	VEHICLE #	DIRECTION OF PICTURE	SUBJECT MATTER
1-5	1	---	Close-up views of deployed airbag and module. Slides 1 and 2 show "pinkish", powdery substance on airbag.



DS9314 #1  
Best Available





**DS9314 #2**  
**Best Available**



DS9314 #3  
Best Available



DS 8314 #4



DS8314 #5



# ACCIDENT FORM

1. Primary Sampling Unit Number \_\_\_\_\_  
 2. Case Number - Stratum AB 14

## 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 φ  
 7. \_\_\_ SS15 Administrative Use φ  
 8. \_\_\_ SS16 \_\_\_\_\_ φ  
 9. \_\_\_ SS17 \_\_\_\_\_ φ  
 10. \_\_\_ SS18 \_\_\_\_\_ φ

## IDENTIFICATION

3. Number of General Vehicle Forms Submitted φ 2  
 4. Date of Accident (Month, Day, Year) ██████ / 9 3  
 5. Time of Accident ██████  
 Code reported military time of accident.  
 NOTE: Midnight = 2400  
 Unknown = 9999

## NUMBER OF EVENTS

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

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



# GENERAL VEHICLE FORM

1. Primary Sampling Unit Number \_\_\_\_\_  
 2. Case Number - Stratum AB 14  
 3. Vehicle Number Q1

11. Police Reported Alcohol Presence 9  
 (0) No alcohol present  
 (1) Yes (alcohol present)  
 (7) Not reported  
 (8) No driver present  
 (9) Unknown

### VEHICLE IDENTIFICATION

4. Vehicle Model Year 93  
 Code the last two digits of the model year  
 (99) Unknown  
 5. Vehicle Make (specify): 49  
TOYOTA  
 Applicable codes are found in your  
 NASS Data Collection, Coding and  
 Editing Manual.  
 (99) Unknown

Note: See variables 37 through 55  
 (Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver 99  
 Code actual value (decimal implied  
 before first digit—0.xx)  
 (95) Test refused  
 (96) None given  
 (97) AC test performed, results unknown  
 (98) No driver present  
 (99) Unknown

Source: No PAR

6. Vehicle Model (specify): Q32  
COROLLA DX  
 Applicable codes are found in your  
 NASS Data Collection, Coding and  
 Editing Manual.  
 (999) Unknown

### ACCIDENT RELATED

13. Speed Limit Q56  
 (000) No statutory limit  
 Code posted or statutory speed limit  
 in kph  
 (999) Unknown

7. Body Type Q4  
 Note: Applicable codes may be found on  
 the back of this page.

35 mph X 1.6093 = Q56 kph

8. Vehicle Identification Number  
1NXA E Q 9 E 6 P Z X X X X X X  
 Left justify; Slash zeros and letter Z (0 and Z)  
 No VIN—Code all zeros  
 Unknown—Code all nine's

14. Attempted Avoidance Maneuver Q3  
 (00) No impact  
 (01) No avoidance actions  
 (02) Braking (no lockup)  
 (03) Braking (lockup)  
 (04) Braking (lockup unknown)  
 (05) Releasing brakes  
 (06) Steering left  
 (07) Steering right  
 (08) Braking and steering left  
 (09) Braking and steering right  
 (10) Accelerating  
 (11) Accelerating and steering left  
 (12) Accelerating and steering right  
 (97) No driver present  
 (98) Other action (specify):  
 (99) Unknown

### OFFICIAL RECORDS

9. Police Reported Vehicle Disposition 9  
 (0) Not towed due to vehicle damage  
 (1) Towed due to vehicle damage  
 (9) Unknown

10. Police Reported Travel Speed 999  
 Code to the nearest kph (NOTE: 000 means  
 less than 0.5 kph)  
 (160) 159.5 kph and above  
 (999) Unknown  
 \_\_\_\_\_ mph X 1.6093 = \_\_\_\_\_ kph

15. Accident Type 69  
 Applicable codes may be found on the  
 back of page two of this field form  
 (00) No impact  
 Code the number of the diagram that  
 best describes the accident circumstance  
 (98) Other accident type (specify):  
 (99) Unknown

\*\*\*\* SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 \*\*\*\*

**OCCUPANT RELATED**

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

17. Number of Occupants This Vehicle 2  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown

18. Number of Occupant Forms Submitted 2

24. Rollover φ  
 (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 1,430  
 Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown

2,387 lbs X .4536 = 1,082 kgs

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

20. Vehicle Cargo Weight φ φ φ 0  
 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) φ

26. Rear Override/Underride (this Vehicle) φ

(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 φ  
 (0) No towed unit  
 (1) Yes--towed trailing unit  
 (9) Unknown

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

23. Post Collision Condition of Tree or Pole (For Highest Delta V) φ  
 (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 φ 9 φ

28. Heading Angle For Other Vehicle 1 9 φ

<p>29. Basis for Total Delta V (highest) <span style="float:right"><u>3</u></span></p> <p><i>Delta V Calculated</i></p> <p>(1) CRASH program—damage only routine                  (2) CRASH program—damage and trajectory routine                  (3) Missing vehicle algorithm</p> <p><i>Delta V Not Calculated</i></p> <p>(4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.                  (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.                  (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.</p>	<p style="text-align: right;">Secondary      Highest</p> <p>32. Lateral Component of Delta V <span style="float:right"><u>0</u></span>                  (3.21) <u>+5.17</u> Nearest kph _____</p> <p>(NOTE: __000 means greater than -0.5 kph and less than +0.5 kph)                  (±160) ±159.5 kph and above                  (__999) Unknown</p> <p>33. Energy Absorption <span style="float:right"><u>0</u> <u>39</u>, <u>7</u> <u>00</u></span>                  (29297.7) <u>39718.4</u> Nearest 100 joules _____</p> <p>(NOTE: 0000 means less than 50 joules)                  (9997) 999,650 joules or more                  (9999) Unknown</p> <p>34. Confidence In Reconstruction Program Results (For Highest Delta V) <span style="float:right"><u>4</u></span></p> <p>(0) No reconstruction                  (1) Collision fits model — results appear reasonable                  (2) Collision fits model — results appear high                  (3) Collision fits model — results appear low                  (4) Borderline reconstruction — results appear reasonable</p> <p>35. Type of Vehicle Inspection <span style="float:right"><u>1</u></span></p> <p>(0) No inspection                  (1) Complete inspection                  (2) Partial inspection (specify): _____</p> <p>36. Is this an AOPS Vehicle? <span style="float:right"><u>1</u></span></p> <p>(0) No                  (1) Yes - researcher determined                  (2) VIN determined air bag system                  (3) VIN determined automatic (passive) belts                  (4) VIN determined air bag and automatic (passive) belts</p>
<b>COMPUTER GENERATED DELTA V</b>	
<p>30. Total Delta V <span style="float:right">Secondary      Highest</span>  <u>29.75</u> (18.49) <u>0</u> <u>3</u> <u>0</u>                  Nearest kph _____</p> <p>(NOTE: 000 means less than 0.5 kph)                  (160) 159.5 kph and above                  (999) Unknown</p> <p>31. Longitudinal Component of Delta V <span style="float:right">+      Secondary      Highest</span>                  (-13.21) <u>0</u> <u>2</u> <u>9</u>  <u>-29.30</u> Nearest kph _____</p> <p>(NOTE: __000 means greater than -0.5 kph and less than +0.5 kph)                  (±160) ±159.5 kph and above                  (__999) Unknown</p>	

**IS OLDMISS APPLICABLE FOR THIS VEHICLE?  YES [ ] NO**

**IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED?  YES [ ] NO**



37. Police Reported Other Drug Presence 9  
 (0) No other drugs present  
 (1) Yes (other drug present)  
 (7) Not reported  
 (8) No driver present  
 (9) Unknown

38. Police Reported Drug Evaluation Classification (DEC) Test For Driver 3  
 (0) No DEC process available or given  
 (1) DEC process given, results known  
 (2) DEC process given, results unknown  
 (3) DEC process available, unknown if given  
 (8) No driver present

39. Other Drug Specimen Test Type For Driver 9  
 (0) No specimen test given  
 (1) Blood test  
 (2) Urine test  
 (3) Other specimen tests (specify):  
 \_\_\_\_\_  
 (7) Unspecified specimen test  
 (8) No driver present  
 (9) Unknown if specimen test given

**DRUG EVALUATION CLASSIFICATION  
 OTHER DRUGS TEST RESULTS FOR DRIVER**

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. <u>9</u>	41. <u>9</u>
Depressant Drug	42. <u>9</u>	43. <u>9</u>
Stimulant Drug	44. <u>9</u>	45. <u>9</u>
Hallucinogen Drug	46. <u>9</u>	47. <u>9</u>
Cannabinoid Drug	48. <u>9</u>	49. <u>9</u>
Phencyclidine (PCP)	50. <u>9</u>	51. <u>9</u>
Inhalant Drug	52. <u>9</u>	53. <u>9</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>9</u>	55. <u>9</u>

**Codes For DEC Test Results**

- (0) No DEC test given
- (1) Passed DEC test
- (2) Failed DEC test
- (3) DEC test given—results unknown
- (8) No driver present
- (9) Unknown if DEC test given

**Codes for Specimen Test Results**

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or not obtained
- (8) No driver present
- (9) Unknown if specimen test given

## OTHER DATA

## 56. Driver's Zip Code

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

## 57. Driver's Race/Ethnic Origin

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

## 58. Vehicle Special Use (This Trip)

- φ
- (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

## 61. Rollover Initiation Object Contacted

φ φ

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

φ

- (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

φ

- (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)

φ 1

- (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

## 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

- φ
- (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

φ

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

## PRECRASH DATA (Continued)

65. Critical Precrash Event 62*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): \_\_\_\_\_
- (09) Unknown cause of control loss

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

*Pedestrian or Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian - unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): \_\_\_\_\_
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): \_\_\_\_\_
- (99) Unknown

For Corrective Actions Attempted see variable GV14 (Attempted Avoidance Manuever)

66. Precrash Stability After Avoidance Manuever 1

- (0) No avoidance manuever
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): \_\_\_\_\_
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Manuever (Corrective Action) 1

- (0) No avoidance manuever
- (1) Vehicle stayed in travel lane where avoidance manuever was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance manuever was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance manuever was initiated
- (4) Vehicle departed roadway
- (5) Avoidance manuever initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), \*\*\*  
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*  
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



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

## EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number _____	3. Vehicle Number <u>01</u>
2. Case Number - Stratum <u>AB14</u>	

### VEHICLE IDENTIFICATION

VIN 1NXA E 09 E G P Z ~~XXXXXX~~ Model Year 93  
 Vehicle Make (specify): TOYOTA Vehicle Model (specify): COROLLA DX 4-DR

### 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	RF BUMPER CORNER <span style="float: right;">→</span>	
2	LF DOOR	

### 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								
INCHES	1	BUMPER	50.4	25.4	57.4	14.75	12.25	13.25	17.0	19.25	25.0	
		- STAND ADJ.		-7.1		-7.1	-7.1	-7.1	-7.1	-7.1	-7.1	
		- FREESPACE		-5.1		-5.1	-1.2	-1	-1	-1.2	-5.1	
		FINAL		12.8		2.55	3.55	6.05	9.0	10.95	12.8	+9.5
CM	1	BUMPER/FINAL	127	33	145	0	9	15	25	28	33	+9
INCHES	2	ABOVE SILL	20	ZONE 1								
CM	2	ABOVE SILL	51	ZONE 1								

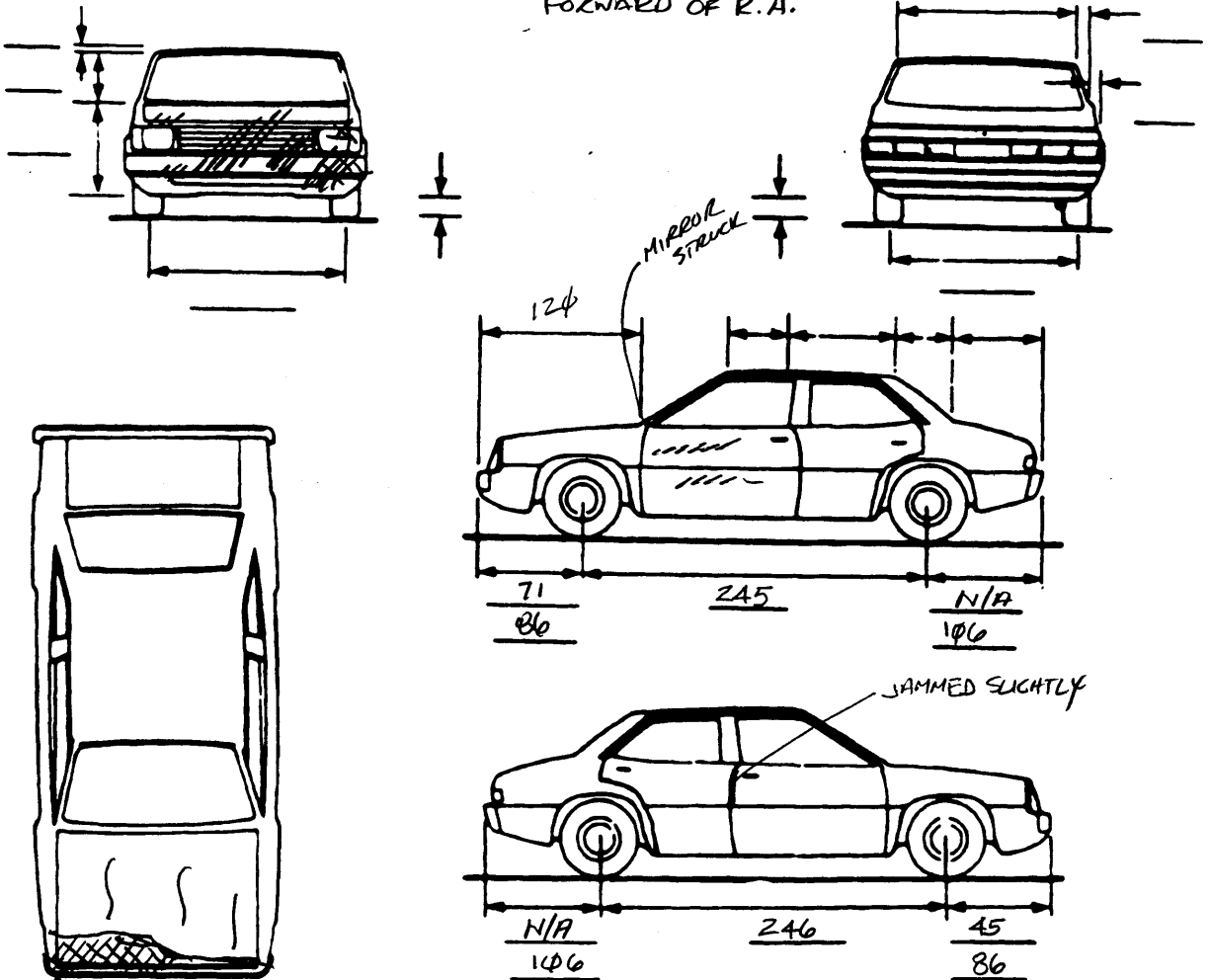
**VEHICLE DAMAGE SKETCH**

<p><b>TIRE - WHEEL DAMAGE</b></p> <p>a. Rotation physically restricted</p> <p>b. Tire deflated</p> <p>RF <u>1</u>      RF <u>2</u>          LF <u>1 SLIGHT</u>      LF <u>2</u>          RR <u>2</u>      RR <u>2</u>          LR <u>2</u>      LR <u>2</u></p> <p>(1) Yes (2) No (8) NA (9) Unk.</p>	<p><b>ORIGINAL SPECIFICATIONS</b></p> <p>Wheelbase <u>96.1"</u> <u>244</u> cm          Overall Length <u>172"</u> <u>437</u> cm          Maximum Width <u>169</u> cm          Curb Weight <u>2387</u> <u>1085</u> kg          Average Track <u>146</u> cm          Front Overhang <u>88</u> cm          Rear Overhang <u>106</u> cm          Undeformed End Width <u>145</u> cm          Engine Size: cyl./displ. <u>1-6</u> L</p>	<p><b>WHEEL STEER ANGLES</b>          (For locked front wheels or displaced rear axles only)</p> <p>RF ± <u>—</u> °          LF ± <u>—</u> °          RR ± <u>—</u> °          LR ± <u>—</u> °</p> <p>Within ± 5 degrees</p>
<p><b>TYPE OF TRANSMISSION</b></p> <p><input type="checkbox"/> Manual    <input checked="" type="checkbox"/> Automatic</p>	<p><b>DRIVE WHEELS</b></p> <p><input checked="" type="checkbox"/> FWD    <input type="checkbox"/> RWD    <input type="checkbox"/> 4WD</p>	<p>Approximate Cargo Weight <u>NONE</u> <u>VISIBLE</u> kg</p>

TANK 3/4 FULL

**MEASUREMENTS IN CENTIMETERS**

— STANDS SET @ 350 CM FORWARD OF R.A.



**NOTES** MAX CRUSH  
 Sketch new penmarks 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 stations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.  
 Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.



**COLLISION DEFORMATION CLASSIFICATION**

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>Φ1</u>	5. <u>Φ2</u>	6. <u>1Z</u>	7. <u>F</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>Φ2</u>

Second Highest Delta "V"

12. <u>Φ2</u>	13. <u>Φ2</u>	14. <u>11</u>	15. <u>L</u>	16. <u>P</u>	17. <u>M</u>	18. <u>S</u>	19. <u>Φ1</u>
---------------	---------------	---------------	--------------	--------------	--------------	--------------	---------------

**CRUSH PROFILE IN CENTIMETERS**

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

HIGHEST DELTA "V"

20. L	21. C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	22. ±D
<u>145</u>	<u>ΦΦ6</u>	<u>ΦΦ9</u>	<u>Φ15</u>	<u>Φ25</u>	<u>Φ28</u>	<u>Φ33</u>	<u>⊕ - ΦΦ9</u>

Second Highest Delta "V"

23. L	24. C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	25. ±D
"CDC ONLY"							+
							-

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

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

28. Original Wheelbase 244  
 Code to the nearest centimeter  
 (999) Unknown

96 . 1 inches X 2.54 = 244 centimeters

<p>29. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? <u>φ</u></p> <p>(0) No post manufacturer modifications                  (1) Yes - post manufacturer modifications (specify): _____                  _____                  _____                  (Include photograph of CERTIFICATION PLACARD in case report)                  (9) Unknown if vehicle is modified</p> <p>30. Fire Occurrence <u>φ</u></p> <p>(0) No fire</p> <p>Yes, fire occurred                  (1) Minor                  (2) Major                  (9) Unknown</p>	<p>31. Origin of Fire <u>φ</u></p> <p>(0) No fire                  (1) Vehicle exterior (front, side, back, top)                  (2) Exhaust system                  (3) Fuel tank (and other fuel retention system parts)                  (4) Engine compartment                  (5) Cargo/trunk compartment                  (6) Instrument panel                  (7) Passenger compartment area                  (8) Other location (specify): _____                  (9) Unknown</p> <p>32. Type of Fuel Tank <u>1</u></p> <p>(0) No fuel tank (electrical vehicle)                  (1) Metallic                  (2) Non-metallic                  (9) Unknown</p>
--	--

\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS \*\*\*  
 (I.E., GV09=0 OR 9 AND GV36=0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.





# INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number \_\_\_\_\_  
 2. Case Number - Stratum AB 14  
 3. Vehicle Number Q1

## INTEGRITY

4. Passenger Compartment Integrity Q Q  
 (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

*SLIGHT*

Door, Tailgate or Hatch Opening

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

- (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 Q 11. RF Q 12. LR Q 13. RR Q 14. TG/H Q

- (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 Q 16. LF Q 17. RF Q 18. LR Q 19. RR Q  
 20. BL Q 21. Roof Q 22. Other Q

- (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 Q 24. LF Q 25. RF Q 26. LR Q 27. RR Q  
 28. BL Q 29. Roof Q 30. Other Q

- (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 Q 32. LF Q 33. RF Q 34. LR Q 35. RR Q  
 36. BL Q 37. Roof Q 38. Other Q

- (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 Q 40. LF Q 41. RF Q 42. LR Q 43. RR Q  
 44. BL Q 45. Roof Q 46. Other Q

- (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. _____

**INTRUDING COMPONENT**

*Interior Components*

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

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

*Exterior Components*

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

**LOCATION OF INTRUSION**

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

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

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

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

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

- (99) Unknown

**MAGNITUDE OF INTRUSION**

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

**DOMINANT CRUSH DIRECTION**

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

**STEERING 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 φ φ  
 \_\_\_\_\_ 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 φ φ  
 (00) No steering rim deformation

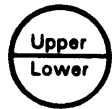
*Quarter Sections*

- (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 φ φ 1,000

\_\_\_\_\_ 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

\_\_\_\_\_ 658 miles X 1.6093 = \_\_\_\_\_ 1,059 kilometers

Source: VEH. INSPECTION

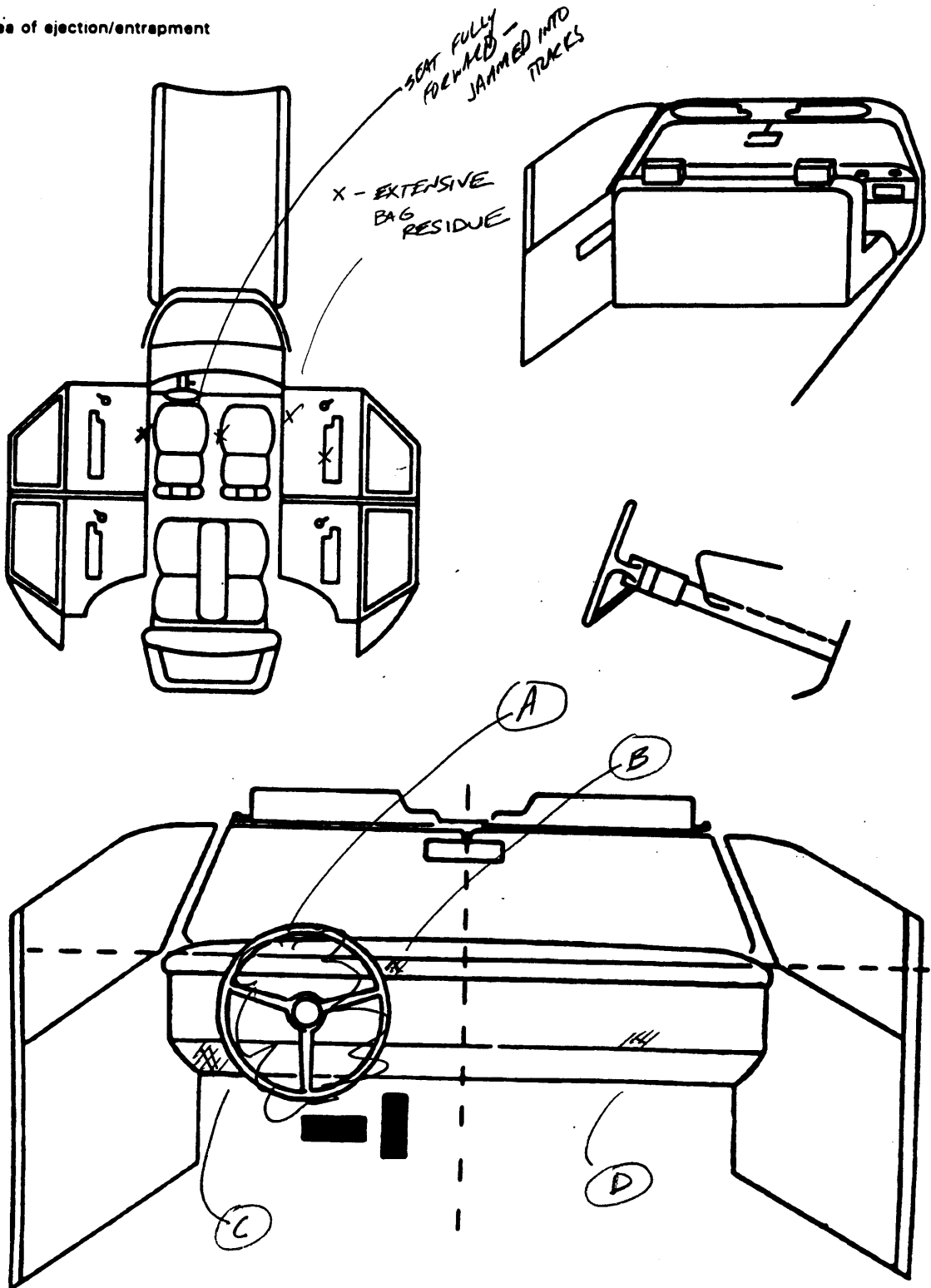
95. Instrument Panel Damage from Occupant Contact? 1  
 (0) No  
 (1) Yes  
 (9) Unknown

96. Knee Bolsters Deformed from Occupant Contact? φ  
 (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	45	01	FACE	DEPLOYED / MAKEUP SMUDGE	1
B	49	01	R. HAND	SCUFF	2
C	49	01	L. KNEE	SCUFF / TRANSFER	1
D	12	02	-	SCUFF / OPEN	1
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): \_\_\_\_\_

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

**LEFT SIDE**

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

**CONFIDENCE LEVEL OF CONTACT POINT**

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

**MANUAL RESTRAINTS**

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

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

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

		Left	Center	Right
FIRST	Availability	4	/	4
	Use	44	/	44
	Failure Modes	1	/	4
SECOND	Availability	4	3	4
	Use	44	44	44
	Failure Modes	4	4	4
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

**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	/	3
	Seat Type	41	/	41
	Seat Performance	1	/	1
	Seat Orientation	1	/	1
SECOND	Head Restraint Type/Damage	1	4	1
	Seat Type	45	45	45
	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)**

**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)



## INTERVIEW FORM (A)

1. Primary Sampling Unit Number _____ 2. Case Number - Stratum <u>AB 14</u> 3. Vehicle Number <u>41</u>	Interviewee(s) Role or Name(s): <u>DRIVER'S FATHER</u>
---	---

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

If the driver was not the person interviewed, was an appointment made for a follow-up interview?

### DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

"EASTBOUND ON XX. IT'S A SIX-LANE ROAD  
THERE. TRUCK WAS WESTBOUND IN THE TURN  
LANE. THERE ARE NO TRAFFIC SIGNALS. TRAFFIC  
WAS VERY HEAVY. THE DRIVER OF THE TRUCK  
JUST TURNED IN FRONT OF HER. THE TRUCK  
SPUN AROUND AND HIT A POLE."

DATE - ~~1993~~

TIME - ~~PM~~

VEH. #2 - 1974 CHEVY P.U. - HE WAS CITED

### OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS





# INTERVIEW FORM (B)

1. Primary Sampling Unit Number _____ 2. Case Number - Stratum <u>  A  B  1  4  </u> 3. Vehicle Number <u>  01  </u>	Interviewee(s) Role or Name(s): _____ <u>  FATHER OF DRIVER  </u>
--	--

## ACCIDENT DATA QUESTIONS

<p>1. Can you tell me in <u>which direction you were traveling?</u></p> <p><input type="checkbox"/> North   <input type="checkbox"/> South   <input checked="" type="checkbox"/> East   <input type="checkbox"/> West</p> <p>(Optional - Where were you coming from or going to?) _____</p> <p>2. <u>In which lane were you traveling?</u> (Note: Lane 1 is designated as the right curb lane.)</p> <p><input checked="" type="checkbox"/> [1]   <input type="checkbox"/> [2]   <input type="checkbox"/> [3]   <input type="checkbox"/> [4]   <input type="checkbox"/> Other (specify): _____</p> <p>3. Can you remember your <u>estimated travel speed</u> (in miles per hour) before the accident?</p> <p><input type="checkbox"/> Stopped   <input type="checkbox"/> 1-10   <input type="checkbox"/> 10-20  <input type="checkbox"/> 20-30   <input type="checkbox"/> 30-40   <input type="checkbox"/> 40-50  <input type="checkbox"/> 50-60   <input type="checkbox"/> 60-70   <input type="checkbox"/> 70+</p> <p>4. Just before the accident, can you tell me what you were intending to do or were doing?</p> <p><input checked="" type="checkbox"/> Going straight   <input type="checkbox"/> Stopped  <input type="checkbox"/> slowing   <input type="checkbox"/> Accelerating  <input type="checkbox"/> Turning left   <input type="checkbox"/> Turning right  <input type="checkbox"/> Changing lanes to left   <input type="checkbox"/> Changing lanes to right  <input type="checkbox"/> Backing  <input type="checkbox"/> Other (specify): _____</p> <p>5. Did you experience any <u>loss of control</u> due to weather conditions or mechanical problems?</p> <p><input checked="" type="checkbox"/> No  <input type="checkbox"/> Yes (If yes, describe below)          _____          _____</p> <p>6. Did you have to take any <u>avoidance actions prior to the accident?</u></p> <p><input checked="" type="checkbox"/> No - Go to question 7  <input type="checkbox"/> Yes - Go to question 6a</p>	<p>6a. <u>What actions did you take?</u></p> <p><input type="checkbox"/> Braking with lock-up  <input type="checkbox"/> Braking without lock-up  <input type="checkbox"/> Releasing brakes  <input type="checkbox"/> Accelerating  <input type="checkbox"/> Steering left  <input type="checkbox"/> Steering right  <input type="checkbox"/> Other (specify): _____</p> <p>7. <u>Where was your vehicle at the time of the collision?</u></p> <p><input checked="" type="checkbox"/> Original travel lane   <input type="checkbox"/> Different travel lane  <input type="checkbox"/> In intersection   <input type="checkbox"/> Off roadway to right  <input type="checkbox"/> Off roadway to left  <input type="checkbox"/> Other (specify): _____</p> <p>8. Was your <u>travel speed at the time of the collision</u> different from your previous travel speed?</p> <p><input type="checkbox"/> No  <input type="checkbox"/> Lower  <input type="checkbox"/> Higher  <input checked="" type="checkbox"/> Unknown</p> <p>8a. <u>Can you estimate your speed at the time of the collision?</u></p> <p><input type="checkbox"/> Stopped   <input type="checkbox"/> 1-10   <input type="checkbox"/> 10-20  <input type="checkbox"/> 20-30   <input type="checkbox"/> 30-40   <input type="checkbox"/> 40-50  <input checked="" type="checkbox"/> 50-60   <input type="checkbox"/> 60-70   <input type="checkbox"/> 70+</p> <p>9. Immediately following the collision, can you describe <u>how your vehicle moved to its stopped position?</u></p> <p>_____          _____          _____</p> <p>10. Can you tell me how many collisions your vehicle had during the accident and the source of the collisions?</p> <p>_____</p> <p>_____</p> <p><i>1/2 HIT POLE AFTER 1ST IMPACT</i></p>
---	---

1. Primary Sampling Unit Number \_\_\_\_\_

3. Vehicle Number 01

2. Case Number - Stratum AB14

4. Occupant Number 01

**VEHICLE/DRIVER DATA QUESTIONS**

1. Can you tell me the year, make, model of your vehicle?

1993 TOYOTA COROLLA  
 Year Make Model

2. Can you describe the damage to your vehicle?  
 \_\_\_\_\_  
 \_\_\_\_\_

3. Was there any previous damage to your vehicle that is not related to this accident?

No  
 Yes (If "yes", describe below)  
 \_\_\_\_\_  
 \_\_\_\_\_

4. Did any of the doors (hatch, tailgate) open during the accident?

No  
 Yes (If "Yes", describe below)  
 \_\_\_\_\_  
 \_\_\_\_\_

5. Did any of the windows break during the accident?

No  
 Yes (If "Yes", describe below)  
 \_\_\_\_\_  
 \_\_\_\_\_

6. Does your vehicle have a glove compartment?

No  
 Yes

6a. Did the glove compartment door come open during the accident?

No  
 Yes  
 Unknown

7. Does your vehicle have "seat belts"?

No (If "No", go to question 7b)  
 Yes (If "Yes", go to question 7a)

7a. Can you describe the type of seat belt for each seat?

Driver's seat  Lap  Lap and shoulder  
 Front seat middle  Lap  Lap and shoulder  
 Front seat right  Lap  Lap and shoulder  
 Rear seat left  Lap  Lap and shoulder  
 Rear seat middle  Lap  Lap and shoulder  
 Rear seat right  Lap  Lap and shoulder

(Identify seat belts for third row and beyond)  
 \_\_\_\_\_  
 \_\_\_\_\_

7b. Were any of the belts removed or not functional prior to the accident?

No  
 Yes (If "Yes", specify which belt and describe problem)  
 \_\_\_\_\_  
 \_\_\_\_\_

8. Do any of the front belts move along a motorized track when the door is opened or closed?

No (If "No", go to question 9)  
 Yes (If "Yes", what seat location?)  
 Left Front  
 Right Front

8a. Were the motorized belts working properly before the accident?

No (If "No", describe condition below)  
 \_\_\_\_\_  
 \_\_\_\_\_

Yes

8b. Were the belts connected to the track prior to the accident?

No  
 Yes  
 Unknown

9. Do any of the front "seat" belts attach to the door such that when the door is opened the belt travels with the door?

No (go to question 10)  
 Yes

9a. Does this belt come across the \_\_\_\_\_?

Chest only  
 Lap and chest

9b. Was this belt connected prior to the accident?

No  
 Yes  
 Unknown

**AIR BAGS**

10. Is your vehicle equipped with a driver's side air bag?

No (go to question 11)  
 Yes (go to question 10a)  
 Unknown (go to question 11)

10a. Did the air bag inflate during the accident?

No (go to questions 10b and 10c)  
 Yes (go to question 10e)

1. Primary Sampling Unit Number \_\_\_\_\_  
 2. Case Number - Stratum AB14

3. Vehicle Number 01  
 4. Occupant Number 01

**VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)**

10b. Was the air bag wiring disconnected prior to the accident?  
 No  
 Yes (If "Yes", describe previous condition)  
 \_\_\_\_\_  
 Unknown

10c. Was your vehicle involved in any accidents prior to this accident which inflated the air bag?  
 No (go to question 11)  
 Yes (go to question 10d)  
 Unknown

10d. Was the air bag re-installed after the accident?  
 No (go to question 11)  
 Yes  
 Unknown

10e. Did the air bag inflate as you expected?  
 No (If "No" describe below)  
STRUCK EYE  
 Yes  
 Unknown

11. Is your vehicle equipped with a passenger side air bag?  
 No (If "No", go to question 12)  
 Yes (If "Yes", go to question 11a)  
 Unknown (If "Unknown", go to question 12)

11a. Did the passenger air bag inflate during the accident?  
 No (go to question 11b)  
 Yes (go to question 12)

11b. Was the passenger air bag wiring disconnected prior to the accident?  
 No  
 Yes (If "Yes", describe below)  
 \_\_\_\_\_  
 Unknown

11c. Was the passenger air bag inflated in a previous accident?  
 No (go to question 12)  
 Yes (go to question 11d)  
 Unknown

11d. Was the passenger air bag re-installed after the accident?  
 No (go to question 12)  
 Yes  
 Unknown

11e. Did the passenger air bag inflate as you expected?  
 No (If "No" describe below)  
 \_\_\_\_\_  
 Yes  
 Unknown

**CHILD SAFETY SEAT**

12. Was there a person in a child safety seat in your vehicle?  
 No (If "No", go to question 13)  
 Yes  
 Unknown

12a. Can you tell me the manufacturer and model of the child safety seat?  
 \_\_\_\_\_

12b. Can you describe the type of child safety seat?  
 Infant  
 Toddler  
 Convertible  
 Booster  
 Other (specify): \_\_\_\_\_  
 Unknown

12c. Where was the child safety seat(s) located?  
 [12] [13]  
 [21] [22] [23]  
 [31] [32] [33]  
 Other (specify): \_\_\_\_\_

12d. Can you tell me which direction the child safety seat was facing prior to the accident?  
 Rear facing  
 Forward facing  
 Other (specify): \_\_\_\_\_  
 Unknown

12e. Was a seat belt used to hold the child seat in place?  
 No (If "No", go to question 12g)  
 Yes (If "Yes", go to question 12f)  
 Unknown

12f. Can you describe how the seat belt was secured to the child seat?  
 Looped through designated rear framing struts?  
 Looped through arm rest slots?  
 Belt across safety shield?  
 Looped through rear frame outside the designated framing struts?  
 Other (specify): \_\_\_\_\_  
 Unknown

12g. What was the child safety seat equipped with at the time of purchase? (check all that apply)  
 Harness  
 Shield  
 Tether strap

If any box is checked, ask questions 12h - 12i.

1. Primary Sampling Unit Number \_\_\_\_\_

3. Vehicle Number 41

2. Case Number - Stratum AB 14

4. Occupant Number 41

**VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)**

12h. Were any of these items added after you owned the child safety seat?

- Yes  
(specify \_\_\_\_\_)
- No
- Unknown

12i. Were any of these items used during the accident?

- Yes (If "Yes", check all that apply)
  - Harness
  - Shield
  - Tether strap
- No
- Unknown

**OPTIONAL**

If you do not know where the vehicle is or if the owner's permission is needed for inspection.

15. Do you know where the vehicle is currently located?

\_\_\_\_\_

16. May I take a look at your vehicle to assess the damage?

- No
- Yes

**CARGO WEIGHT AND MILEAGE**

13. Was there any cargo in your vehicle?

- No (If "No", go to question 14)
- Yes (If "Yes", go to question 13a)
- Unknown

13a. Can you estimate the weight of the cargo?

\_\_\_\_\_ lbs.

Cargo description

\_\_\_\_\_

14. Can you tell me the mileage on the vehicle?

\_\_\_\_\_ miles

**DRIVER ONLY**

17. What race do you consider yourself?

- White
- Black
- American Indian, Eskimo or Aleut, Asian or Pacific Islander
- Other (specify: \_\_\_\_\_)
- Unknown.

18. Are you of hispanic origin?

- No
- Yes

1. Primary Sampling Unit Number \_\_\_\_\_ 3. Vehicle Number 41  
 2. Case Number - Stratum AB 14 4. Occupant Number 41

**OCCUPANT DATA QUESTIONS**

1. Was there anyone else in your vehicle at the time of the accident?  
 No (If "No", go to question 4)  
 Yes (If "Yes", specify number in question 2 below and then go to question 3)  
 Unknown

2. How many?  
 1 One other person  
 2 Two other persons  
 3 Three other persons  
 4 Four other persons  
 5 Five other persons  
 6 Six other persons  
 7 Seven or more other persons (specify number:)

3. Where was this person sitting? (Circle seating positions)

	[12]	<u>[13]</u>
[21]	[22]	[23]
[31]	[32]	[33]

Other (specify): \_\_\_\_\_

5d. Were you (Was he/she)  
 Sitting upright or  
 Leaning to left side, or  
 Leaning to right side?

**OCCUPANT EJECTION**

6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident?  
 No (If "No", go to question 7)  
 Yes (If "Yes", go to question 6a)  
 Unknown

6a. Can you remember what part of the vehicle you were (he/she was) thrown out?  
 No  
 Yes (Describe:)

**OCCUPANT RESTRAINT**

7. Were you (Was he/she) wearing a seat belt just before the accident?  
 No (If "No", go to question 8)  
 Yes  
 Unknown

7a. Were you (Was he/she) wearing the  
 Lap belt?  
 Lap and Shoulder belt?  
 Shoulder belt?

7b. Can you describe how you were (he/she was) wearing the lap belt?  
 Across the stomach  
 Low on lap  
 Other (specify:)  
 Unknown

7c. Can you describe how you were (he/she was) wearing the shoulder belt?  
 Over the shoulder  
 Under the arm  
 Behind the back  
 Behind the seat  
 Other (specify:)

7d. Did any part of the belt system break or tear?  
 No  
 Yes (If "Yes", describe)  
 Unknown

**OCCUPANT CHARACTERISTICS**

4. Can I have your (his/her) height, weight, age, and sex?  
 Height 4'11 Weight 90 Age 17  
 Sex:  Male  Female

**OCCUPANT POSTURE**

5. Can you tell me how you (he/she was) were sitting in your vehicle?  
NORMAL UPRIGHT.

5a. Can you describe the location of your (his/her) feet just prior to the collision?  
FOOT ON GAS

5b. Can you describe the location of your (his/her) arms?  
10/2

5c. Was your (his/her) back resting against the seat back rest?  
 No (If "No", describe the position)  
 Yes  
 Unknown

**OCCUPANT ENTRAPMENT**

8. Were you (Was he/she) trapped in the vehicle?  
 No  
 Yes (If "Yes", describe)  
 Unknown



PSU Number \_\_\_\_\_ Case Number-Stratum AB14 Vehicle Number 01 Occupant Number 01

INJURY DATA FROM INTERVIEWEE(S)

Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s): DRIVER'S FATHER

SOFT TISSUE/INTERNAL INJURIES

490402.1/2  
CONTUSION

ABRASION 290202.1/4

ABRADED/CUT 290202.1/8

ABRASION UNDER CHIN 290202.1/8

MACULAR HOLE  
RETINAL TEAR

STRAIN 740402.1/1

STRAIN 740402.1/2

LAC 241000.1  
241002.2  
w/ RETINAL DETACHMENT

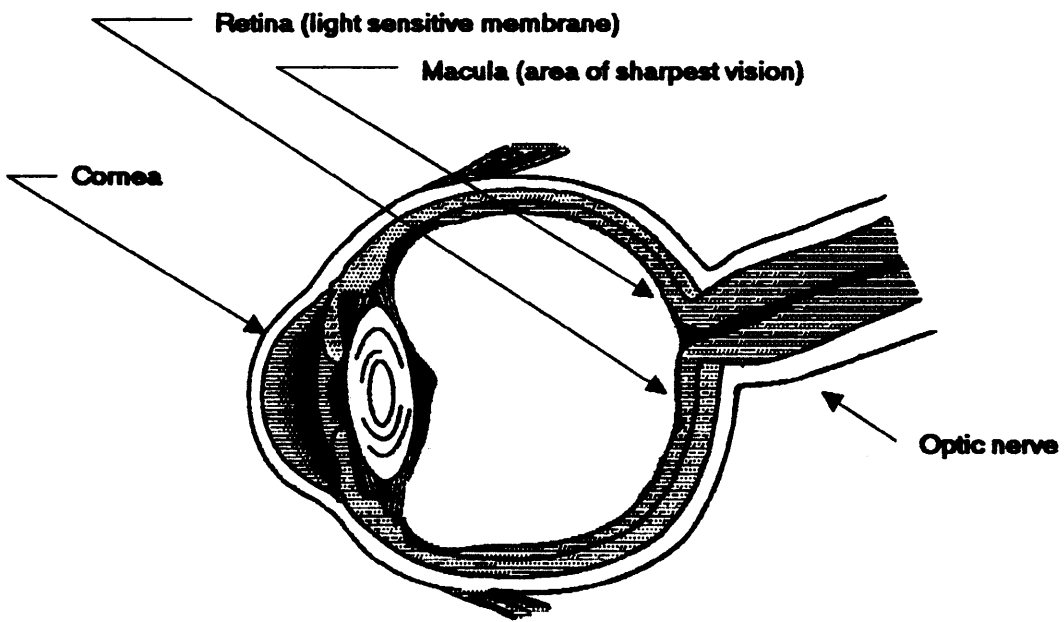
CONTUSIONS 890402.1/1  
890402.1/2

- NO GLASSES
- NO MAKEUP
- IN HOSPITAL FOR 3 1/2 HOURS
- SAW OPHTHMOLOGIST NEXT DAY
- HAS PERMANENT VISION LOSS

SKELETAL INJURIES

FX-NOSE (SMALL) 251000.1/4

The space provided on the back of this page may be used to document injuries noted by the interviewee(s).



**The macula is a one-millimeter part of the retina with the greatest density of light-sensitive cells, making it the area of sharpest vision.**

1. Primary Sampling Unit Number \_\_\_\_\_

3. Vehicle Number 412. Case Number - Stratum AB 144. Occupant Number 41

## OCCUPANT INJURY DATA QUESTIONS

1. Were you (Was he/she) injured?

- No (If "No", go to next occupant. Stop if no other occupant.)  
 Yes (If "Yes", complete Occupant Injury Questions)  
 Unknown

2. Did you (he/she) receive any cuts, abrasions, or bruises?

- No (go to question 3)  
 Yes (If "Yes", record the exact location(s) and size on the manikin(s).)  
 Unknown

2a. Do you know what caused your (his/her) injury(s)?

- No  
 Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)  
 Unknown

3. Did you (he/she) experience any broken bones?

- No (If "No", go to question 4)  
 Yes (If "Yes", record the exact location(s) and type of fracture(s) on the manikin(s), and then go to question 3a.)  
 Unknown

3a. Do you know what caused the injury(s)?

- No  
 Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)  
 Unknown

4. Did you (he/she) injure your (his/her) head?

- No (If "No", go to question 5)  
 Yes (If "Yes", describe the type of injury(s) on the manikin(s), then go to question 4a.)  
 Unknown

4a. Do you know what caused the injury(s)?

- No  
 Yes (If "Yes", specify the component(s) on the manikin(s).)  
 Unknown

5. Were any of your (his/her) internal organs injured?

- No (If "No", go to question 6)  
 Yes (If "Yes", thoroughly describe the type of injury(s) and specify the internal organ(s) injured on the manikin(s), and then go to question 5a.)  
 Unknown

5a. Do you know what caused this injury?

- No  
 Yes (If "Yes", specify the component(s) on the manikin(s).)  
 Unknown

6. Did you (he/she) suffer any joint sprains or muscle strains?

- No (If "No", go to question 7)  
 Yes (If "Yes", specify on the manikin(s), and then go to question 6a.)  
 Unknown

6a. Do you know what caused the injury(s)?

- No  
 Yes (If "Yes", specify the component(s) on the manikin(s).)  
 Unknown

7. Did you (he/she) receive treatment for your (his/her) injury(s)?

- No (If "No", go to question 8)  
 Yes (If "Yes", go to question 7a)

7a. Were you (Was he/she) treated by:

- Hospital/trauma center? (specify hospital name): \_\_\_\_\_  
 Medical clinic  
 Out patient surgery? (specify medical facility): \_\_\_\_\_  
 Paramedics or first aid at the scene?  
 A doctor in his/her office?  
 Treated at home?  
 None of the above, go to question 8.

7b. Were you (Was he/she) treated and released from the emergency room?

- No (If "No", go to question 7c.)  
 Yes (If "Yes", go to question 7e.)

7c. Were you (Was he/she) hospitalized?

- No (If "No", give an explanation)  
 Yes (If "Yes", go to question 7d.)

7d. How many days were you (was he/she) in the hospital?

0 days

1. Primary Sampling Unit Number \_\_\_\_\_

3. Vehicle Number   01  

2. Case Number - Stratum   AB     14  

4. Occupant Number   01  

OCCUPANT INJURY DATA QUESTIONS (CONTINUED)

7e. Have you (Has he/she) received any follow-up treatment?

No

Yes (If "Yes", describe:)

OPHTHOLOGIST

Unknown

8. Have you (he/she) lost any days from work or school (college)?

No

Yes (If "Yes", determine the number of days lost) (Specify:)

Not working prior to the accident

Unknown

7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?

No

Yes (If "Yes", mail or present the form for signature.)

**National Accident Sampling System-Crashworthiness Data System: Interview Form**

1. Primary Sampling Unit Number \_\_\_\_\_ 3. Vehicle Number 41  
 2. Case Number - Stratum AB 1 4 4. Occupant Number 02

**OCCUPANT DATA QUESTIONS SUPPLEMENT**

1. Who was the next occupant in your vehicle at the time of the accident?  
BROTHER

2. Occupant Number 2 of 2.

3. Where were you (was this person) sitting? (Circle seating positions)

[21]	[12]	[13]
[31]	[22]	[23]
[ ] Other (specify): _____	[32]	[33]

5d. Were you (Was he/she)  
 Sitting upright or  
 Leaning to left side, or  
 Leaning to right side?

**OCCUPANT EJECTION**

6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident?  
 No (If "No", go to question 7)  
 Yes (If "Yes", go to question 6a)  
 Unknown

6a. Can you remember what part of the vehicle you were (he/she was) thrown out?  
 No  
 Yes (Describe:)

**OCCUPANT RESTRAINT**

7. Were you (Was he/she) wearing a seat belt just before the accident?  
 No (If "No", go to question 8)  
 Yes  
 Unknown

7a. Were you (Was he/she) wearing the  
 Lap belt?  
 Lap and Shoulder belt?  
 Shoulder belt?

7b. Can you describe how you were (he/she was) wearing the lap belt?  
 Across the stomach  
 Low on lap  
 Other (specify:)  
 Unknown

7c. Can you describe how you were (he/she was) wearing the shoulder belt?  
 Over the shoulder  
 Under the arm  
 Behind the back  
 Behind the seat  
 Other (specify:)

7d. Did any part of the belt system break or tear?  
 No  
 Yes (If "Yes", describe)  
 Unknown

**OCCUPANT CHARACTERISTICS**

4. Can I have your (his/her) height, weight, age, and sex?  
 Height 4'7" Weight 65 Age 14  
 Sex:  Male  Female

**OCCUPANT POSTURE**

5. Can you tell me how you (he/she) was sitting in the vehicle?  
NORMAL / UPRIGHT

5a. Can you describe the location of your (his/her) feet just prior to the collision?  
UNK.

5b. Can you describe the location of your (his/her) arms?  
UNK.

5c. Was your (his/her) back resting against the seat back rest?  
 No (If "No", describe the position)  
 Yes  
 Unknown

**OCCUPANT ENTRAPMENT**

8. Were you (Was he/she) trapped in the vehicle?  
 No  
 Yes (If "Yes", describe)  
 Unknown

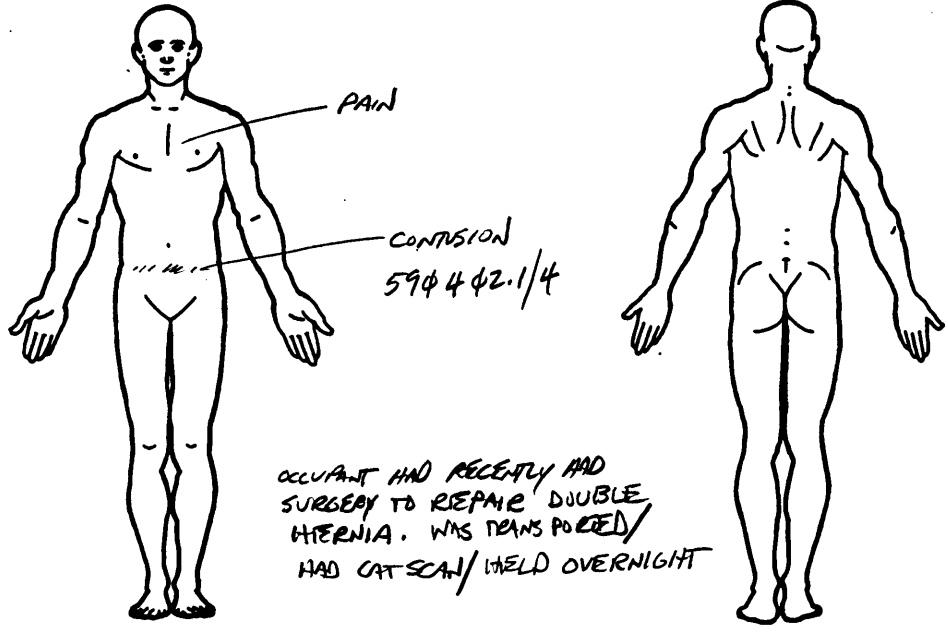


PSU Number \_\_\_\_\_ Case Number—Stratum AB 14 Vehicle Number 41 Occupant Number 42

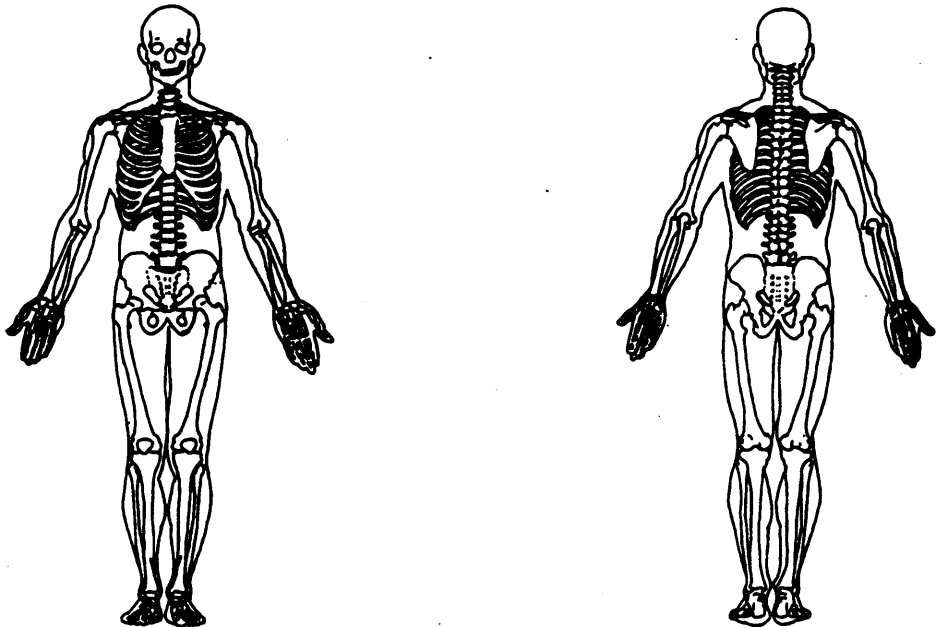
INJURY DATA FROM INTERVIEWEE(S)

Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s): FATHER

SOFT TISSUE/INTERNAL INJURIES



SKELETAL INJURIES



The space provided on the back of this page may be used to document injuries noted by the interviewee(s).

1. Primary Sampling Unit Number \_\_\_\_\_  
 2. Case Number - Stratum AB14

3. Vehicle Number 41  
 4. Occupant Number 02

**OCCUPANT INJURY DATA QUESTIONS**

- 1. Were you (Was he/she) injured?  
 No (If "No", go to next occupant. Stop if no other occupant.)  
 Yes (If "Yes", complete Occupant Injury Questions)  
 Unknown
- 2. Did you (he/she) receive any cuts, abrasions, or bruises?  
 No (go to question 3)  
 Yes (If "Yes", record the exact location(s) and size on the manikin(s).)  
 Unknown
- 2a. Do you know what caused your (his/her) injury(s)?  
 No  
 Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)  
 Unknown
- 3. Did you (he/she) experience any broken bones?  
 No (If "No", go to question 4)  
 Yes (If "Yes", record the exact location(s) and type of fracture(s) on the manikin(s), and then go to question 3a.)  
 Unknown
- 3a. Do you know what caused the injury(s)?  
 No  
 Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)  
 Unknown
- 4. Did you (he/she) injure your (his/her) head?  
 No (If "No", go to question 5)  
 Yes (If "Yes", describe the type of injury(s) on the manikin(s), then go to question 4a.)  
 Unknown
- 4a. Do you know what caused the injury(s)?  
 No  
 Yes (If "Yes", specify the component(s) on the manikin(s).)  
 Unknown
- 5. Were any of your (his/her) internal organs injured?  
 No (If "No", go to question 6)  
 Yes (If "Yes", thoroughly describe the type of injury(s) and specify the internal organ(s) injured on the manikin(s), and then go to question 5a.)  
 Unknown

- 5a. Do you know what caused this injury?  
 No  
 Yes (If "Yes", specify the component(s) on the manikin(s).)  
 Unknown
- 6. Did you (he/she) suffer any joint sprains or muscle strains?  
 No (If "No", go to question 7)  
 Yes (If "Yes", specify on the manikin(s), and then go to question 6a.)  
 Unknown
- 6a. Do you know what caused the injury(s)?  
 No  
 Yes (If "Yes", specify the component(s) on the manikin(s).)  
 Unknown
- 7. Did you (he/she) receive treatment for your (his/her) injury(s)?  
 No (If "No", go to question 8)  
 Yes (If "Yes", go to question 7a)
- 7a. Were you (Was he/she) treated by:  
 Hospital/trauma center? (specify hospital name): \_\_\_\_\_  
 Medical clinic  
 Out patient surgery? (specify medical facility): \_\_\_\_\_  
 Paramedics or first aid at the scene?  
 A doctor in his/her office?  
 Treated at home?  
 None of the above, go to question 8.
- 7b. Were you (Was he/she) treated and released from the emergency room?  
 No (If "No", go to question 7c.)  
 Yes (If "Yes", go to question 7e.)
- 7c. Were you (Was he/she) hospitalized?  
 No (If "No", give an explanation)  
 Yes (If "Yes", go to question 7d.)  
 \_\_\_\_\_  
 \_\_\_\_\_
- 7d. How many days were you (was he/she) in the hospital?  
 \_\_\_\_\_ / \_\_\_\_\_ days

1. Primary Sampling Unit Number \_\_\_\_\_

3. Vehicle Number 01

2. Case Number - Stratum AB 14

4. Occupant Number 02

OCCUPANT INJURY DATA QUESTIONS (CONTINUED)

7e. Have you (Has he/she) received any follow-up treatment?

No

Yes (If "Yes", describe:)

\_\_\_\_\_

Unknown

7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?

No

Yes (If "Yes", mail or present the form for signature.)

8. Have you (he/she) lost any days from work or school (college)?

No

Yes (If "Yes", determine the number of days lost) (Specify:)

Not working prior to the accident

Unknown



# OCCUPANT ASSESSMENT FORM

<p>1. Primary Sampling Unit Number _____</p> <p>2. Case Number - Stratum <u>AB 14</u></p> <p>3. Vehicle Number <u>01</u></p> <p>4. Occupant Number <u>01</u></p>	<p style="text-align: center;"><b>OCCUPANT'S SEATING</b></p> <p>10. Occupant's Seat Position <u>11</u></p> <p><i>Front Seat</i></p> <p>(11) Left side (12) Middle (13) Right side (14) Other (specify): _____ (15) On or in the lap of another occupant</p> <p><i>Second Seat</i></p> <p>(21) Left side (22) Middle (23) Right side (24) Other (specify): _____ (25) On or in the lap of another occupant</p> <p><i>Third Seat</i></p> <p>(31) Left side (32) Middle (33) Right side (34) Other (specify): _____ (35) On or in the lap of another occupant</p> <p><i>Fourth Seat</i></p> <p>(41) Left side (42) Middle (43) Right side (44) Other (specify): _____ (45) On or in the lap of another occupant</p> <p>(97) In or on unenclosed area (98) Other seat (specify): _____ (99) Unknown</p>
<b>OCCUPANT'S CHARACTERISTICS</b>	
<p>5. Occupant's Age <u>17</u> Code actual age at time of accident. (00) Less than one year old (specify by month): _____  (97) 97 years and older (99) Unknown</p> <p>6. Occupant's Sex <u>2</u> (1) Male (2) Female (9) Unknown</p> <p>7. Occupant's Height <u>154</u> Code actual height to the nearest centimeter. (999) Unknown  <u>59</u> inches X 2.54 = <u>154</u> centimeters</p> <p>8. Occupant's Weight <u>441</u> Code actual weight to the nearest kilogram. (999) Unknown  <u>490</u> pounds X .4536 = <u>441</u> kilograms</p> <p>9. Occupant's Role <u>1</u> (1) Driver (2) Passenger (9) Unknown</p>	<p>11. Occupant's Posture <u>0</u> (0) Normal posture</p> <p><i>Abnormal posture</i></p> <p>(1) Kneeling or standing on seat (2) Lying on or across seat (3) Kneeling, standing or sitting in front of seat (4) Sitting sideways or turned to talk with another occupant or to look out a rear window (5) Sitting on a console (6) Lying back in a reclined seat position (7) Bracing with feet or hands on a surface in front of seat (8) Other abnormal posture (specify): _____ (9) Unknown</p>

## EJECTION/ENTRAPMENT

12. Ejection φ

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

13. Ejection Area φ

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

14. Ejection Medium φ

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

15. Medium Status (Immediately Prior To Impact) φ

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

16. Entrapment φ

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

## RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

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

*Integral Belt Partially Destroyed*

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

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

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

18. Manual (Active) Belt System Use 4

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

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

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

19. Proper Use of Manual (Active) Belts 1

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

*Belt Used Improperly*

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

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

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

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

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

(6) Broken retractor \_\_\_\_\_

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

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

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

21. Air Bag System Availability/Function 1

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

*Non-functional*

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

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

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

22. Air Bag System Deployment 1

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

23. Are There Indications of Air Bag System Failure? 1

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

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

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

24. Police Reported Restraint Use 9

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

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

(9) Police indicated "unknown"

"NO PAR"



## 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) 41

- (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) 8

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

JAMMED SEAT TRACK

(9) Unknown

## CHILD SAFETY SEAT

28. Child Safety Seat Make/Model   ϕ  ϕ  ϕ    
 (000) No child safety seat  
 Applicable codes are found in your NASS CDS  
 Data Collection, Coding and Editing  
 (950) Built-in child safety seat  
 (997) Other make/model (specify):  
 \_\_\_\_\_  
 (998) Unknown make/model  
 (999) Unknown if child safety seat used

29. Type of Child Safety Seat   ϕ    
 (0) No child safety seat  
 (1) Infant seat  
 (2) Toddler seat  
 (3) Convertible seat  
 (4) Booster seat  
 (7) Other type child safety seat (specify):  
 \_\_\_\_\_  
 (8) Unknown child safety seat type  
 (9) Unknown if child safety seat used

30. Child Safety Seat Orientation   ϕ  ϕ    
 (00) No child safety seat  
  
*Designed for Rear Facing for This Age/Weight*  
 (01) Rear facing  
 (02) Forward facing  
 (08) Other orientation (specify):  
 \_\_\_\_\_  
 (09) Unknown orientation  
  
*Designed For Forward Facing for This Age/Weight*  
 (11) Rear facing  
 (12) Forward facing  
 (18) Other orientation (specify):  
 \_\_\_\_\_  
 (19) Unknown orientation  
  
*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*  
 (21) Rear facing  
 (22) Forward facing  
 (28) Other orientation (specify):  
 \_\_\_\_\_  
 (29) Unknown orientation  
  
 (99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage   ϕ  ϕ    
  
 32. Child Safety Seat Shield Usage   ϕ  ϕ    
  
 33. Child Safety Seat Tether Usage   ϕ  ϕ  

Note: Options below applicable to  
 Variables OA31-OA33.  
 (00) No child safety seat

*Not Designed With Harness/Shield/Tether*

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

*Designed With Harness/Shield/Tether*

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

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used  
 (22) Harness/shield/tether used  
 (29) Unknown if harness/shield/tether used  
  
 (99) Unknown if child safety seat used

**INJURY CONSEQUENCES**

34. Injury Severity (Police Rating) 9

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

"NO PAR"

35. Treatment - Mortality 4

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

*Nonfatal*

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

(9) Unknown

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

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

(9) Unknown

37. Hospital Stay φ φ

(00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 97

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

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

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

39. Time to Death φ φ

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

40. 1st Medically Reported Cause of Death φ φ

41. 2nd Medically Reported Cause of Death φ φ

42. 3rd Medically Reported Cause of Death φ φ

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

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

(99) Unknown

43. Number of Recorded Injuries for This Occupant 1 φ

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

**AUTOMATIC BELT SYSTEM**44. Automatic (Passive) Belt System Availability/  
Function φ

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

*Non-functional*

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

45. Automatic (Passive) Belt System Use φ

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

- (3) Automatic belt use unknown  
 (9) Unknown

46. Automatic (Passive) Belt System Type φ

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

47. Proper Use of Automatic (Passive) Belt System φ

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

*Automatic Belt Used Improperly*

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

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

48. Automatic (Passive) Belt Failure Modes During Accident φ

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

- (6) Broken retractor  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other automatic belt failure (specify): \_\_\_\_\_

- (9) Unknown

49. Seat Orientation (this Occupant Position) 1

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

- (9) Unknown

**STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER****TRAUMA DATA**50. Glasgow Coma Scale (GCS) Score (at Medical Facility) 9 7

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

51. Was the Occupant Given Blood? 9

- (1) No - blood not given  
 (2) Yes - blood given (specify units): \_\_\_\_\_  
 (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 9 7

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

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO [] YES []

UPDATE CANDIDATE?

NO [] YES []



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

# OCCUPANT INJURY FORM

BEST AVAILABLE COPY  
Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number _____	3. Vehicle Number <u>01</u>
2. Case Number - Stratum <u>AB14</u>	4. Occupant Number <u>01</u>

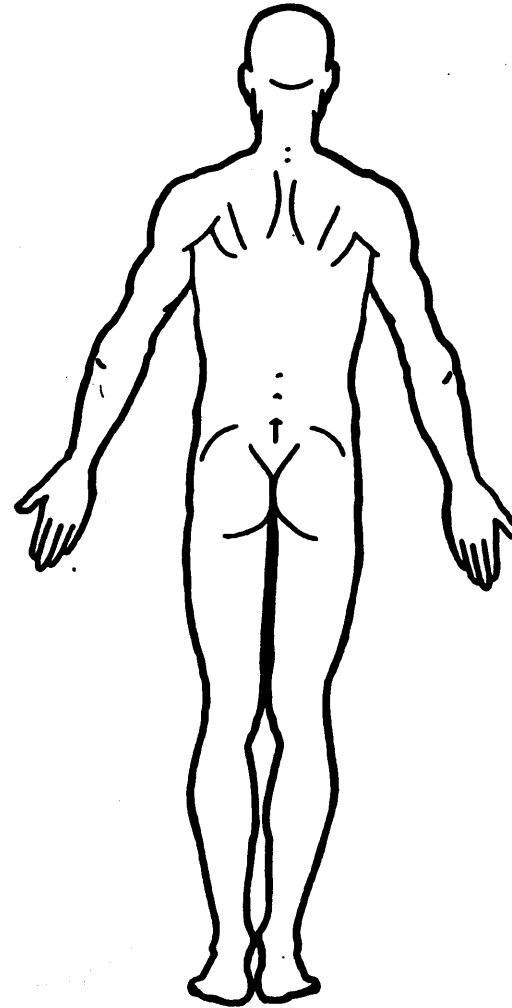
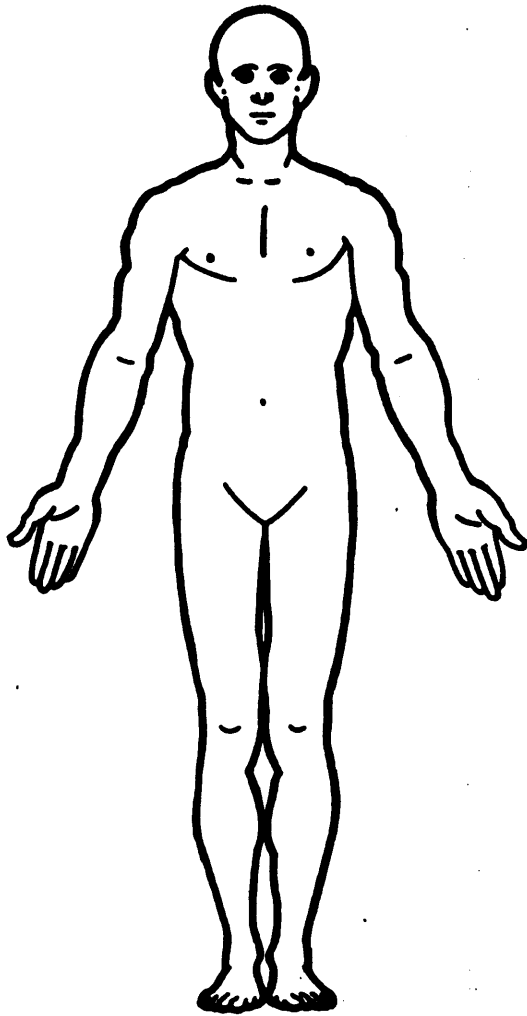
## INJURY DATA

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>7</u>	6. <u>2</u>	7. <u>9</u>	8. <u>02</u>	9. <u>02</u>	10. <u>1</u>	11. <u>4</u>	12. <u>45</u>	13. <u>2</u>	14. <u>1</u>	15. <u>00</u>
2nd	16. <u>7</u>	17. <u>2</u>	18. <u>9</u>	19. <u>02</u>	20. <u>02</u>	21. <u>1</u>	22. <u>8</u>	23. <u>45</u>	24. <u>2</u>	25. <u>1</u>	26. <u>00</u>
3rd	27. <u>7</u>	28. <u>2</u>	29. <u>9</u>	30. <u>02</u>	31. <u>02</u>	32. <u>1</u>	33. <u>8</u>	34. <u>45</u>	35. <u>2</u>	36. <u>1</u>	37. <u>00</u>
4th	38. <u>7</u>	39. <u>7</u>	40. <u>4</u>	41. <u>04</u>	42. <u>02</u>	43. <u>1</u>	44. <u>2</u>	45. <u>04</u>	46. <u>2</u>	47. <u>2</u>	48. <u>00</u>
5th	49. <u>7</u>	50. <u>7</u>	51. <u>4</u>	52. <u>04</u>	53. <u>02</u>	54. <u>1</u>	55. <u>1</u>	56. <u>04</u>	57. <u>2</u>	58. <u>2</u>	59. <u>00</u>
6th	60. <u>7</u>	61. <u>4</u>	62. <u>9</u>	63. <u>04</u>	64. <u>02</u>	65. <u>1</u>	66. <u>1</u>	67. <u>97</u>	68. <u>9</u>	69. <u>7</u>	70. <u>00</u>
7th	71. <u>7</u>	72. <u>8</u>	73. <u>9</u>	74. <u>04</u>	75. <u>02</u>	76. <u>1</u>	77. <u>1</u>	78. <u>09</u>	79. <u>2</u>	80. <u>1</u>	81. <u>00</u>
8th	82. <u>7</u>	83. <u>8</u>	84. <u>9</u>	85. <u>04</u>	86. <u>02</u>	87. <u>1</u>	88. <u>2</u>	89. <u>09</u>	90. <u>2</u>	91. <u>1</u>	92. <u>00</u>
9th	93. <u>7</u>	94. <u>2</u>	95. <u>5</u>	96. <u>14</u>	97. <u>04</u>	98. <u>1</u>	99. <u>4</u>	100. <u>45</u>	101. <u>2</u>	102. <u>1</u>	103. <u>00</u>
10th	104. <u>7</u>	105. <u>2</u>	106. <u>4</u>	107. <u>10</u>	108. <u>00</u>	109. <u>1</u>	110. <u>2</u>	111. <u>45</u>	112. <u>2</u>	113. <u>1</u>	114. <u>00</u>

## 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.)





# 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

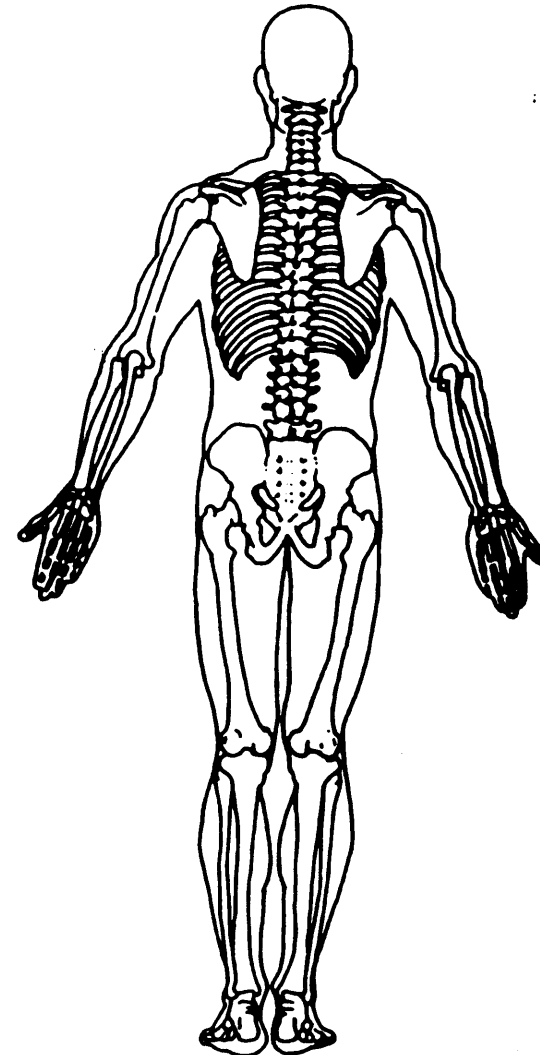
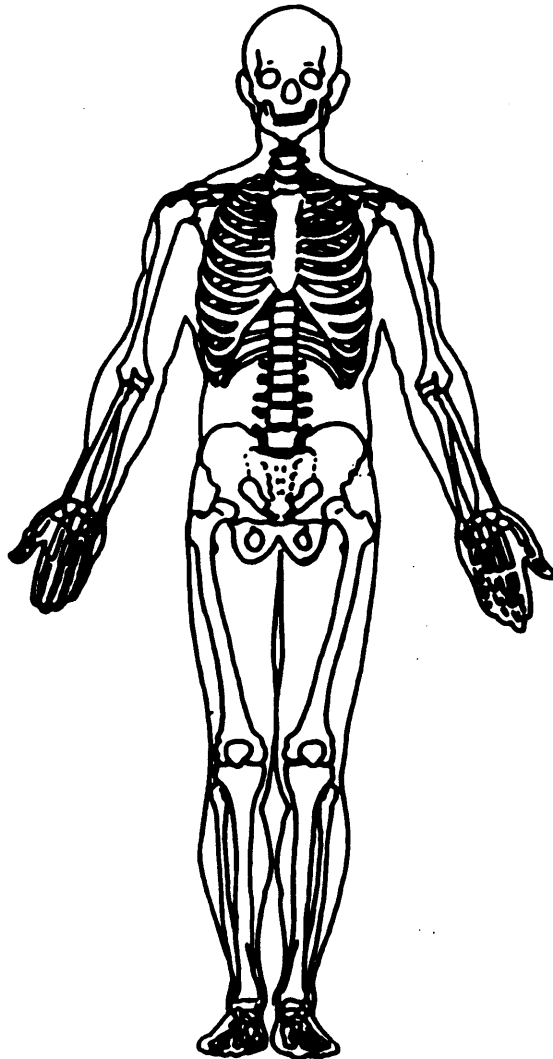
pH = \_\_\_

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.)





# OCCUPANT ASSESSMENT FORM

<p>1. Primary Sampling Unit Number _____</p> <p>2. Case Number - Stratum <u>AB 14</u></p> <p>3. Vehicle Number <u>01</u></p> <p>4. Occupant Number <u>02</u></p>	<p style="text-align: center;"><b>OCCUPANT'S SEATING</b></p> <p>10. Occupant's Seat Position <u>13</u> <i>Front Seat</i> (11) Left side (12) Middle (13) Right side (14) Other (specify): _____ (15) On or in the lap of another occupant</p> <p><i>Second Seat</i> (21) Left side (22) Middle (23) Right side (24) Other (specify): _____ (25) On or in the lap of another occupant</p> <p><i>Third Seat</i> (31) Left side (32) Middle (33) Right side (34) Other (specify): _____ (35) On or in the lap of another occupant</p> <p><i>Fourth Seat</i> (41) Left side (42) Middle (43) Right side (44) Other (specify): _____ (45) On or in the lap of another occupant</p> <p>(97) In or on unenclosed area (98) Other seat (specify): _____ (99) Unknown</p>
<b>OCCUPANT'S CHARACTERISTICS</b>	
<p>5. Occupant's Age <u>14</u> Code actual age at time of accident. (00) Less than one year old (specify by month): _____  (97) 97 years and older (99) Unknown</p> <p>6. Occupant's Sex <u>1</u> (1) Male (2) Female (9) Unknown</p> <p>7. Occupant's Height <u>140</u> Code actual height to the nearest centimeter. (999) Unknown  <u>55</u> inches X 2.54 = <u>140</u> centimeters</p> <p>8. Occupant's Weight <u>029</u> Code actual weight to the nearest kilogram. (999) Unknown  <u>065</u> pounds X .4536 = <u>029</u> kilograms</p> <p>9. Occupant's Role <u>2</u> (1) Driver (2) Passenger (9) Unknown</p>	<p>11. Occupant's Posture <u>0</u> (0) Normal posture</p> <p><i>Abnormal posture</i> (1) Kneeling or standing on seat (2) Lying on or across seat (3) Kneeling, standing or sitting in front of seat (4) Sitting sideways or turned to talk with another occupant or to look out a rear window (5) Sitting on a console (6) Lying back in a reclined seat position (7) Bracing with feet or hands on a surface in front of seat (8) Other abnormal posture (specify): _____ (9) Unknown</p>

## EJECTION/ENTRAPMENT

12. Ejection φ

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

13. Ejection Area φ

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

14. Ejection Medium φ

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

15. Medium Status (Immediately Prior To Impact) φ

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

16. Entrapment φ

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

## RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

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

*Integral Belt Partially Destroyed*

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

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

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

18. Manual (Active) Belt System Use 4

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

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

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

19. Proper Use of Manual (Active) Belts 1

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

*Belt Used Improperly*

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

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

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

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

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

(6) Broken retractor \_\_\_\_\_

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

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

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

21. Air Bag System Availability/Function 4

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

*Non-functional*

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

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

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

22. Air Bag System Deployment 4

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

23. Are There Indications of Air Bag System Failure? 4

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

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

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

24. Police Reported Restraint Use 9

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

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

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

"NO PAR"

## 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) 41

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

## CHILD SAFETY SEAT

28. Child Safety Seat Make/Model φ φ φ  
 (00) No child safety seat  
 Applicable codes are found in your NASS CDS  
 Data Collection, Coding and Editing  
 (950) Built-in child safety seat  
 (997) Other make/model (specify):  
 \_\_\_\_\_  
 (998) Unknown make/model  
 (999) Unknown if child safety seat used

29. Type of Child Safety Seat 4  
 (0) No child safety seat  
 (1) Infant seat  
 (2) Toddler seat  
 (3) Convertible seat  
 (4) Booster seat  
 (7) Other type child safety seat (specify):  
 \_\_\_\_\_  
 (8) Unknown child safety seat type  
 (9) Unknown if child safety seat used

30. Child Safety Seat Orientation φ φ  
 (00) No child safety seat  
  
*Designed for Rear Facing for This Age/Weight*  
 (01) Rear facing  
 (02) Forward facing  
 (08) Other orientation (specify):  
 \_\_\_\_\_  
 (09) Unknown orientation  
  
*Designed For Forward Facing for This Age/Weight*  
 (11) Rear facing  
 (12) Forward facing  
 (18) Other orientation (specify):  
 \_\_\_\_\_  
 (19) Unknown orientation  
  
*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*  
 (21) Rear facing  
 (22) Forward facing  
 (28) Other orientation (specify):  
 \_\_\_\_\_  
 (29) Unknown orientation  
  
 (99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage φ φ

32. Child Safety Seat Shield Usage φ φ

33. Child Safety Seat Tether Usage φ φ

Note: Options below applicable to  
 Variables OA31-OA33.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether  
 added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
 harness/shield/tether added

(09) Unknown if harness/shield/tether  
 added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

## INJURY CONSEQUENCES

34. Injury Severity (Police Rating) 9

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

35. Treatment - Mortality 4

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

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):  
\_\_\_\_\_
- (9) Unknown

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

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

37. Hospital Stay 4 4

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

38. Working Days Lost 9 7

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

**STOP - GO TO VARIABLE 44 ON PAGE 7****VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**39. Time to Death 0 0

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

40. 1st Medically Reported Cause of Death 4 441. 2nd Medically Reported Cause of Death 4 442. 3rd Medically Reported Cause of Death 4 4

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

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

(99) Unknown

43. Number of Recorded Injuries for This Occupant 4 1

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



**AUTOMATIC BELT SYSTEM**

44. Automatic (Passive) Belt System Availability/ Function φ  
 (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown  
  
*Non-functional*  
 (4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

45. Automatic (Passive) Belt System Use φ  
 (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): \_\_\_\_\_  
 (3) Automatic belt use unknown  
 (9) Unknown

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

47. Proper Use of Automatic (Passive) Belt System φ  
 (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat  
  
*Automatic Belt Used Improperly*  
 (3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_  
 (8) Other improper use of automatic belt system (specify): \_\_\_\_\_  
 (9) Unknown

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

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

**STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER**

**TRAUMA DATA**

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

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

52. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 97  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

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

UPDATE CANDIDATE?      NO [ ]    YES [ ]



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

# OCCUPANT INJURY FORM

BEST AVAILABLE COPY  
Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number _____	3. Vehicle Number <u>41</u>
2. Case Number - Stratum <u>AB 14</u>	4. Occupant Number <u>02</u>

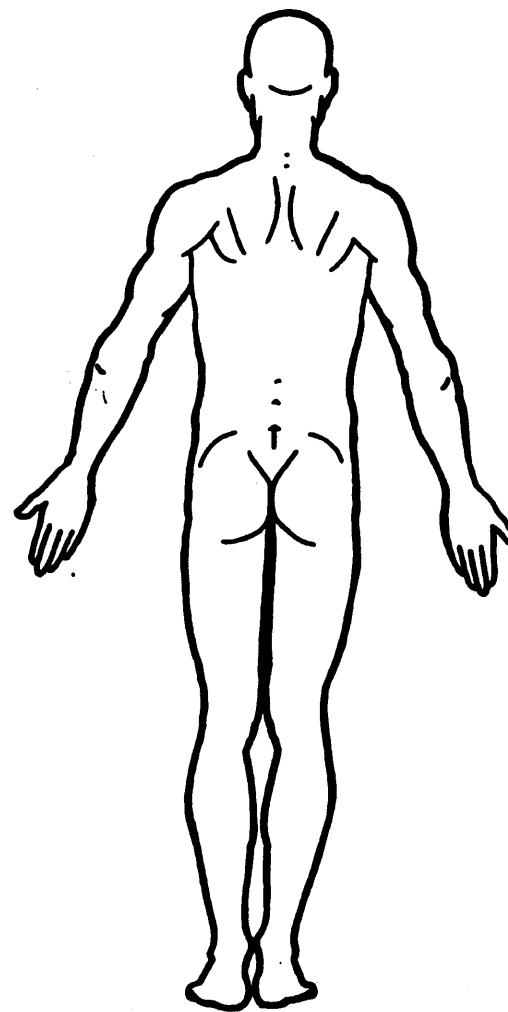
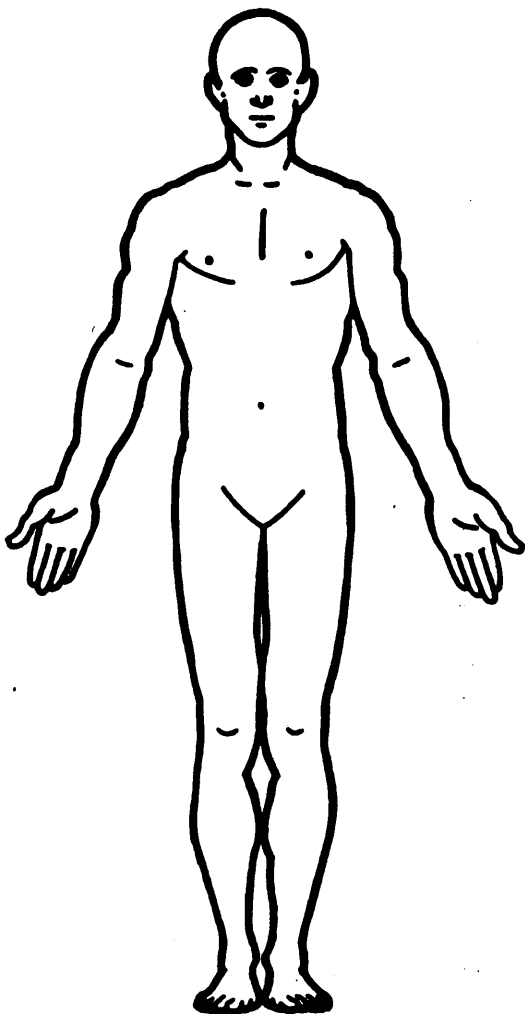
## INJURY DATA

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.

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

## OFFICIAL INJURY DATA – SOFT TISSUE INJURIES

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



# 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

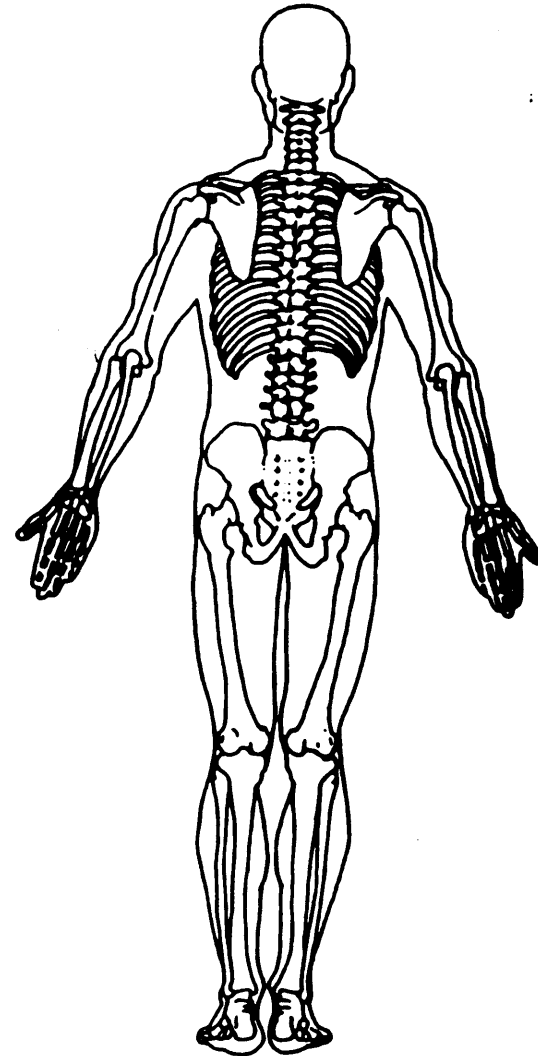
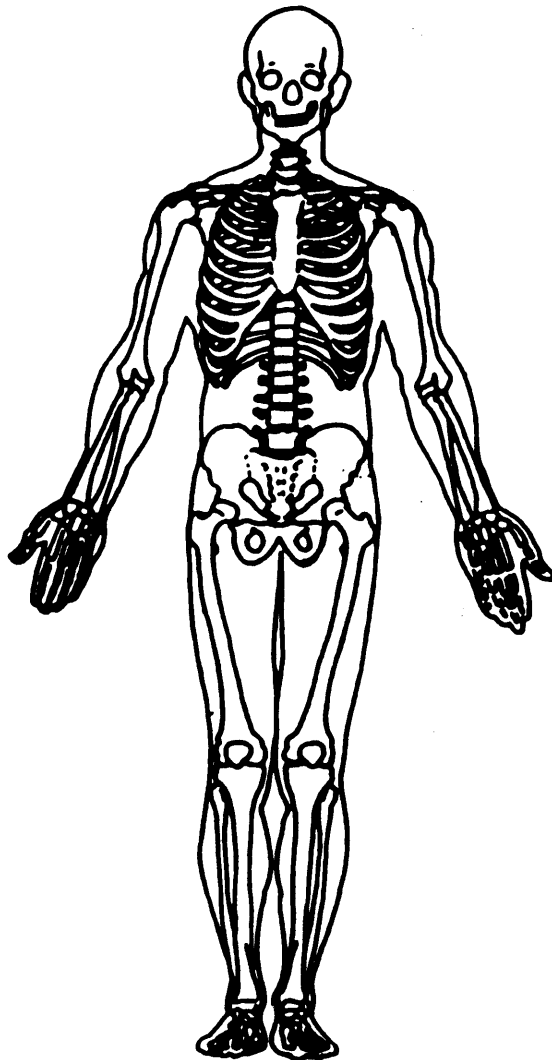
pH = \_\_\_

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.)





# GENERAL VEHICLE FORM

1. Primary Sampling Unit Number       
 2. Case Number - Stratum   A B 1 4    
 3. Vehicle Number     02    


### VEHICLE IDENTIFICATION

4. Vehicle Model Year     74      
 Code the last two digits of the model year  
 (99) Unknown

5. Vehicle Make (specify):     20      
  CHEVROLET    
 Applicable codes are found in your  
 NASS Data Collection, Coding and  
 Editing Manual.  
 (99) Unknown

6. Vehicle Model (specify):     481      
  PICKUP    
 Applicable codes are found in your  
 NASS Data Collection, Coding and  
 Editing Manual.  
 (999) Unknown

7. Body Type     34      
 Note: Applicable codes may be found on  
 the back of this page.

8. Vehicle Identification Number  
  9999-999 99     
 Left justify; Slash zeros and letter Z (0 and Z)  
 No VIN—Code all zeros  
 Unknown—Code all nine's

### OFFICIAL RECORDS

9. Police Reported Vehicle Disposition     9      
 (0) Not towed due to vehicle damage  
 (1) Towed due to vehicle damage  
 (9) Unknown

10. Police Reported Travel Speed     999      
 Code to the nearest kph (NOTE: 000 means  
 less than 0.5 kph)  
 (160) 159.5 kph and above  
 (999) Unknown  
 \_\_\_\_\_ mph X 1.6093 = \_\_\_\_\_ kph

11. Police Reported Alcohol Presence     9      
 (0) No alcohol present  
 (1) Yes (alcohol present)  
 (7) Not reported  
 (8) No driver present  
 (9) Unknown

Note: See variables 37 through 55  
 (Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver     99      
 Code actual value (decimal implied  
 before first digit—0.xx)  
 (95) Test refused  
 (96) None given  
 (97) AC test performed, results unknown  
 (98) No driver present  
 (99) Unknown

Source:   NO PAR  

### ACCIDENT RELATED

13. Speed Limit     056      
 (000) No statutory limit  
 Code posted or statutory speed limit  
 in kph  
 (999) Unknown  
  35   mph X 1.6093 =   056   kph

14. Attempted Avoidance Maneuver     01      
 (00) No impact  
 (01) No avoidance actions  
 (02) Braking (no lockup)  
 (03) Braking (lockup)  
 (04) Braking (lockup unknown)  
 (05) Releasing brakes  
 (06) Steering left  
 (07) Steering right  
 (08) Braking and steering left  
 (09) Braking and steering right  
 (10) Accelerating  
 (11) Accelerating and steering left  
 (12) Accelerating and steering right  
 (97) No driver present  
 (98) Other action (specify):  
 (99) Unknown

15. Accident Type     68      
 Applicable codes may be found on the  
 back of page two of this field form  
 (00) No impact  
 Code the number of the diagram that  
 best describes the accident circumstance  
 (98) Other accident type (specify):  
 (99) Unknown

\*\*\*\* SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 \*\*\*\*

**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 1,660  
 Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown

3,659 lbs X .4536 = 1,659 kgs

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

20. Vehicle Cargo Weight 9,990  
 Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown

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

**OVERRIDE/UNDERRIDE (THIS VEHICLE)**

25. Front Override/Underride (this Vehicle) 0

26. Rear Override/Underride (this Vehicle) 0

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

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

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

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

**RECONSTRUCTION DATA**

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

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

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

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

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

27. Heading Angle For This Vehicle 190

28. Heading Angle For Other Vehicle 090

<p>29. Basis for Total Delta V (highest) <span style="float: right;"><u>3</u></span></p> <p><i>Delta V Calculated</i></p> <p>(1) CRASH program—damage only routine                  (2) CRASH program—damage and trajectory routine                  (3) Missing vehicle algorithm</p> <p><i>Delta V Not Calculated</i></p> <p>(4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.                  (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.                  (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.</p>	<table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;"></td> <td style="text-align: center; border-bottom: 1px solid black;">Secondary</td> <td style="text-align: center; border-bottom: 1px solid black;">Highest</td> </tr> <tr> <td>32. Lateral Component of Delta V</td> <td style="text-align: center;">+ <u>0</u></td> <td style="text-align: center;"><u>19</u></td> </tr> <tr> <td><i>(-11.92)</i> <u>-19.16</u> Nearest kph</td> <td></td> <td></td> </tr> <tr> <td colspan="3" style="padding-top: 10px;">                     (NOTE: <u>  </u>000 means greater than -0.5 kph and less than +0.5 kph)                      (±160) ±159.5 kph and above                      (<u>  </u>999) Unknown                 </td> </tr> <tr> <td>33. Energy Absorption</td> <td style="text-align: center;"><u>4</u></td> <td style="text-align: center;"><u>29,500</u></td> </tr> <tr> <td><i>(21746.7)</i> <u>29481.7</u> Nearest 100 joules</td> <td></td> <td></td> </tr> <tr> <td colspan="3" style="padding-top: 10px;">                     (NOTE: 0000 means less than 50 joules)                      (9997) 999,650 joules or more                      (9999) Unknown                 </td> </tr> <tr> <td>34. Confidence In Reconstruction Program Results (For Highest Delta V)</td> <td></td> <td style="text-align: center;"><u>4</u></td> </tr> <tr> <td colspan="3">                     (0) No reconstruction                      (1) Collision fits model — results appear reasonable                      (2) Collision fits model — results appear high                      (3) Collision fits model — results appear low                      (4) Borderline reconstruction — results appear reasonable                 </td> </tr> <tr> <td>35. Type of Vehicle Inspection</td> <td></td> <td style="text-align: center;"><u>4</u></td> </tr> <tr> <td colspan="3">                     (0) No inspection                      (1) Complete inspection                      (2) Partial inspection (specify):                      _____                 </td> </tr> <tr> <td>36. Is this an AOPS Vehicle?</td> <td></td> <td style="text-align: center;"><u>4</u></td> </tr> <tr> <td colspan="3">                     (0) No                      (1) Yes - researcher determined                      (2) VIN determined air bag system                      (3) VIN determined automatic (passive) belts                      (4) VIN determined air bag and automatic (passive) belts                 </td> </tr> </table>		Secondary	Highest	32. Lateral Component of Delta V	+ <u>0</u>	<u>19</u>	<i>(-11.92)</i> <u>-19.16</u> Nearest kph			(NOTE: <u>  </u> 000 means greater than -0.5 kph and less than +0.5 kph) (±160) ±159.5 kph and above ( <u>  </u> 999) Unknown			33. Energy Absorption	<u>4</u>	<u>29,500</u>	<i>(21746.7)</i> <u>29481.7</u> Nearest 100 joules			(NOTE: 0000 means less than 50 joules) (9997) 999,650 joules or more (9999) Unknown			34. Confidence In Reconstruction Program Results (For Highest Delta V)		<u>4</u>	(0) No reconstruction (1) Collision fits model — results appear reasonable (2) Collision fits model — results appear high (3) Collision fits model — results appear low (4) Borderline reconstruction — results appear reasonable			35. Type of Vehicle Inspection		<u>4</u>	(0) No inspection (1) Complete inspection (2) Partial inspection (specify): _____			36. Is this an AOPS Vehicle?		<u>4</u>	(0) No (1) Yes - researcher determined (2) VIN determined air bag system (3) VIN determined automatic (passive) belts (4) VIN determined air bag and automatic (passive) belts		
	Secondary	Highest																																						
32. Lateral Component of Delta V	+ <u>0</u>	<u>19</u>																																						
<i>(-11.92)</i> <u>-19.16</u> Nearest kph																																								
(NOTE: <u>  </u> 000 means greater than -0.5 kph and less than +0.5 kph) (±160) ±159.5 kph and above ( <u>  </u> 999) Unknown																																								
33. Energy Absorption	<u>4</u>	<u>29,500</u>																																						
<i>(21746.7)</i> <u>29481.7</u> Nearest 100 joules																																								
(NOTE: 0000 means less than 50 joules) (9997) 999,650 joules or more (9999) Unknown																																								
34. Confidence In Reconstruction Program Results (For Highest Delta V)		<u>4</u>																																						
(0) No reconstruction (1) Collision fits model — results appear reasonable (2) Collision fits model — results appear high (3) Collision fits model — results appear low (4) Borderline reconstruction — results appear reasonable																																								
35. Type of Vehicle Inspection		<u>4</u>																																						
(0) No inspection (1) Complete inspection (2) Partial inspection (specify): _____																																								
36. Is this an AOPS Vehicle?		<u>4</u>																																						
(0) No (1) Yes - researcher determined (2) VIN determined air bag system (3) VIN determined automatic (passive) belts (4) VIN determined air bag and automatic (passive) belts																																								
<b>COMPUTER GENERATED DELTA V</b>																																								
<p>30. Total Delta V <span style="float: right;"><u>0 2 0</u></span></p> <p><i>(12.34)</i> <u>19.86</u> Nearest kph</p> <p>(NOTE: 000 means less than 0.5 kph)                  (160) 159.5 kph and above                  (999) Unknown</p>	<p>31. Longitudinal Component of Delta V <span style="float: right;"><u>+ 0 4 5</u></span></p> <p><i>(-3.19)</i> <u>-5.14</u> Nearest kph</p> <p>(NOTE: <u>  </u>000 means greater than -0.5 kph and less than +0.5 kph)                  (±160) ±159.5 kph and above                  (<u>  </u>999) Unknown</p>																																							

IS OLDMISS APPLICABLE FOR THIS VEHICLE?  YES [ ] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED?  YES [ ] NO



37. Police Reported Other Drug Presence 9  
 (0) No other drugs present  
 (1) Yes (other drug present)  
 (7) Not reported  
 (8) No driver present  
 (9) Unknown

38. Police Reported Drug Evaluation Classification (DEC) Test For Driver 3  
 (0) No DEC process available or given  
 (1) DEC process given, results known  
 (2) DEC process given, results unknown  
 (3) DEC process available, unknown if given  
 (8) No driver present

39. Other Drug Specimen Test Type For Driver 9  
 (0) No specimen test given  
 (1) Blood test  
 (2) Urine test  
 (3) Other specimen tests (specify): \_\_\_\_\_  
 (7) Unspecified specimen test  
 (8) No driver present  
 (9) Unknown if specimen test given

**DRUG EVALUATION CLASSIFICATION  
 OTHER DRUGS TEST RESULTS FOR DRIVER**

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. <u>9</u>	41. <u>9</u>
Depressant Drug	42. <u>9</u>	43. <u>9</u>
Stimulant Drug	44. <u>9</u>	45. <u>9</u>
Hallucinogen Drug	46. <u>9</u>	47. <u>9</u>
Cannabinoid Drug	48. <u>9</u>	49. <u>9</u>
Phencyclidine (PCP)	50. <u>9</u>	51. <u>9</u>
Inhalant Drug	52. <u>9</u>	53. <u>9</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>9</u>	55. <u>9</u>

**Codes For DEC Test Results**

- (0) No DEC test given
- (1) Passed DEC test
- (2) Failed DEC test
- (3) DEC test given—results unknown
- (8) No driver present
- (9) Unknown if DEC test given

**Codes for Specimen Test Results**

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or not obtained
- (8) No driver present
- (9) Unknown if specimen test given

## OTHER DATA

56. Driver's Zip Code 9 9 9 9 9
- (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 9
- (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) 9
- (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)  $\neq$  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 4
- (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 4
- (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 4 4
62. Location on Vehicle Where Initial Principal Tripping Force Is Applied 4
- (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 4
- (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) 1 4
- (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

## PRECRASH DATA (Continued)

65. Critical Precrash Event 15*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_
- (06) Traveling too fast for conditions \_\_\_\_\_
- (08) Other cause of control loss (specify): \_\_\_\_\_
- (09) Unknown cause of control loss \_\_\_\_\_

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

*Pedestrian or Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian - unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): \_\_\_\_\_
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): \_\_\_\_\_
- (99) Unknown \_\_\_\_\_

For Corrective Actions Attempted see variable GV14 (Attempted Avoidance Manuever)

66. Precrash Stability After Avoidance Manuever φ

- (0) No avoidance manuever
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): \_\_\_\_\_
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Manuever (Corrective Action) φ

- (0) No avoidance manuever
- (1) Vehicle stayed in travel lane where avoidance manuever was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance manuever was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance manuever was initiated
- (4) Vehicle departed roadway
- (5) Avoidance manuever initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), \*\*\*  
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*  
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



# OCCUPANT ASSESSMENT FORM

	OCCUPANT'S SEATING
<p>1. Primary Sampling Unit Number _____</p> <p>2. Case Number - Stratum <u>AB 14</u></p> <p>3. Vehicle Number <u>QZ</u></p> <p>4. Occupant Number <u>Q1</u></p>	<p>10. Occupant's Seat Position <u>11</u></p> <p><i>Front Seat</i></p> <p>(11) Left side (12) Middle (13) Right side (14) Other (specify): _____ (15) On or in the lap of another occupant</p> <p><i>Second Seat</i></p> <p>(21) Left side (22) Middle (23) Right side (24) Other (specify): _____ (25) On or in the lap of another occupant</p> <p><i>Third Seat</i></p> <p>(31) Left side (32) Middle (33) Right side (34) Other (specify): _____ (35) On or in the lap of another occupant</p> <p><i>Fourth Seat</i></p> <p>(41) Left side (42) Middle (43) Right side (44) Other (specify): _____ (45) On or in the lap of another occupant</p> <p>(97) In or on unenclosed area (98) Other seat (specify): _____ (99) Unknown</p>
OCCUPANT'S CHARACTERISTICS	
<p>5. Occupant's Age <u>99</u></p> <p>Code actual age at time of accident. (00) Less than one year old (specify by month): _____</p> <p>(97) 97 years and older (99) Unknown</p> <p>6. Occupant's Sex <u>1</u></p> <p>(1) Male (2) Female (9) Unknown</p> <p>7. Occupant's Height <u>999</u></p> <p>Code actual height to the nearest centimeter. (999) Unknown</p> <p>_____ inches X 2.54 = _____ centimeters</p> <p>8. Occupant's Weight <u>999</u></p> <p>Code actual weight to the nearest kilogram. (999) Unknown</p> <p>_____ pounds X .4536 = _____ kilograms</p> <p>9. Occupant's Role <u>1</u></p> <p>(1) Driver (2) Passenger (9) Unknown</p>	<p>11. Occupant's Posture <u>9</u></p> <p>(0) Normal posture</p> <p><i>Abnormal posture</i></p> <p>(1) Kneeling or standing on seat (2) Lying on or across seat (3) Kneeling, standing or sitting in front of seat (4) Sitting sideways or turned to talk with another occupant or to look out a rear window (5) Sitting on a console (6) Lying back in a reclined seat position (7) Bracing with feet or hands on a surface in front of seat (8) Other abnormal posture (specify): _____ (9) Unknown</p>

## EJECTION/ENTRAPMENT

12. Ejection φ

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

13. Ejection Area φ

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

14. Ejection Medium φ

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

15. Medium Status (Immediately Prior To Impact) φ

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

16. Entrapment φ

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

## RESTRAINT SYSTEM EVALUATION

<p>17. Manual (Active) Belt System Availability <u>3</u></p> <p>(0) None available  (1) Belt removed/destroyed  (2) Shoulder belt  (3) Lap belt  (4) Lap and shoulder belt  (5) Belt available—type unknown</p> <p><i>Integral Belt Partially Destroyed</i>  (6) Shoulder belt (lap belt destroyed/removed)  (7) Lap belt (shoulder belt destroyed/removed)</p> <p>(8) Other belt (specify): _____  (9) Unknown _____</p>	<p>21. Air Bag System Availability/Function <u>4</u></p> <p>(0) Not equipped/not available  (1) Air bag</p> <p><i>Non-functional</i>  (2) Air bag disconnected (specify): _____  (3) Air bag not reinstalled  (9) Unknown</p>
<p>18. Manual (Active) Belt System Use <u>99</u></p> <p>(00) None used, not available, or belt removed/destroyed  (01) Inoperative (specify): _____</p> <p>(02) Shoulder belt  (03) Lap belt  (04) Lap and shoulder belt  (05) Belt used—type unknown  (08) Other belt used (specify): _____</p> <p>(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</p>	<p>22. Air Bag System Deployment <u>4</u></p> <p>(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</p> <p>23. Are There Indications of Air Bag System Failure? <u>4</u></p> <p>(0) Not equipped/not available  (1) No  (2) Yes (specify): _____  (9) Unknown</p>
<p>19. Proper Use of Manual (Active) Belts <u>9</u></p> <p>(0) None used or not available  (1) Belt used properly  (2) Belt used properly with child safety seat</p> <p><i>Belt Used Improperly</i>  (3) Shoulder belt worn under arm  (4) Shoulder belt worn behind back or seat  (5) Belt worn around more than one person  (6) Lap belt worn on abdomen  (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____</p> <p>(8) Other improper use of manual belt system (specify): _____  (9) Unknown _____</p>	<p>Note: See Variables 44 through 48 (Page 5) for information on Automatic Belts</p> <p>24. Police Reported Restraint Use <u>9</u></p> <p>(0) None used  (1) Police did not indicate restraint use  (2) Shoulder belt  (3) Lap belt  (4) Lap and shoulder belt  (5) Belt used, type not specified  (6) Child safety seat  (7) Other or automatic restraint (specify): _____</p> <p>(8) Restrained, type unknown  (9) Police indicated "unknown"</p>
<p>20. Manual (Active) Belt Failure Modes During Accident <u>9</u></p> <p>(0) No manual belt used  (1) No manual belt failure(s)  (2) Torn webbing (stretched webbing not included)  (3) Broken buckle or latchplate  (4) Upper anchorage separated  (5) Other anchorage separated (specify): _____</p> <p>(6) Broken retractor  (7) Combination of above (specify): _____</p> <p>(8) Other manual belt failure (specify): _____  (9) Unknown _____</p>	

HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant at This Occupant Position 9

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

(9) Unknown

26. Seat Type (this Occupant Position) 99

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

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

27. Seat Performance (this Occupant Position) 9

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

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

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

(9) Unknown

## CHILD SAFETY SEAT

<p>28. Child Safety Seat Make/Model <u>  4  4  4  </u>            (000) No child safety seat            Applicable codes are found in your NASS CDS Data Collection, Coding and Editing            (950) Built-in child safety seat            (997) Other make/model (specify):            _____            (998) Unknown make/model            (999) Unknown if child safety seat used</p>	<p>31. Child Safety Seat Harness Usage <u>  4  4  </u>            32. Child Safety Seat Shield Usage <u>  4  4  </u>            33. Child Safety Seat Tether Usage <u>  4  4  </u></p> <p>Note: Options below applicable to Variables OA31-OA33.            (00) No child safety seat</p>
<p>29. Type of Child Safety Seat <u>  4  </u>            (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</p>	<p><i>Not Designed With Harness/Shield/Tether</i>            (01) After market harness/shield/tether added, not used            (02) After market harness/shield/tether used            (03) Child safety seat used, but no after market harness/shield/tether added            (09) Unknown if harness/shield/tether added or used</p> <p><i>Designed With Harness/Shield/Tether</i>            (11) Harness/shield/tether not used            (12) Harness/shield/tether used            (19) Unknown if harness/shield/tether used</p>
<p>30. Child Safety Seat Orientation <u>  4  4  </u>            (00) No child safety seat</p> <p><i>Designed for Rear Facing for This Age/Weight</i>            (01) Rear facing            (02) Forward facing            (08) Other orientation (specify):            _____            (09) Unknown orientation</p> <p><i>Designed For Forward Facing for This Age/Weight</i>            (11) Rear facing            (12) Forward facing            (18) Other orientation (specify):            _____            (19) Unknown orientation</p> <p><i>Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight</i>            (21) Rear facing            (22) Forward facing            (28) Other orientation (specify):            _____            (29) Unknown orientation</p> <p>(99) Unknown if child safety seat used</p>	<p><i>Unknown If Designed With Harness/Shield/Tether</i>            (21) Harness/shield/tether not used            (22) Harness/shield/tether used            (29) Unknown if harness/shield/tether used</p> <p>(99) Unknown if child safety seat used</p>



**INJURY CONSEQUENCES**

34. Injury Severity (Police Rating) 9

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

"NO PPK"

35. Treatment - Mortality 9

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

*Nonfatal*

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

(9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 9

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

(9) Unknown

37. Hospital Stay 99

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

38. Working Days Lost 99

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

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

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

39. Time to Death 44

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

40. 1st Medically Reported Cause of Death 44

41. 2nd Medically Reported Cause of Death 44

42. 3rd Medically Reported Cause of Death 44

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

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

(99) Unknown

43. Number of Recorded Injuries for This Occupant 97

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

**AUTOMATIC BELT SYSTEM**

44. Automatic (Passive) Belt System Availability/ Function φ  
 (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown  
  
*Non-functional*  
 (4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

45. Automatic (Passive) Belt System Use φ  
 (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  
  
 (3) Automatic belt use unknown  
 (9) Unknown

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

47. Proper Use of Automatic (Passive) Belt System φ  
 (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat  
  
*Automatic Belt Used Improperly*  
 (3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
  
 (8) Other improper use of automatic belt system (specify):  
 (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident φ  
 (0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
  
 (9) Unknown

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

**STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER**

**TRAUMA DATA**

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

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

52. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 97  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

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

UPDATE CANDIDATE? NO [] YES [ ]



# OLDMISS PROGRAM SUMMARY

(All Measurements in Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

Identifying Title			
Primary Sampling Unit	Case No.-Stratum	Accident Event Sequence No.	Date (Month, day, year) of Run
	AB 14	41	██████ ████████ 93

OLDMISS Vehicle Identification			
Vehicle 1	Year	Make	Model
	1993	TOYOTA	COROLLA
Vehicle 2	Year	Make	Model
	1974	CHEVROLET	PICKUP
			NASS Veh. No.
			1
			2

## GENERAL INFORMATION

VEHICLE 1	VEHICLE 2
Size (2387) (155) (2542) <u>1</u>	Size (3659) <sup>117 WB</sup> EST (150) (3849) <u>4</u>
Weight 1085 + 74 + 0 = 1155 kg	Weight 1059 + 68 + = 1727 kg
Damaged Area of Vehicle (F = Front, L = Left, R = Right, B = Back) <u>F</u> Vehicle 1	Damaged Area of Vehicle (F = Front, L = Left, R = Right, B = Back) <u>R</u> Vehicle 2
Vehicle Heading Angles At Impact, in Degrees + <u>0 0 0</u> ° Vehicle 1	Vehicle Heading Angles At Impact, in Degrees + <u>4 9 5</u> ° Vehicle 2
Stiffness Category for Vehicle <u>9</u> Vehicle 1	Stiffness Category for Vehicle <u>4</u> Vehicle 2

## DAMAGE INFORMATION

For Which Vehicle Is The Damage Known	<u>1</u>	Crush Measurements Known Vehicle	(2.55) C <sub>1</sub> <u>4 4 6</u> cm (3.55) C <sub>2</sub> <u>4 4 9</u> cm (6.05) C <sub>3</sub> <u>4 1 5</u> cm (9.0) C <sub>4</sub> <u>4 2 5</u> cm (10.95) C <sub>5</sub> <u>4 2 8</u> cm (12.8) C <sub>6</sub> <u>4 3 3</u> cm
PDOF for Known Vehicle in Degrees (-180 to +180)	<u>0 1 0</u> °	Damage Midpoint Offset for Known Vehicle	(3.5) D <u>4 4 9</u> cm
Damage Length (L) for Known Vehicle	(57) <u>1 4 5</u> cm	Estimated Damage Midpoint Offset for Unknown Vehicle	(10) D <u>4 2 5</u> cm

**SUMMARY OF OLDMISPC RESULTS**

**CASE NUMBER: AB14 - IMPACT NO. 1 - FRONT TO SIDE - TOYOTA V. CHEV. P.U.**

**SPEED CHANGE (DAMAGE)**

	RESULTANT MPH (KPH)	LONGITUDINAL MPH (KPH)	LATERAL MPH (KPH)	PDOF DEG
VEH #1 (KNOWN)	18.49 ( 29.75)	-18.21 (-29.30)	3.21 ( 5.17)	350.00
VEH #2 (ESTIMATED)	12.34 ( 19.86)	-3.19 ( -5.14)	-11.92 (-19.18)	75.00

	ENERGY FT-LBS (NT-M)	FORCE LBS (NT)
VEH #1 (KNOWN)	29297.7 ( 39718.4)	38315.3 (170426.5)
VEH #2 (ESTIMATED)	21746.7 ( 29481.7)	38315.3 (170426.5)

**SUMMARY OF DAMAGE DATA**

	VEHICLE #1 (KNOWN DAMAGE DIMENSION)		VEHICLE #2 (ESTIMATED DAMAGE DIMENSION)	
	IN	(CM)	IN	(CM)
L-----	57.0	144.8	57.9	147.1
C1-----	2.5	6.5	6.2	15.7
C2-----	3.5	9.0	6.9	17.5
C3-----	6.1	15.4	8.7	22.1
C4-----	9.8	24.9	11.4	29.1
C5-----	10.9	27.8	12.3	31.2
C6-----	12.8	32.5	13.6	34.6
D-----	9.0	22.9	10.0	25.4

**VEHICLE INFORMATION**

VEHICLE #1 (FRONT DAMAGE KNOWN)		VEHICLE #2 (SIDE DAMAGE UNKNOWN)	
SIZE-----	1	SIZE-----	4
STIFFNESS--	9	STIFFNESS--	4
SIDE-----	F	SIDE-----	R
HANGL-----	.0 DEG	HANGL-----	95.0 DEG
WEIGHT-----	2542.0 LBS (1152.8 KG)	WEIGHT-----	3809.0 LBS (1727.4 KG)
MASS-----	6.579 LB-SEC**2/IN ( 74.33 NT-SEC**2/CM)	MASS-----	9.858 LB-SEC**2/IN ( 111.37 NT-SEC**2/CM)
RADIUS		RADIUS	
GYRATION--	2006.0 IN**2 ( 12941.9 CM**2)	GYRATION--	3741.0 IN**2 ( 24135.4 CM**2)

**AIRBAG SUPPLEMENT**

**ACCIDENT SUMMARY**

1. Accident Date: [REDACTED] 1993

2. Police Investigated

- (1) Yes
- (2) No
- (3) Unknown

Agency:  
City:  
County:

3. General Locality

- (1) Freeway, Limited Access
- (2) Urban (City)
- (3) Urban-Rural (mixed)
- (4) Rural, Fields

4. Configuration (First Harm)

- (0) Struck Object or Ped
- (1) Rear-End
- (2) Head-On
- (3) Rear-to-Rear
- (4) Angle
- (5) Sideswipe-Same Direction
- (6) Sideswipe-Opposite Dir.
- (7) Noncollision
- (8) Nonimpact Deployment
- (9) Unknown

5. Fire Involved

- (0) None
- (1) Airbag Vehicle
- (2) Other Vehicle
- (3) Both Vehicles
- (9) Unknown

6. Vehicles Involved

7. Persons Involved

8. Injured Persons

9. Maximum AIS in Accident

**AIRBAG VEHICLE INSPECTION**

10. Date Vehicle Inspected:

11. Reason Vehicle Note Inspected

- (0) Not Required
- (1) Inspection Completed
- (2) Cannot be Located
- (3) Repaired or Destroyed
- (5) Refusal or Impounded
- (7) Other:

12. Impact Data Obtained

- (0) No Data Obtained
- (1) CDC Only
- (2) Crush Profile Only
- (3) Trajectory Data Only
- (4) CDC and Crush Profile
- (5) CDC and Trajectory
- (6) Crush and Trajectory
- (7) CDC, Crush, and Trajectory

13. Basis of Delta-V

- (0) Not Computed (Unknown why)
- (1) CRASH - Damage Only
- (2) CRASH - Damage + Traj
- (3) OLDMISS
- (4) POLES
- (5) Unknown Basis
- (6) One Vehicle Beyond Scope
- (7) Collision Beyond Scope
- (8) Insufficient Data

**VEHICLE HISTORY**

14. Prior Impacts for AB Vehicle?

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

15. Prior AB Maintenance or Service

- (1) Yes, (2) No, (9) Unknown

Describe:

**AIRBAG SUPPLEMENT**

**AIRBAG VEHICLE**

Fleet: **NO**  
VIN: **1NXAE09E6PZXXXXXX**  
Mileage: **658 mi (1059 km)**

**SYSTEM READINESS LAMP**

16. Pre-Impact Lamp Condition  1  
(1) Functioning/Proved Out  
(2) Inoperative  
(9) Unknown
17. Driver's Report of Pre-Impact Flashing   $\emptyset$   
(00) No Flashing Reported  
(01) Continuous Flashing  
(02) Number of Flashes: \_\_\_\_\_  
(11)  
(12) Constant Light  
(19) Flashing, Unknown Number  
(88) Not Applicable, System Removed  
(99) Unknown
18. Period of Pre-Impact Flashing   $\emptyset$   
(0) No Flashing  
(1) Same Day as Impact  
(2) Prior Day  
(3) Prior Two Days  
(4) Prior Week  
(5) Prior Month  
(6) Over One Month  
(9) Unknown
19. Post-Impact Lamp Condition  2  
(1) Functioning/Proved Out  
(2) Inoperative  
(9) Unknown
20. Post-Impact Flashing   $\emptyset$   
(00) No Flashing Reported  
(01) Continuous Flashing  
(02) Number of Flashes: \_\_\_\_\_  
(11)  
(12) Constant Light  
(19) Flashing, Unknown Number  
(88) Not Applicable, System Removed  
(99) Unknown

21. Airbag Vehicle First Harmful Event  13  
(01) Fire or explosion  
(02) Immersion  
(03) Gas Inhalation  
(04) Fell from vehicle  
(05) Injured in vehicle  
(06) Other noncollision (specify):  
(07) Overturn  
(08) Jackknife  
COLLISION WITH:  
(09) Pedestrian  
(10) Pedalcyclist  
(11) Railway train  
(12) Animal  
(13) Motor vehicle in transport (same roadway)  
(14) Motor vehicle in transport (other roadway)  
(15) Parked motor vehicle  
(16) Other type nonmotorist (specify):  
(17) Thrown or falling object  
(18) Boulder  
COLLISION WITH FIXED OBJECT  
(20) Building  
(21) Impact attenuator/crash cushion  
(22) Bridge pier or abutment  
(23) Bridge parapet end  
(24) Bridge rail  
(25) Guardrail  
(26) Concrete traffic barrier  
(27) Median barrier  
(28) Other longitudinal barrier (specify):  
(29) Highway/traffic sign post  
(30) Overhead sign support  
(31) Luminaire/light support  
(32) Utility pole  
(33) Other post, pole, or support  
(34) Culvert  
(35) Curb  
(36) Ditch  
(37) Embankment-earth  
(38) Embankment-rock, stone, or concrete  
(39) Fence  
(40) Wall  
(41) Fire hydrant  
(42) Shrubbery  
(43) Tree  
(44) Other fixed object (specify):  
(45) Pavement surface irregularity  
(99) Unknown

AIRBAG SUPPLEMENT

AIRBAG VEHICLE IMPACT SUMMARY

- 22. Vehicle Role 3
  - (0) Noncollision
  - (1) Striking unit
  - (2) Struck unit
  - (3) Both striking and struck
  - (9) Unknown
  
- 23. Manner of Leaving Scene 2
  - (1) Driven
  - (2) Towed-due to damage
  - (3) Towed-not for damage
  - (4) Towed-details unknown
  - (5) Abandoned
  - (9) Unknown
  
- 24. Number of Impact Events 3
  - (8) 8 or more
  - (9) Unknown
  
- 25. Rollover φ
  - (0) No rollover
  - (1) First event
  - (2) Subsequent event
  - (3) Yes, Unknown event
  - (9) Unknown
  
- 26. Override/Underride φ
  - (0) No override/underride
  - (1) Override - 1st CDC
  - (2) Override - Other CDC
  - (3) Underride - 1st CDC
  - (4) Underride - Other CDC
  - (9) Unknown

AIRBAG VEHICLE DAMAGE

CODES: (1) Yes, (2) No, (9) Unknown

- 27. Left Front Fender Damage 1
  
- 28. Right Front Fender Damage 1
  
- 29. Center Top of Grille Damage 1

FRONT BUMPER E.A. STATUS

- 30. Left 5
  
- 31. Right 5
  - (1) Normal
  - (2) Extended
  - (3) Partial Compression
  - (4) Complete Compression
  - (5) Not Applicable
  - (9) Unknown

FIRST AIRBAG VEHICLE IMPACT:

- 32. Configuration 4
  - (0) Struck Object or Ped
  - (1) Rear-End
  - (2) Head-On
  - (3) Rear-to-Rear
  - (4) Angle
  - (5) Sideswipe-Same Direction
  - (6) Sideswipe-Opposite Dir.
  - (7) Noncollision
  - (8) Nonimpact Deployment
  - (9) Unknown

- 33. CDC: 12 F D E W 2
- 34. Object Contacted: 1974 CHEVROLET PICKUP

PRIMARY/DEPLOYMENT IMPACT:

- 35. Event Number 1
  
- 36. Total Delta-V 30 KPH  
19 MPH
  
- 37. Longitudinal Delta-V - 29 KPH  
- 18 MPH
  
- 38. Configuration 4
  - See 32 above for codes
  
- 39. CDC: 12 F D E W 2
- 40. Object Contacted: 1974 CHEVROLET PICKUP

**AIRBAG SUPPLEMENT**

**AIRBAG SYSTEM DAMAGE**

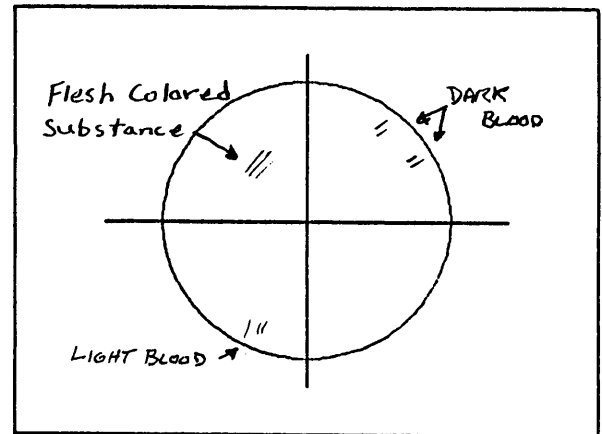
- CODES: (1) Yes, Damaged  
 (2) No, Intact  
 (3) Not Applicable  
 (9) Unknown

- |   |   |
|---|---|
| 41. Airbag Module   | 2 |
| 42. Left Front Sensor   | 9 |
| 43. Center Front Sensor                                       | 9 |
| 44. Right Front Sensor  | 9 |
| 45. Rear Cowl Sensor  | 3 |
| 46. Diagnostic Module   | 2 |
| 47. Wiring  | 2 |
| 48. Knee Diverter   | 3 |
| 49. Indication of disconnected or loose electrical connectors | 2 |
| 50. Condition of Deployed Bag                                 | 1 |
- (1) Bag intact  
 (2) Split or torn  
 (3) Cut by object in impact  
 (4) Cut after accident  
 (5) Other  
 (8) NA (not deployed)  
 (9) Unknown

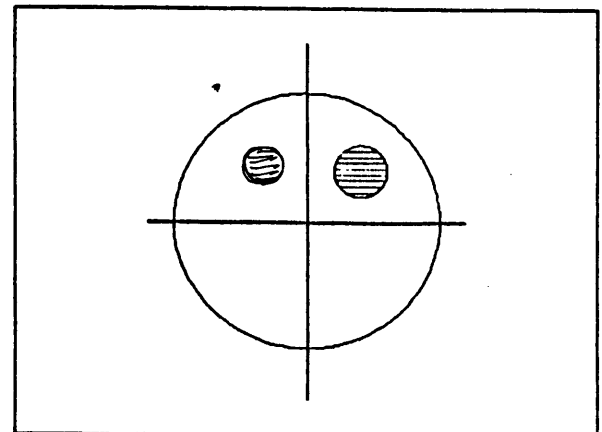
**DESCRIBE SYSTEM AND BAG DAMAGE:**

**NOTE DAMAGE AND CONTACT MARKS ON AIRBAG DIAGRAMS BELOW:**

**FRONT**



**BACK**





AIRBAG SUPPLEMENT

OCCUPANTS OF AIRBAG CAR

- 51. Number of Occupants in Vehicle 2
- 52. Number of Injured Persons 2
- 53. Maximum AIS in Airbag Vehicle 1
  - (0) No Injury
  - (1-6) AIS Severity
  - (7) Injured, unknown severity
  - (9) Unknown

DRIVER

Age: 17 yrs.

Sex: FEMALE

- 54. Number of Driver Injuries 0
- 55. Source of Best Injury Data 7
  - (0) Not injured
  - (1) Autopsy
  - (2) Hospital Medical Records
  - (3) Emergency Room only
  - (4) Private physician, clinic
  - (5) Lay Coroner Report
  - (6) EMS Personnel
  - (7) Interviewee
  - (8) Police
  - (9) Unknown

MAXIMUM AIS BY BODY REGION

REGION	MAX AIS	CONTACT
Head/Neck/Face	<u>1</u>	<u>45</u>
Chest	<u>1</u>	<u>41</u>
Abdomen	<u>    </u>	<u>    </u>
Legs/Hips	<u>1</u>	<u>49</u>
Other (Arms)	<u>1</u>	<u>44</u>
Driver Maximum	<u>1</u>	<u>45</u>

EJECTION

Extent: NONE

Portal: NONE

OTHER VEHICLE:

Maximum AIS UNK  
 Prime/Deploy Impact w AB Vehicle  
 Event Number 1

CDC: UNKNOWN (NOT INSPECTED)

Total Delta V 20 KPH  
(12 MPH)

Make: CHEVROLET

Model Year: 1974

Model:

Body Type: PICKUP

NOTES:

AIRBAG SUPPLEMENT

6

DRIVER BELT USAGE: (1) Used (2) Not Used (9) Unknown

1

Evidence: INTERVIEWEE

DRIVER POSTURE: Any comments Recorded (1) Yes, (2) No

1

Describe driver's posture and position on seat including specific comments on head, torso, buttocks, legs, and feet. Also note hand and arm position. Did driver brace before crash? Describe:

NORMAL, UPRIGHT - HANDS 10/2 O'CLOCK POSITION - FEET (R) ON PEEEL,  
(L) ON FLOORBOARD

DRIVER FOREIGN OBJECTS: Comments Recorded (1) Yes, (2) No

2

Was driver wearing contact lenses or eyeglasses? Or holding any foreign object at the time of the impact (packages on lap, pipe, food, bottle, cigarette, etc.)? Did any lenses, objects, or jewelery play any role?:

DRIVER COMMENTS: Comments Recorded (1) Yes, (2) No

1

Was the driver aware that the vehicle was equipped with a supplemental restraint system? Did driver offer any comments on smoke, noise, etc.? Did the driver comment on the airbag as a restraint system? Describe:

PASSENGER-AIRBAG CONTACT: (1) Yes, (2) No, (9) Unknown

2

Describe: