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Washington, D.C. 20590

U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

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

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The crash investigation process is an inexact science that requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points are 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.

The attached case summary was completed prior to NHTSA establishing a National Automotive Sampling System/ Special Crash Investigations Program combination case procedure.

CALSPAN REVIEW OF NASS AIR BAG DEPLOYMENT CASE

CASE NO. 96-41-024A

VEHICLE: 1995 FORD ESCORT

LOCATION:

DRIVER OUTCOME: FATAL

SUMMARY

This summary focuses on NASS Case No. 41-024A (1996 Sample) which involved a 1995 Ford Escort that was involved in a multiple event crash with a 1995 Honda Prelude, a stop sign, and a small diameter tree. The Ford Escort was equipped with supplemental driver and passenger side air bags which deployed during the crash sequence. The driver of the Ford Escort was a 79 year old male who was restrained by the manual lap belt and the motorized 2-point shoulder restraint. He sustained multiple thoracic injuries from his involvement with the deploying air bag and multiple abdominal injuries from loading the manual lap belt system during the subsequent tree impact sequence. As a result of his injuries, the driver expired in an emergency room of a local hospital within an hour of the crash.

The involved 1995 Ford Escort was a 2-door hatchback with a vehicle identification number of 1FASP11J8SW (production number deleted) and an odometer reading of 11,620 km (7,221 miles). In addition to the supplemental restraint system, the Escort was equipped with 2-point motorized shoulder belts in the front outboard seated positions with manual lap belts. Based on the NASS investigation of the crash, the driver was properly restrained by the lap and shoulder belt systems.

The crash occurred in [REDACTED], during daylight hours at an urban four-leg intersection in a residential area. Both roadways consisted of two-lane asphalt road surfaces that were dry at the time of the crash. The posted speed limits were 48 km/h (30 mph). The Ford Escort was traveling in a southerly direction on the approach to the intersection. The driver had negotiated a left curve on his approach, however, he failed to stop for a stop sign which controlled southbound traffic flow through the intersection. The 1995 Honda Prelude was traveling in an easterly direction on the approach to the intersection. There were no traffic controls for east/westbound traffic flow. As the Honda entered the intersection, the Ford Escort traveled through the stop sign and entered the Honda's path of travel. There was no pre-crash braking initiated by either driver.

The full frontal area of the Honda Prelude impacted the right front fender and door of the Ford Escort resulting in respective directions of force of 11 o'clock and 2 o'clock. The impact crushed the front bumper of the Honda Prelude to a maximum depth of 27.0 cm (10.6") resulting in a CDC of 11-FDEW-01. The Escort sustained 22.0 cm (8.7") of crush located at the trailing edge of the right front fender. The CDC for this impact sequence was 02-RYEW-02. Velocity changes were computed by the damage algorithm of the SMASH program at 21 km/h (13 mph) for the Escort, with a longitudinal component of -11 km/h (-7 mph), and 18 km/h (11 mph) for the Prelude. The impact rotated the Ford Escort in a counterclockwise (CCW) direction and displaced the Honda in a

clockwise (CW). As a result of the impact induced rotation, the vehicles impacted in a minor sideslap configuration involving the right rear bumper corner of the Escort and the left door of the Prelude. The Ford Escort departed the southeast quadrant of the intersection and impacted a stop sign with the right front bumper corner. The 12 o'clock direction of force impact produced minor damage to the bumper fascia, however, crush associated with this sequence was unknown due to the subsequent tree impact.

The Ford Escort traveled approximately 3m (12') and impacted a small diameter tree with the left frontal area. The direct contact damage began 20.0 cm (7.9") left of center and extended 16.0 cm (6.3") to the left. Maximum crush was documented at 38.0 cm (15.0") located on the front bumper at the inboard edge of the left headlamp lens. The SMASH program computed a longitudinal velocity change of 26.0 km/h (16.2 mph) which was sufficient to deploy the driver and passenger side air bags. The Escort came to rest engaged against the struck tree.

The driver of the Escort was a 79 year old male with a reported height of 175.3 cm (69.0") and weight of 81.6 kg (180 lbs.). He was restrained by the automatic 2-point shoulder belt webbing and the manual lap belt. Belt usage was supported by the researchers evaluation of the belt system and from injuries sustained by the driver. There was no reported loading evidence on the belt webbings and/or hardware. The driver was probably in a normal upright posture with the seat track adjusted to a forward third track position. He responded to the initial right side impact sequence by moving laterally to the right and forward. The belt systems restrained the driver from contact with interior components and prevented him from contact injury. The minor secondary sideslap configuration probably did not displace the driver to the right. He would have initiated a rebound trajectory to the left and was probably in an upright position as the right front corner area of the vehicle impacted the stop sign. Although the impact with the stop sign was minor, it probably displaced the driver forward. The inertia activated belts probably relaxed during the post-impact travel and locked at impact with the sign. The movement of the driver within the vehicle could have resulted in spool-out of the shoulder belt webbing which allowed him to move forward within a close proximity to the steering wheel as the vehicle impacted the small diameter tree.

The deploying driver's side air bag contacted the chest of the driver as he initiated a forward trajectory in response to the frontal impact with the tree. He subsequently loaded the belt webbing, however, his loading of the shoulder belt webbing was minimal due to the air bag expansion against his chest. As a result of the driver's involvement with the deploying air bag, he sustained multiple bilateral rib fractures with contusions over the hila of both lungs (AIS-5), a fractured sternum at the second intercostal space (AIS-2), a 1 cm laceration of the myocardium over the anterior surface (AIS-5), and a perforation (laceration) of the pericardium with 250 ml of blood (AIS-2). In addition to the internal injuries attributed to the air bag, the driver sustained numerous soft tissue injuries that were associated with air bag deployment. These soft tissue injuries included ecchymosis of the dorsum of the right wrist (AIS-1) from probable contact with the instrument panel as the air bag expanded against his forearm, a 6 cm diameter contusion of the forehead from air bag contact, an abrasion of the left upper arm, an abrasion of the inferior nose, and two partial thickness linear abrasions of the right chin. The driver also sustained superficial lacerations of the left upper arm

which were attributed to flying right side glass. There was no other mechanism visible within the interior of the vehicle to support the superficial lacerations.

The driver's forward trajectory in response to the frontal impact force resulted in a superficial laceration of the right knee from probable contact with the knee bolster or mid instrument panel. There was no contact evidence within the vehicle to support the contact sequence. His loading force against the shoulder belt webbing resulted in oblique linear abrasions that extended across the chest from the left shoulder to the right upper chest. The autopsy reported noted that the abrasion pattern was indicative of shoulder belt usage. The hospital medical report noted a contusion to the left upper chest area that probably overlapped the abraded area. The driver's abdominal loading of the manual lap belt webbing resulted in a contusion over the lower portion of the falciform ligament of the liver and a 3 cm laceration of the medial portion of the anterior right lobe of the liver, interiorly, up to 2 cm in depth which is surrounded by a crush exhibiting injury (AIS-2), 400 ml of blood in the peritoneal cavity, and hemorrhage in the omentum and mesentery (AIS-2).

The driver was apparently removed from the vehicle by paramedics and transported by ambulance to a local hospital where he expired in the emergency room following arrival.

It should be noted that the occupant's injury mechanisms were determined to be related to the deploying air bag and the automatic and manual seat belt systems following the case review by Calspan's NASS Zone Center and the Special Crash Investigation Team. This assessment was derived by the location and extent of the driver's injuries and his trajectories based on the impact forces for the multiple crash sequence.



024A

CASE SUMMARY

PSU 41 CASE NO. 028A TYPE OF ACCIDENT _____

A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES

(Provide a summary of the accident sequence as well as any particular event of the accident that is noteworthy. Injury mechanism and vehicle crashworthiness is the focus, not driver culpability. Do not include any personal identifiers.)

see Attached

B. VEHICLE PROFILE(S)

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

DO NOT SANITIZE THIS FORM

C. PERSON PROFILE(S)

BEST AVAILABLE

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

Body Region

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

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

Injury Type

Abrasion
 Amputation
 Avulsion
 Burn
 Concussion
 Contusion
 Crush
 Detachment, separation
 Dislocation

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

Abbreviated Injury Scale

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

DO NOT SANITIZE THIS FORM

PSU41 * *
CASE 024A

1996 Case Summary Form

TYPE OF ACCIDENT: CAR VS CAR RIGHT ANGLE

A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES

V-1 WAS SOUTH BOUND APPROACHING AN INTERSECTION. V-2 WAS EAST BOUND APPROACHING THE INTERSECTION. BOTH VEHICLES ENTERED THE INTERSECTION, AND V-2'S FRONT IMPACTED V-1'S RIGHT SIDE. V-1 BEGAN TO ROTATE CCW, AND V-2 BEGAN TO ROTATE CW. V-1'S RIGHT REAR CORNER IMPACTED V-2'S LEFT SIDE.

V-2 CONTINUED TO ROTATE CW AND CAME TO FR FACING NW IN THE SE QUADRANT OF THE INTERSECTION.

V-1 DEPARTED THE INTERSECTION VIA THE SE CORNER. V-1'S RF CORNER IMPACTED A STOP SIGN POLE. V-1 CONTINUED HEADING SW UNTILL V-1'S FRONT IMPACTED A TREE. V-1 CAME TO REST APPROXIMATELY AT THE POINT OF IMPACT WITH THE TREE.

PSU41

1996 Case Summary Form

CASE 024A

TYPE OF ACCIDENT: CAR VS CAR RIGHT ANGLE

B. VEHICLE PROFILE(S)

V e h. No	Class of Vehicle	Year/Make/ Model	Most Severe Damage Based on Vehicle Inspection		
			Damage Plane	Severity Descr.	Component Failure
1	SUBCOMPACT	95/FORD/ESCORT	RIGHT	MODERATE	NONE
2	COMPACT	95/HONDA/PRELUDE	FRONT	MINOR	NONE

PSU41
CASE 024A

1996 Case Summary Form

TYPE OF ACCIDENT: CAR VS CAR RIGHT ANGLE

C. PERSON PROFILE(S)

— Most Severe Injury
(TO BE COMPLETED BY ZONE CENTER)

V e h. No	Person Role	Seat Positon	Restraint Use	Body Region	Injury Type	A	
						I S	Injury Source
1	DRIVER	LF	2PT AUTO/2PTMN AIR BAG	heart	laceration	5	airbag
2	DRIVER	LF	3PTMN/AIR BAG	face	laceration	1	rear view mirror

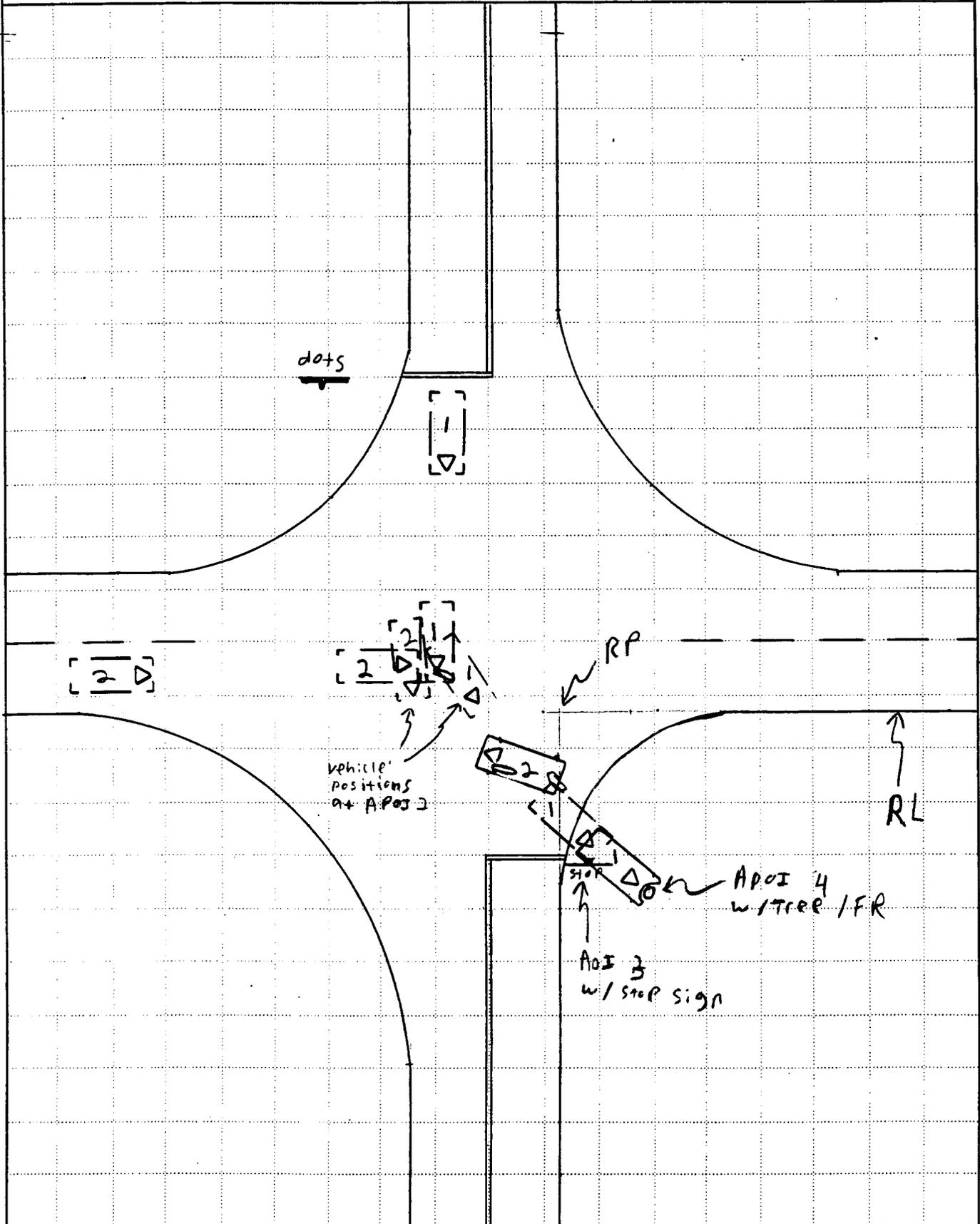


ACCIDENT COLLISION DIAGRAM

PSU No. 41

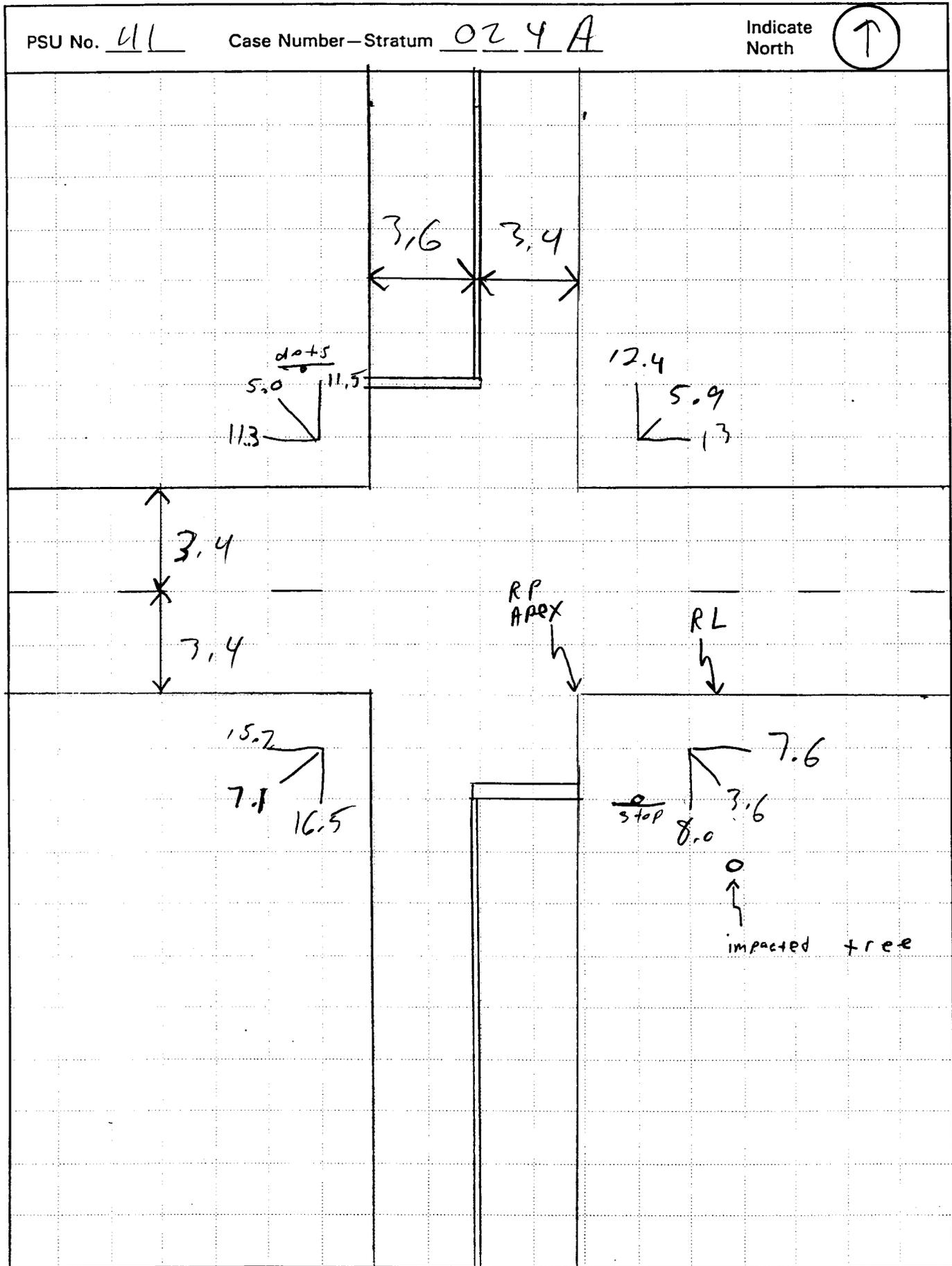
Case Number—Stratum 024A

Indicate
North





ACCIDENT COLLISION DIAGRAM





ACCIDENT COLLISION MEASUREMENT TABLE

Primary Sampling Unit Number 41

Case Number - Stratum 024 A

ACCIDENT COLLISION DIAGRAM

Document the physical plant:

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

Document vehicle dynamics including:

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

CRASH DATA

	VEH. #1	VEH. #2	VEH. #3
Heading Angle	<u>180</u>	<u>90°</u>	
Surface Type	<u>bit</u>	<u>bit</u>	
Surface Condition	<u>dry</u>	<u>dry</u>	
Coefficient of Friction	<u>.7</u>	<u>.7</u>	
Grade (v/h) Measurement (between impact and final rest)	<u>9/48</u>	<u>9/48</u>	
Grade (v/h) Measurement (at location of rollover initiation)	<u>—</u>	<u>—</u>	
Grade (v/h) Measurement (at pre-crash location)	<u>9/48</u>	<u>9/48</u>	

Reference Point: SE Apex

Reference line: S Road edge

Item	Distance and Direction EW from Reference Point	Distance and Direction NS from Reference Line
impacted tree	4.4 E	8.7 S
impacted stop sign	1.3 E	7.2 S
V-2 FR ^o LF	3.2 W	2.9 S
" " RF	2.6 W	1.2 S
" " LR	0.7 W	3.8 S
" " RR	0.0	2.0 S
V-1 gouse ^{1m long} MK / APOI	5.2 W	1.7 W
V-1 FR ^o LF	4.6 E	8.0 S
" " RF	3.2 E	9.0 S
gouse MK 1m long	2.4 W	2.5 S
gouse MK .2m long	0.0	3.7 S



ACCIDENT FORM

1. Primary Sampling Unit Number 41
2. Case Number - Stratum 024 A

IDENTIFICATION

3. Number of General Vehicle Forms Submitted 02
4. Date of Accident (Month, Day, Year) / / 96
5. Time of Accident 1640
Code reported military time of accident.
NOTE: Midnight = 2400
Unknown = 9999

SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS15-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6. SS15 Administrative Use 0
7. SS16 Pedestrian Crash Data Study 0
(Data for this special study available in a separate file.)
8. SS17 Impact Fires 0
9. SS18 Unsafe Driver Actions 0
10. SS19 Run Off Road 0

NUMBER OF EVENTS

11. Number of Recorded Events in This Accident 04
Code the number of events which occurred in this accident.

ACCIDENT EVENTS

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

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>01</u>	13. <u>01</u>	14. <u>01</u>	15. <u>R</u>	16. <u>02</u>	17. <u>02</u>	18. <u>F</u>
19. <u>02</u>	20. <u>01</u>	21. <u>01</u>	22. <u>R</u>	23. <u>02</u>	24. <u>02</u>	25. <u>L</u>
26. <u>03</u>	27. <u>01</u>	28. <u>01</u>	29. <u>F</u>	30. <u>50</u>	31. <u>00</u>	32. <u>0</u>
33. <u>04</u>	34. <u>01</u>	35. <u>01</u>	36. <u>F</u>	37. <u>42</u>	38. <u>00</u>	39. <u>0</u>
40. <u>05</u>	41. <u> </u>	42. <u> </u>	43. <u> </u>	44. <u> </u>	45. <u> </u>	46. <u> </u>

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

CODES FOR CLASS OF VEHICLE

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

CODES FOR GENERAL AREA OF DAMAGE (GAD)

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

CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

- | | |
|---|---|
| (01-30) — Vehicle Number

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

(36) Noncollision injury
(38) Other noncollision (specify):

(39) Noncollision — details unknown

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

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

(54) Concrete traffic barrier
(55) Impact attenuator
(56) Other traffic barrier (includes guardrail)
(specify): _____ | (57) Fence
(58) Wall
(59) Building
(60) Ditch or culvert
(61) Ground
(62) Fire hydrant
(63) Curb
(64) Bridge
(68) Other fixed object (specify):

(69) Unknown fixed object

Collision with Nonfixed Object
(70) Passenger car, light truck, van, or other vehicle
not in-transport
(71) Medium/heavy truck or bus not in-transport
(72) Pedestrian
(73) Cyclist or cycle
(74) Other nonmotorist or conveyance

(75) Vehicle occupant
(76) Animal
(77) Train
(78) Trailer, disconnected in transport
(79) Object fell from vehicle in-transport
(88) Other nonfixed object (specify):

(89) Unknown nonfixed object
(98) Other event (specify):

(99) Unknown event or object |
|---|---|

PRECRASH ENVIRONMENTAL DATA	
<p>19. Relation To Interchange Or Junction <u>2</u></p> <p>(0) Non-interchange area and non-junction (1) Interchange area related</p> <p><i>Non-Interchange junctions</i> (2) Intersection related (3) Driveway, alley access related (4) Other junction (specify) _____ (5) Unknown type of junction (9) Unknown</p>	<p>25. Roadway Surface Condition <u>1</u></p> <p>(1) Dry (2) Wet (3) Snow or slush (4) Ice (5) Sand, dirt, or oil (8) Other (specify): _____ (9) Unknown</p>
<p>20. Trafficway Flow <u>0</u></p> <p>(0) Not physically divided (two way traffic) (1) Divided trafficway-median strip without positive barrier (2) Divided trafficway-median strip with positive barrier (3) One way traffic (9) Unknown</p>	<p>26. Light Conditions <u>1</u></p> <p>(1) Daylight (2) Dark (3) Dark, but lighted (4) Dawn (5) Dusk (9) Unknown</p>
<p>21. Number Of Travel Lanes <u>2</u></p> <p>(1) One (2) Two (3) Three (4) Four (5) Five (6) Six (7) Seven or more (9) Unknown</p>	<p>27. Atmospheric Conditions <u>0</u></p> <p>(0) No adverse atmospheric-related driving conditions (1) Rain (2) Sleet/hail (3) Snow (4) Fog (5) Rain and fog (6) Sleet and fog (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): _____ (9) Unknown</p>
<p>22. Roadway Alignment <u>1</u></p> <p>(1) Straight (2) Curve right (3) Curve left (9) Unknown</p>	<p>28. Traffic Control Device <u>2</u></p> <p>(0) No traffic control(s) (1) Traffic control signal (not RR crossing)</p> <p><i>Regulatory</i> (2) Stop sign (3) Yield sign (4) School zone sign (5) Other regulatory sign (specify): _____ (6) Warning sign (not RR crossing) (7) Unknown sign (8) Miscellaneous/other controls including RR controls (specify): _____ (9) Unknown</p>
<p>23. Roadway Profile <u>1</u></p> <p>(1) Level (2) Uphill grade (> 2%) (3) Hill crest (4) Downhill grade (> 2%) (5) Sag (9) Unknown</p>	<p>29. Traffic Control Device Functioning <u>2</u></p> <p>(0) No traffic control device (1) Traffic control device not functioning (specify): _____ (2) Traffic control device functioning properly (9) Unknown</p>
<p>24. Roadway Surface Type <u>2</u></p> <p>(1) Concrete (2) Bituminous (asphalt) (3) Brick or block (4) Slag, gravel, or stone (5) Dirt (8) Other (specify): _____ (9) Unknown</p>	

OCCUPANT RELATED

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

AIR BAG RELATED

- 40. Is this an AOPS Vehicle? 1
 - (0) No (includes unknown)
 - (1) Yes - researcher determined
 - (2) VIN determined air bag system
 - (3) VIN determined automatic (passive) belts
 - (4) VIN determined air bag and automatic (passive) belts
- 41. Air Bag(s) Deployment, First Seat Frontal 6
 - (0) Not equipped or not available
 - (1) No air bags deployed

Single Air Bag Vehicle

 - (2) Driver air bag deployed
 - (3) Driver air bag, unknown if deployed

Multiple Air Bag Vehicle

 - (4) Driver side only deployed
 - (5) Passenger side only deployed
 - (6) Driver and passenger side deployed
 - (7) Driver and passenger side unknown if deployed
 - (8) Air bag(s) deployed, details unknown
 - (9) Unknown
- 42. Air Bag(s) Deployment, Other Than First Seat Frontal 0
 - (0) Not equipped with an "other" air bag
 - (1) Deployed during accident (as a result of impact)
 - (2) Deployed inadvertently just prior to accident
 - (3) Deployed, details unknown
 - (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 - (5) Unknown if deployed
 - (7) Nondeployed
 - (9) Unknown

Specify type of "other" air bag present: _____

VEHICLE WEIGHT ITEMS

- 43. Vehicle Curb Weight 1,050
 - Code weight to nearest 10 kilograms.
 - (045) Less than 454 kilograms
 - (612) 6,124 kilograms or more
 - (999) Unknown

Source: _____

- 44. Vehicle Cargo Weight 9,990
 - Code weight to nearest 10 kilograms.
 - (000) Less than 5 kilograms
 - (454) 4,536 kilograms or more
 - (999) Unknown
- _____ lbs X .4536 = _____ kgs
- Source: _____

ROLLOVER DATA

- 45. Rollover 00
 - (00) No rollover (no overturning)

Rollover (primarily about the longitudinal axis)

 - (01-16) Code the number of quarter turns
 - (17) Rollover, 17 or more quarter turns (specify): _____
 - (98) Rollover--end-over-end (i.e., primarily about the lateral axis)
 - (99) Rollover (overturn), details unknown
- 46. Rollover Initiation Type 00
 - (00) No rollover
 - (01) Trip-over
 - (02) Flip-over
 - (03) Turn-over
 - (04) Climb-over
 - (05) Fall-over
 - (06) Bounce-over
 - (07) Collision with another vehicle
 - (08) Other rollover initiation type specify): _____
 - (98) Rollover--end-over-end
 - (99) Unknown rollover initiation type
- 47. Location of Rollover Initiation 0
 - (0) No rollover
 - (1) On roadway
 - (2) On shoulder—paved
 - (3) On shoulder—unpaved
 - (4) On roadside or divided trafficway median
 - (8) Rollover--end-over-end
 - (9) Unknown
- 48. Rollover Initiation Object Contacted 00

(Note: Applicable codes on back of page)
- 49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0
 - (0) No rollover
 - (1) Wheels/tires
 - (2) Side plane
 - (3) End plane
 - (4) Undercarriage
 - (5) Other location on vehicle (specify): _____
 - (6) Non-contact rollover forces (specify): _____
 - (8) Rollover--end-over-end
 - (9) Unknown
- 50. Direction of Initial Roll _____
 - (0) No rollover
 - (1) Roll right - primarily about the longitudinal axis
 - (2) Roll left - primarily about the longitudinal axis
 - (8) Rollover--end-over-end
 - (9) Unknown roll direction

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

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

Noncollision

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

Collision With Fixed Object

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

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

Nonbreakaway Pole or Post

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

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

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

- (69) Unknown fixed object

Collision with Nonfixed Object

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

- (89) Unknown nonfixed object

- (98) Other event (specify): _____

- (99) Unknown event or object



EXTERIOR VEHICLE FORM

1. Primary Sampling Unit Number <u>41</u>	3. Vehicle Number <u>01</u>
2. Case Number - Stratum <u>024A</u>	

VEHICLE IDENTIFICATION

VIN 1FASP11J8SW XXXXXXXXXX Model Year 95
 Vehicle Make (specify): Ford Vehicle Model (specify): Escort

LOCATOR

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

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
1	Starts 167 Forward RRA	Starts 52 Forward RRA	C-4
2	Starts RRBC	Starts RRBC	None
3	Starts RFBC	overlaps impact no 4	UK 2

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).

↓ 4 Starts 20 left of CL Full Frontal 7 left of C-2
 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 ₁	C ₂	C ₃	C ₄	C ₅	C ₆	±D
		Width (CDC)	Max Crush								
1	mid door	175	C-4	290	15	7	17	37	34	27	+130
	SL Adjustment	-15			0	0	2	22	19	12	
	Free space				0	0	0	0	2	6	
	Actual crush				0	0	2	22	17	6	
2	R side at BC	5		No residual crush							-216
3	overlaps 4	6	UK	overlaps impact no 4							
4	Bumper	16	38	120	7	32	25	20	18	19	-28
	Free space				13	5	3	3	5	13	
	Actual crush				0	27	22	17	13	6	✓

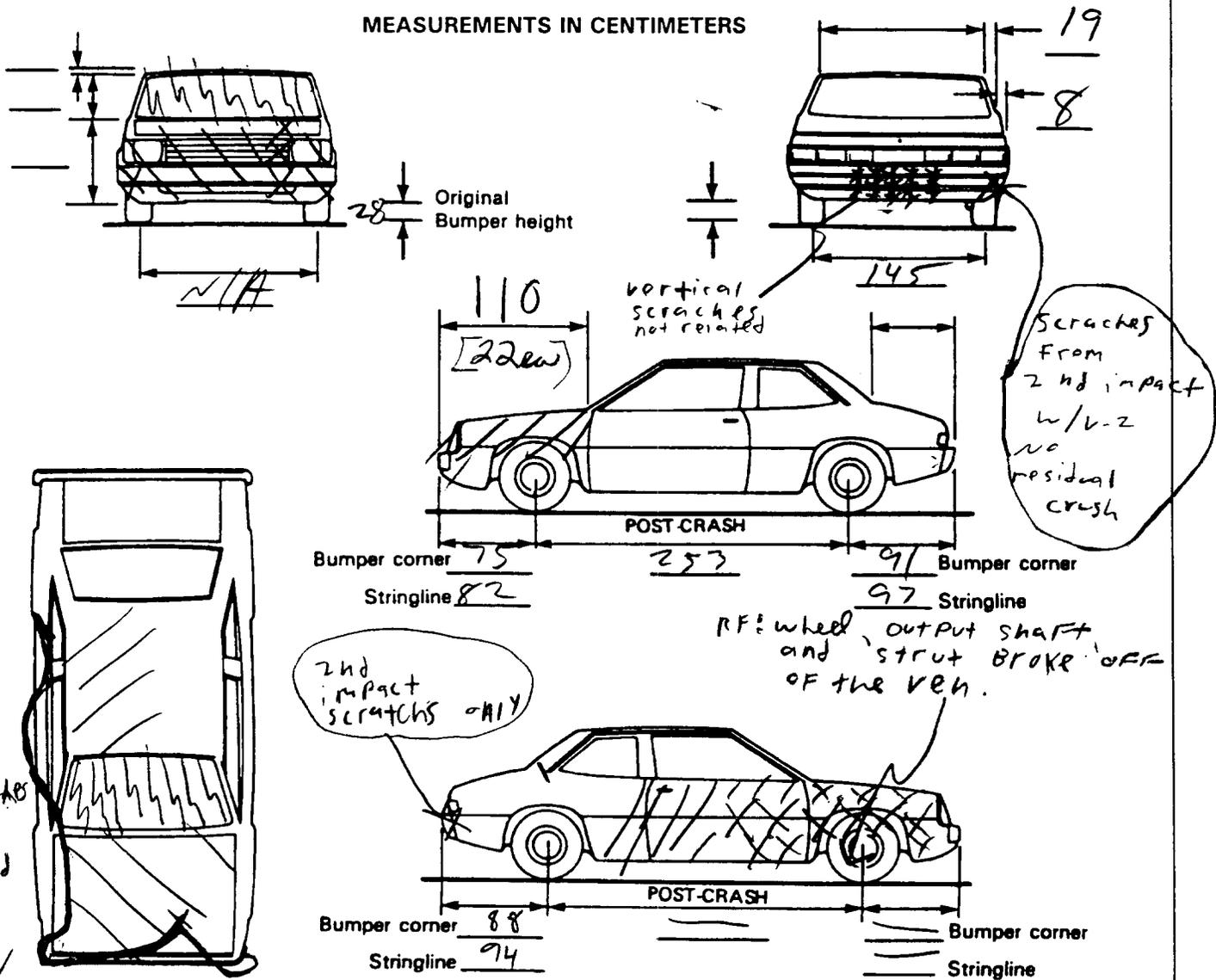
ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	_____.	inches	x 2.54	=	_____	cm
Overall Length	_____.	inches	x 2.54	=	_____	cm
Maximum Width	_____.	inches	x 2.54	=	_____	cm
Curb Weight	_____,_____	pounds	x .4536	=	_____,_____	kg
Average Track	_____.	inches	x 2.54	=	_____	cm
Front Overhang	_____.	inches	x 2.54	=	_____	cm
Rear Overhang	_____.	inches	x 2.54	=	_____	cm
Undeformed End Width	_____.	inches	x 2.54	=	_____	cm
Engine Size: cyl./displ.	_____	cc	x .001	=	____.	L
	_____	CID	x .0164	=	____.	L

VEHICLE DAMAGE SKETCH

<p>TIRE—WHEEL DAMAGE</p> <p>a. Rotation physically restricted b. Tire deflated</p> <p>RF <u>Missing</u> RF <u>2</u></p> <p>LF <u>2</u> LF <u>2</u></p> <p>RR <u>2</u> RR <u>2</u></p> <p>LR <u>2</u> LR <u>2</u></p> <p>(1) Yes (2) No (8) NA (9) Unk.</p>	<p>ORIGINAL SPECIFICATIONS</p> <p>Wheelbase <u>98.4</u> <u>250</u> cm</p> <p>Overall Length <u>170</u> <u>432</u> cm</p> <p>Maximum Width <u>66.7</u> <u>169</u> cm</p> <p>Curb Weight <u>2316</u> <u>1051</u> kg</p> <p>Average Track <u>56.5</u> <u>144</u> cm</p> <p>Front Overhang <u>94</u> cm</p> <p>Rear Overhang <u>101</u> cm</p> <p>Undeformed End Width <u>147</u> cm</p> <p>Engine Size: cyl./displ. <u>4/1.9</u> L</p>	<p>WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only)</p> <p>RF ± _____ °</p> <p>LF ± _____ °</p> <p>RR ± _____ °</p> <p>LR ± _____ °</p> <p>Within ± 5 degrees</p>
<p>TYPE OF TRANSMISSION</p> <p><input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic</p> <p>END SHIFT ≥ 10 CM</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>DRIVE WHEELS</p> <p><input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD</p> <p>Approximate Cargo Weight <u>Ø</u> kg</p>	

MEASUREMENTS IN CENTIMETERS



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

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

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>04</u>	5. <u>42</u>	6. <u>12</u>	7. <u>F</u>	8. <u>Y</u>	9. <u>E</u>	10. <u>NW</u>	11. <u>02</u>

↑ OK ↑ ΔV.

Second Highest Delta "V"

12. <u>01</u>	13. <u>02</u>	14. <u>02</u>	15. <u>R</u>	16. <u>Y</u>	17. <u>E</u>	18. <u>W</u>	19. <u>02</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 ₁	C ₂	C ₃	C ₄	C ₅	C ₆	22. ± D
<u>147</u>	<u>000</u>	<u>027</u>	<u>022</u>	<u>017</u>	<u>013</u>	<u>006</u>	<u>+028</u>

Second Highest Delta "V"

23. L	24. C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	25. ± D
<u>290</u>	<u>000</u>	<u>000</u>	<u>002</u>	<u>022</u>	<u>017</u>	<u>006</u>	<u>0130</u>

26. Undeformed End Width (Coded when highest severity impact is an end plane impact.) 147
 _____ Code to the nearest centimeter
 (250) 250 centimeters or more
 (998) No highest severity end plane impact
 (999) Unknown

27. Direct Damage Width (For highest severity impact) 016
 _____ Code to the nearest centimeter
 (250) 250 centimeters or more
 (999) Unknown

28. Original Wheelbase 250
 _____ Code to the nearest centimeter
 (650) 650 centimeters or more
 (999) Unknown
 _____ inches X 2.54 = _____ centimeters

29. Original Average Track Width 144
 _____ Code to the nearest centimeter
 (185) 185 centimeters or more
 (999) Unknown
 _____ inches X 2.54 = _____ centimeters

FUEL SYSTEM

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

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

- 32. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? 0
 (0) No post manufacturer modifications
 (1) Yes - post manufacturer modifications (specify): _____

 (Include photograph of CERTIFICATION PLACARD in case report)
 (9) Unknown if vehicle is modified

- 35. Location of Fuel Tank-1 Filler Cap 2
- 36. Location of Fuel Tank-2 Filler Cap 0
 (0) No fuel tank
 (1) On back plane
 (2) Aft of center of the rear wheels (rear axle) on left side plane
 (3) Aft of center of the rear wheels (rear axle) on right side plane
 (4) Forward of center of the rear wheels (rear axle) on left side plane
 (5) Forward of center of the rear wheels (rear axle) on right side plane
 (6) Over the center of the rear wheels (rear axle) on left side plane
 (7) Over the center of the rear wheels (rear axle) on right side plane
 (8) Other (specify): _____
 (9) Unknown

- 37. Type of Fuel Tank-1 1
- 38. Type of Fuel Tank-2 0
 (0) No fuel tank (electrical vehicle)
 (1) Metallic
 (2) Non-metallic
 (9) Unknown

FIRE OCCURRENCE

- 33. Fire Occurrence 0
 (0) No fire

 Yes, fire occurred
 (1) Minor
 (2) Major
 (9) Unknown

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

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

- 41. Damage to Fuel Tank-1 0
- 42. Damage to Fuel Tank-2 0
 (0) No fuel tank
 (1) No damage to fuel tank
 (2) Deformed, no seam failure
 (3) Deformed, with a seam failure
 (4) Punctured
 (5) Lacerated (ripped)
 (6) Abraded (scraped)
 (7) Filler neck separation from the fuel tank
 (8) Other damage (specify): _____
 (9) Unknown

43. Leakage Location of Fuel System-1 1

44. Leakage Location of Fuel System-2 0
 (0) No fuel tank
 (1) No fuel leakage

Primary Area Of Leakage

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

45. Fuel Type-1 C1

46. Fuel Type-2 00

Single Fuel Type

- (00) No fuel tank
- (01) Gasoline
- (02) Diesel
- (03) CNG (Compressed Natural Gas)
- (04) LPG (Liquid Petroleum Gas) also known as Propane
- (05) LNG (Liquid Natural Gas)
- (06) Methanol (M100 or M85)
- (07) Ethanol (E100 or E85)
- (08) Other (Hydrogen or others) (specify): _____

Electric Powered or Electric/Solar Powered Vehicles

- (10) Lead Acid Battery
- (11) Nickel-Iron Battery
- (12) Nickel-Cadmium Battery
- (13) Sodium Metal Chloride Battery
- (14) Sodium Sulfur Battery
- (18) Other (Specify): _____
- (98) Other Hybrid (specify): _____
- (99) Unknown fuel type

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

(0) No (one or two tanks only)

Yes - More Than Two Tanks

- (1) Yes -- no damage to any tank or filler cap and no fuel system leakage
- (2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): _____
- (3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):
 Type of tank _____
 Tank location _____
 Filler cap location _____
 Tank damage _____
 Location of leakage _____
 Type of fuel _____
- (9) Unknown if more than two tanks

COMMENTS

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

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number 41
 2. Case Number - Stratum 024A
 3. Vehicle Number 01

INTEGRITY

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

Yes, Integrity Was Lost Through

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

(99) Unknown

Door, Tailgate or Hatch Opening

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

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

(9) Unknown

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

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

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

Door, Tailgate or Hatch Came Open During Collision

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

(9) Unknown

GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 2
 20. BL 2 21. Roof 0 22. Other 0

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

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 1 27. RR 1
 28. BL 1 29. Roof 0 30. Other 0

- (0) No glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (7) Glazing removed prior to accident
- (9) Unknown

Glazing Damage from Impact Forces

31. WS 1 32. LF 1 33. RF 6 34. LR 1 35. RR 1
 36. BL 1 37. Roof 0 38. Other 0

- (0) No glazing
- (1) No glazing damage from impact forces
- (2) Glazing in place and cracked from impact forces
- (3) Glazing in place and holed from impact forces
- (4) Glazing out-of-place (cracked or not) and not holed from impact forces
- (5) Glazing out-of-place and holed from impact forces
- (6) Glazing disintegrated from impact forces
- (7) Glazing removed prior to accident
- (9) Unknown if damaged

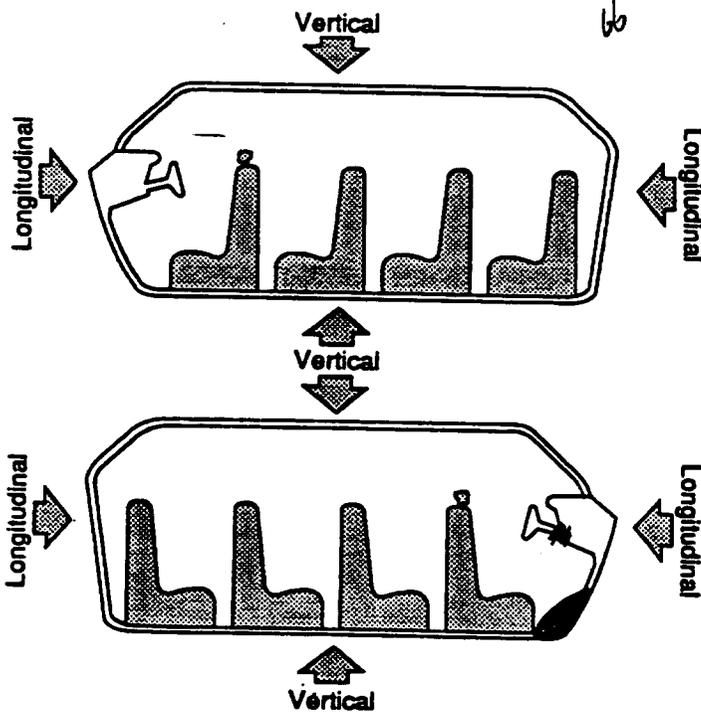
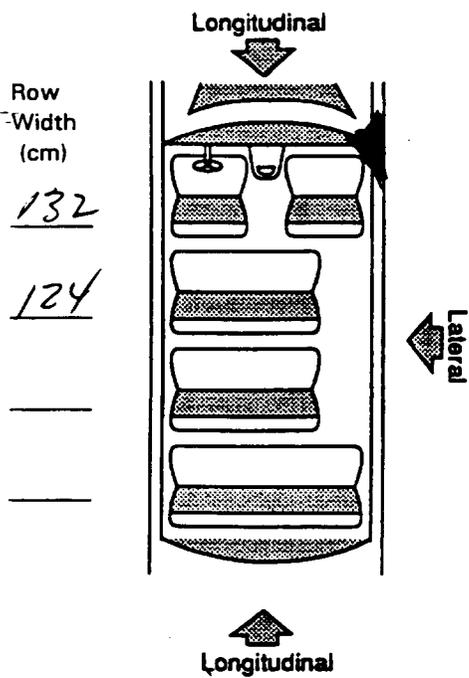
Glazing Damage from Occupant Contact

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

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

INTRUSION WORKSHEET

NOTE: SKETCH INTRUDED AREAS



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION	
13	SIDE PANEL	68	45	23	3
13	RT / INST. PANEL	93	83	10	2
13	A-Pillar	-	-	-	
13	kick panel	-	-	-	
13	toe pan	-	-	-	
		-	-	-	
		-	-	-	
		-	-	-	
		-	-	-	
		-	-	-	
		-	-	-	
		-	-	-	
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		-	-	-	
		-	-	-	
		-	-	-	
		-	-	-	
		-	-	-	
		-	-	-	
		-	-	-	

OCCUPANT AREA INTRUSION

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

INTRUDING COMPONENT

Interior Components

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

Exterior Components

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

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

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>13</u>	48. <u>10</u>	49. <u>3</u>	50. <u>3</u>
2nd	51. <u>13</u>	52. <u>04</u>	53. <u>2</u>	54. <u>2</u>
3rd	55. <u>99</u>	56. <u>99</u>	57. <u>9</u>	58. <u>9</u>
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

LOCATION OF INTRUSION

Front Seat

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

Fourth Seat

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

Second Seat

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

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

(99) Unknown

Third Seat

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

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

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

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—	N/A	=	
--	---	-----	---	--

	—		=	
--	---	--	---	--

STEERING COLUMN

INSTRUMENT PANEL

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

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

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

90. Steering Rim/Spoke Deformation 0 0
 Code actual measured
 deformation to the nearest centimeter
 (00) No steering rim deformation
 (01-14) Actual measured value in centimeters
 (15) 15 centimeters or more
 (98) Observed deformation cannot be measured
 (99) Unknown

91. Location of Steering Rim/Spoke Deformation 0 0
 (00) No steering rim deformation

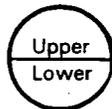
Quarter Sections

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



Half Sections

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



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

92. Odometer Reading 0 1 2,000
 _____ 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
7,221 miles X 1.6093 = 11,620 kilometers

Source: _____

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

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

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

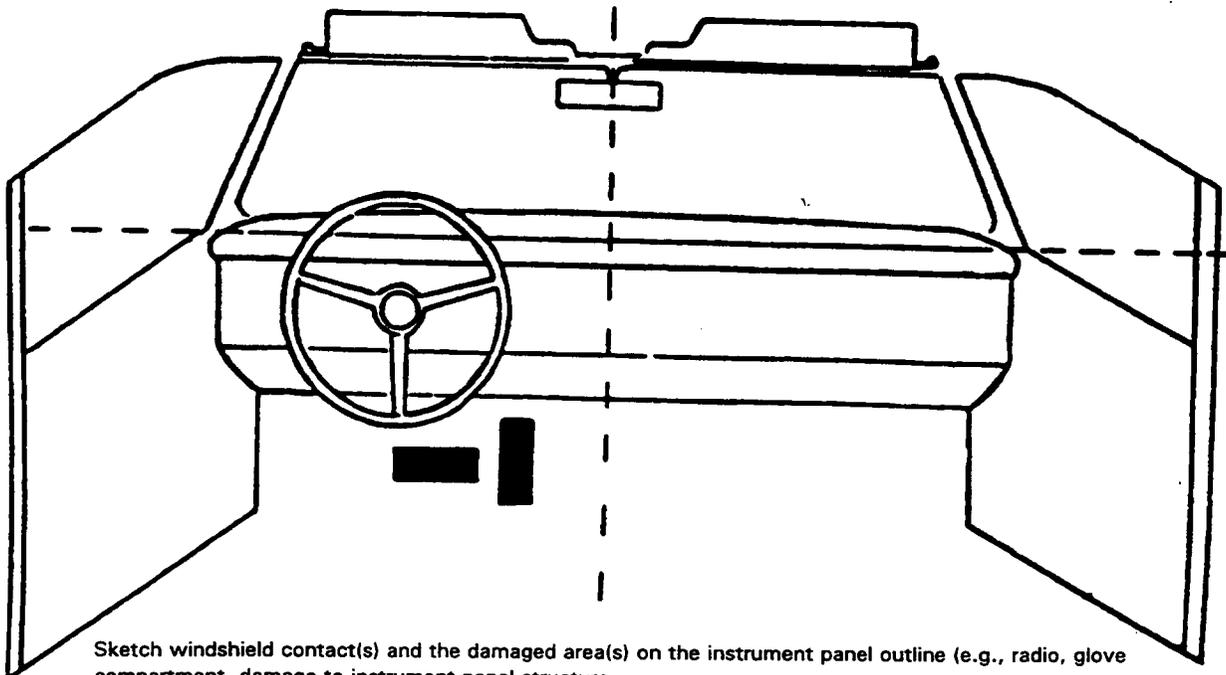
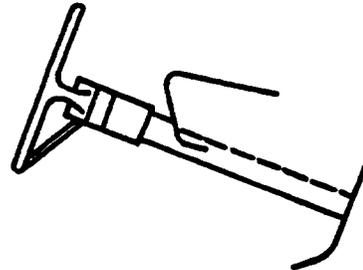
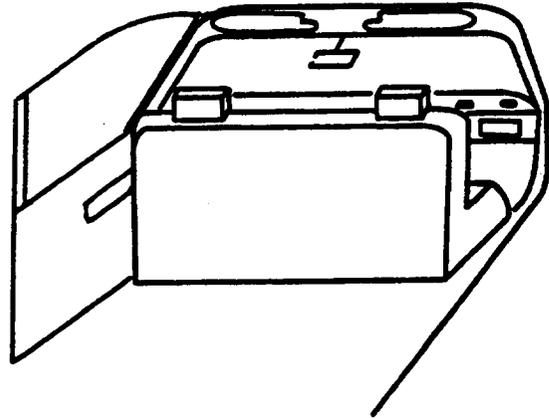
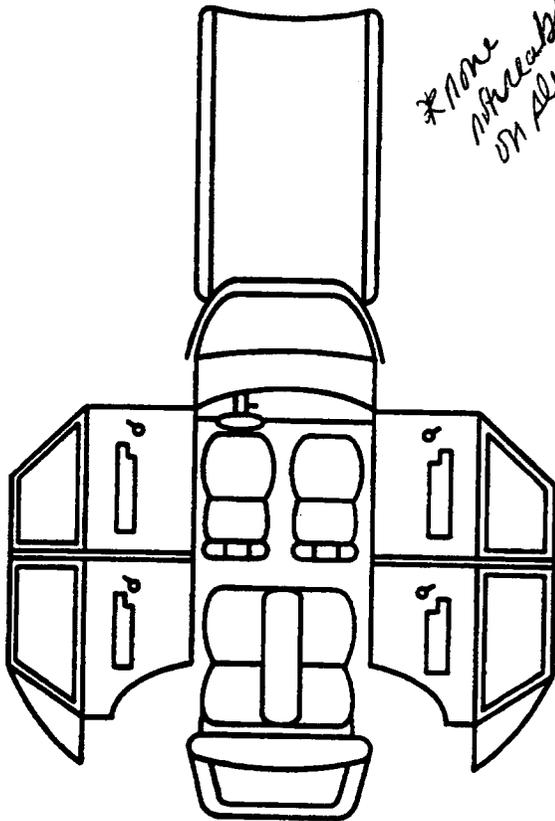
96. Did Glove Compartment Door Open During Collision(s)? 2
 (0) No glove compartment door
 (1) No - door did not open
 (2) Yes - door opened
 (9) Unknown

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

(9) Unknown

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

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

N/A

FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tapedeck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object, (specify): _____
- (019) Other front object (specify): _____

CODES FOR INTERIOR COMPONENTS

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): _____
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): _____

RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests
- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): _____
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): _____

INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): _____
- (155) Head restraint system
- (160) Other occupants (specify): _____
- (161) Interior loose objects
- (162) Child safety seat (specify): _____
- (163) Other interior object (specify): _____

AIR BAG

- (170) Air bag-driver side
- (175) Air bag compartment cover-driver side
- (180) Air bag-passenger side
- (185) Air bag compartment cover-passenger side
- (190) Other air bag (specify) _____
- (195) Other air bag compartment cover (specify) _____

ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): _____

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): _____
- (409) Additional or relocated switches, (specify): _____
- (410) Raised roof
- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): _____

CONFIDENCE LEVEL OF CONTACT POINT

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

MANUAL RESTRAINTS

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

		Left	Center	Right
F I R S T	A-Availability	3	6	3
	B-Evidence of usage	03	00	03
	C-Used in this crash?	03	00	00
	D-Proper Use	1	0	0
	E-Failure Modes	1	0	0
	F-Anchorage Adjustment	0	0	0
S E C O N D	A-Availability	4	3	4
	B-Evidence of usage	00	00	00
	C-Used in this crash?	00	00	00
	D-Proper Use	0	0	0
	E-Failure Modes	0	0	0
	F-Anchorage Adjustment	1	0	1
O T H E R	A-Availability			
	B-Evidence of usage			
	C-Used in this crash?			
	D-Proper Use			
	E-Failure Modes			
	F-Anchorage Adjustment			

A-Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown
- Integral Belt Partially Destroyed*
- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): _____
- (9) Unknown

B/C-Manual (Active) Belt System Use

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

D-Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat
- Belt Used Improperly*
- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of manual belt system (specify): _____
- (9) Unknown

E-Manual (Active) Belt Failure Modes During Accident

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

F-Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt
- Adjustable shoulder Belt Upper Anchorage*
- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

AUTOMATIC RESTRAINTS

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

AIR BAGS

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

Air Bag System Availability/Function

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

Non-functional

- (2) Air bag disconnected (specify): _____
(3) Air bag not reinstalled
(9) Unknown

**Air Bag System Deployment
(This Occupant Position)**

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

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

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

AUTOMATIC BELTS

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

A-Automatic (Passive) Belt System Availability/Function

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

Non-functional

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

B-Automatic (Passive) Belt System Use

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

C-Automatic (Passive) Belt System Type

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

D-Proper Use of Automatic (Passive) Belt System

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

Automatic Belt Used Improperly

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

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

E-Automatic (Passive) Belt Failure Modes During Accident

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

FIRST SEAT FRONTAL AIR BAGS

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

	Driver	Passenger
A-Type of air bag?	1	1
B-Flaps open at tear points?	2	2
C-Flaps damaged?	1	1
D-Air bag damaged?	01	01
E-Source of air bag damage	01	01
F-Air bag tethered?	2	1
G-Air bag have vent ports?	2	2
H-Other occupant contact air bag?	1	1
I-Occupant wearing eyewear?	9	1

A-Type of Air Bag

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

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

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

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

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

D-Was There Damage To The Air Bag?

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

Yes - Air Bag Damage

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

E-Source of Air Bag Damage

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

F-Was The Air Bag Tethered?

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

G-Did The Air Bag Have Vent Ports?

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

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

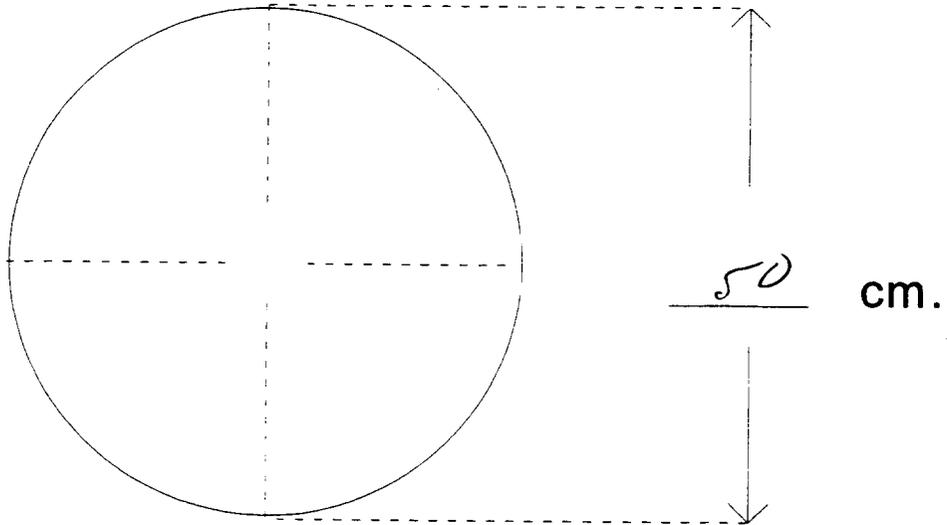
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

I-Was This Occupant Wearing Eye-wear?

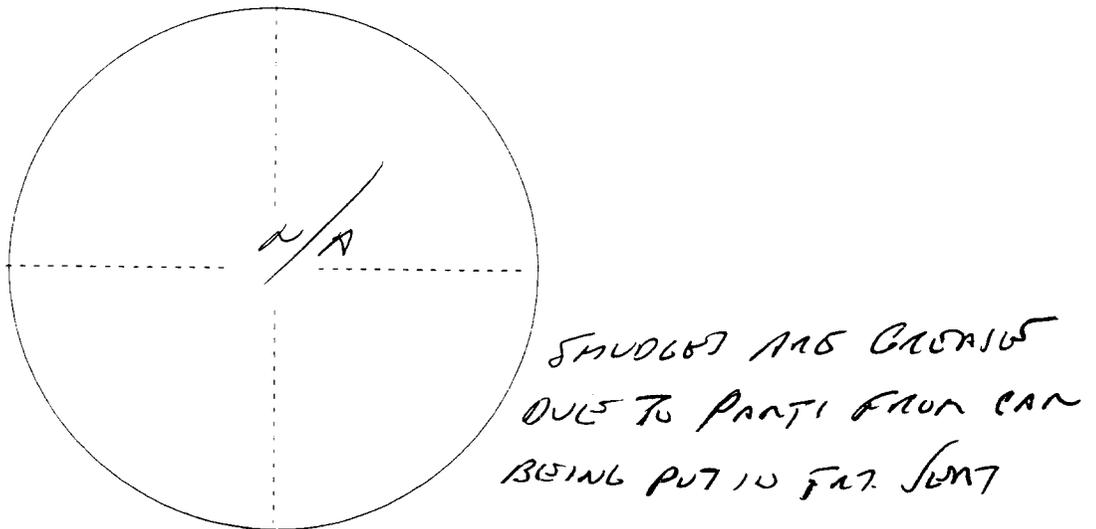
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

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



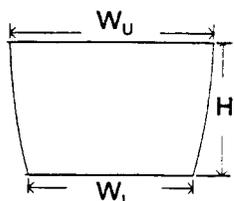
2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)



DRIVER AIR BAG SKETCHES (Cont'd)

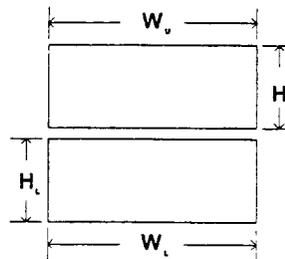
3. DRIVER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W_U) _____ width (W_L) _____
 height (H) _____



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

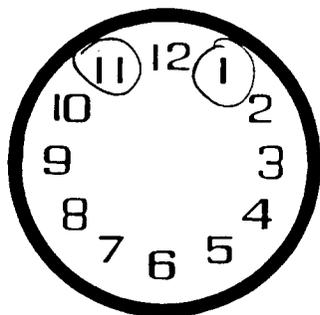
a. Upper Flap b. Lower Flap
 width (W_U) 24 width (W_L) 18
 height (H_U) 11 height (H_L) 6



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

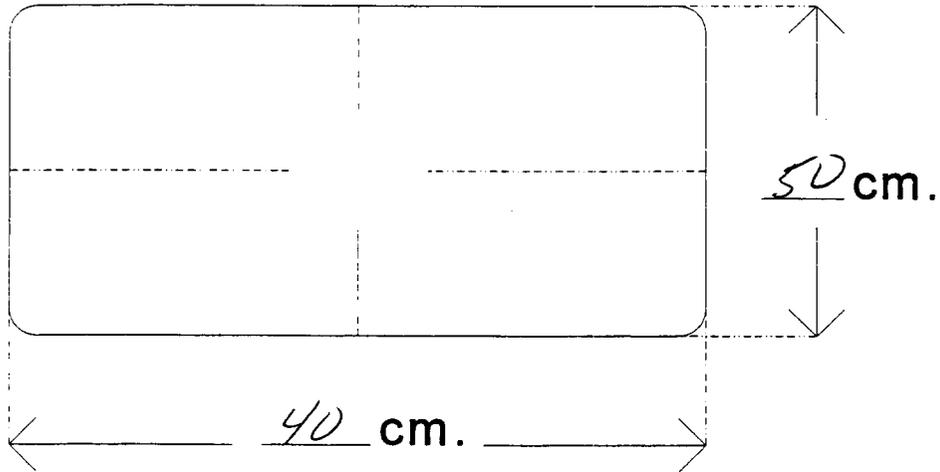
6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS

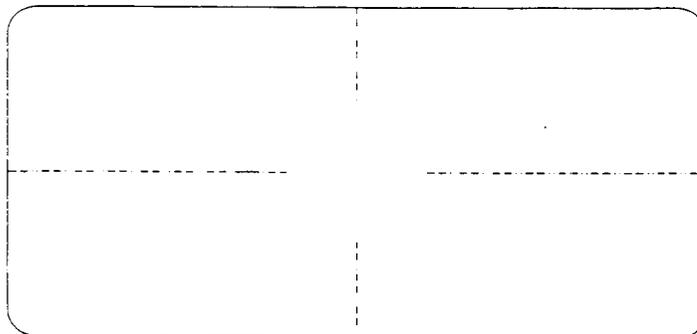


PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

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



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



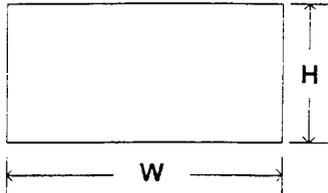
*SMOULT AND
GREASE FROM PARTS
BEING PUT IN CAN.*

PASSENGER AIR BAG SKETCHES (Cont'd)

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

width (W) 32

height (H) 17



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

a. Upper Flap

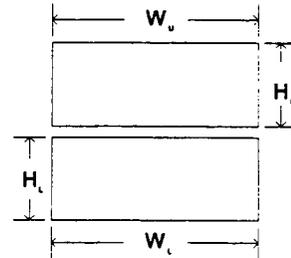
b. Lower Flap

width (W_U) _____

width (W_L) _____

height (H_U) _____

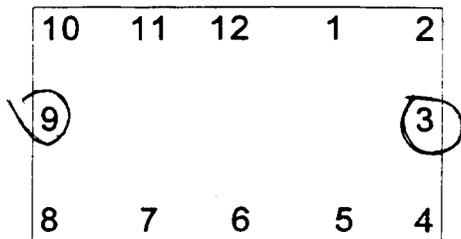
height (H_L) _____



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

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES

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

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

"OTHER" AIR BAG SKETCHES (Cont'd)

3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG

4. SKETCH AIR BAG VENT PORTS

HEAD RESTRAINTS/SEAT EVALUATION

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

		Left	Center	Right
FIRST	A-Head Restraint Type/Damage	3		3
	B-Seat Type	02	N/A	02
	C-Seat Orientation	1		1
	D-Seat Track Position	3		3
	E-Seat Back Incline Pre/Post Impact	23		23
	F-Seat Performance	1		1
SECOND	A-Head Restraint Type/Damage	0	0	0
	B-Seat Type	05	05	05
	C-Seat Orientation	1	1	1
	D-Seat Track Position	1	1	1
	E-Seat Back Incline Pre/Post Impact	23	23	23
	F-Seat Performance	1	1	1
THIRD	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
OTHER	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

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

HEAD RESTRAINTS/SEAT EVALUATION

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

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

B-Seat Type (this Occupant Position)

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

C-Seat Orientation (this Occupant Position)

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

D-Seat Track Adjusted Position Prior To Impact

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

Adjustable Seat Track

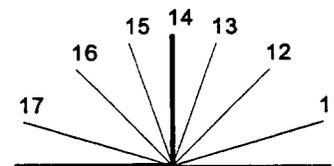
- (2) Seat at forward most track position
 (3) Seat between forward most and middle track positions
 (4) Seat at middle track position
 (5) Seat between middle and rear most track positions
 (6) Seat at rear most track position
 (9) Unknown

E-Seat Back Incline Prior and Post Impact

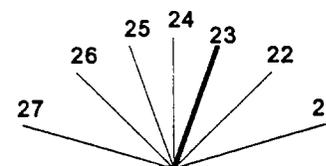
- (00) Occupant not seated or no seat
 (01) Not adjustable

Upright prior to impact

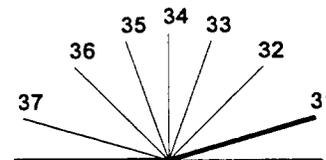
- (11) Moved to completely rearward position
 (12) Moved to rearward midrange position
 (13) Moved to slightly rearward position
 (14) Retained pre-impact position
 (15) Moved to slightly forward position
 (16) Moved to forward midrange position
 (17) Moved to completely forward position

**Slightly reclined prior to impact**

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

**Completely reclined prior to impact**

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



- (99) Unknown

F-Seat Performance (this Occupant Position)

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

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

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

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

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

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

- (19) Unknown orientation

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

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

- (29) Unknown orientation
- (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage
Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat
- Not Designed with Harness/Shield/Tether
- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used
- Designed With Harness/Shield/Tether
- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

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

6. Child Safety Seat Make/Model
(Specify make/model and occupant number)

EJECTION/ENTRAPMENT DATA

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

EJECTION No [] Yes []

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

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

Ejection

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

Ejection Area

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

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

- (9) Unknown

Ejection Medium

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

- (5) Integral structure
- (8) Other medium (specify):

- (9) Unknown

Medium Status (Immediately Prior to Impact)

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

ENTRAPMENT No [] Yes []

Describe entrapment mechanism: _____

Component(s): _____

(Note on vehicle interior sketch)

PSU NUMBER	<u>41</u>
CASE NUMBER	<u>024A</u>
VEHICLE NUMBER	<u>01</u>

INTERVIEW FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

- ENTIRE FORM
- PAGE NUMBER (S) _____

OCCUPANT ASSESSMENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 41
 2. Case Number - Stratum 024A
 3. Vehicle Number 01
 4. Occupant Number 01

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 79
 Code actual age at time of accident.
 (00) Less than one year old (specify by month):
 (97) 97 years and older
 (99) Unknown

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

7. Occupant's Height 175
 Code actual height to the nearest centimeter.
 (999) Unknown
69 inches X 2.54 = 175.3 centimeters 082
999

8. Occupant's Weight 180
 Code actual weight to the nearest kilogram.
 (999) Unknown
180 pounds X .4536 = 81.6 kilograms

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

OCCUPANT'S SEATING

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

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

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

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

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

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

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

EJECTION/ENTRAPMENT

12. Ejection 0

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

13. Ejection Area 0

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

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

- (5) Integral structure
- (8) Other medium (specify):

- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

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

16. Entrapment 0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.
(specify): _____
- (9) Unknown

17. Occupant Mobility 9

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

BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 3
- (0) None available
 - (1) Belt removed/destroyed
 - (2) Shoulder belt
 - (3) Lap belt
 - (4) Lap and shoulder belt
 - (5) Belt available—type unknown
- Integral Belt Partially Destroyed*
- (6) Shoulder belt (lap belt destroyed/removed)
 - (7) Lap belt (shoulder belt destroyed/removed)
 - (8) Other belt (specify): _____
 - (9) Unknown
19. Manual (Active) Belt System Use 0303
- (00) None used, not available, or belt removed/destroyed
 - (01) Inoperative (specify): _____
 - (02) Shoulder belt
 - (03) Lap belt
 - (04) Lap and shoulder belt
 - (05) Belt used—type unknown
 - (08) Other belt used (specify): _____
 - (12) Shoulder belt used with child safety seat
 - (13) Lap belt used with child safety seat
 - (14) Lap and shoulder belt used with child safety seat
 - (15) Belt used with child safety seat—type unknown
 - (18) Other belt used with child safety seat (specify): _____
 - (99) Unknown if belt used
20. Proper Use of Manual (Active) Belts 1 X
- (0) None used or not available
 - (1) Belt used properly
 - (2) Belt used properly with child safety seat
- Belt Used Improperly*
- (3) Shoulder belt worn under arm
 - (4) Shoulder belt worn behind back or seat
 - (5) Belt worn around more than one person
 - (6) Lap belt worn on abdomen
 - (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
 - (8) Other improper use of manual belt system (specify): _____
 - (9) Unknown
21. Manual (Active) Belt Failure Modes During Accident 1 X
- (0) No manual belt used or not available
 - (1) No manual belt failure(s)
 - (2) Torn webbing (stretched webbing not included)
 - (3) Broken buckle or latchplate
 - (4) Upper anchorage separated
 - (5) Other anchorage separated (specify): _____
 - (6) Broken retractor
 - (7) Combination of above (specify): _____
 - (8) Other manual belt failure (specify): _____
 - (9) Unknown

22. Manual Shoulder Belt Upper Anchorage Adjustment 0
- (0) No manual shoulder belt
 - (1) No upper anchorage adjustment for manual shoulder belt
- Adjustable shoulder Belt Upper Anchorage*
- (2) In full up position
 - (3) In mid position
 - (4) In full down position
 - (5) Position unknown
 - (9) Unknown if position has adjustable upper anchorage adjustment
23. Automatic (Passive) Belt System Availability/Function 1
- (0) Not equipped/not available
 - (1) 2 point automatic belts
 - (2) 3 point automatic belts
 - (3) Automatic belts - type unknown
- Non-functional*
- (4) Automatic belts destroyed or rendered inoperative
 - (9) Unknown
24. Automatic (Passive) Belt System Use 1
- (0) Not equipped/not available/destroyed or rendered inoperative
 - (1) Automatic belt in use
 - (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
 - (3) Automatic belt use unknown
 - (9) Unknown
25. Automatic (Passive) Belt System Type 2
- (0) Not equipped/not available
 - (1) Non-motorized system
 - (2) Motorized system
 - (9) Unknown
26. Proper Use of Automatic (Passive) Belt System 1
- (0) Not equipped/not available/not used
 - (1) Automatic belt used properly
 - (2) Automatic belt used properly with child safety seat
- Automatic Belt Used Improperly*
- (3) Automatic shoulder belt worn under arm
 - (4) Automatic shoulder belt worn behind back
 - (5) Automatic belt worn around more than one person
 - (6) Lap portion of automatic belt worn on abdomen
 - (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
 - (8) Other improper use of automatic belt system (specify): _____
 - (9) Unknown
27. Automatic (Passive) Belt Failure Modes During Accident 1
- (0) Not equipped/not available/not in use
 - (1) No automatic belt failure(s)
 - (2) Torn webbing (stretched webbing not included)
 - (3) Broken buckle or latchplate
 - (4) Upper anchorage separated
 - (5) Other anchorage separated (specify): _____
 - (6) Broken retractor
 - (7) Combination of above (specify): _____
 - (8) Other automatic belt failure (specify): _____
 - (9) Unknown

POLICE REPORTED RESTRAINT USE **AIR BAG SYSTEM FUNCTION**

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

29. Police Reported Air Bag Availability/Function 4
- (0) No air bag available
 - (1) Police did not indicate air bag availability/function
 - (2) Deployed
 - (3) Not deployed
 - (4) Unknown if deployed
 - (9) Police indicated "unknown"
- Pass Book states safety equipment in use - airbag but not available*

Check the Primary Source Used In Determining Belt Use.

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

30. Frontal Air Bag System Availability/Function (This Occupant Position) 1
- (0) Not equipped/not available
 - (1) Air bag
- Non-functional*
- (2) Air bag disconnected (specify):
- _____
- (3) Air bag not reinstalled
 - (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 1
- (0) Not equipped/not available
 - (1) Deployed during accident (as a result of impact)
 - (2) Deployed inadvertently just prior to accident
 - (3) Deployed, details unknown
 - (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 - (5) Unknown if deployed
 - (7) Nondeployed
 - (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0
- (0) Not equipped/not available
 - (1) Air bag
- Non-functional*
- (2) Air bag disconnected (specify):
- _____
- (3) Air bag not reinstalled
 - (9) Unknown
- Specify type of "other" air bag present:*
- _____

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0
- (0) Not equipped with an "other" air bag
 - (1) Deployed during accident (as a result of impact)
 - (2) Deployed inadvertently just prior to accident
 - (3) Deployed, details unknown
 - (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 - (5) Unknown if deployed
 - (7) Nondeployed
 - (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position) 1
- (0) Not equipped/not available
 - (1) No
 - (2) Yes (specify):
- _____
- (9) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 9
 (0) Not equipped/not available
 (1) No previous accidents

 Yes
 (2) Previous accident(s) without deployment(s)
 (3) One previous accident with deployment
 (4) More than one previous accident with at least one deployment
 (8) Previous accidents, unknown deployment status
 (9) Unknown

36. Type of Air Bag 8+
 (0) Not equipped/not available
 (1) Original manufacturer installed system
 (2) Retrofitted air bag
 (3) Replacement air bag
 (8) Unknown type of air bag
 (9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 9
 (0) Not equipped/not available
 (1) No prior maintenance
 (2) Yes, prior maintenance (specify):

 (9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 96
 (00) Not equipped/not available
 _____ Code the accident event sequence number that initiated the air bag deployment
 (96) Deployed, unknown event
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown

39. CDC For Air Bag Deployment Impact 6
 (0) Not equipped/not available
 (1) Highest delta V
 (2) Second highest delta V
 (3) Other non-coded delta V (specify):

 (6) Deployed, unknown event
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 996
 (_000) Not equipped/not available
Code the value of the delta V for the impact that initiated the air bag deployment
 (_996) Deployment, unknown longitudinal Delta V
 (_997) Not deployed
 (_998) Unknown if deployed
 (_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes
 (3) Deployed, unknown if flap(s) opened at designated tear points
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 1
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify): _____
 (3) Deployed, unknown if air bag module cover flap(s) damaged
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

43. Was There Damage To The Air Bag? 01
 (00) Not equipped/not available
 (01) Not damaged

Yes - Air Bag Damage
 (02) Ruptured
 (03) Cut
 (04) Torn
 (05) Holed
 (06) Burned
 (07) Abraded
 (88) Other damage (specify):

 (95) Damaged, details unknown
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION *continued*

HEAD RESTRAINT AND SEAT EVALUATION

44. Source of Air Bag Damage 01
 (00) Not equipped/not available
 (01) Not damaged
 (02) Object worn by occupant, (specify):

 (03) Object carried by occupant, (specify):

 (04) Adaptive/assistive controls, (specify):

 (05) Fire in vehicle
 (06) Thermal burns
 (07) Rescue or emergency efforts
 (88) Other damage source (specify):

 (95) Damaged, unknown source
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown
45. Was The Air Bag Tethered? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of tether straps): uk

 (3) Deployed, unknown if tethered
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of vent ports): 2

 (3) Deployed, unknown if vent ports present
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify):

 (3) Deployed, unknown if other occupant contact to air bag
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 4
 (0) Not air bag equipped/air bag not available
 (1) No
 (2) Eyeglasses/sunglasses
 (3) Contact lenses
 (4) Deployed, unknown if eyewear worn
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

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

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

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

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

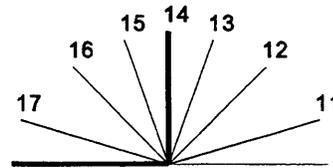
HEAD RESTRAINT AND SEAT EVALUATION *continued*

53. Seat Back Incline Prior and Post Impact 23

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

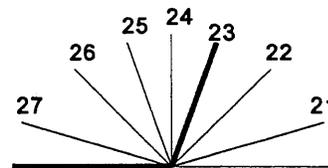
Upright prior to impact

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



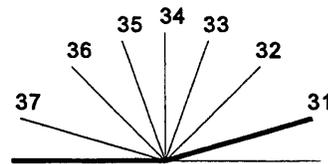
Slightly reclined prior to impact

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



Completely reclined prior to impact

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



(99) Unknown

54. Seat Performance (this Occupant Position) 1

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

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 000

(000) No child safety seat

Applicable codes are found in your NASS CDS
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 00

(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

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

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0059. Child Safety Seat Shield Usage 0060. Child Safety Seat Tether Usage 00Note: Options below applicable to
Variables OA58-OA60.

(00) No child safety seat

Not Designed With Harness/Shield/Tether(01) After market harness/shield/tether
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market
harness/shield/tether added(09) Unknown if harness/shield/tether
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES61. Injury Severity (Police Rating) 4

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

62. Treatment - Mortality 1

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

Nonfatal

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

- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 2 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

64. Hospital Stay 00

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

65. Working Days Lost 62

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

STOP WORK HERE**VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

TO BE CODED BY THE ZONE CENTER**INJURY CONSEQUENCES****TRAUMA DATA**

66. Time to Death 01
 _____ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
 (00) Not fatal
 (96) Fatal - ruled disease
 (99) Unknown

67. 1st Medically Reported Cause of Death 01

68. 2nd Medically Reported Cause of Death 03

69. 3rd Medically Reported Cause of Death 00
 _____ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
 (00) Not fatal or no additional causes
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

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

(99) _____ Unknown

70. Number of Recorded Injuries for This Occupant 18
 _____ Code the actual number of injuries recorded for this occupant.
 (00) No recorded injuries
 (97) Injured, details unknown
 (99) Unknown if injured

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

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

73. Arterial Blood Gases (ABG) - HCO₃ 01
 (00) Not injured
 (01) Injured, ABGs not measured or reported
 (02-50) Code the actual value of the HCO₃
 (96) ABGs reported, HCO₃ unknown
 (97) Injured, details unknown
 (99) Unknown if injured

BELT USE DETERMINATION

74. Primary Source of Belt Use Determination 1
 (0) Not equipped/not available/destroyed or rendered inoperative
 (1) Vehicle inspection
 (2) Official injury data
 (3) Driver/occupant interview
 (8) Other (specify): _____
 (9) Unknown if belt used



OCCUPANT INJURY FORM

1. Primary Sampling Unit Number	<u>41</u>	3. Vehicle Number	<u>01</u>
2. Case Number - Stratum	<u>024A</u>	4. Occupant Number	<u>01</u>

INJURY DATA

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

Source of Injury Data	A.I.S. - 90						Injury Source	Injury Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number		
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect						
<i>heart lac - myocardium</i>	1st 5. <u>1</u>	6. <u>4</u>	7. <u>4</u>	8. <u>10</u>	9. <u>12</u>	10. <u>5</u>	11. <u>4</u>	12. <u>170</u>	13. <u>2</u>	14. <u>1</u>	15. <u>00</u>	TS
<i>pericardium lac</i>	2nd 16. <u>1</u>	17. <u>4</u>	18. <u>4</u>	19. <u>16</u>	20. <u>02</u>	21. <u>2</u>	22. <u>4</u>	23. <u>170</u>	24. <u>2</u>	25. <u>1</u>	26. <u>00</u>	
<i>flail - rib ft</i>	3rd 27. <u>1</u>	28. <u>4</u>	29. <u>5</u>	30. <u>02</u>	31. <u>66</u>	32. <u>5</u>	33. <u>3</u>	34. <u>170</u>	35. <u>2</u>	36. <u>1</u>	37. <u>00</u>	TS
<i>bric cont</i>	4th 38. <u>1</u>	39. <u>5</u>	40. <u>4</u>	41. <u>18</u>	42. <u>10</u>	43. <u>2</u>	44. <u>1</u>	45. <u>152</u>	46. <u>2</u>	47. <u>1</u>	48. <u>00</u>	
<i>bric lac</i>	5th 49. <u>1</u>	50. <u>5</u>	51. <u>4</u>	52. <u>18</u>	53. <u>22</u>	54. <u>2</u>	55. <u>1</u>	56. <u>152</u>	57. <u>2</u>	58. <u>1</u>	59. <u>00</u>	
<i>mesentery hemorrhage</i>	6th 60. <u>1</u>	61. <u>5</u>	62. <u>4</u>	63. <u>20</u>	64. <u>99</u>	65. <u>2</u>	66. <u>8</u>	67. <u>152</u>	68. <u>7</u>	69. <u>1</u>	70. <u>00</u>	
<i>omentum hemorrhage</i>	7th 71. <u>1</u>	72. <u>5</u>	73. <u>4</u>	74. <u>22</u>	75. <u>99</u>	76. <u>2</u>	77. <u>8</u>	78. <u>152</u>	79. <u>2</u>	80. <u>1</u>	81. <u>00</u>	
<i>arm abr</i>	8th 82. <u>3</u>	83. <u>7</u>	84. <u>9</u>	85. <u>02</u>	86. <u>02</u>	87. <u>1</u>	88. <u>2</u>	89. <u>170</u>	90. <u>2</u>	91. <u>1</u>	92. <u>00</u>	
<i>sternum ft</i>	9th 93. <u>1</u>	94. <u>4</u>	95. <u>5</u>	96. <u>08</u>	97. <u>04</u>	98. <u>2</u>	99. <u>4</u>	100. <u>170</u>	101. <u>2</u>	102. <u>1</u>	103. <u>00</u>	
<i>head cont</i>	10th 104. <u>1</u>	105. <u>1</u>	106. <u>9</u>	107. <u>04</u>	108. <u>02</u>	109. <u>1</u>	110. <u>5</u>	111. <u>170</u>	112. <u>2</u>	113. <u>1</u>	114. <u>00</u>	

OCCUPANT INJURY CLASSIFICATION

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

SOURCE OF INJURY DATA	INJURY SOURCE CONFIDENCE LEVEL	DIRECT/INDIRECT INJURY
<u>OFFICIAL RECORDS</u> (1) Autopsy records with or without hospital/medical records (2) Hospital/medical records other than emergency room (e.g., discharge summary) (3) Emergency room records only (including associated X-rays or other lab reports) (4) Private physician, walk-in or emergency clinic <u>UNOFFICIAL RECORDS</u> (5) Lay coroner report (6) E.M.S. personnel (7) Interviewee (8) Other source (specify): _____ (9) Police	(1) Certain (2) Probable (3) Possible (9) Unknown	(1) Direct contact injury (2) Indirect contact injury (3) Noncontact injury (7) Injured, unknown source

INJURY SOURCES

FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): _____

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): _____
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): _____

RIGHT SIDE

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

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): _____
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): _____

INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): _____
- (155) Head restraint system
- (160) Other occupants (specify): _____
- (161) Interior loose objects
- (162) Child safety seat (specify): _____
- (163) Other interior object (specify): _____

AIR BAG

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

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify) _____
- (195) Other air bag compartment cover (specify) _____

ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): _____

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): _____
- (409) Additional or relocated switches, (specify): _____

- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

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

EXTERIOR OF OTHER MOTOR VEHICLE

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

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

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

NONCONTACT INJURY

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

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, 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.)

ALL INJURIES FROM AUTOPSY EXCEPT AS NOTED

Restrained?

___ No

___ Yes

unknown
if used
Blood Alcohol Level
(mg/dl)

BAL = .01%

Glasgow Coma
Scale Score

GCSS = 03

Units of Blood
Given

Units = NR

Arterial Blood Gases

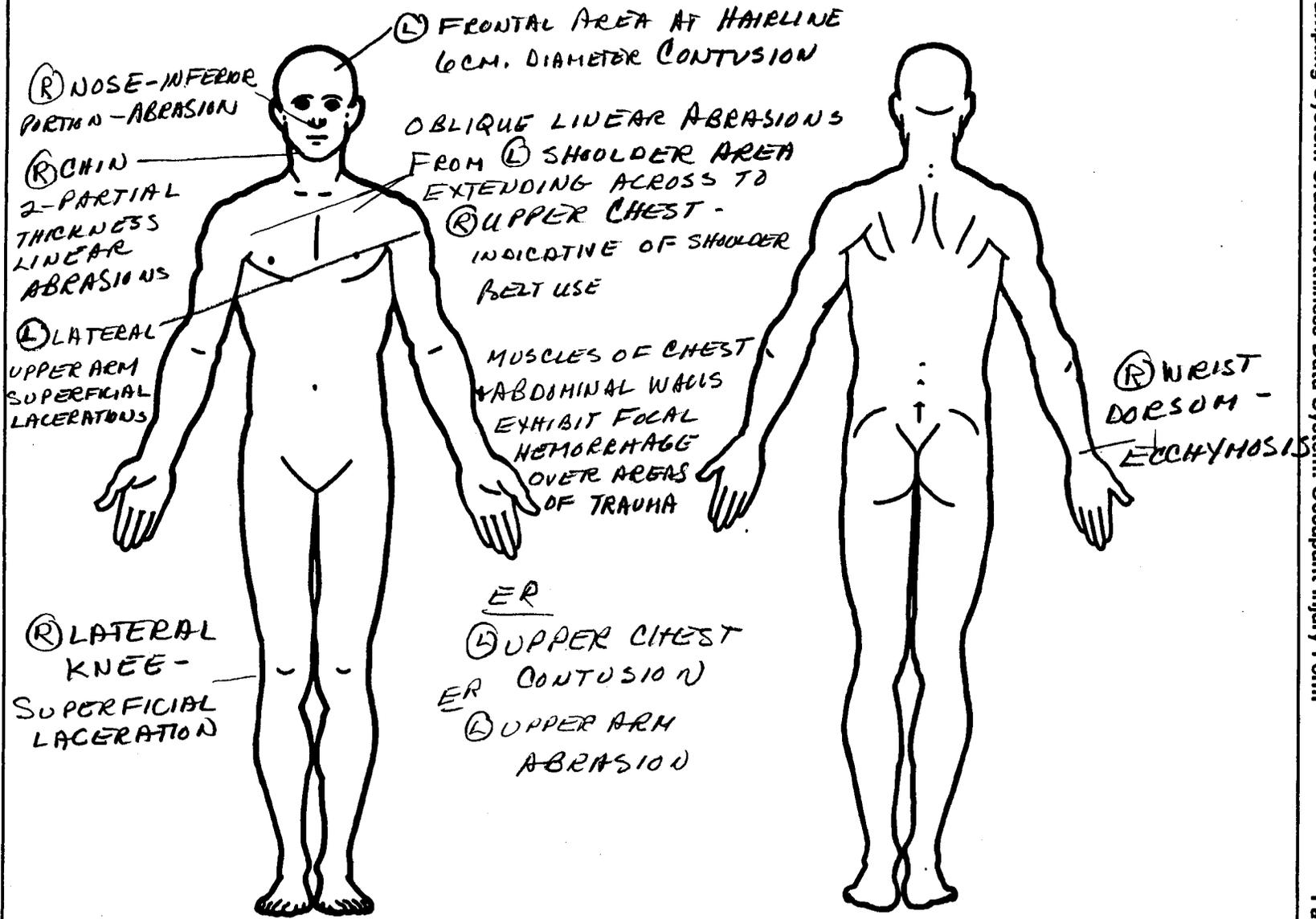
pH = .

PO₂ = /

PCO₂ = /

HCO₃ = /

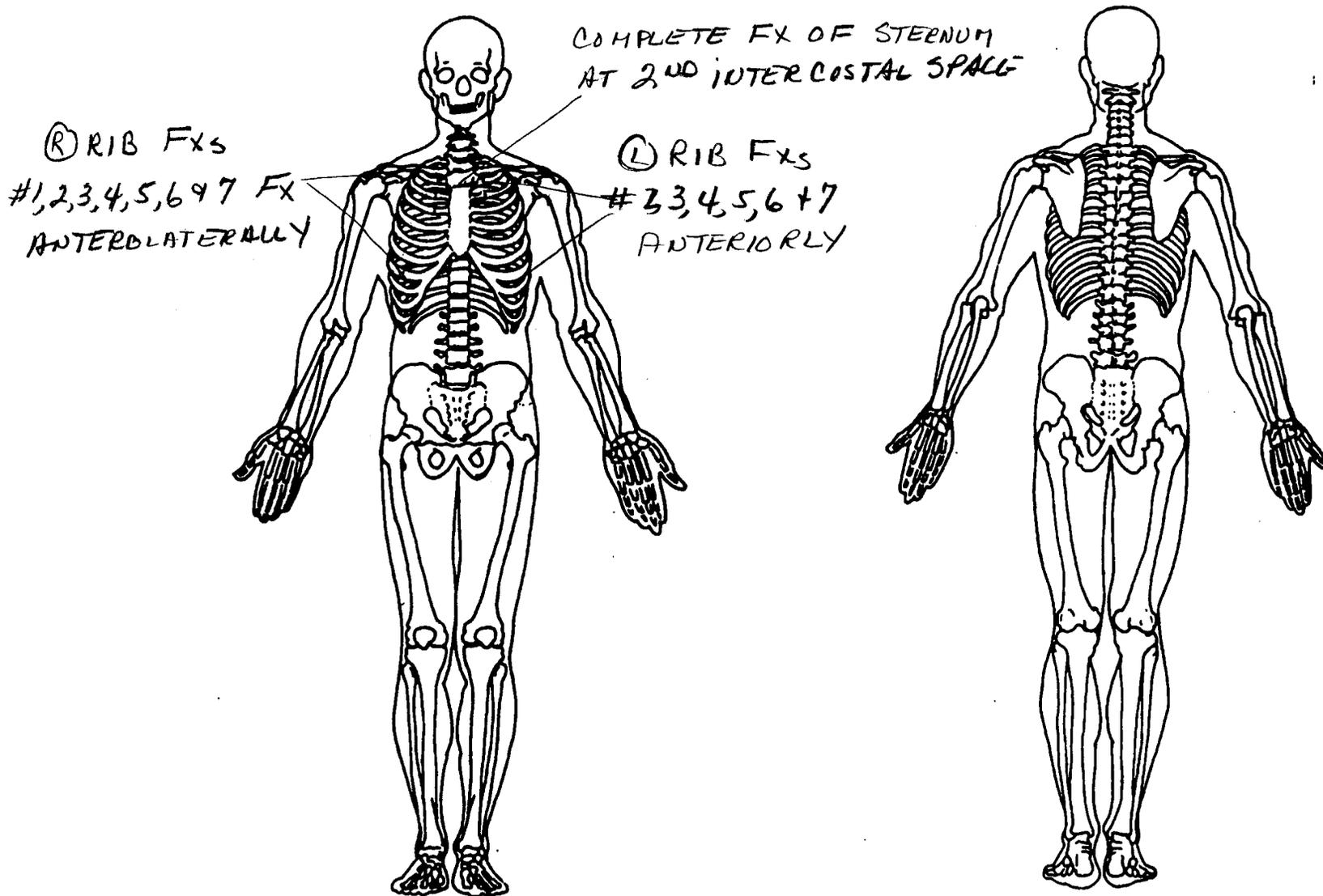
no
records



OFFICIAL INJURY DATA — SKELETAL INJURIES

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

ALL INJURIES FROM AUTOPSY



OFFICIAL INJURY DATA — INTERNAL INJURIES

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

ALL INJURIES FROM AUTOPSY

HEMORRHAGE IS PRESENT IN ANTERIOR MEDIASTINAL SOFT TISSUE

ⓑ LUNG

CONTUSIONS OVER HILA OF BOTH LUNGS

LIVER

CONTUSION OVER LOWER PORTION OF FALCIFORM LIGAMENT

LIVER -

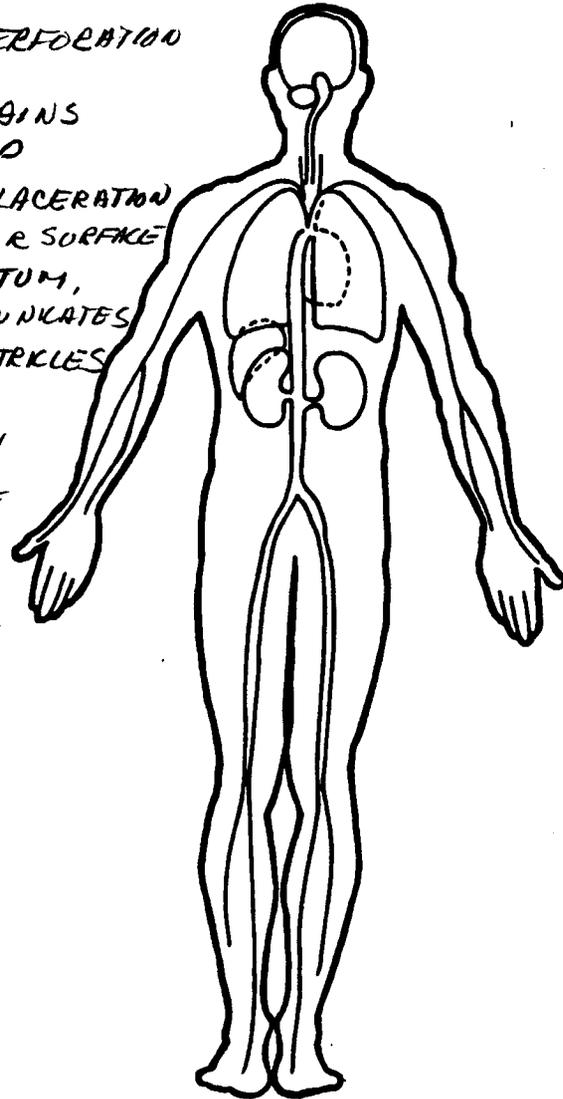
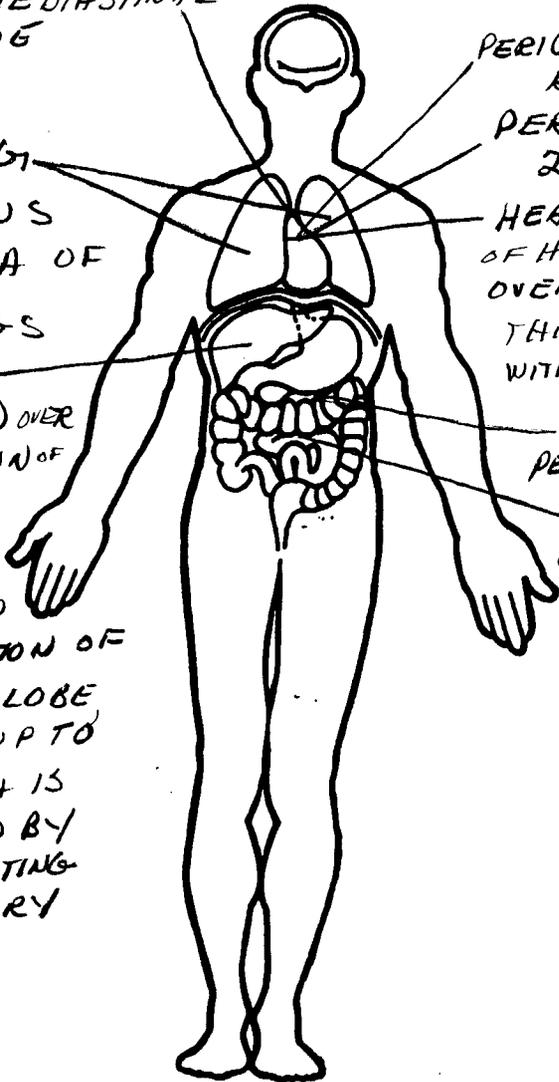
3CM. LAC. ON MEDIAL PORTION OF ANTERIOR ⓑ LOBE INFERIORLY, UP TO 2CM DEEP, + IS SURROUNDED BY LIVER EXHIBITING CRUSH INJURY

PERICARDIUM HAS PERFORATION ANTERIORLY
PERICARDIUM CONTAINS 250 ML OF BLOOD

HEART - 1CM LONG LACERATION OF HEART ON ANTERIOR SURFACE OVER ANTERIOR SEPTUM, THIS DEFECT COMMUNICATES WITH BOTH ⓐ + ⓑ VENTRICLES

400ML BLOOD IN PERITONEAL CAVITY

HEMORRHAGE IN THE OMENTUM AND MESENTERY





UPDATE FORM

1. Primary Sampling Unit Number 41

2. Case Number — Stratum 024 A

3. Vehicle Number 01

4. Occupant Number 01

RECEIVED 1996

Driver or Occupant Name: _____

Address: _____

Other Information: _____

(Sanitize this section prior to Update submission.)

STATUS OF OCCUPANT INFORMATION

	INITIAL SUBMISSION	UPDATED INFORMATION
OAL08. Date Official Medical Data Requested	_____	<u>96</u>
OAL09. Date Official Medical Data Obtained	_____	<u>96</u>
OAL16. Injury Treatment Status	<u>99</u>	_____
OAL17. Injury Information	_____	_____
Official		
a. Autopsy (invasive examination)	<u>B 08</u>	<u>011</u>
b. Post-ER medical record which includes information about death based on non-invasive examination	<u>B</u>	_____
c. Admission record/summary or admission/discharge face sheet	<u>B</u>	_____
d. Discharge summary	<u>B</u>	_____
e. Operative report	<u>B</u>	_____
f. Radiographic record(s) (X-ray, CT scan)	<u>B</u>	_____
g. History and physical examination and/or consultation records	<u>B</u>	_____
h. Emergency room records (includes nurses' notes)	<u>B 08</u>	_____
j. Private physician	<u>B</u>	_____
Unofficial		
k. Lay coroner	<u>B</u>	_____
l. EMS record	<u>B</u>	_____
m. Interviewee	<u>B</u>	_____
n. Other source (specify): _____	<u>B</u>	<u>B</u>
o. Police report	<u>B</u>	<u>B</u>

	INITIAL SUBMISSION	UPDATED INFORMATION
OAL18. Medical Facility Code	<u>02</u>	_____
GV14. Alcohol Test Results For Driver	<u>96</u>	_____
GV16. Other Drug Specimen Test Type For Driver	<u>0</u>	_____
OA05. Occupant's Age	<u>79</u>	_____
OA06. Occupant's Sex	<u>1</u>	_____
OA07. Occupant's Height	<u>999</u>	_____
OA08. Occupant's Weight	<u>999</u>	_____
OA61. Treatment-Mortality	<u>1</u>	_____
OA62. Type of Medical Facility (for Initial Treatment)	<u>9</u>	_____
OA63. Hospital Stay	<u>00</u>	_____



UPDATE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

<p>1. Primary Sampling Unit Number <u>41</u></p> <p>2. Case Number – Stratum <u>024A</u></p> <p>3. Vehicle Number <u>01</u></p> <p>4. Occupant Number <u>1996 01</u></p> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">RECEIVED</p>	<p>Driver or Occupant Name: _____</p> <p>Address: _____</p> <p>Other Information: _____</p> <p style="text-align: center; font-style: italic;">(Sanitize this section prior to Update submission.)</p>
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STATUS OF OCCUPANT INFORMATION

	INITIAL SUBMISSION	UPDATED INFORMATION		INITIAL SUBMISSION	UPDATED INFORMATION
OAL08. Date Official Medical Data Requested		<u>96</u>	OAL18. Medical Facility Code	<u>97</u>	<u>02</u>
OAL09. Date Official Medical Data Obtained		<u>96</u>	GV14. Alcohol Test Results For Driver	---	---
OAL16. Injury Treatment Status	<u>3</u>	---	GV16. Other Drug Specimen Test Type For Driver	---	---
OAL17. Injury Information			OA05. Occupant's Age	---	---
<u>Official</u>			OA06. Occupant's Sex	---	---
a. Autopsy (invasive examination)	<u>B 011</u>	---	OA07. Occupant's Height	---	---
b. Post-ER medical record which includes information about death based on non-invasive examination	<u>B</u>	---	OA08. Occupant's Weight	---	---
c. Admission record/summary or admission/discharge face sheet	<u>B</u>	---	OA61. Treatment-Mortality	---	---
d. Discharge summary	<u>B</u>	---	OA62. Type of Medical Facility (for Initial Treatment)	---	---
e. Operative report	<u>B</u>	---	OA63. Hospital Stay	---	---
f. Radiographic record(s) (X-ray, CT scan)	<u>B</u>	---			
g. History and physical examination and/or consultation records	<u>B</u>	---			
h. Emergency room records (includes nurses' notes)	<u>B 08</u>	<u>011</u>			
j. Private physician	<u>B</u>	---			
<u>Unofficial</u>					
k. Lay coroner	<u>B</u>	---			
l. EMS record	<u>B</u>	---			
m. Interviewee	<u>B</u>	---			
n. Other source (specify):	<u>B</u>	<u>B</u>			
o. Police report	<u>B</u>	<u>B</u>			

PRECRASH ENVIRONMENTAL DATA	
<p>19. Relation To Interchange Or Junction <u>2</u></p> <p>(0) Non-interchange area and non-junction (1) Interchange area related</p> <p><i>Non-Interchange junctions</i> (2) Intersection related (3) Driveway, alley access related (4) Other junction (specify) _____ (5) Unknown type of junction (9) Unknown</p>	<p>25. Roadway Surface Condition <u>1</u></p> <p>(1) Dry (2) Wet (3) Snow or slush (4) Ice (5) Sand, dirt, or oil (8) Other (specify): _____ (9) Unknown</p>
<p>20. Trafficway Flow <u>0</u></p> <p>(0) Not physically divided (two way traffic) (1) Divided trafficway-median strip without positive barrier (2) Divided trafficway-median strip with positive barrier (3) One way traffic (9) Unknown</p>	<p>26. Light Conditions <u>1</u></p> <p>(1) Daylight (2) Dark (3) Dark, but lighted (4) Dawn (5) Dusk (9) Unknown</p>
<p>21. Number Of Travel Lanes <u>2</u></p> <p>(1) One (2) Two (3) Three (4) Four (5) Five (6) Six (7) Seven or more (9) Unknown</p>	<p>27. Atmospheric Conditions <u>0</u></p> <p>(0) No adverse atmospheric-related driving conditions (1) Rain (2) Sleet/hail (3) Snow (4) Fog (5) Rain and fog (6) Sleet and fog (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): _____ (9) Unknown</p>
<p>22. Roadway Alignment <u>1</u></p> <p>(1) Straight (2) Curve right (3) Curve left (9) Unknown</p>	<p>28. Traffic Control Device <u>2</u></p> <p>(0) No traffic control(s) (1) Traffic control signal (not RR crossing)</p> <p><i>Regulatory</i> (2) Stop sign (3) Yield sign (4) School zone sign (5) Other regulatory sign (specify): _____ (6) Warning sign (not RR crossing) (7) Unknown sign (8) Miscellaneous/other controls including RR controls (specify): _____ (9) Unknown</p>
<p>23. Roadway Profile <u>1</u></p> <p>(1) Level (2) Uphill grade (> 2%) (3) Hill crest (4) Downhill grade (> 2%) (5) Sag (9) Unknown</p>	<p>29. Traffic Control Device Functioning <u>2</u></p> <p>(0) No traffic control device (1) Traffic control device not functioning (specify): _____ (2) Traffic control device functioning properly (9) Unknown</p>
<p>24. Roadway Surface Type <u>2</u></p> <p>(1) Concrete (2) Bituminous (asphalt) (3) Brick or block (4) Slag, gravel, or stone (5) Dirt (8) Other (specify): _____ (9) Unknown</p>	

OCCUPANT RELATED

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

AIR BAG RELATED

40. Is this an AOPS Vehicle? 1
 (0) No (includes unknown)
 (1) Yes - researcher determined
 (2) VIN determined air bag system
 (3) VIN determined automatic (passive) belts
 (4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 6
 (0) Not equipped or not available
 (1) No air bags deployed
Single Air Bag Vehicle
 (2) Driver air bag deployed
 (3) Driver air bag, unknown if deployed
Multiple Air Bag Vehicle
 (4) Driver side only deployed
 (5) Passenger side only deployed
 (6) Driver and passenger side deployed
 (7) Driver and passenger side unknown if deployed
 (8) Air bag(s) deployed, details unknown
 (9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0
 (0) Not equipped with an "other" air bag
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

Specify type of "other" air bag present: _____

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight 1,250
 Code weight to nearest 10 kilograms.
 (045) Less than 454 kilograms
 (612) 6,124 kilograms or more
 (999) *Unknown
 _____ lbs X .4536 = 1,254 kgs

Source: _____

44. Vehicle Cargo Weight 0,000
 Code weight to nearest 10 kilograms.
 (000) Less than 5 kilograms
 (454) 4,536 kilograms or more
 (999) Unknown
 _____ lbs X .4536 = _____ kgs

Source: _____

ROLLOVER DATA

45. Rollover 00
 (00) No rollover (no overturning)
Rollover (primarily about the longitudinal axis)
 (01-16) Code the number of quarter turns
 (17) Rollover, 17 or more quarter turns (specify): _____
 (98) Rollover--end-over-end (i.e., primarily about the lateral axis)
 (99) Rollover (overturn), details unknown
46. Rollover Initiation Type 00
 (00) No rollover
 (01) Trip-over
 (02) Flip-over
 (03) Turn-over
 (04) Climb-over
 (05) Fall-over
 (06) Bounce-over
 (07) Collision with another vehicle
 (08) Other rollover initiation type specify): _____
 (98) Rollover--end-over-end
 (99) Unknown rollover initiation type
47. Location of Rollover Initiation 0
 (0) No rollover
 (1) On roadway
 (2) On shoulder--paved
 (3) On shoulder--unpaved
 (4) On roadside or divided trafficway median
 (8) Rollover--end-over-end
 (9) Unknown
48. Rollover Initiation Object Contacted 00
 (Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0
 (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify): _____
 (6) Non-contact rollover forces (specify): _____
 (8) Rollover--end-over-end
 (9) Unknown
50. Direction of Initial Roll 0
 (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (8) Rollover--end-over-end
 (9) Unknown roll direction

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

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

Noncollision

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

Collision With Fixed Object

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

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

Nonbreakaway Pole or Post

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

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

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

- (69) Unknown fixed object

Collision with Nonfixed Object

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

- (89) Unknown nonfixed object

- (98) Other event (specify):

- (99) Unknown event or object



EXTERIOR VEHICLE FORM

1. Primary Sampling Unit Number <u>41</u>	3. Vehicle Number <u>02</u>
2. Case Number - Stratum <u>024A</u>	

VEHICLE IDENTIFICATION

VIN JHM B B 1 1 7 3 S XXXXXXXXXX Model Year 95

Vehicle Make (specify): Honda Vehicle Model (specify): Prolete

LOCATOR

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

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
<u>1</u>	<u>Full Frontal</u>	<u>Full Frontal</u>	<u>C-2</u>
<u>2</u>	<u>Starts 88 Forward LRA</u>	<u>Starts 66 Forward LRA</u>	<u>C-4</u>

CRUSH PROFILE IN CENTIMETERS

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

Measure 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 ₁	C ₂	C ₃	C ₄	C ₅	C ₆	±D
		Width (CDC)	Max Crush								
<u>1</u>	<u>BUMPER</u>	<u>138</u>	<u>C-2</u>	<u>138</u>	<u>33</u>	<u>35</u>	<u>27</u>	<u>22</u>	<u>20</u>	<u>26</u>	<u>0</u>
	<u>Free Space</u>				<u>20</u>	<u>8</u>	<u>3</u>	<u>3</u>	<u>8</u>	<u>20</u>	
	<u>Actual crush</u>		<u>OK</u>		<u>13</u>	<u>27</u>	<u>24</u>	<u>19</u>	<u>12</u>	<u>6</u>	
<u>2</u>	<u>UPPER DOOR</u>	<u>30</u>	<u>C-4</u>	<u>67</u>	<u>1</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>3</u>	<u>2</u>	<u>-6</u>
	<u>Free Space</u>				<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
	<u>Actual crush</u>				<u>0</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>2</u>	<u>1</u>	

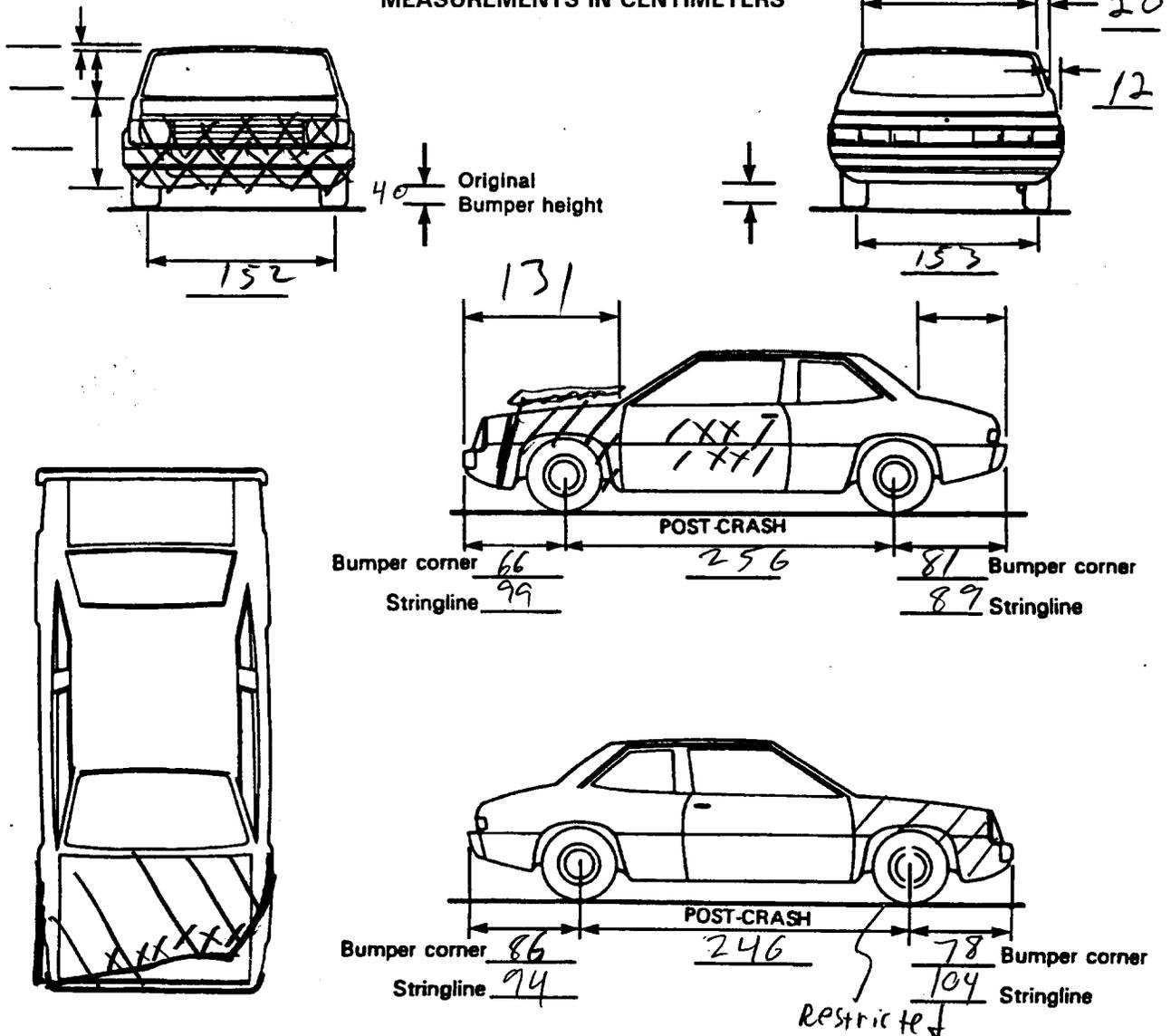
ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	_____.	inches	x	2.54	=	_____	cm
Overall Length	_____.	inches	x	2.54	=	_____	cm
Maximum Width	_____.	inches	x	2.54	=	_____	cm
Curb Weight	_____,_____	pounds	x	.4536	=	_____,_____	kg
Average Track	_____.	inches	x	2.54	=	_____	cm
Front Overhang	_____.	inches	x	2.54	=	_____	cm
Rear Overhang	_____.	inches	x	2.54	=	_____	cm
Undeformed End Width	_____.	inches	x	2.54	=	_____	cm
Engine Size: cyl./displ.	_____	cc	x	.001	=	____.	L
	_____	CID	x	.0164	=	____.	L

VEHICLE DAMAGE SKETCH

<p>TIRE—WHEEL DAMAGE</p> <p>a. Rotation physically restricted</p> <p>RF <u>1</u> LF <u>2</u> RR <u>2</u> LR <u>2</u></p> <p>b. Tire deflated</p> <p>RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u></p> <p>(1) Yes (2) No (8) NA (9) Unk.</p>	<p>ORIGINAL SPECIFICATIONS</p> <p>Wheelbase <u>100.4</u> <u>255</u> cm</p> <p>Overall Length <u>174.8</u> <u>444</u> cm</p> <p>Maximum Width <u>69.5</u> <u>177</u> cm</p> <p>Curb Weight <u>2765</u> <u>1254</u> kg</p> <p>Average Track <u>59.8</u> <u>152</u> cm</p> <p>Front Overhang <u>Field</u> <u>104</u> cm</p> <p>Rear Overhang <u>Field</u> <u>92</u> cm</p> <p>Undeformed End Width <u>144</u> cm</p> <p>Engine Size: cyl./displ. <u>4/2.3</u> L</p>	<p>WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only)</p> <p>RF <u>20</u> ° LF ± _____ ° RR ± _____ ° LR ± _____ °</p> <p>Within ± 5 degrees</p>
<p>TYPE OF TRANSMISSION</p> <p><input checked="" type="checkbox"/> Manual <input type="checkbox"/> Automatic</p> <p>END SHIFT ≥ 10 CM</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>DRIVE WHEELS</p> <p><input type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD</p>	<p>Approximate Cargo Weight <u>Field</u> kg</p>

MEASUREMENTS IN CENTIMETERS



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

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

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

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

Second Highest Delta "V"

12. <u>02</u>	13. <u>01</u>	14. <u>09</u>	15. <u>L</u>	16. <u>P</u>	17. <u>M</u>	18. <u>W</u>	19. <u>01</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 ₁	C ₂	C ₃	C ₄	C ₅	C ₆	22. ±D
<u>144</u>	<u>013</u>	<u>027</u>	<u>024</u>	<u>019</u>	<u>012</u>	<u>006</u>	<u>±000</u>

Second Highest Delta "V"

23. L	24. C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	25. ±D
<u>067</u>	<u>000</u>	<u>002</u>	<u>003</u>	<u>004</u>	<u>002</u>	<u>001</u>	<u>0006</u>

26. Undeformed End Width
(Coded when highest severity impact is an end plane impact.)
Code to the nearest centimeter
(250) 250 centimeters or more
(998) No highest severity end plane impact
(999) Unknown

144

27. Direct Damage Width
(For highest severity impact)
Code to the nearest centimeter
(250) 250 centimeters or more
(999) Unknown

138

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

255

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

152

FUEL SYSTEM

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

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

- 32. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? 0
 (0) No post manufacturer modifications
 (1) Yes - post manufacturer modifications (specify): _____

 (Include photograph of CERTIFICATION PLACARD in case report)
 (9) Unknown if vehicle is modified

- 35. Location of Fuel Tank-1 Filler Cap 2
- 36. Location of Fuel Tank-2 Filler Cap 2
 (0) No fuel tank
 (1) On back plane
 (2) Aft of center of the rear wheels (rear axle) on left side plane
 (3) Aft of center of the rear wheels (rear axle) on right side plane
 (4) Forward of center of the rear wheels (rear axle) on left side plane
 (5) Forward of center of the rear wheels (rear axle) on right side plane
 (6) Over the center of the rear wheels (rear axle) on left side plane
 (7) Over the center of the rear wheels (rear axle) on right side plane
 (8) Other (specify): _____
 (9) Unknown

- 37. Type of Fuel Tank-1 1
- 38. Type of Fuel Tank-2 0
 (0) No fuel tank (electrical vehicle)
 (1) Metallic
 (2) Non-metallic
 (9) Unknown

FIRE OCCURRENCE

- 33. Fire Occurrence 0
 (0) No fire

 Yes, fire occurred
 (1) Minor
 (2) Major
 (9) Unknown

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

 (9) Unknown

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

- 41. Damage to Fuel Tank-1 1
- 42. Damage to Fuel Tank-2 0
 (0) No fuel tank
 (1) No damage to fuel tank
 (2) Deformed, no seam failure
 (3) Deformed, with a seam failure
 (4) Punctured
 (5) Lacerated (ripped)
 (6) Abraded (scraped)
 (7) Filler neck separation from the fuel tank
 (8) Other damage (specify): _____
 (9) Unknown

43. Leakage Location of Fuel System-1 1

44. Leakage Location of Fuel System-2 0

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

Primary Area Of Leakage

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

45. Fuel Type-1 01

46. Fuel Type-2 00

Single Fuel Type

(00) No fuel tank
(01) Gasoline
(02) Diesel
(03) CNG (Compressed Natural Gas)
(04) LPG (Liquid Petroleum Gas) also known as Propane
(05) LNG (Liquid Natural Gas)
(06) Methanol (M100 or M85)
(07) Ethanol (E100 or E85)
(08) Other (Hydrogen or others) (specify): _____

Electric Powered or Electric/Solar Powered Vehicles

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

(98) Other Hybrid (specify): _____

(99) Unknown fuel type

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

(0) No (one or two tanks only)

Yes - More Than Two Tanks

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

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

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

(9) Unknown if more than two tanks

COMMENTS

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

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number 41
 2. Case Number - Stratum 024A
 3. Vehicle Number 02

INTEGRITY

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

Yes, Integrity Was Lost Through

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

 (99) Unknown

Door, Tailgate or Hatch Opening

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

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

 (9) Unknown

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

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

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

Door, Tailgate or Hatch Came Open During Collision

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

 (9) Unknown

GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 4 17. RF 4 18. LR 4 19. RR 4
 20. BL 4 21. Roof 0 22. Other 0

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

- (9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 4 26. LR 1 27. RR 1
 28. BL 1 29. Roof 0 30. Other 0

- (0) No glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (7) Glazing removed prior to accident
- (9) Unknown

Handwritten note:
 Was checked
 1st Edition 10
 2nd Edition

Glazing Damage from Impact Forces

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

- (0) No glazing
- (1) No glazing damage from impact forces
- (2) Glazing in place and cracked from impact forces
- (3) Glazing in place and holed from impact forces
- (4) Glazing out-of-place (cracked or not) and not holed from impact forces
- (5) Glazing out-of-place and holed from impact forces
- (6) Glazing disintegrated from impact forces
- (7) Glazing removed prior to accident
- (9) Unknown if damaged

Glazing Damage from Occupant Contact

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

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

OCCUPANT AREA INTRUSION

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

INTRUDING COMPONENT

Interior Components

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

Exterior Components

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

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

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

LOCATION OF INTRUSION

- | | |
|--|---|
| <p>Front Seat</p> <ul style="list-style-type: none"> (11) Left (12) Middle (13) Right <p>Second Seat</p> <ul style="list-style-type: none"> (21) Left (22) Middle (23) Right <p>Third Seat</p> <ul style="list-style-type: none"> (31) Left (32) Middle (33) Right | <p>Fourth Seat</p> <ul style="list-style-type: none"> (41) Left (42) Middle (43) Right <p>(97) Catastrophic</p> <p>(98) Other enclosed area (specify) _____</p> <p>(99) Unknown</p> |
|--|---|

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

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

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

STEERING COLUMN

INSTRUMENT PANEL

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

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

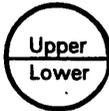
89. Telescoping Steering Column Adjustment 0
 (0) No telescoping steering column
 (1) Full back
 (2) Between full back and midpoint
 (3) Midpoint
 (4) Between midpoint and full forward
 (5) Full forward
 (9) Unknown

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

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

Quarter Sections

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



Half Sections

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



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

92. Odometer Reading 999,000
 _____ kilometers
 Code to the nearest 1,000 kilometers
 (000) No odometer
 (001) Less than 1,500 kilometers
 (500) 499,500 kilometers or more
 (999) Unknown
 _____ miles X 1.6093 = _____ kilometers

Source: _____

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

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

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

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

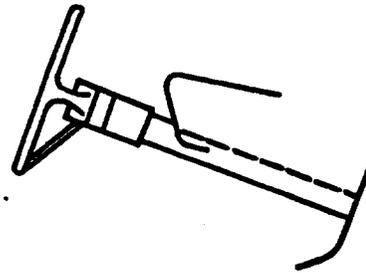
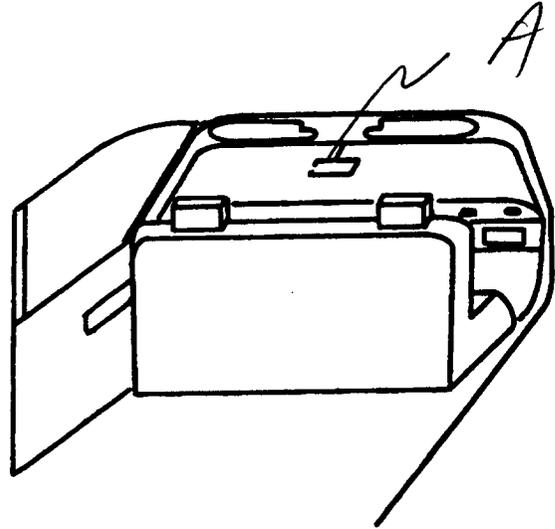
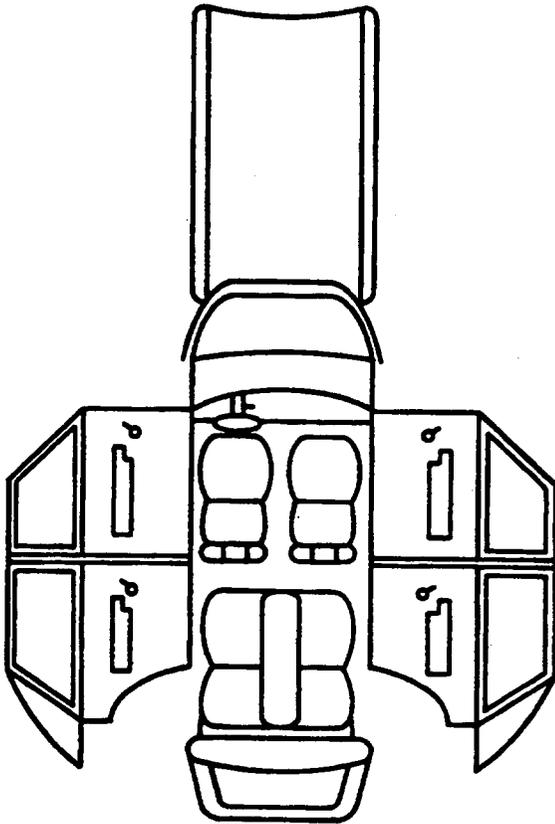
97. Adaptive (Assistive) Driving Equipment 0
 (0) No adaptive driving equipment
 (1) Adaptive driving equipment installed (Check all that apply.)

- Hand controls for braking/acceleration
- Steering control devices (attached to OEM steering wheel)
- Steering knob attached to steering wheel
- Low effort power steering (unit or device)
- Replacement steering wheel (i.e., reduced diameter)
- Joy-stick steering controls
- Wheelchair tie-downs
- Modification to seat belts (specify): _____
- Additional or relocated switches (specify): _____
- Raised roof
- Wall-mounted head rest (used behind wheelchair)
- Other adaptive device (specify): _____

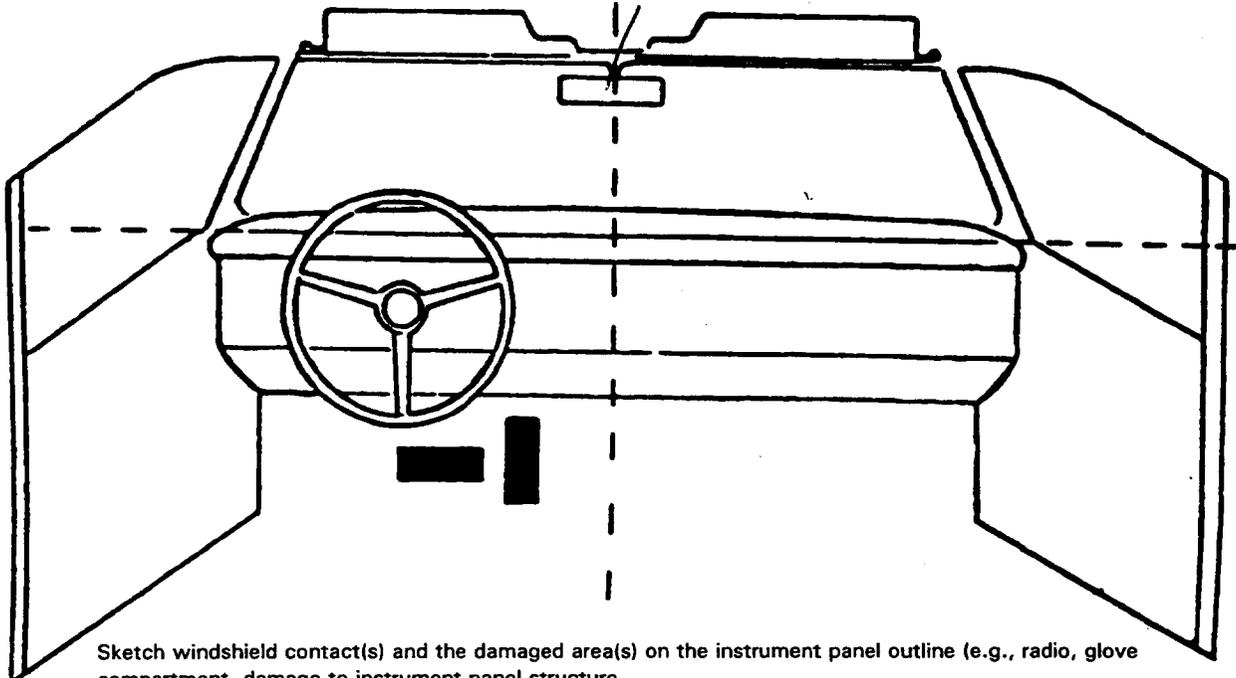
(9) Unknown _____

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



wheels
came off



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	002	1	head	knocked off	3
B					
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

CODES FOR INTERIOR COMPONENTS

FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object, (specify): _____
- (019) Other front object (specify): _____

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): _____
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): _____

RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests
- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): _____
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): _____

INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): _____
- (155) Head restraint system
- (160) Other occupants (specify): _____
- (161) Interior loose objects
- (162) Child safety seat (specify): _____
- (163) Other interior object (specify): _____

AIR BAG

- (170) Air bag-driver side
- (175) Air bag compartment cover-driver side
- (180) Air bag-passenger side
- (185) Air bag compartment cover-passenger side
- (190) Other air bag (specify) _____
- (195) Other air bag compartment cover (specify) _____

ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): _____

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): _____
- (409) Additional or relocated switches, (specify): _____
- (410) Raised roof
- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): _____

CONFIDENCE LEVEL OF CONTACT POINT

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

MANUAL RESTRAINTS

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

If a child safety seat is present, encode the data on the back of this page 11.

If the vehicle has automatic restraints available, encode the appropriate data on page 6.

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

A-Manual (Active) Belt System Availability

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

- Integral Belt Partially Destroyed*
- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): _____
- (9) Unknown

B/C-Manual (Active) Belt System Use

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

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

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

D-Proper Use of Manual (Active) Belts

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

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

E-Manual (Active) Belt Failure Modes During Accident

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

F-Shoulder Belt Upper Anchorage Adjustment

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

- Adjustable shoulder Belt Upper Anchorage*
- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

AUTOMATIC RESTRAINTS

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

AIR BAGS

		Frontal Air Bags--Left Front	Frontal Air Bags-Right Front	Other Air Bag
F I R S T	Availability/Function	1	1	X
	Deployment	1	1	X
	Failure	1	1	X

Air Bag System Availability/Function	Air Bag System Deployment (This Occupant Position)	Are There Indications of Air Bag System Failure? (This Occupant Position)
(0) Not equipped/not available	(0) Not equipped/not available	(0) Not equipped/not available
(1) Air bag	(1) Deployed during accident (as a result of impact)	(1) No
<i>Non-functional</i>	(2) Deployed inadvertently just prior to accident	(2) Yes (specify): _____
(2) Air bag disconnected (specify): _____	(3) Deployed, accident sequence undetermined	(9) Unknown
(3) Air bag not reinstalled	(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)	
(9) Unknown	(5) Unknown if deployed	
	(7) Nondeployed	
	(9) Unknown	

AUTOMATIC BELTS

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

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

FIRST SEAT FRONTAL AIR BAGS

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

	Driver	Passenger
A-Type of air bag?	1	1
B-Flaps open at tear points?	2	2
C-Flaps damaged?	1	1
D-Air bag damaged?	01	01
E-Source of air bag damage	01	01
F-Air bag tethered?	2	1
G-Air bag have vent ports?	2	2
H-Other occupant contact air bag?	1	1
I-Occupant wearing eyewear?	4	4

A-Type of Air Bag

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

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

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

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

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

D-Was There Damage To The Air Bag?

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

Yes - Air Bag Damage

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

(95) Damaged, details unknown

- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

E-Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):

(95) Damaged, unknown source

- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

F-Was The Air Bag Tethered?

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

G-Did The Air Bag Have Vent Ports?

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

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

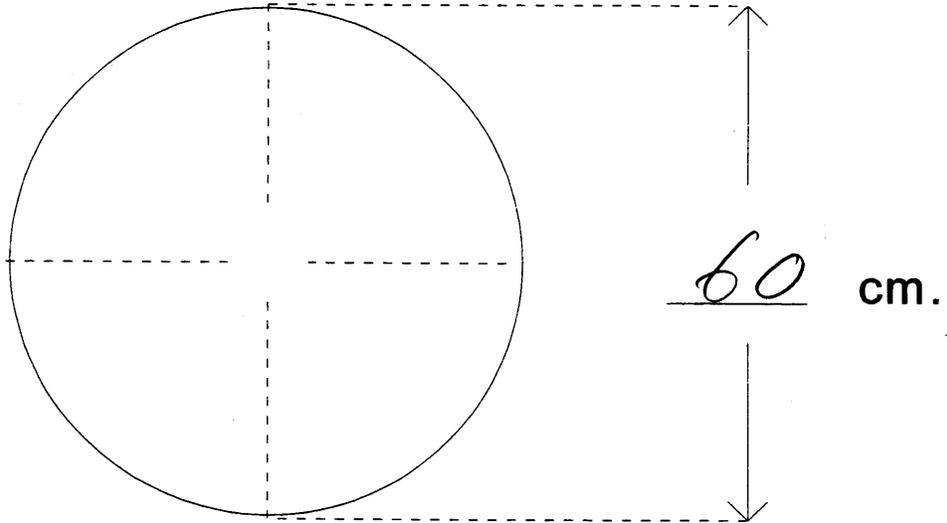
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

I-Was This Occupant Wearing Eye-wear?

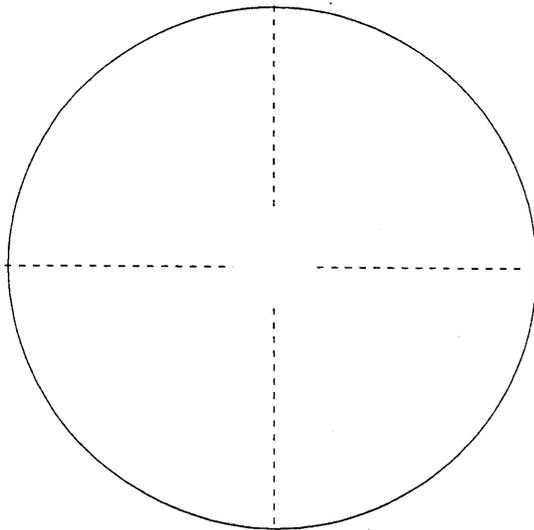
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

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



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

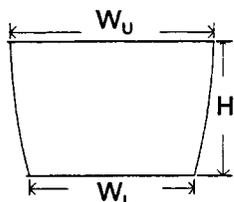


DRIVER AIR BAG SKETCHES (Cont'd)

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

width (W_U) _____ width (W_L) _____

height (H) _____

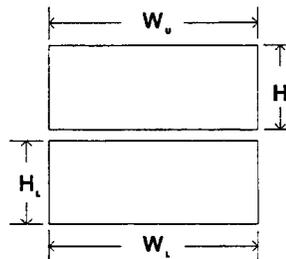


4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap b. Lower Flap

width (W_U) 14 width (W_L) 14

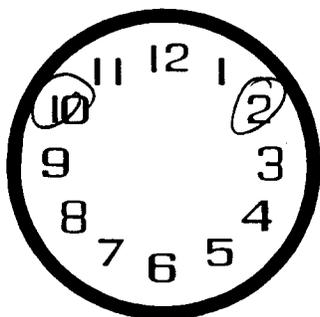
height (H_U) 14 height (H_L) 6



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

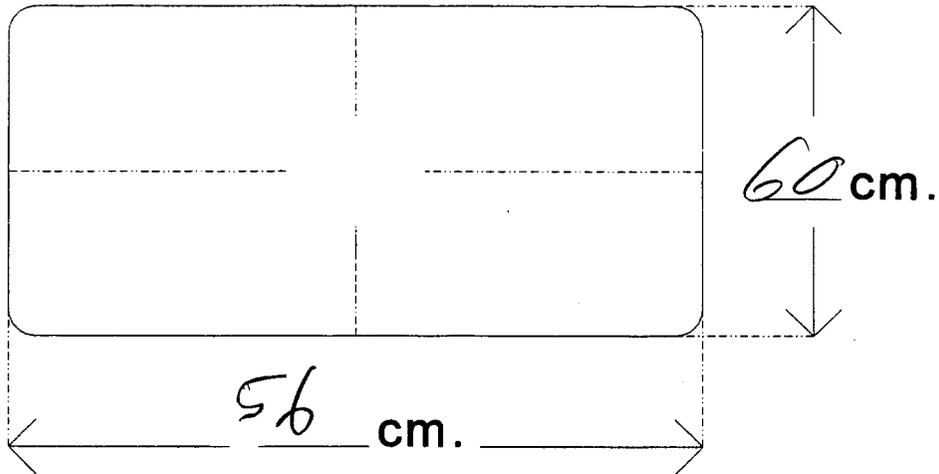
6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS

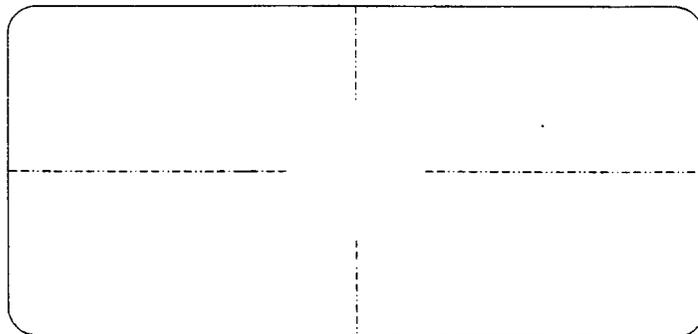


PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

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



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

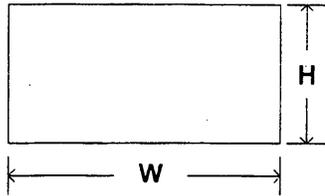


PASSENGER AIR BAG SKETCHES (Cont'd)

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

width (W) _____

height (H) _____



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

a. Upper Flap

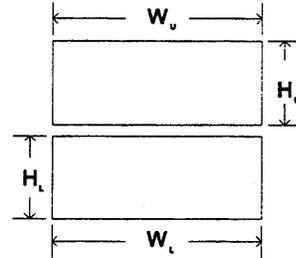
b. Lower Flap

width (W_U) _____

width (W_L) _____

height (H_U) _____

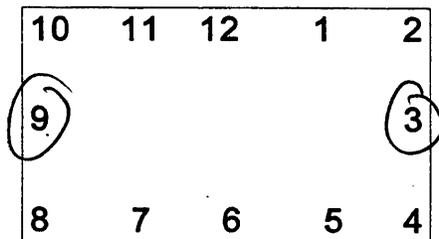
height (H_L) _____



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

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES

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

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

"OTHER" AIR BAG SKETCHES (Cont'd)

3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG

4. SKETCH AIR BAG VENT PORTS

HEAD RESTRAINTS/SEAT EVALUATION

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

		Left	Center	Right
F I R S T	A-Head Restraint Type/Damage	1	0	1
	B-Seat Type	02	00	02
	C-Seat Orientation	1	0	1
	D-Seat Track Position	6	0	5
	E-Seat Back Incline Pre/Post Impact	23	00	23
	F-Seat Performance	1	0	1
S E C O N D	A-Head Restraint Type/Damage	0	0	0
	B-Seat Type	03	03	03
	C-Seat Orientation	1	1	1
	D-Seat Track Position	1	1	1
	E-Seat Back Incline Pre/Post Impact	01	01	01
	F-Seat Performance	1	1	1
T H I R D	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
O T H E R	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

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

HEAD RESTRAINTS/SEAT EVALUATION

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

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

B-Seat Type (this Occupant Position)

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

C-Seat Orientation (this Occupant Position)

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

D-Seat Track Adjusted Position Prior To Impact

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

Adjustable Seat Track

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

E-Seat Back Incline Prior and Post Impact

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

Upright prior to impact

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

Slightly reclined prior to impact

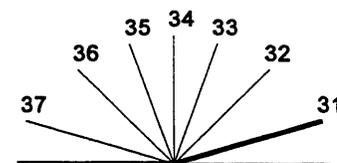
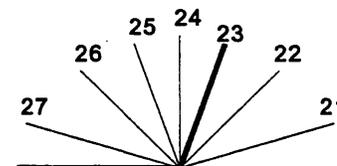
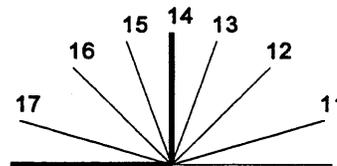
- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

Completely reclined prior to impact

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

F-Seat Performance (this Occupant Position)

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



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

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

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

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation
- Designed for Forward Facing for This Age/Weight
- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation
- Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight
- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation
- (99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

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

6. Child Safety Seat Make/Model
(Specify make/model and occupant number)

EJECTION/ENTRAPMENT DATA

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

EJECTION No [] Yes []

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

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

Ejection

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

Ejection Area

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

(7) Roof

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

(9) Unknown _____

Ejection Medium

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

(5) Integral structure

- (8) Other medium (specify):

(9) Unknown _____

Medium Status (Immediately Prior to Impact)

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

ENTRAPMENT No [] Yes []

Describe entrapment mechanism: _____

Component(s): _____

(Note on vehicle interior sketch)



OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number 41
 2. Case Number - Stratum 024A
 3. Vehicle Number 02
 4. Occupant Number 01

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 33
 Code actual age at time of accident.
 (00) Less than one year old (specify by month):

 (97) 97 years and older
 (99) Unknown

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

7. Occupant's Height 180
 Code actual height to the nearest
 centimeter.
 (999) Unknown
 _____ inches X 2.54 = _____ centimeters

8. Occupant's Weight 092
 Code actual weight to the nearest
 kilogram.
 (999) Unknown
 _____ pounds X .4536 = _____ kilograms

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

OCCUPANT'S SEATING

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

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

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

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

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

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

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

EJECTION/ENTRAPMENT

12. Ejection 0

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

13. Ejection Area 0

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

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

- (5) Integral structure
- (8) Other medium (specify):

- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

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

16. Entrapment 0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.
(specify): _____
- (9) Unknown

17. Occupant Mobility 4

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

BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4
- (0) None available
 - (1) Belt removed/destroyed
 - (2) Shoulder belt
 - (3) Lap belt
 - (4) Lap and shoulder belt
 - (5) Belt available—type unknown
- Integral Belt Partially Destroyed*
- (6) Shoulder belt (lap belt destroyed/removed)
 - (7) Lap belt (shoulder belt destroyed/removed)
 - (8) Other belt (specify): _____
 - (9) Unknown
19. Manual (Active) Belt System Use 04
- (00) None used, not available, or belt removed/destroyed
 - (01) Inoperative (specify): _____
 - (02) Shoulder belt
 - (03) Lap belt
 - (04) Lap and shoulder belt
 - (05) Belt used—type unknown
 - (08) Other belt used (specify): _____
 - (12) Shoulder belt used with child safety seat
 - (13) Lap belt used with child safety seat
 - (14) Lap and shoulder belt used with child safety seat
 - (15) Belt used with child safety seat—type unknown
 - (18) Other belt used with child safety seat (specify): _____
 - (99) Unknown if belt used
20. Proper Use of Manual (Active) Belts 1
- (0) None used or not available
 - (1) Belt used properly
 - (2) Belt used properly with child safety seat
- Belt Used Improperly*
- (3) Shoulder belt worn under arm
 - (4) Shoulder belt worn behind back or seat
 - (5) Belt worn around more than one person
 - (6) Lap belt worn on abdomen
 - (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
 - (8) Other improper use of manual belt system (specify): _____
 - (9) Unknown
21. Manual (Active) Belt Failure Modes During Accident —
- (0) No manual belt used or not available
 - (1) No manual belt failure(s)
 - (2) Torn webbing (stretched webbing not included)
 - (3) Broken buckle or latchplate
 - (4) Upper anchorage separated
 - (5) Other anchorage separated (specify): _____
 - (6) Broken retractor
 - (7) Combination of above (specify): _____
 - (8) Other manual belt failure (specify): _____
 - (9) Unknown

22. Manual Shoulder Belt Upper Anchorage Adjustment 1
- (0) No manual shoulder belt
 - (1) No upper anchorage adjustment for manual shoulder belt
- Adjustable shoulder Belt Upper Anchorage*
- (2) In full up position
 - (3) In mid position
 - (4) In full down position
 - (5) Position unknown
 - (9) Unknown if position has adjustable upper anchorage adjustment 0
23. Automatic (Passive) Belt System Availability/Function 0
- (0) Not equipped/not available
 - (1) 2 point automatic belts
 - (2) 3 point automatic belts
 - (3) Automatic belts - type unknown
- Non-functional*
- (4) Automatic belts destroyed or rendered inoperative
 - (9) Unknown
24. Automatic (Passive) Belt System Use 0
- (0) Not equipped/not available/destroyed or rendered inoperative
 - (1) Automatic belt in use
 - (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
 - (3) Automatic belt use unknown
 - (9) Unknown
25. Automatic (Passive) Belt System Type 0
- (0) Not equipped/not available
 - (1) Non-motorized system
 - (2) Motorized system
 - (9) Unknown
26. Proper Use of Automatic (Passive) Belt System 0
- (0) Not equipped/not available/not used
 - (1) Automatic belt used properly
 - (2) Automatic belt used properly with child safety seat
- Automatic Belt Used Improperly*
- (3) Automatic shoulder belt worn under arm
 - (4) Automatic shoulder belt worn behind back
 - (5) Automatic belt worn around more than one person
 - (6) Lap portion of automatic belt worn on abdomen
 - (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
 - (8) Other improper use of automatic belt system (specify): _____
 - (9) Unknown
27. Automatic (Passive) Belt Failure Modes During Accident —
- (0) Not equipped/not available/not in use
 - (1) No automatic belt failure(s)
 - (2) Torn webbing (stretched webbing not included)
 - (3) Broken buckle or latchplate
 - (4) Upper anchorage separated
 - (5) Other anchorage separated (specify): _____
 - (6) Broken retractor
 - (7) Combination of above (specify): _____
 - (8) Other automatic belt failure (specify): _____
 - (9) Unknown

POLICE REPORTED RESTRAINT USE	AIR BAG SYSTEM FUNCTION
<p>28. Police Reported Belt Use 5</p> <p>(0) None used (1) Police did not indicate belt use (2) Shoulder belt (3) Lap belt (4) Lap and shoulder belt (5) Belt used, type not specified (6) Child safety seat (7) Automatic belt (8) Other type belt, (specify): _____</p> <p>(9) Police indicated "unknown"</p>	<p>30. Frontal Air Bag System Availability/Function (This Occupant Position) 1</p> <p>(0) Not equipped/not available (1) Air bag <i>Non-functional</i> (2) Air bag disconnected (specify): _____</p> <p>(3) Air bag not reinstalled (9) Unknown</p>
<p>29. Police Reported Air Bag Availability/Function 4</p> <p>(0) No air bag available (1) Police did not indicate air bag availability/function (2) Deployed (3) Not deployed (4) Unknown if deployed (9) Police indicated "unknown"</p>	<p>31. Frontal Air Bag System Deployment (This Occupant Position) 1</p> <p>(0) Not equipped/not available (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, details unknown (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown</p>
<p>Check the Primary Source Used In Determining Belt Use.</p> <p><input checked="" type="checkbox"/> Vehicle inspection <input type="checkbox"/> Official injury data <input type="checkbox"/> Driver/occupant interview <input type="checkbox"/> Other (specify): _____</p> <p><input type="checkbox"/> Unknown if belt used _____ _____ _____ _____</p>	<p>32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0</p> <p>(0) Not equipped/not available (1) Air bag <i>Non-functional</i> (2) Air bag disconnected (specify): _____</p> <p>(3) Air bag not reinstalled (9) Unknown <i>Specify type of "other" air bag present:</i> _____</p>
	<p>33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0</p> <p>(0) Not equipped with an "other" air bag (1) Deployed during accident (as a result of impact) (2) Deployed inadvertently just prior to accident (3) Deployed, details unknown (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical) (5) Unknown if deployed (7) Nondeployed (9) Unknown</p>
	<p>34. Are There Indications of Air Bag System Failure? (This Occupant Position) 1</p> <p>(0) Not equipped/not available (1) No (2) Yes (specify): _____</p> <p>(9) Unknown</p>

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1

- (0) Not equipped/not available
 (1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)
 (3) One previous accident with deployment
 (4) More than one previous accident with at least one deployment
 (8) Previous accidents, unknown deployment status
 (9) Unknown

36. Type of Air Bag 1

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

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? +

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

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01

- (00) Not equipped/not available
 _____ Code the accident event sequence number that initiated the air bag deployment

- (96) Deployed, unknown event
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown

39. CDC For Air Bag Deployment Impact 1

- (0) Not equipped/not available
 (1) Highest delta V
 (2) Second highest delta V
 (3) Other non-coded delta V (specify):

- (6) Deployed, unknown event
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact +0015

- (_000) Not equipped/not available
Code the value of the delta V for the impact that initiated the air bag deployment
 (_996) Deployment, unknown longitudinal Delta V
 (_997) Not deployed
 (_998) Unknown if deployed
 (_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2

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

42. Were Air Bag Module Cover Flap(s) Damaged? 1

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

43. Was There Damage To The Air Bag? 01

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

Yes - Air Bag Damage

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

- (95) Damaged, details unknown
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM
EVALUATION** *continued*

44. Source of Air Bag Damage 01
 (00) Not equipped/not available
 (01) Not damaged
 (02) Object worn by occupant, (specify):

 (03) Object carried by occupant, (specify):

 (04) Adaptive/assistive controls, (specify):

 (05) Fire in vehicle
 (06) Thermal burns
 (07) Rescue or emergency efforts
 (88) Other damage source (specify):

 (95) Damaged, unknown source
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown
45. Was The Air Bag Tethered? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of tether straps):
2
 (3) Deployed, unknown if tethered
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of vent ports):

 (3) Deployed, unknown if vent ports present
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify):

 (3) Deployed, unknown if other occupant contact to air bag
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 1
 (0) Not air bag equipped/air bag not available
 (1) No
 (2) Eyeglasses/sunglasses
 (3) Contact lenses
 (4) Deployed, unknown if eyewear worn
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION

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

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

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

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

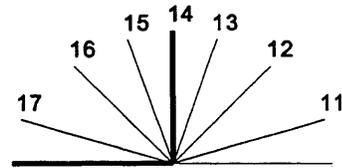
HEAD RESTRAINT AND SEAT EVALUATION *continued*

53. Seat Back Incline Prior and Post Impact
 (00) Occupant not seated or no seat
 (01) Not adjustable

23

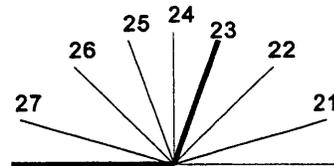
Upright prior to impact

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



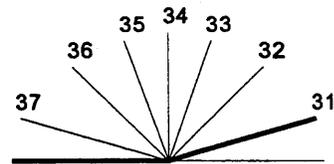
Slightly reclined prior to impact

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



Completely reclined prior to impact

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



(99) Unknown

54. Seat Performance (this Occupant Position)

1

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

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 00 0
 (000) No child safety seat
 Applicable codes are found in your NASS CDS
 Data Collection, Coding and Editing
 (950) Built-in child safety seat
 (997) Other make/model (specify):

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

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

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

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

Designed for Rear Facing for This Age/Weight

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

 (09) Unknown orientation

Designed For Forward Facing for This Age/Weight

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

 (19) Unknown orientation

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

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

 (29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 00

59. Child Safety Seat Shield Usage 00

60. Child Safety Seat Tether Usage 00

Note: Options below applicable to
 Variables OA58-OA60.

(00) No child safety seat

Not Designed With Harness/Shield/Tether

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

Designed With Harness/Shield/Tether

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

Unknown If Designed With Harness/Shield/Tether

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

(99) Unknown if child safety seat used

INJURY CONSEQUENCES61. Injury Severity (Police Rating) 3

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

62. Treatment - Mortality 4

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

Nonfatal

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

- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 2

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

- (9) Unknown

64. Hospital Stay 00

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

65. Working Days Lost 12

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

STOP WORK HERE**VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

TO BE CODED BY THE ZONE CENTER

INJURY CONSEQUENCES

TRAUMA DATA

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

67. 1st Medically Reported Cause of Death 00

68. 2nd Medically Reported Cause of Death 00

69. 3rd Medically Reported Cause of Death 00
 _____ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
 (00) Not fatal or no additional causes
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify):

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

(99) _____ Unknown

70. Number of Recorded Injuries for This Occupant 04
 _____ Code the actual number of injuries recorded for this occupant.
 (00) No recorded injuries
 (97) Injured, details unknown
 (99) Unknown if injured

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

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

73. Arterial Blood Gases (ABG) - HCO₃ 01
 (00) Not injured
 (01) Injured, ABGs not measured or reported
 (02-50) Code the actual value of the HCO₃
 (96) ABGs reported , HCO₃ unknown
 (97) Injured, details unknown
 (99) Unknown if injured

BELT USE DETERMINATION

74. Primary Source of Belt Use Determination 1
 (0) Not equipped/not available/destroyed or rendered inoperative
 (1) Vehicle inspection
 (2) Official injury data
 (3) Driver/occupant interview
 (8) Other (specify): _____
 (9) Unknown if belt used



ebag + felt

BEST AVAILABLE

Form Approved
O.M.B. No. 2127-0021

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

OCCUPANT INJURY FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	<u>41</u>	3. Vehicle Number	<u>02</u>
2. Case Number - Stratum	<u>024A</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.

frontal

Source of Injury Data	A.I.S. - 90						Injury Source	Injury Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number	
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect					
① forehead lac	5. <u>3</u>	6. <u>2</u>	7. <u>9</u>	8. <u>06</u>	9. <u>02</u>	10. <u>1</u>	11. <u>7</u>	12. <u>002</u>	13. <u>2</u>	14. <u>1</u>	15. <u>00</u>
scalp lac	16. <u>3</u>	17. <u>1</u>	18. <u>9</u>	19. <u>06</u>	20. <u>02</u>	21. <u>1</u>	22. <u>5</u>	23. <u>002</u>	24. <u>2</u>	25. <u>1</u>	26. <u>00</u>
② wrist abr	27. <u>7</u>	28. <u>7</u>	29. <u>9</u>	30. <u>02</u>	31. <u>02</u>	32. <u>1</u>	33. <u>2</u>	34. <u>170</u>	35. <u>2</u>	36. <u>1</u>	37. <u>00</u>
③ ankle cont	38. <u>3</u>	39. <u>8</u>	40. <u>9</u>	41. <u>04</u>	42. <u>02</u>	43. <u>1</u>	44. <u>1</u>	45. <u>254</u>	46. <u>2</u>	47. <u>1</u>	48. <u>00</u>
5th	49. ___	50. ___	51. ___	52. ___	53. ___	54. ___	55. ___	56. ___	57. ___	58. ___	59. ___
6th	60. ___	61. ___	62. ___	63. ___	64. ___	65. ___	66. ___	67. ___	68. ___	69. ___	70. ___
7th	71. ___	72. ___	73. ___	74. ___	75. ___	76. ___	77. ___	78. ___	79. ___	80. ___	81. ___
8th	82. ___	83. ___	84. ___	85. ___	86. ___	87. ___	88. ___	89. ___	90. ___	91. ___	92. ___
9th	93. ___	94. ___	95. ___	96. ___	97. ___	98. ___	99. ___	100. ___	101. ___	102. ___	103. ___
10th	104. ___	105. ___	106. ___	107. ___	108. ___	109. ___	110. ___	111. ___	112. ___	113. ___	114. ___

OCCUPANT INJURY CLASSIFICATION

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

SOURCE OF INJURY DATA	INJURY SOURCE CONFIDENCE LEVEL	DIRECT/INDIRECT INJURY
<u>OFFICIAL RECORDS</u> (1) Autopsy records with or without hospital/medical records (2) Hospital/medical records other than emergency room (e.g., discharge summary) (3) Emergency room records only (including associated X-rays or other lab reports) (4) Private physician, walk-in or emergency clinic <u>UNOFFICIAL RECORDS</u> (5) Lay coroner report (6) E.M.S. personnel (7) Interviewee (8) Other source (specify): _____ (9) Police	(1) Certain (2) Probable (3) Possible (9) Unknown	(1) Direct contact injury (2) Indirect contact injury (3) Noncontact injury (7) Injured, unknown source

INJURY SOURCES

FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): _____
- (019) Other front object (specify): _____

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): _____
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): _____

RIGHT SIDE

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

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): _____
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): _____

INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): _____
- (155) Head restraint system
- (160) Other occupants (specify): _____
- (161) Interior loose objects
- (162) Child safety seat (specify): _____
- (163) Other interior object (specify): _____

AIR BAG

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

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

ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): _____

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): _____
- (409) Additional or relocated switches, (specify): _____

- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

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

EXTERIOR OF OTHER MOTOR VEHICLE

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

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

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

NONCONTACT INJURY

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

R temple L scalp

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Restrained?

No
 Yes

Blood Alcohol Level (mg/dl)

BAL = NA

Glasgow Coma Scale Score

GCSS = 15

Units of Blood Given

Units = 0

Arterial Blood Gases

pH =

PO₂ =

PCO₂ =

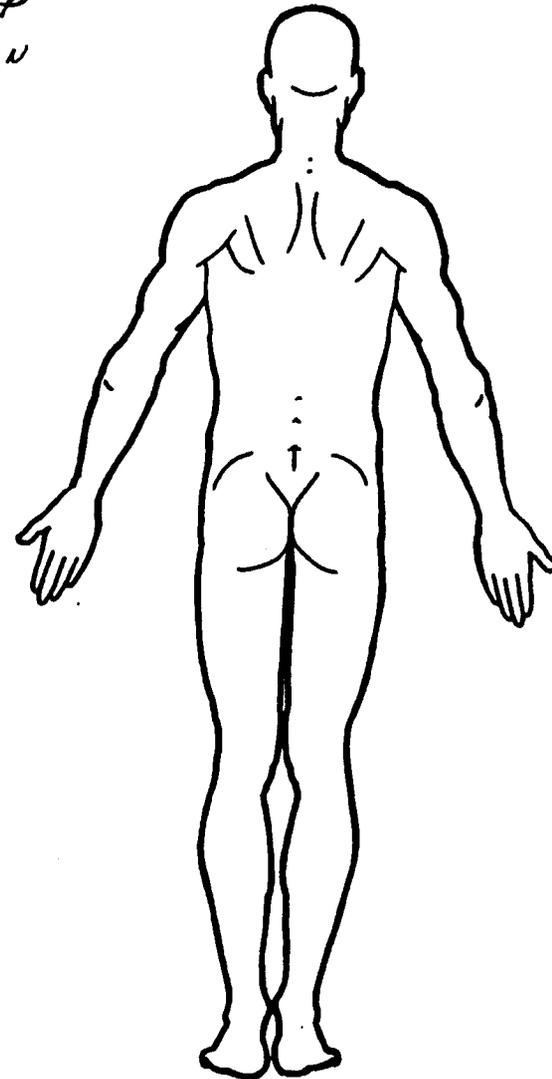
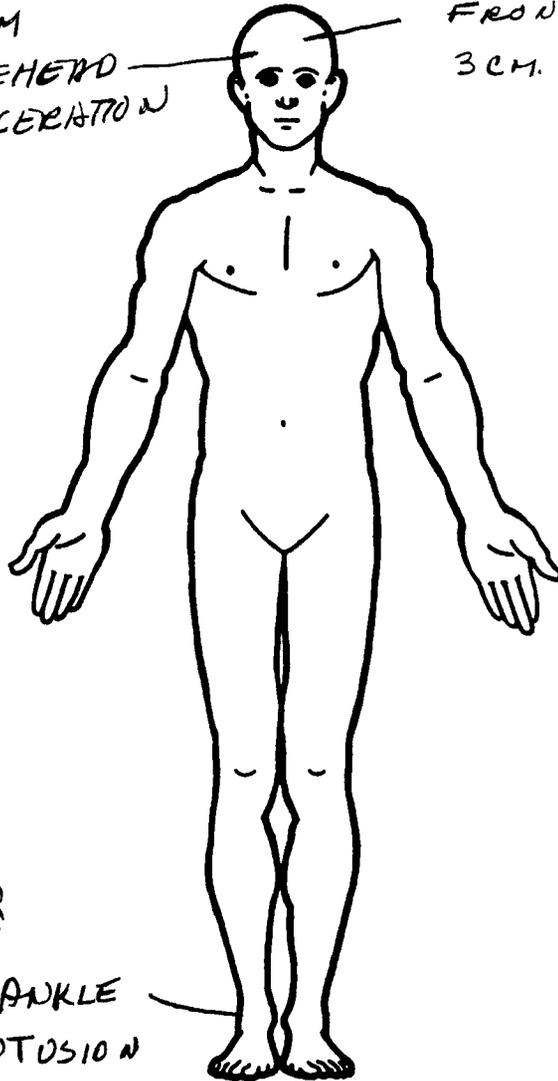
HCO₃ =

no record

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

ER
3 CM
FOREHEAD
LACERATION

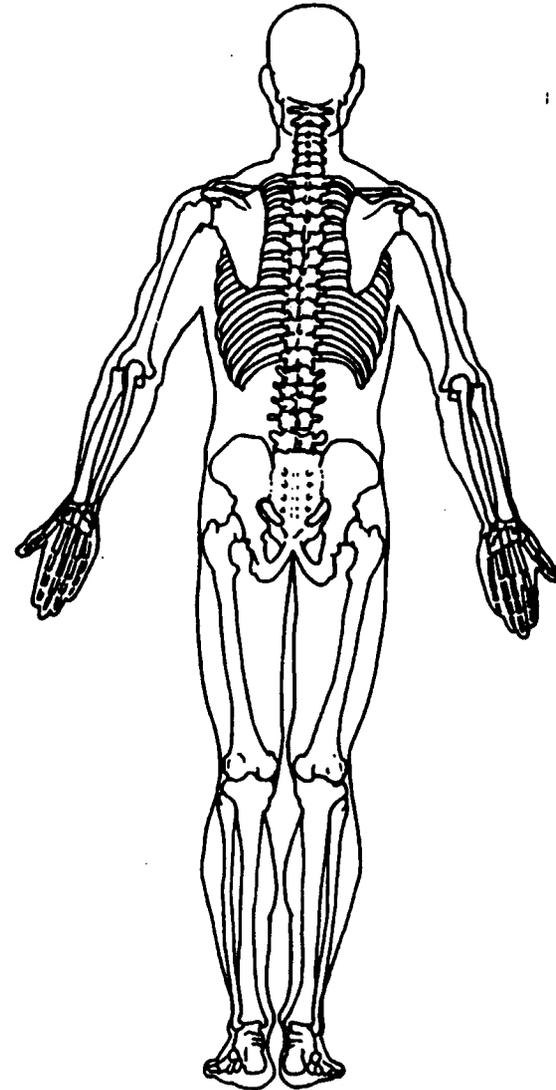
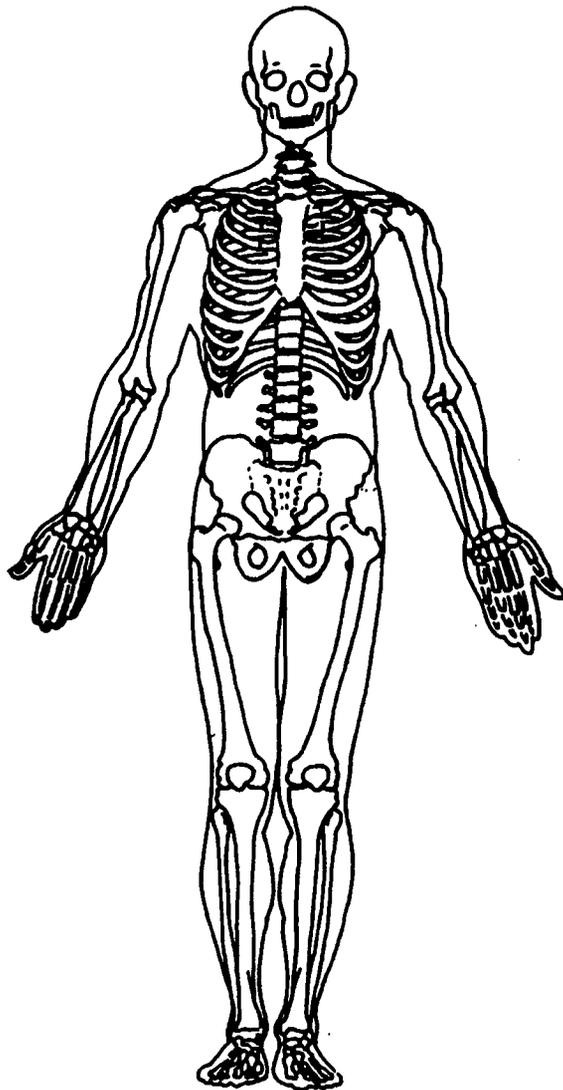
ER
FRONTAL SCALP
3 CM. LACERATION



ER
ANKLE
CONTUSION

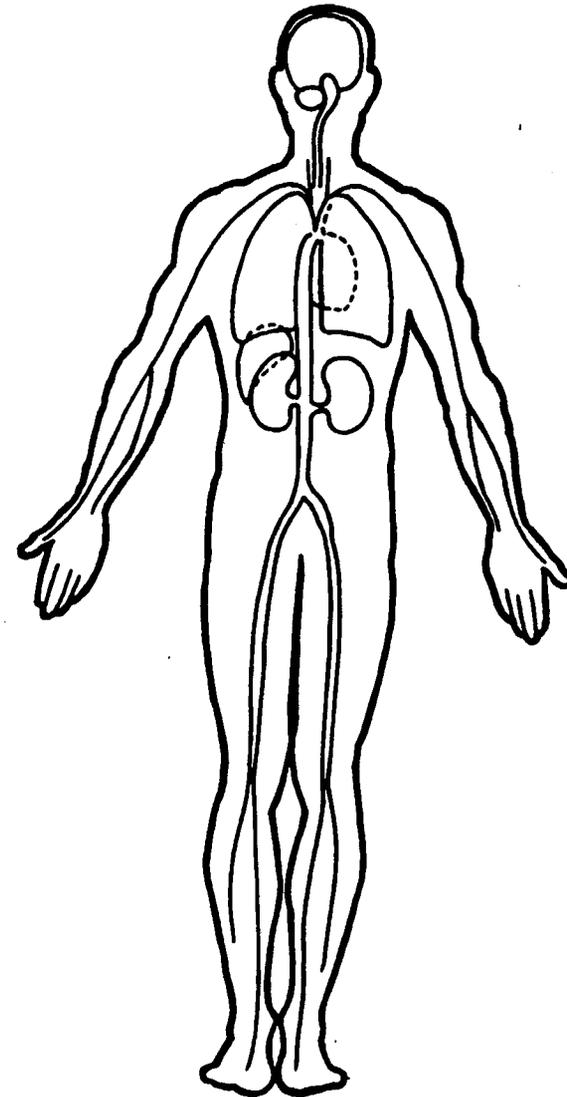
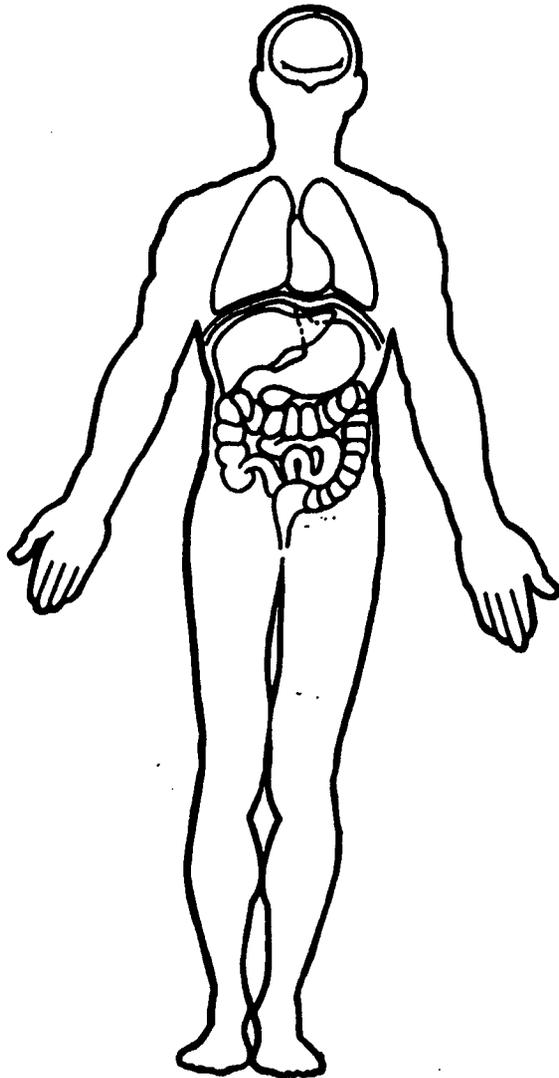
OFFICIAL INJURY DATA — SKELETAL INJURIES

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



OFFICIAL INJURY DATA – INTERNAL INJURIES

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





SMASH PROGRAM SUMMARY

(All Measurements In Metric)

Identifying Title

41

Primary
Sampling Unit

024A

Case No.-Stratum

01

Accident Event
Sequence No.

1 / 1 / 96

Date (Month, day, year) of Run

GENERAL INFORMATION

VEHICLE 1

NASS Vehicle Number

01

Year

1995

Make

Ford

Model

Escort

Body Style

03

CDC

02RYEW2

PDOF

$\pm +60^\circ$

Heading Angle

$\pm +180^\circ$

VEHICLE 2

NASS Vehicle Number

02

Year

1995

Make

Honda

Model

Prelude

Body Style

02

CDC

11FDEW1

PDOF

$\pm +330^\circ$

Heading Angle

$\pm +90^\circ$

VEHICLE SPECIFICATIONS

VEHICLE 1

Wheelbase

250 cm

Overall Length

432 cm

Overall Width

169 cm

Weight

$1051 + 74 + \text{VK} = 1125$ kg

Curb Occupant(s) Cargo

Engine Displacement

1.9 L

Drive System

FWD

Size

1

Stiffness

1

VEHICLE 2

Wheelbase

255 cm

Overall Length

444 cm

Overall Width

177 cm

Weight

$1254 + 92 + 0 = 1346$ kg

Curb Occupant(s) Cargo

Engine Displacement

2.3 L

Drive System

FWD

Size

3

Stiffness

9

DAMAGE INFORMATION

VEHICLE 1

Damage Known?

Y

Damage Length

290 cm

Damage Offset

$\pm +130$ cm

Crush Depth:

C1 0 cm

C2 0 cm

C3 2 cm

C4 22 cm

C5 17 cm

C6 6 cm

VEHICLE 2

Damage Known?

Y

Damage Length

144 cm

Damage Offset

\pm 0 cm

Crush Depth:

C1 13 cm

C2 27 cm

C3 24 cm

C4 19 cm

C5 12 cm

C6 6 cm

SCENE INFORMATION

Rest and Impact Positions No Yes

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

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

VEHICLE MOTION

Sustained Contact No Yes

Sustained Contact No Yes

VEHICLE 1

VEHICLE 2

Vehicle Rotation No Yes

Vehicle Rotation No Yes

Rotation Stop Before Rest No Yes

Rotation Stop Before Rest No Yes

End of Rotation X _____ m

End of Rotation X _____ m

Position Y _____ m

Position Y _____ m

Heading Angle _____ °

Heading Angle _____ °

Curved Path No Yes

Curved Path No Yes

Point on Path
 X _____ m Y _____ m

Point on Path
 X _____ m Y _____ m

Rotation Direction None CW CCW

Rotation Direction None CW CCW

Rotation >360° No Yes

Rotation >360° No Yes

FRICTION INFORMATION

Coefficient of Friction _____

Rolling Resistance Option

1

Vehicle 1 Rolling Resistance

Vehicle 2 Rolling Resistance

LF _____
 RF _____
 LR _____
 RR _____

LF _____
 RF _____
 LR _____
 RR _____

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

Model Year: _____

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

Make: _____

Model: _____

VIN: _____

Complete and ATTACH the appropriate damage sketch and dimensions to the form.

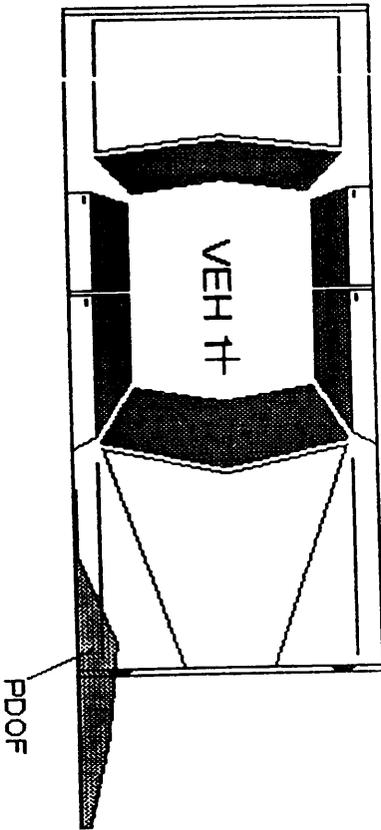
Vehicle Dimensions

	Vehicle #1	Vehicle #2
Length	432.0 cm (170 in)	444.0 cm (175 in)
Width	169.0 cm (67 in)	177.0 cm (70 in)
Wheelbase	250.0 cm (98 in)	255.0 cm (100 in)
Weight	1125 kgs (2480 lbs)	1346 kgs (2967 lbs)
CG to Front of Veh	193.0 cm (76 in)	228.1 cm (90 in)
Engine Displacement	1.9 liters	2.3 liters
Moment of Inertia	189679 kgs (16789 lbs)	239723 kgs (21218 lbs)
Vehicle Mass	1125 kgs (6.4 lb-s ² /in)	1346 kgs (7.7 lb-s ² /in)

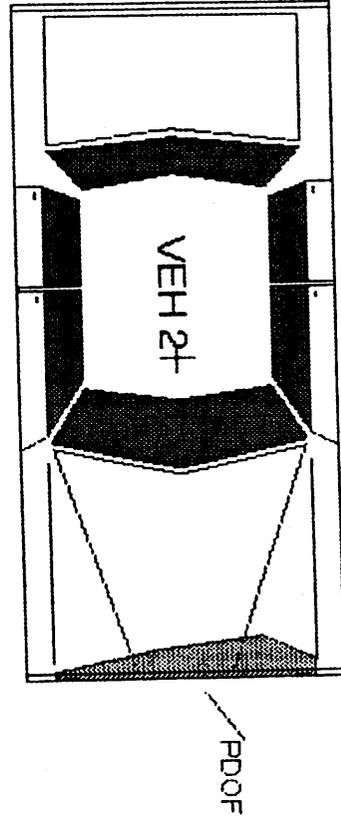
<Continue>

Use arrow keys to highlight, press Enter to select << Help >> << Exit >>

1995 FORD ESCORT



1995 HONDA PRELUDE



Summary of Results Using Damage

41024A EVENT 1

Speed Change
(Damage)

Vehicle #1

Total 21 km/h (13 mph)
 Longitudinal -11 km/h (-7 mph)
 Latitudinal -18 km/h (-11 mph)
 PDOF Angle 60 °
 Energy Dissipated = 26390 Joules (19462 Ft-Lb)
 Barrier Equivalent Speed = 17.9 km/h (11.1 mph)
 Calculated using size and stiffness categories.

Vehicle #2

Total 18 km/h (11 mph)
 Longitudinal -15 km/h (-9 mph)
 Latitudinal 9 km/h (5 mph)
 PDOF Angle -30 °
 Energy Dissipated = 35207 Joules (25964 Ft-Lb)
 Barrier Equivalent Speed = 20.8 km/h (12.9 mph)
 Calculated using size and stiffness categories.

<Continue>

File Edit Calculate Reports Graphics Options Help

General Information

	Vehicle #1	Vehicle #2
Year	1995	1995
Make	FORD	HONDA
Model	ESCORT	PRELUDE
CDC	02RYEW2	11FDEW1
Side Damaged	R	F
PDOF Angle	60 °	330 °
Heading Angle	180 °	90 °
Calculation method:	Size and Stiffness	Size and Stiffness
Size Category	1	3
Stiffness Category	1	9
Vehicle Weight	1125 kgs (2480 lbs)	1346 kgs (2967 lbs)

<Continue>

Use arrow keys to highlight, press Enter to select << Help >> << Exit >>

File Edit Calculate Reports Graphics Options Help

Damage Information

	Vehicle #1	Vehicle #2
Damage Known?	Yes	Yes
Crush Length	290.0 cm (114 in)	144.0 cm (57 in)
C1	0.0 cm (0 in)	13.0 cm (5 in)
C2	0.0 cm (0 in)	27.0 cm (11 in)
C3	2.0 cm (1 in)	24.0 cm (9 in)
C4	22.0 cm (9 in)	19.0 cm (7 in)
C5	17.0 cm (7 in)	12.0 cm (5 in)
C6	6.0 cm (2 in)	6.0 cm (2 in)
D	130.0 cm (51 in)	0.0 cm (0 in)
D'	185.4 cm (73 in)	-10.3 cm (-4 in)

<Continue>

Use arrow keys to highlight, press Enter to select << Help >> << Exit >>

PSU41
CASE 024A

1996 ACCIDENT FORM

IDENTIFICATION

3. Number of General Vehicle Forms Submitted 02
4. Date of Accident (Month, Day, Year) /96
5. Time of Accident (military time) 1640

SPECIAL STUDIES - INDICATORS

6. SS15 0 7. SS16 0 8. SS17 0 9. SS18 0 10. SS19 0

NUMBER OF EVENTS

11. Number of Recorded Events in This Accident 04

PSU41
CASE 024A

1996 ACCIDENT FORM

ACCIDENT EVENTS

Accident Event Seq. Number	Vehicle Number	Class of Vehicle	General Area of Damage	Veh. Num. or Obj. Cont.	Class of Vehicle	General Area of Damage
012. 01	013. 01	014. 01	015. R	016. 02	017. 02	018. F
019. 02	020. 01	021. 01	022. R	023. 02	024. 02	025. L
026. 03	027. 01	028. 01	029. F	030. 50	031. 00	032. 0
033. 04	034. 01	035. 01	036. F	037. 42	038. 00	039. 0

INTRA ERRORS

***** NO ERRORS *****

PSU41
CASE 024A
VEHICLE 01

1996 GENERAL VEHICLE FORM

VEHICLE IDENTIFICATION

4. Vehicle Model Year	95	5. Vehicle Make	12
6. Vehicle Model	013	7. Body Type	03
8. VIN	1FASP11JBSW	9. Vehicle Special Use (This Trip)	0

OFFICIAL RECORDS

10. Police Reported Vehicle Disposition	1
11. Police Reported Travel Speed	048
12. Speed Limit	048
13. Police Reported Alcohol Presence For Driver	0
14. Alcohol Test Result For Driver	96
15. Police Reported Other Drug Presence For Driver	0
16. Other Drug Speciman Test Result For Driver	1
17. Driver's Zip Code	
18. Driver's Race/Ethnic Origin	9

PRECRASH ENVIRONMENTAL DATA

19. Relation to Interchange or Junction	2
20. Trafficway Flow	0
21. Number Of Travel Lanes	2
22. Roadway Alignment	1
23. Roadway Profile	1
24. Roadway Surface Type	2
25. Roadway Surface Condition	1

26. Light Conditions	1
27. Atmospheric Conditions	0
28. Traffic Control Device	2
29. Traffic Control Device Functioning	2

PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention to Driving	99
31. Pre-Event Movement (Prior to Recognition of Critical Event)	01
32. Critical Precrash Event	17
33. Attempted Avoidance Maneuver	99
34. Pre-Impact Stability	9
35. Pre-Impact Location	1
36. Accident Type	87

OCCUPANT RELATED

37. Driver Presence in Vehicle	1
38. Number of Occupants This Vehicle	01
39. Number of Occupant Forms Submitted	01

AIR BAG RELATED

40. Is this an AOPS Vehicle?	1
41. Air Bag(s) Deployment, First Seat Frontal	6
42. Air Bag(s) Deployment, Other Than First Seat Frontal	0

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight	1,050
44. Vehicle Cargo Weight	9,990

ROLLOVER DATA

45. Rollover	00
46. Rollover Initiation Type	00
47. Location of Rollover Initiation	0
48. Rollover Initiation Object Contacted	00
49. Location on Vehicle Where Initial Principal Tripping Force is Applied	0
50. Direction of Initial Roll	0

OVERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle)	0
52. Rear Override/Underride (this Vehicle)	0

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

53. Heading Angle For This Vehicle	998
54. Heading Angle For Other Vehicle	998

RECONSTRUCTION DATA

55. Towed Trailing Unit 0
56. Documentation of Trajectory Data for This Vehicle 1
57. Post Collision Condition of Tree or Pole 1
(For Highest Delta V)

ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) 01

COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V (Highest) 026
60. Longitudinal Component of Delta V (Highest) -026
61. Lateral Component of Delta V (Highest) 000
62. Energy Absorption 032,200
63. Impact Speed (Highest) 998

DELTA V CONFIDENCE LEVEL

64. Confidence in Reconstruction Program Results 1
(For Highest Delta V)

OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed (Highest) 026

ESTIMATED DELTA V

66. Estimated Highest Delta V (Research Determined) 0

INSPECTION TYPE

67. Type of Vehicle Inspection 3

DELTA V EVENT NUMBER

68. Delta V Event Number 04

INTRA ERRORS

***** NO ERRORS *****

PSU41
CASE 024A
VEHICLE 01

1996 EXTERIOR VEHICLE FORM

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) Direction of Force	(2) (3) Deform. Location	(4) Longitud. or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distrib.	(7) Deform. Extent
4. 04	5. 42	6. 12	7. F	8. Y	9. E	10. W	11. 02

SECOND HIGHEST DELTA "V"

12. 01	13. 02	14. 02	15. R	16. Y	17. E	18. W	19. 02
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CRUSH PROFILE IN CENTIMETERS

HIGHEST DELTA "V"

20. L 147	21. C1 000	C2 027	C3 022	C4 017	C5 013	C6 006	22. +/-D -028
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SECOND HIGHEST DELTA "V"

23. L 290	24. C1 000	C2 000	C3 002	C4 022	C5 017	C6 006	25. +/-D +130
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CRUSH PROFILE IN CENTIMETERS (CONT.)

26. Undeformed End Width		147
(Coded when highest severity impact is an end plane impact.)		
27. Direct Damage Width		016
(For highest severity impact)		
28. Original Wheelbase		250
29. Original Average Track Width		144
30. Are CDCs Documented but Not Coded on The Automated File?		1
31. Researcher's Assessment of Vehicle Disposition		1
32. Is this a Multi-staged Manufactured Vehicle and/or a Certified Altered Vehicle?		0

FIRE OCCURRENCE

33. Fire Occurrence	0
34. Origin of Fire	0

FUEL SYSTEM

	Fuel Tank 1		Fuel Tank 2	
Location of Fuel Tank Filler Cap	35.	2	36.	0
Type of Fuel Tank	37.	1	38.	0
Location of Fuel Tank	39.	4	40.	0
Damage to Fuel Tank	41.	1	42.	0
Leakage of Fuel System	43.	1	44.	0
Fuel Type	45.	01	46.	00

47. Is this Vehicle Equipped with more than two Fuel Tanks? 0

INTRA ERRORS

***** NO ERRORS *****

INTEGRITY

4. Passenger Compartment Integrity 06

Door, Tailgate or Hatch Opening

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

Damage/Failure Associated with Door,
Tailgate or Hatch Opening in Collision

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

GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 2
20. BL 2 21. Roof 0 22. Other 0

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 1 27. RR 1
28. BL 1 29. Roof 0 30. Other 0

GLAZING (Cont.)

Glazing Damage from Impact Forces

31. WS 1 32. LF 1 33. RF 6 34. LR 1 35. RR 1
36. BL 1 37. Roof 0 38. Other 0

Glazing Damage from Occupant Contact

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

OCCUPANT AREA INTRUSION

Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
47. 13	48. 10	49. 3	50. 3
51. 13	52. 04	53. 2	54. 2
55.	56.	57.	58.
59.	60.	61.	62.
63.	64.	65.	66.
67.	68.	69.	70.
71.	72.	73.	74.
75.	76.	77.	78.
79.	80.	81.	82.
83.	84.	85.	86.

STEERING COLUMN

87. Steering Column Type	1
88. Tilt Steering Column Adjustment	0
89. Telescoping Steering Column Adjustment	0
90. Steering Rim/Spoke Deformation	00
91. Location of Steering Rim/Spoke Deformation	00

INSTRUMENT PANEL

92. Odometer Reading	012,000
93. Instrument Panel Damage from Occupant Contact?	0
94. Type of Knee Bolster Covering	2
95. Knee Bolsters Deformed from Occupant Contact?	1
96. Did Glove Compartment Door Open During Collision(s)?	2
97. Adaptive (Assistive) Driving Equipment	0

INTRA ERRORS

***** NO ERRORS *****

PSU41
CASE 024A
VEHICLE 01 OCCUPANT 01

1996 OCCUPANT ASSESSMENT FORM

OCCUPANT'S CHARACTERISTICS

5. Age	79	6. Sex	1	7. Height	999
8. Weight	999	9. Role	1		

OCCUPANT'S SEATING

10. Seat Position	11	11. Posture	9
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EJECTION/ENTRAPMENT

12. Ejection	0	13. Ejection Area	0	14. Ejection Medium	0
15. Medium Status	0	16. Entrapment	0	17. Occupant Mobility	9

BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability	3
19. Manual (Active) Belt System Use	03
20. Proper Use of Manual (Active) Belts	1
21. Manual (Active) Belt Failure Modes During Accident	1
22. Shoulder Belt Upper Anchorage Adjustment	0
23. Automatic (Passive) Belt System Availability/Function	1
24. Automatic (Passive) Belt System Use	1
25. Automatic (Passive) Belt System Type	2
26. Proper Use of Automatic (Passive) Belt System	1
27. Automatic (Passive) Belt Failure Modes During Accident	1

POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use	5
29. Police Reported Air Bag Availability/Function	4

AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System Availability/Function (This Occupant Position)	1
31. Frontal Air Bag System Deployment (This Occupant Position)	1
32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position)	0
33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position)	0
34. Are There Indications of Air Bag System Failure?	1

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)	9
36. Type of Air Bag	1
37. Had Any Prior Maint./Serv. Been Performed on This Air Bag System	9
38. Air Bag Deployment Accident Event Sequence Number	96
39. CDC For Air Bag Deployment Impact	6
40. Long. Component of Delta V For Air Bag Deployment Impact	996
41. Did Air Bag Module Cover Flap(s) Open at Designated Tear Points?	2
42. Were Air Bag Module Cover Flap(s) Damaged?	1
43. Was There Damage To The Air Bag?	01
44. Source of Air Bag Damage	01
45. Was The Air Bag Tethered?	2
46. Did The Air Bag Have Vent Ports?	2
47. Was the Air Bag in this Occup.'s Pos. Contacted by Another Occup.?	1
48. Was This Occupant Wearing Eye-wear?	4

HEAD RESTRAINT AND SEAT EVALUATION

49. Head Restraint Type/Damage by Occup. at This Occup. Pos.	3
50. Seat Type (This Occupant Position)	02
51. Seat Orientation (this Occupant Position)	1
52. Seat Track Adjusted Position Prior To Impact	3
53. Seat Back Incline Prior and Post Impact	23
54. Seat Performance (this Occupant Position)	1

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model	000
56. Type of Child Safety Seat	0
57. Child Safety Seat Orientation	00
58. Child Safety Seat Harness Usage	00
59. Child Safety Seat Shield Usage	00
60. Child Safety Seat Tether Usage	00

INJURY CONSEQUENCES

61. Injury Severity (Police Rating)	4
62. Treatment - Mortality	1
63. Type of Med. Facility (Initial)	9
64. Hospital Stay	00
65. Working Days Lost	62

COMPLETED BY ZONE CENTER

INJURY CONSEQUENCES

- 66. Time to Death
- 67. 1st Medically Reported Cause of Death
- 68. 2nd Medically Reported Cause of Death
- 69. 3rd Medically Reported Cause of Death
- 70. Number of Recorded Injuries for This Occupant

TRAUMA DATA

- 71. Glasgow Coma Scale (GCS) Score (at Medical Facility)
- 72. Was Occupant Given Blood?
- 73. Arterial Blood Gases (ABG)

BELT USE DETERMINATION

- 74. Primary Source of Belt Use Determination

INTRA ERRORS

2pt. Belts (mouse track can be seen in slides) + AIR BAG

MR

JK

HH2001 2 If AIR BAG AVAILABILITY/FUNCTION DA20 equals 1-3, then AUTOMATIC
 HH2002 BELT AVAILABILITY DA23 should equal 0.

PSU41
CASE 024A
VEHICLE 02

1996 GENERAL VEHICLE FORM

VEHICLE IDENTIFICATION

4. Vehicle Model Year	95	5. Vehicle Make	37
6. Vehicle Model	033	7. Body Type	02
8. VIN	JHMBB1173SC	9. Vehicle Special Use (This Trip)	0

OFFICIAL RECORDS

10. Police Reported Vehicle Disposition	1
11. Police Reported Travel Speed	048
12. Speed Limit	048
13. Police Reported Alcohol Presence For Driver	0
14. Alcohol Test Result For Driver	96
15. Police Reported Other Drug Presence For Driver	0
16. Other Drug Specimen Test Result For Driver	0
17. Driver's Zip Code	
18. Driver's Race/Ethnic Origin	1

PRECRASH ENVIRONMENTAL DATA

19. Relation to Interchange or Junction	2
20. Trafficway Flow	0
21. Number Of Travel Lanes	2
22. Roadway Alignment	1
23. Roadway Profile	1
24. Roadway Surface Type	2
25. Roadway Surface Condition	1
26. Light Conditions	1
27. Atmospheric Conditions	0
28. Traffic Control Device	2

29. Traffic Control Device Functioning 2

PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention to Driving	01
31. Pre-Event Movement (Prior to Recognition of Critical Event)	01
32. Critical Precrash Event	66
33. Attempted Avoidance Maneuver	06
34. Pre-Impact Stability	1
35. Pre-Impact Location	1
36. Accident Type	86

OCCUPANT RELATED

37. Driver Presence in Vehicle	1
38. Number of Occupants This Vehicle	01
39. Number of Occupant Forms Submitted	01

AIR BAG RELATED

40. Is this an ADPS Vehicle?	1
41. Air Bag(s) Deployment, First Seat Frontal	6
42. Air Bag(s) Deployment, Other Than First Seat Frontal	0

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight	1,250
44. Vehicle Cargo Weight	0,000

ROLLOVER DATA

45. Rollover	00
46. Rollover Initiation Type	00
47. Location of Rollover Initiation	0
48. Rollover Initiation Object Contacted	00
49. Location on Vehicle Where Initial Principal Tripping Force is Applied	0
50. Direction of Initial Roll	0

OVERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle)	0
52. Rear Override/Underride (this Vehicle)	0

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

53. Heading Angle For This Vehicle	090
54. Heading Angle For Other Vehicle	180

RECONSTRUCTION DATA

55. Towed Trailing Unit 0
56. Documentation of Trajectory Data for This Vehicle 1
57. Post Collision Condition of Tree or Pole 0
(For Highest Delta V)

ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) 01

COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V (Highest) 018
60. Longitudinal Component of Delta V (Highest) -015
61. Lateral Component of Delta V (Highest) +009
62. Energy Absorption 035,200
63. Impact Speed (Highest) 998

DELTA V CONFIDENCE LEVEL

64. Confidence in Reconstruction Program Results 1
(For Highest Delta V)

OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed (Highest) 021

ESTIMATED DELTA V

66. Estimated Highest Delta V (Research Determined) 0

INSPECTION TYPE

67. Type of Vehicle Inspection 3

DELTA V EVENT NUMBER

68. Delta V Event Number 01

INTRA ERRORS

***** NO ERRORS *****

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident	(4) Longitud.	(5) Vertical	(6)
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Event Sequence Number	Object Contacted	(1) Direction of Force	(2) (2) Direction of Force	(3) Deform. Location	or Lateral Location	or Lateral Location	Type of Damage Distrib.	(7) Deform. Extent
4. 01	5. 01	6. 11	7. F	8. D	9. E	10. W	11. 01	

SECOND HIGHEST DELTA "V"

12. 02	13. 01	14. 09	15. L	16. P	17. M	18. W	19. 01
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CRUSH PROFILE IN CENTIMETERS

HIGHEST DELTA "V"

20. L 144	21. C1 013	C2 027	C3 024	C4 019	C5 012	C6 006	22. +/-D 000
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SECOND HIGHEST DELTA "V"

23. L 067	24. C1 000	C2 002	C3 003	C4 004	C5 002	C6 001	25. +/-D -006
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CRUSH PROFILE IN CENTIMETERS (CONT.)

26. Undeformed End Width		144
(Coded when highest severity impact is an end plane impact.)		
27. Direct Damage Width		138
(For highest severity impact)		
28. Original Wheelbase		255
29. Original Average Track Width		152
30. Are CDCs Documented but Not Coded on The Automated File?		0
31. Researcher's Assessment of Vehicle Disposition		1
32. Is this a Multi-staged Manufactured Vehicle and/or a Certified Altered Vehicle?		0

FIRE OCCURRENCE

33. Fire Occurrence	0
34. Origin of Fire	0

FUEL SYSTEM

	Fuel Tank 1	Fuel Tank 2
Location of Fuel Tank Filler Cap	35. 2	36. 0
Type of Fuel Tank	37. 1	38. 0

Location of Fuel Tank	39. 4	40. 0
Damage to Fuel Tank	41. 1	42. 0
Leakage of Fuel System	43. 1	44. 0
Fuel Type	45. 01	46. 00

47. Is this Vehicle Equipped with more than two Fuel Tanks? 0

INTRA ERRORS

***** NO ERRORS *****

INTEGRITY

4. Passenger Compartment Integrity 00

Door, Tailgate or Hatch Opening

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

Damage/Failure Associated with Door,
Tailgate or Hatch Opening in Collision

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

GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 4 17. RF 4 18. LR 4 19. RR 4
20. BL 4 21. Roof 0 22. Other 0

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 1 27. RR 1
28. BL 1 29. Roof 0 30. Other 0

GLAZING (Cont.)

Glazing Damage from Impact Forces

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

Glazing Damage from Occupant Contact

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

OCCUPANT AREA INTRUSION

Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
47.	48.	49.	50.
51.	52.	53.	54.
55.	56.	57.	58.
59.	60.	61.	62.
63.	64.	65.	66.
67.	68.	69.	70.
71.	72.	73.	74.
75.	76.	77.	78.
79.	80.	81.	82.
83.	84.	85.	86.

STEERING COLUMN

87. Steering Column Type	2
88. Tilt Steering Column Adjustment	1
89. Telescoping Steering Column Adjustment	0
90. Steering Rim/Spoke Deformation	00
91. Location of Steering Rim/Spoke Deformation	00

INSTRUMENT PANEL

92. Odometer Reading	999,000
93. Instrument Panel Damage from Occupant Contact?	0
94. Type of Knee Bolster Covering	2
95. Knee Bolsters Deformed from Occupant Contact?	1
96. Did Glove Compartment Door Open During Collision(s)?	1
97. Adaptive (Assistive) Driving Equipment	0

INTRA ERRORS

***** NO ERRORS *****

PSU41
CASE 024A
VEHICLE 02 OCCUPANT 01

1996 OCCUPANT ASSESSMENT FORM

OCCUPANT'S CHARACTERISTICS

5. Age	33	6. Sex	1	7. Height	180
8. Weight	092	9. Role	1		

OCCUPANT'S SEATING

10. Seat Position	11	11. Posture	0
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EJECTION/ENTRAPMENT

12. Ejection	0	13. Ejection Area	0	14. Ejection Medium	0
15. Medium Status	0	16. Entrapment	0	17. Occupant Mobility	4

BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability	4
19. Manual (Active) Belt System Use	04
20. Proper Use of Manual (Active) Belts	1
21. Manual (Active) Belt Failure Modes During Accident	1
22. Shoulder Belt Upper Anchorage Adjustment	1
23. Automatic (Passive) Belt System Availability/Function	0
24. Automatic (Passive) Belt System Use	0
25. Automatic (Passive) Belt System Type	0
26. Proper Use of Automatic (Passive) Belt System	0
27. Automatic (Passive) Belt Failure Modes During Accident	0

POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use	5
29. Police Reported Air Bag Availability/Function	4

AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System Availability/Function (This Occupant Position)	1
31. Frontal Air Bag System Deployment (This Occupant Position)	1
32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position)	0
33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position)	0
34. Are There Indications of Air Bag System Failure?	1

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)	1
36. Type of Air Bag	1
37. Had Any Prior Maint./Serv. Been Performed on This Air Bag System	1
38. Air Bag Deployment Accident Event Sequence Number	01
39. CDC For Air Bag Deployment Impact	1
40. Long. Component of Delta V For Air Bag Deployment Impact	-015
41. Did Air Bag Module Cover Flap(s) Open at Designated Tear Points?	2
42. Were Air Bag Module Cover Flap(s) Damaged?	1
43. Was There Damage To The Air Bag?	01
44. Source of Air Bag Damage	01
45. Was The Air Bag Tethered?	2
46. Did The Air Bag Have Vent Ports?	2
47. Was the Air Bag in this Occup.'s Pos. Contacted by Another Occup.?	1
48. Was This Occupant Wearing Eye-wear?	1

HEAD RESTRAINT AND SEAT EVALUATION

49. Head Restraint Type/Damage by Occup. at This Occup. Pos.	1
50. Seat Type (This Occupant Position)	02
51. Seat Orientation (this Occupant Position)	1
52. Seat Track Adjusted Position Prior To Impact	6
53. Seat Back Incline Prior and Post Impact	23
54. Seat Performance (this Occupant Position)	1

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model	000
56. Type of Child Safety Seat	0
57. Child Safety Seat Orientation	00
58. Child Safety Seat Harness Usage	00
59. Child Safety Seat Shield Usage	00
60. Child Safety Seat Tether Usage	00

INJURY CONSEQUENCES

61. Injury Severity (Police Rating)	3
62. Treatment - Mortality	4
63. Type of Med. Facility (Initial)	2
64. Hospital Stay	00
65. Working Days Lost	12

COMPLETED BY ZONE CENTER

INJURY CONSEQUENCES

- 66. Time to Death
- 67. 1st Medically Reported Cause of Death

- 68. 2nd Medically Reported Cause of Death
- 69. 3rd Medically Reported Cause of Death
- 70. Number of Recorded Injuries for This Occupant

TRAUMA DATA

- 71. Glasgow Coma Scale (GCS) Score (at Medical Facility)
- 72. Was Occupant Given Blood?
- 73. Arterial Blood Gases (ABG)

BELT USE DETERMINATION

- 74. Primary Source of Belt Use Determination

INTRA ERRORS

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

*Therapist & released
 12 days lost
 per interview
 clearing ok
 on 8/1/80*

INTER ERRORS

MR
 EH0011 2 If TREATMENT DA62 equals 1, then 1st DEFORMATION EXTENT EV11
 EH0012 should be greater than 03. GV=01 DA=01

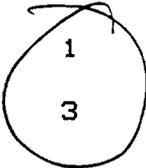
*OK 4, driver - killed
 deformation extent is not
 greater than 3.*

PSU41
CASE 024A
CURRENT VERSION: 9.00

ERROR SUMMARY SCREEN

████████/96

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



MDE/FORMS REL.

ID # 1
████████ ████████ / 9 6



SMASH PROGRAM SUMMARY

(All Measurements In Metric)

Identifying Title

41

Primary
Sampling Unit

024A

Case No.-Stratum

02

Accident Event
Sequence No.

 , , 96

Date (Month, day, year) of Run

GENERAL INFORMATION

VEHICLE 1

NASS Vehicle Number

01
1995

Year

Make

Ford

Model

Escort

Body Style

03

CDC

04 RBLV1

PDOF

\pm +120 °

Heading Angle

\pm +150 °

VEHICLE 2

NASS Vehicle Number

02

Year

1995

Make

Honda

Model

prelude

Body Style

02

CDC

09 LPmw1

PDOF

\pm +270 °

Heading Angle

\pm +170 °

VEHICLE SPECIFICATIONS

VEHICLE 1

Wheelbase

250 cm

Overall Length

432 cm

Overall Width

169 cm

Weight

1051 + 74 + UK = 1125 kg

Curb Occupant(s) Cargo

Engine Displacement

1.9 L

Drive System

FWD

Size

1

Stiffness

1

VEHICLE 2

Wheelbase

255 cm

Overall Length

444 cm

Overall Width

177 cm

Weight

1254 + 92 + 0 = 1346 kg

Curb Occupant(s) Cargo

Engine Displacement

2.3 L

Drive System

FWD

Size

3

Stiffness

3

DAMAGE INFORMATION

VEHICLE 1

Damage Known?

4

Damage Length

5 cm

Damage Offset

\pm -210 cm

Crush Depth:

C1 0 cm

C2 0 cm

C3 0 cm

C4 0 cm

C5 0 cm

C6 0 cm

VEHICLE 2

Damage Known?

4

Damage Length

67 cm

Damage Offset

\pm -6 cm

Crush Depth:

C1 0 cm

C2 2 cm

C3 3 cm

C4 4 cm

C5 2 cm

C6 1 cm

SCENE INFORMATION

Rest and Impact Positions No Yes

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

VEHICLE MOTION

Sustained Contact No Yes

Sustained Contact No Yes

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

FRICITION INFORMATION

Coefficient of Friction _____

Rolling Resistance Option 1

Vehicle 1 Rolling Resistance	Vehicle 2 Rolling Resistance
LF _____	LF _____
RF _____	RF _____
LR _____	LR _____
RR _____	RR _____

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

Model Year: _____

Make: _____

Model: _____

VIN: _____

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

Complete and ATTACH the appropriate damage sketch and dimensions to the form.

Speed Change
(Damage)

Vehicle #1
 Total 4 km/h (3 mph)
 Longitudinal 2 km/h (1 mph)
 Latitudinal -4 km/h (-2 mph)
 PDOF Angle = 120 x
 Energy Dissipated = 192 Joules (142 Ft-Lb)
 Barrier Equivalent Speed = 1.4 km/h (0.9 mph)
 Calculated using crush coefficients entered by the user.

Vehicle #2
 Total 4 km/h (2 mph)
 Longitudinal -0 km/h (-0 mph)
 Latitudinal 4 km/h (2 mph)
 PDOF Angle = -90 x
 Energy Dissipated = 2195 Joules (1619 Ft-Lb)
 Barrier Equivalent Speed = 6.5 km/h (4.0 mph)
 Calculated using crush coefficients entered by the user.

<Continue>

File Edit Calculate Reports Graphics Options Help
 General Information

	Vehicle #1	Vehicle #2
Year	1995	1995
Make	FORD	HONDA
Model	ESCORT	PRELUDE
CDC	04RBLU1	09LPMW1
Side Damaged	R	L
PDOP Angle	120 x	270 x
Heading Angle	150 x	170 x
Calculation method:	Vehicle's Crush Coeff.	Vehicle's Crush Coeff.
d0 crush coeff.	63.29 sqrt(N)	63.32 sqrt(N)
d1 crush coeff.	6.84 sqrt(N)/cm	7.50 sqrt(N)/cm

<Continue>

Use arrow keys to highlight, press Enter to select << Help >> << Exit >>

File Edit Calculate Reports Graphics Options Help
 Damage Information

	Vehicle #1	Vehicle #2
Damage Known?	Yes	Yes
Crush Length	5.0 cm (2 in)	67.0 cm (26 in)
C1	0.0 cm (0 in)	20.0 cm (8 in)
C2	0.0 cm (0 in)	2.0 cm (1 in)
C3	0.0 cm (0 in)	9.0 cm (4 in)
C4	0.0 cm (0 in)	4.0 cm (2 in)
C5	0.0 cm (0 in)	2.0 cm (1 in)
C6	0.0 cm (0 in)	1.0 cm (0 in)
D	-209.9 cm (-83 in)	-9.0 cm (-4 in)
D'	-209.3 cm (-82 in)	-4.0 cm (-2 in)

<Continue>

Use arrow keys to highlight, press Enter to select << Help >> << Exit >>

File Edit Calculate Reports Graphics Options Help
 Vehicle Dimensions

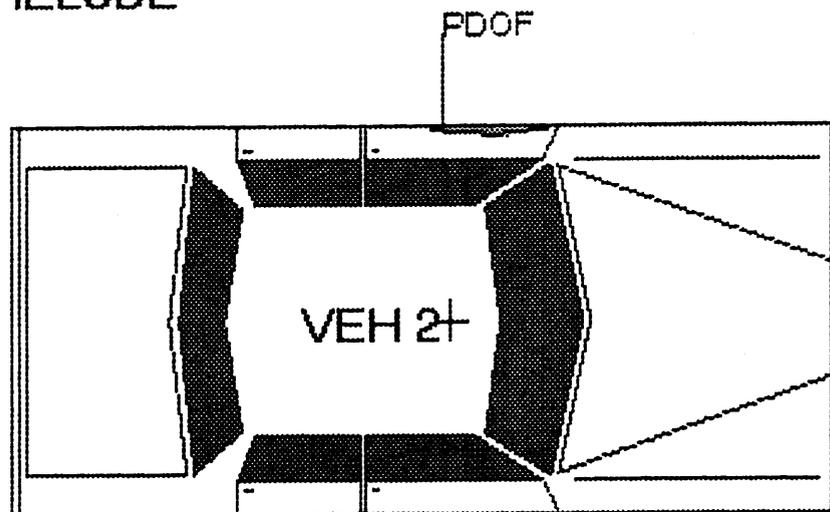
	Vehicle #1	Vehicle #2
Length	432.0 cm (170 in)	444.0 cm (175 in)
Width	169.0 cm (67 in)	177.0 cm (70 in)
Wheelbase	250.0 cm (98 in)	255.0 cm (100 in)

Weight	1125 kgs (2480 lbs)	1346 kgs (2967 lbs)
CG to Front of Veh	193.0 cm (76 in)	228.1 cm (90 in)
Engine Displacement	1.9 liters	2.3 liters
Moment of Inertia	189679 kgs (16789 lbs)	239723 kgs (21218 lbs)
Vehicle Mass	1125 kgs (6.4 lb-s ² /in)	1346 kgs (7.7 lb-s ² /in)

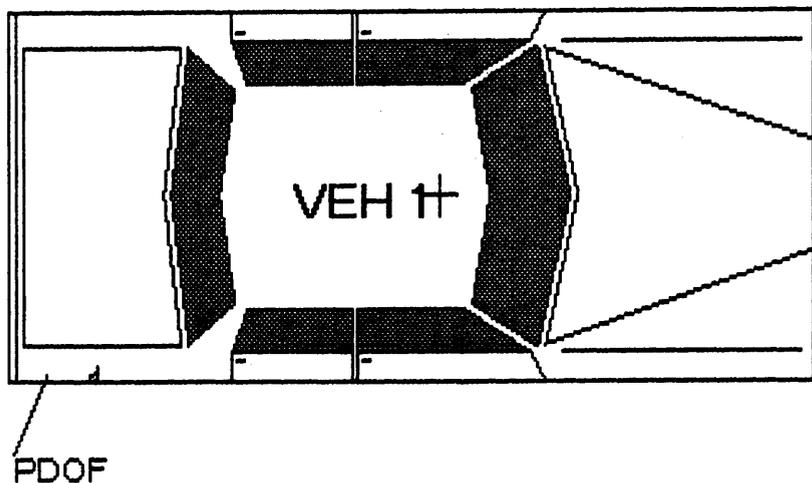
<Continue>

Use arrow keys to highlight, press Enter to select << Help >> << Exit >>

1995 HONDA PRELUDE



1995 FORD ESCORT





SMASH PROGRAM SUMMARY

(All Measurements in Metric)

Identifying Title

41

Primary Sampling Unit

024A

Case No.-Stratum

04

Accident Event Sequence No.

 96

Date (Month, day, year) of Run

GENERAL INFORMATION

VEHICLE 1

NASS Vehicle Number

01

Year

1995

Make

Ford

Model

Escort

Body Style

03

CDC

12 F Year 2

PDOF

\pm 000 °

Heading Angle

\pm +130 °

VEHICLE 2

NASS Vehicle Number

Year

Make

Model

Body Style

CDC

PDOF

Heading Angle

Barrier

VEHICLE SPECIFICATIONS

VEHICLE 1

Wheelbase

250 cm

Overall Length

432 cm

Overall Width

169 cm

Weight

1051 + 74 + OK = 1125 kg

Curb Occupant(s) Cargo

Engine Displacement

1.9 L

Drive System

FWD

Size

1/9

Stiffness

VEHICLE 2

Wheelbase

Overall Length

Overall Width

Weight

Curb Occupant(s) Cargo

Engine Displacement

Drive System

Size

Stiffness

DAMAGE INFORMATION

VEHICLE 1

Damage Known?

Y

Damage Length

147 cm

Damage Offset

\pm -28 cm

Crush Depth:

C1 0 cm

C2 27 cm

C3 22 cm

C4 17 cm

C5 13 cm

C6 6 cm

VEHICLE 2

Damage Known?

Y

Damage Length

Damage Offset

Crush Depth:

C1 _____ cm

C2 _____ cm

C3 _____ cm

C4 _____ cm

C5 _____ cm

C6 _____ cm

SCENE INFORMATION

Rest and Impact Positions No Yes

VEHICLE 1

Rest X _____ . ____ m
 Position Y _____ . ____ m
 Heading Angle _____ °

Impact X _____ . ____ m
 Position Y _____ . ____ m
 Heading Angle _____ °

Slip Angle (-180 to +180) _____ °

VEHICLE 2

Rest X _____ . ____ m
 Position Y _____ . ____ m
 Heading Angle _____ °

Impact X _____ . ____ m
 Position Y _____ . ____ m
 Heading Angle _____ °

Slip Angle (-180 to +180) _____ °

VEHICLE MOTION

Sustained Contact No Yes

Sustained Contact No Yes

VEHICLE 1

VEHICLE 2

Vehicle Rotation No Yes

Vehicle Rotation No Yes

Rotation Stop Before Rest No Yes

Rotation Stop Before Rest No Yes

End of Rotation X _____ . ____ m

End of Rotation X _____ . ____ m

Position Y _____ . ____ m

Position Y _____ . ____ m

Heading Angle _____ °

Heading Angle _____ °

Curved Path No Yes

Curved Path No Yes

Point on Path
 X _____ . ____ m Y _____ . ____ m

Point on Path
 X _____ . ____ m Y _____ . ____ m

Rotation Direction None CW CCW

Rotation Direction None CW CCW

Rotation >360° No Yes

Rotation >360° No Yes

FRICTION INFORMATION

Coefficient of Friction _____

Rolling Resistance Option

1

Vehicle 1 Rolling Resistance

Vehicle 2 Rolling Resistance

LF _____ . _____

LF _____ . _____

RF _____ . _____

RF _____ . _____

LR _____ . _____

LR _____ . _____

RR _____ . _____

RR _____ . _____

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

Model Year: _____

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

Make: _____

Model: _____

VIN: _____

Complete and ATTACH the appropriate damage sketch and dimensions to the form.

Speed Change
(Damage)

Vehicle #1
Total 26 km/h (16 mph)
Longitudinal -26 km/h (-16 mph)
Latitudinal 0 km/h (0 mph)
PDOF Angle 0 x
Energy Dissipated = 32230 Joules (23768 Ft-Lb)
Barrier Equivalent Speed = 26.3 km/h (16.3 mph)
Calculated using size and stiffness categories.

Vehicle #2
Total 0 km/h (0 mph)
Longitudinal 0 km/h (0 mph)
Latitudinal 0 km/h (0 mph)
PDOF Angle 0 x
Energy Dissipated = 0 Joules (0 Ft-Lb)
Barrier Equivalent Speed = 0.0 km/h (0.0 mph)
Calculated using size and stiffness categories.

<Continue>

File Edit Calculate Reports Graphics Options Help

General Information

	Vehicle #1	Vehicle #2
Year	1995	1900
Make	FPRD	
Model	ESCORT	
CDC	12FVEW2	BARRIER
Side Damaged	F	
PDOF Angle	0 x	0 x
Heading Angle	130 x	0 x
Calculation method:	Size and Stiffness	Size and Stiffness
Size Category	1	11
Stiffness Category	9	11
Vehicle Weight	1125 kgs (2480 lbs)	453592 kgs (999999 lbs)

<Continue>

Use arrow keys to highlight, press Enter to select << Help >> << Exit >>

File Edit Calculate Reports Graphics Options Help

Damage Information

	Vehicle #1	Vehicle #2
Damage Known?	Yes	Yes
Crush Length	147.0 cm (58 in)	0.0 cm (0 in)
C1	0.0 cm (0 in)	0.0 cm (0 in)
C2	27.0 cm (11 in)	0.0 cm (0 in)
C3	22.0 cm (9 in)	0.0 cm (0 in)
C4	17.0 cm (7 in)	0.0 cm (0 in)
C5	13.0 cm (5 in)	0.0 cm (0 in)
C6	6.0 cm (2 in)	0.0 cm (0 in)
D	-27.9 cm (-11 in)	0.0 cm (0 in)
D'	-34.0 cm (-13 in)	0.0 cm (0 in)

<Continue>

Use arrow keys to highlight, press Enter to select << Help >> << Exit >>

File Edit Calculate Reports Graphics Options Help

Vehicle Dimensions

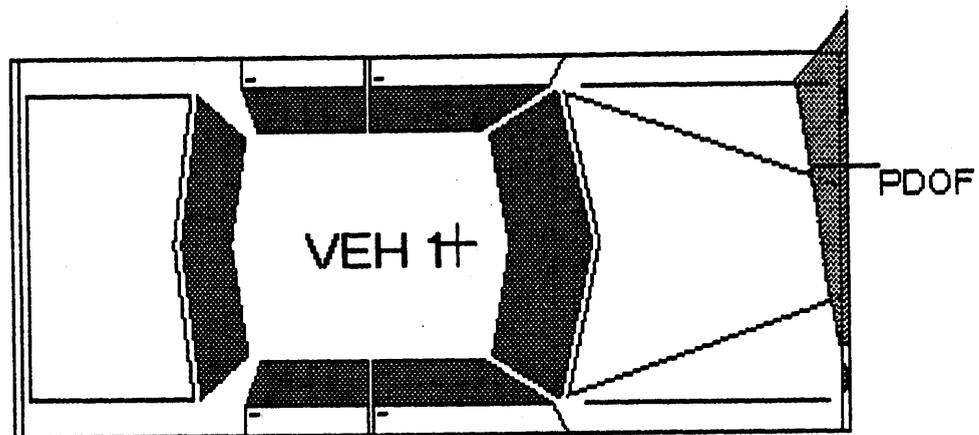
	Vehicle #1	Vehicle #2
Length	432.0 cm (170 in)	0.0 cm (0 in)
Width	163.0 cm (67 in)	0.0 cm (0 in)
Wheelbase	250.0 cm (98 in)	254.0 cm (100 in)

Weight	1125 kgs (2480 lbs)	453592 kgs (999999 lbs)
CG to Front of Veh	193.0 cm (76 in)	127.0 cm (50 in)
Engine Displacement	1.9 liters	0.0 liters
Moment of Inertia	189679 kgs (16789 lbs)	29375740821 kgs (2600101632 lb)
Vehicle Mass	1125 kgs (6.4 lb-s^2/in)	453515 kgs (2600.1 lb-s^2/in)

<Continue>

Use arrow keys to highlight, press Enter to select << Help >> << Exit >>

1995 FPRD ESCORT





SLIDE INDEX

Primary Sampling Unit Number 41

Case Number - Stratum 024A

Slide No.	Vehicle No.	Direction of Picture	Description of Slide Subject Matter
1-3	1	S	Approach
4	1	S	APOI no 1
5	1	S	close up of gauge at APOI no 1
6-7	1	SE	Post impact trajectory
8	1	SE	APOI no 3
9	1	SE	APOI no 4 / FR
10	1	SE	close up of tree
11	1	N	look Back From: Approach
12	1	N	" " APOI
13	1	NW	" " FR
14-6	2	E	Approach
17	2	E	APOI
18	2	SE	Post impact trajectory
19	2	SE	FR
20	2	W	look Back From: Approach
21	2	W	" " APOI
22	2	NW	" " FR
23-48	1		Exterior
49-62	1		Interior
63-79	2		Exterior
80-102	2		Interior



PSU 41-024A (1996) #1



PSU 41-024A (1996) #2



PSU 41-024A (1996) #3



PSU 41-024A (1996) #4



PSU 41-024A (1996) #5



PSU 41-024A (1996) #6



PSU 41-024A (1998) #7



PSU 41-024A (1998) #8



PSU 41-024A (1998) #9



PSU 41-024A (1996) #10



PSU 41-024A (1996) #11



PSU 41-024A (1996) #12



PSU 41-024A (1998) #13



PSU 41-024A (1996) #14



PSU 41-024A (1996) #15



PSU 41-024A (1996) #16



PSU 41-024A (1998) #17



PSU 41-024A (1996) #18



PSU 41-024A (1996) #19



PSU 41-024A (1996) #20



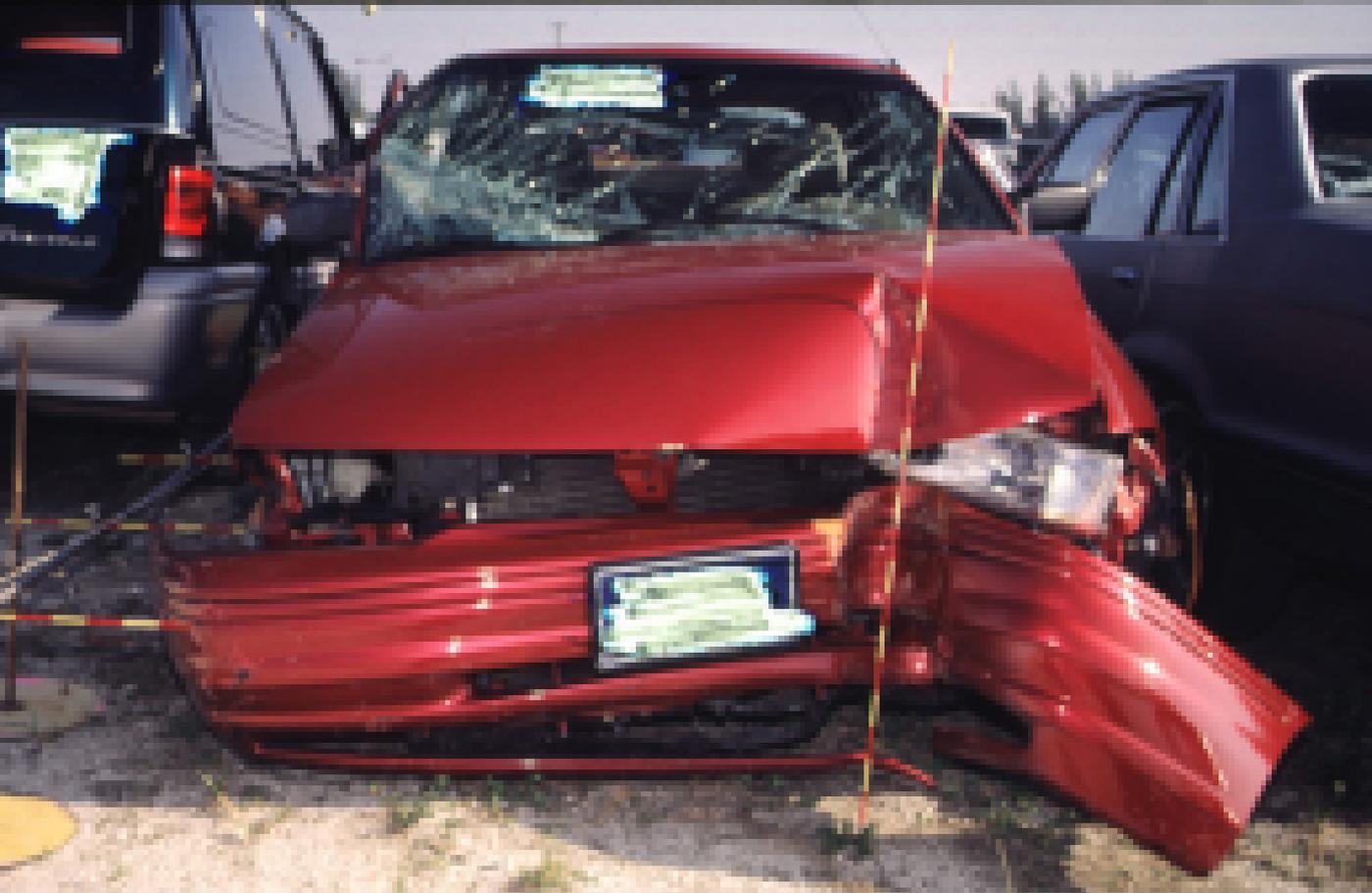
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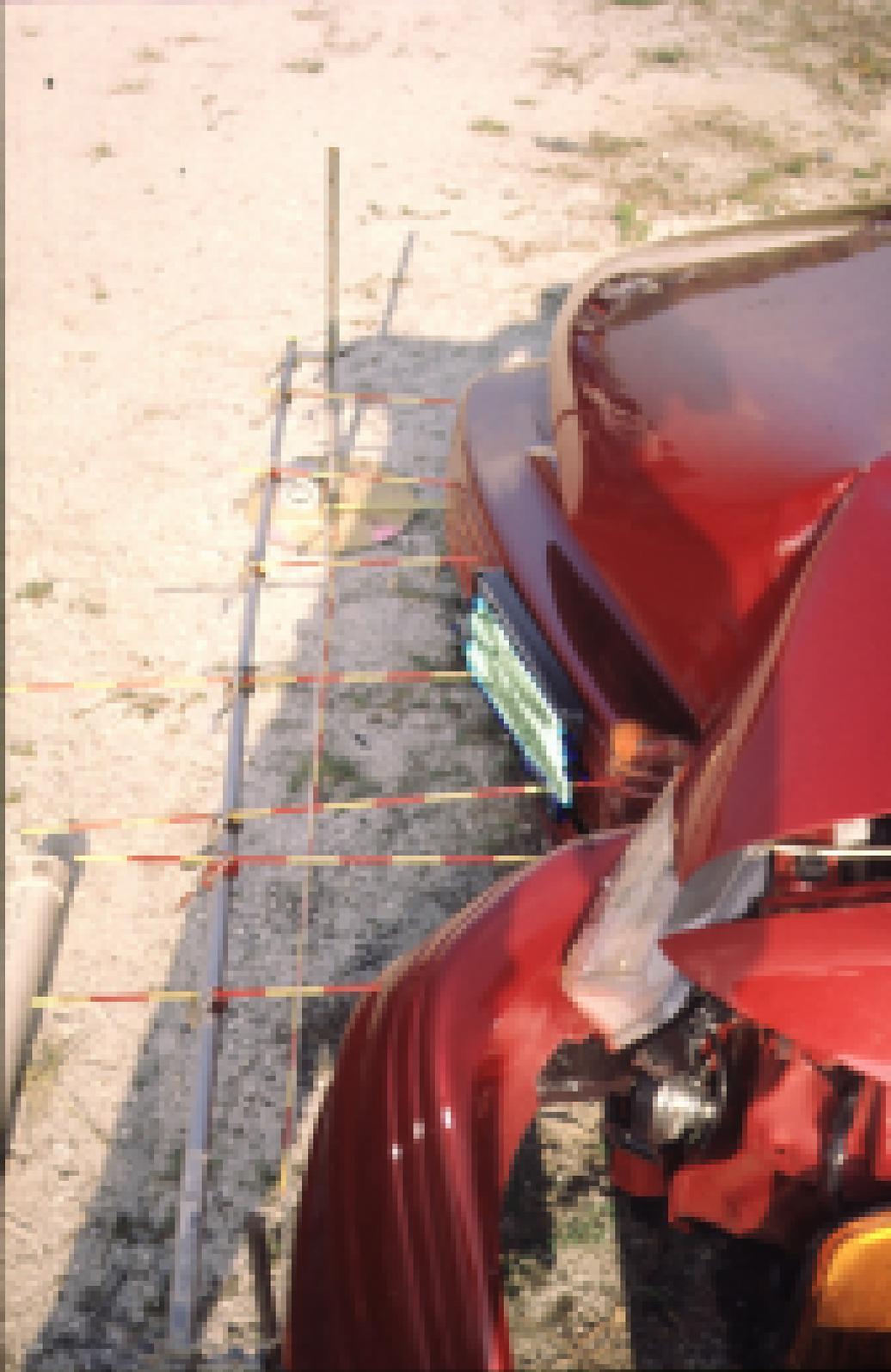
PSU 41-024A (1996) #22



PSU 41-024A (1996) #23
Best Available



**PSU 41-024A (1996) #24
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PSU 41-024A (1998) #25

Best Available



PSU 41-024A (1996) #26



**PSU 41-024A (1996) #27
Best Available**



PSU 41-024A (1996) #28
Best Available



PSU 41-024A (1996) #29



PSU 41-024A (1998) #30



PSU 41-024A (1996) #31



PSU 41-024A (1996) #32



PSU 41-024A (1996) #33



PSU 41-024A (1998) #34



PSU 41-024A (1996) #35



PSU 41-024A (1996) #36



PSU 41-024A (1996) #37



PSU 41-024A (1996) #38



PSU 41-024A (1996) #39



PSU 41-024A (1996) #40



PSU 41-024A (1996) #41



PSU 41-024A (1996) #42



PSU 41-024A (1996) #43



PSU 41-024A (1996) #44



PSU 41-024A (1996) #46



PSU 41-024A (1996) #47



PSU 41-024A (1996) #48



PSU 41-024A (1996) #49
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PSU 41-024A (1986) #50
Best Available



PSU 41-024A (1996) #51
Best Available



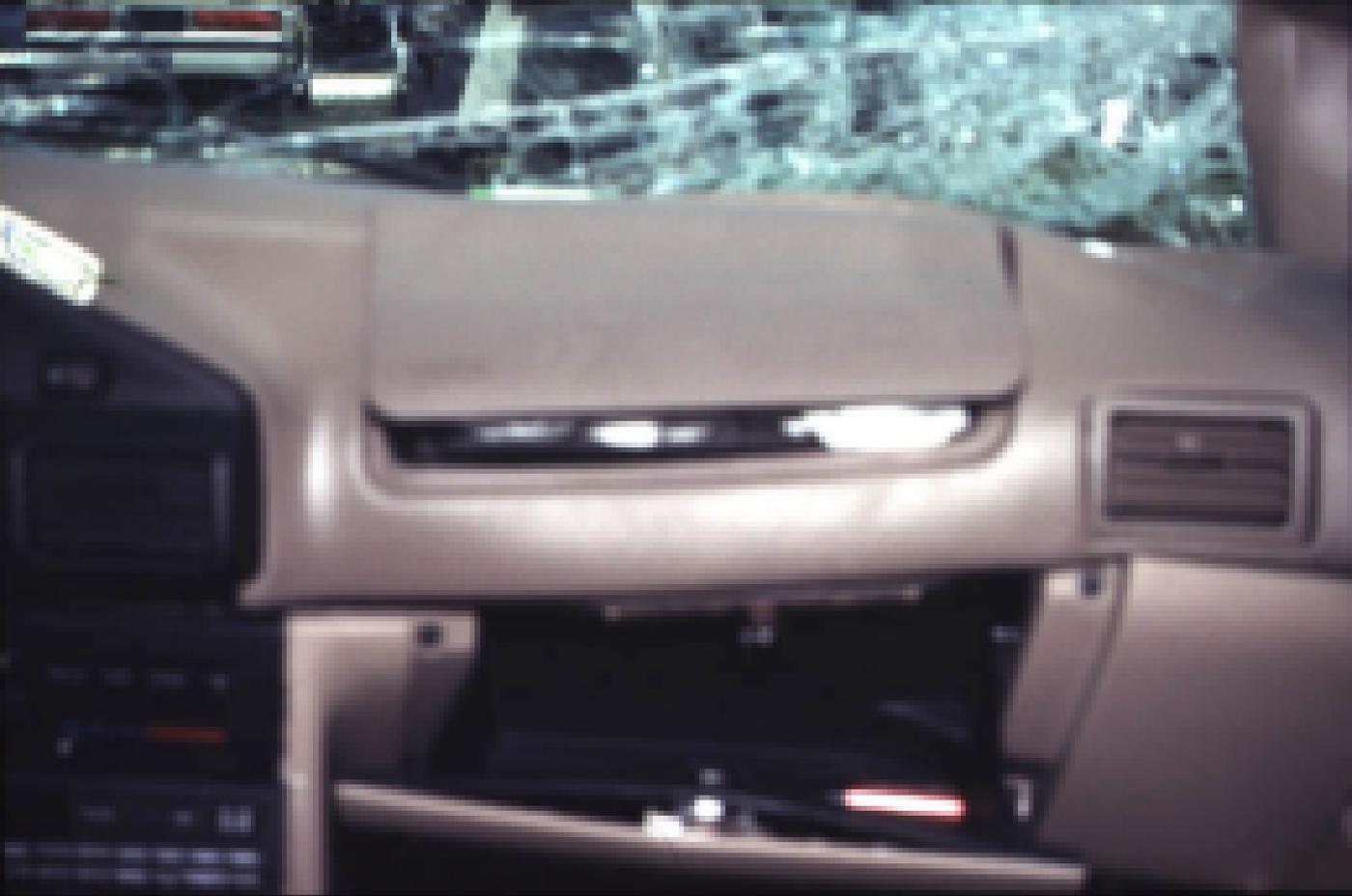
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Best Available



PSU 41-024A (1996) #53
Best Available



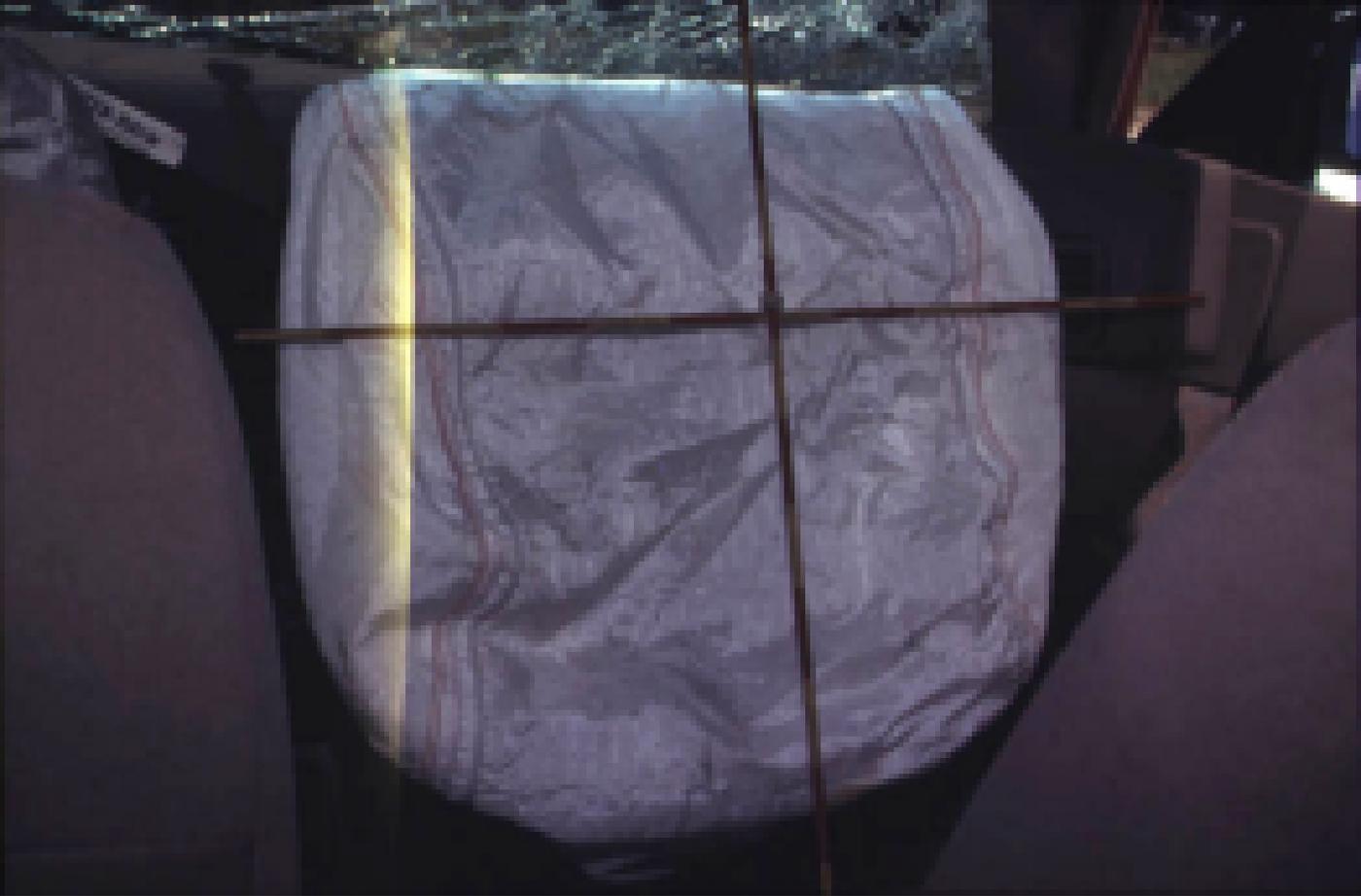
PSU 41-024A (1996) #54
Best Available



PSU 41-024A (1996) #55
Best Available



PSU 41-024A (1996) #56
Best Available



PSU 41-024A (1996) #57
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PSU 41-024A (1998) #58



PSU 41-024A (1996) #59



PSU 41-024A (1996) #60



PSU 41-024A (1996) #61



PSU 41-024A (1996) #62



PSU 41-024A (1996) #63



PSU 41-024A (1995) #64



PSU 41-024A (1998) #65



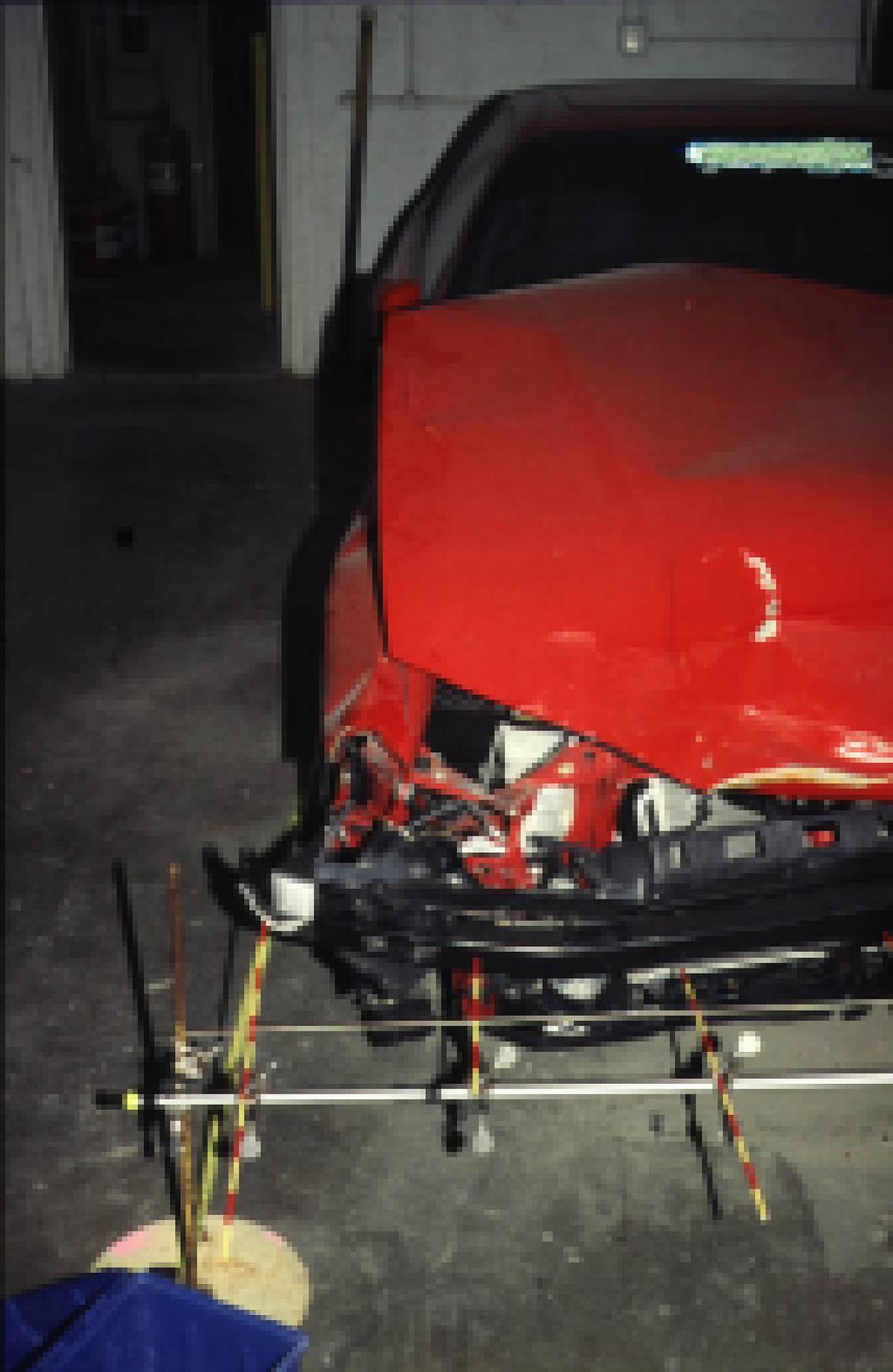
PSU 41-024A (1996) #66

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PSU 41-024A (1996) #67

Best Available



FSU 41-024A (1996) #68

Best Available



PSU 41-024A (1996) #69
Best Available



PSU 41-024A (1996) #70
Best Available



PSU 41-024A (1996) #71
Best Available



PSU 41-024A (1996) #72



FSU 41-024A (1996) #73
Best Available



PSU 41-024A (1996) #74
Best Available



PSU 41-024A (1998) #75
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PSU 41-024A (1996) #78



PSU 41-024A (1996) #77



PSU 41-024A (1996) #78
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PSU 41-024A (1996) #79
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PSU 41-024A (1996) #80
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PSU 41-024A (1996) #81
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PSU 41-024A (1996) #62
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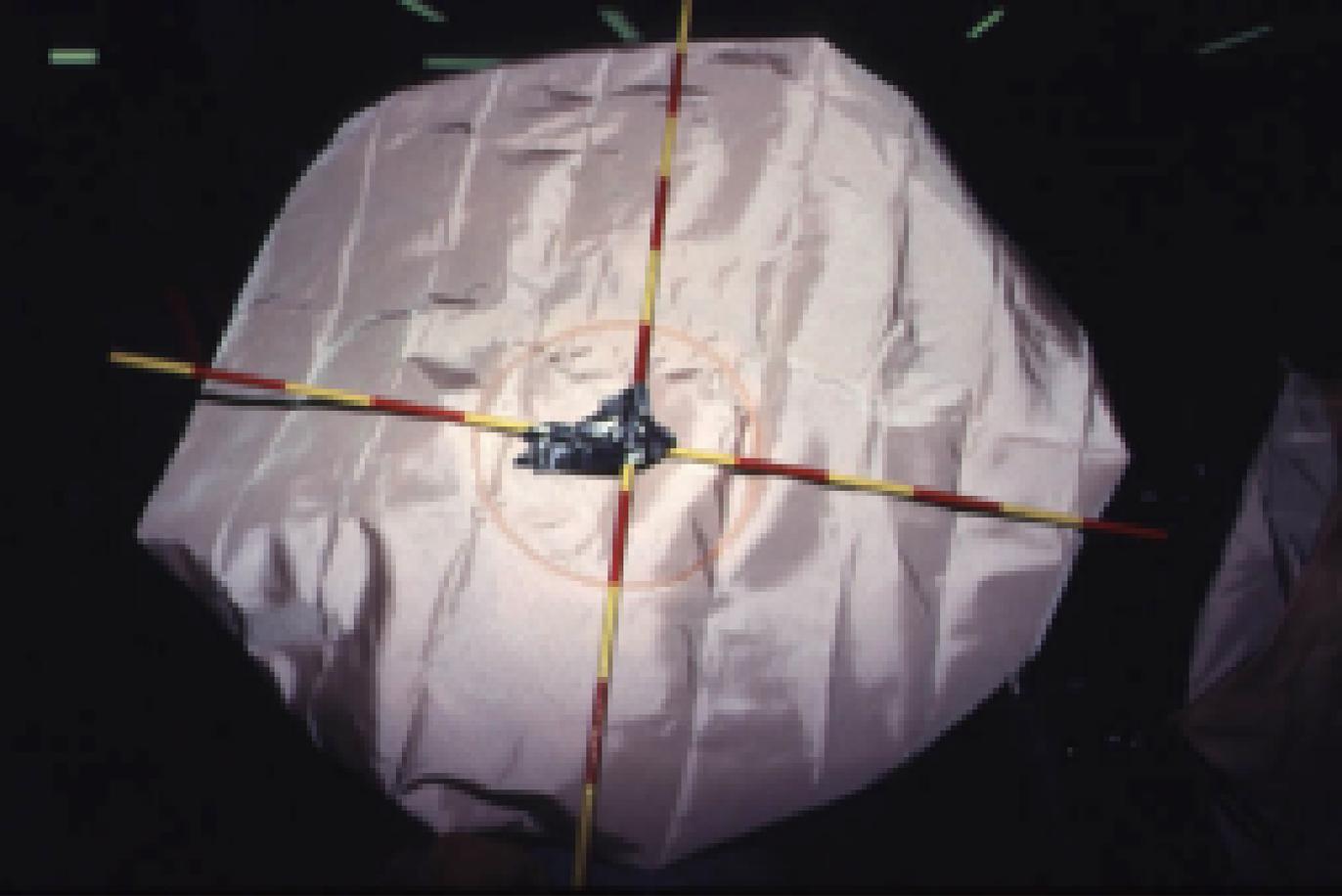
PSU 41-024A (1996) #83

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PSU 41-024A (1996) #84

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PSU 41-024A (1996) #85
Best Available



PSU 41-024A (1996) #86
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PSU 41-024A (1996) #87
Best Available



PSU 41-024A (1996) #88

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PSU 41-024A (1996) #69
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PSU 41-024A (1996) #90
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PSU 41-024A (1996) #91

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PSU 41-024A (1996) #92
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PSU 41-024A (1998) #93
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PSU 41-024A (1996) #94
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PSU 41-024A (1996) #95

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PSU 41-024A (1996) #96

Best Available



PSU 41-024A (1996) #97



PSU 41-024A (1996) #98



PSU 41-024A (1996) #88



PSU 41-024A (1996) #100



PSU 41-024A (1998) #101



PSU 41-024A (1996) #102