400 Seventh Street, S.W.
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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U.S. Department of Transportation
National Highway Traffic Safety Administration

CASE SUMMARY

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

PSU 79 CASE NO. 091D TYPE OF ACCIDENT Compact Utility/CAR - Obtuse Angle

A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES

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

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)

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

Body Region

Abdomen
Ankle—foot
Arm (upper)
Back-thoracolumbar spine
Brain
Chest
Ears
Eye
Elbow
Face
Forearm
Head—skull
Heart
Kidneys
Knee
Leg (lower)
Liver
Lower limbs(s) (whole or unknown part)
Mouth
Neck—cervical spine
Nose
Pelvic—hip
Pulmonary—lungs
Shoulder
Spleen
Thigh
Thyroid, other endocrine gland
Upper limb(s) (whole or unknown part)
Vertebrae
Whole body
Wrist—hand

Injury Type

Abrasion
Amputation
Avulsion
Burn
Concussion
Contusion
Crush
Detachment, separation
Dislocation
Fracture
Fracture and dislocation
Laceration
Other
Perforation, puncture
Rupture
Sprain
Strain
Total severance, transection
Unknown

Abbreviated Injury Scale

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

DO NOT SANITIZE THIS FORM

PSU79 1995 Case Summary Form
CASE 091D
TYPE OF ACCIDENT: COMPACT UTIL/CAR -OBTUSE ANGLE

A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES

V1 was heading east on a 7-lane, undivided, level, dry, asphalt road, in the left turn pocket to head north, at an intersection controlled by overhanging trilights. V2 was heading west in the #1 lane of the same 7-lane road, approaching the same intersection, when the front of V2 contacted the right side of V1. This impact caused V1 to roll left, two quarter turns, coming to rest on the roof. Both vehicles were towed due to damage. The driver of V1 was transported with non-serious injuries. The driver of V2 was transported with serious injuries.
01

PSU79 1995 Case Summary Form
CASE 091D
TYPE OF ACCIDENT: COMPACT UTIL/CAR -OBTUSE ANGLE

B. VEHICLE PROFILE(S)

Veh. No	Class of Vehicle	Year/Make/ Model	Damage Plane	Severity Descr.	Component Failure
01	Compact utility	95/Toyota/4-Runner	Right	Moderate	None
02	Subcompact	88/Ford/Festiva	Front	Unk	Unk

01

PSU79 1995 Case Summary Form
CASE 091D
TYPE OF ACCIDENT: COMPACT UTIL/CAR -OBTUSE ANGLE

C. PERSON PROFILE(S)

Veh. No	Person Role	Seat Positon	Restraint Use	Body Region	Injury Type	AIS	Injury Source
01	Driver	FL	Lap &Shoulder	Injured Severity Unknown			
02	Driver	FL	Unk	Injured Severity Unknown			

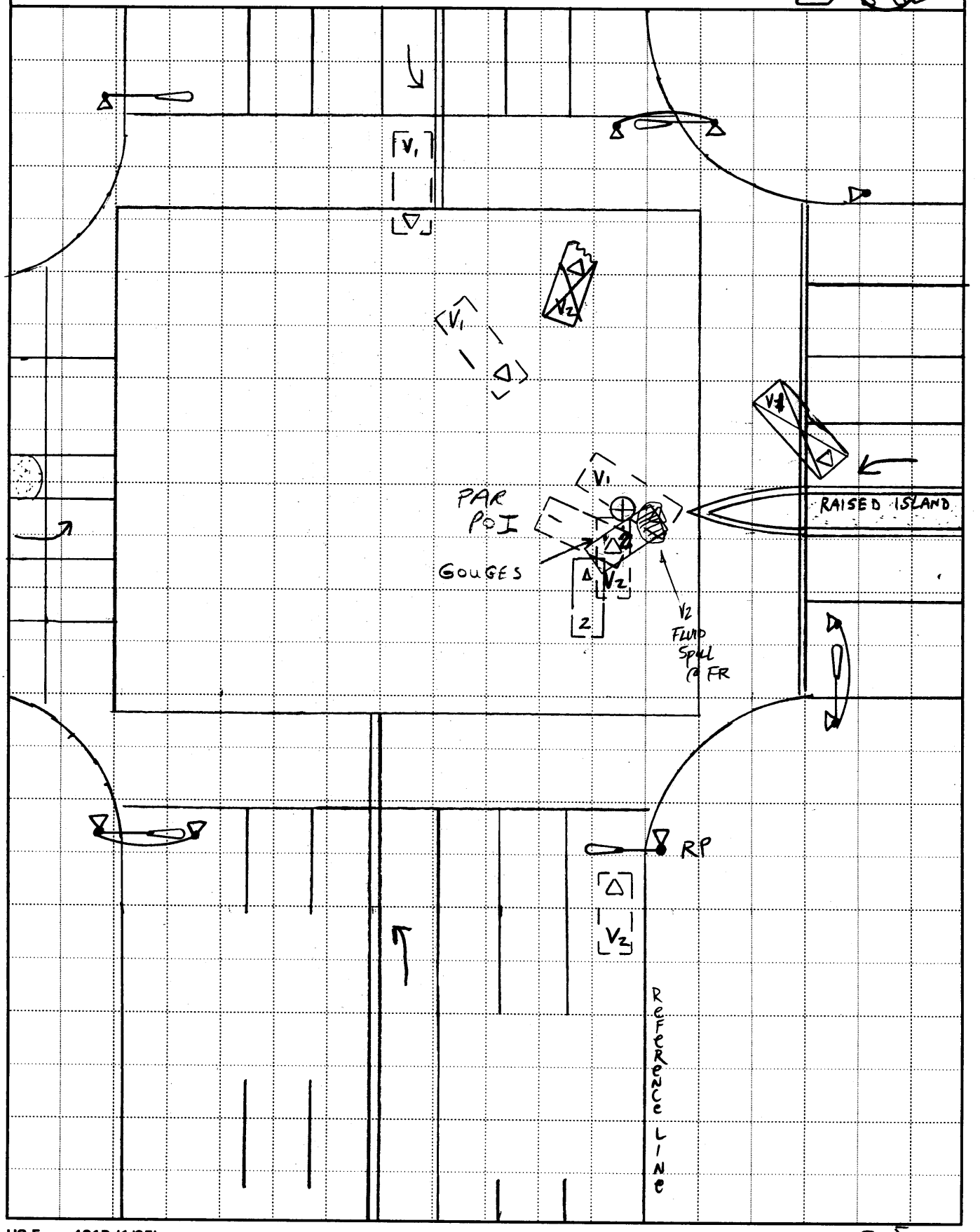
U.S. Department of Transportation
National Highway Traffic Safety Administration

ACCIDENT COLLISION DIAGRAM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

PSU No. 79 Case Number—Stratum 091D

Indicate North



HS Form 431B (1/95)

Scale: 1 centimeter = 2.5 meters

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

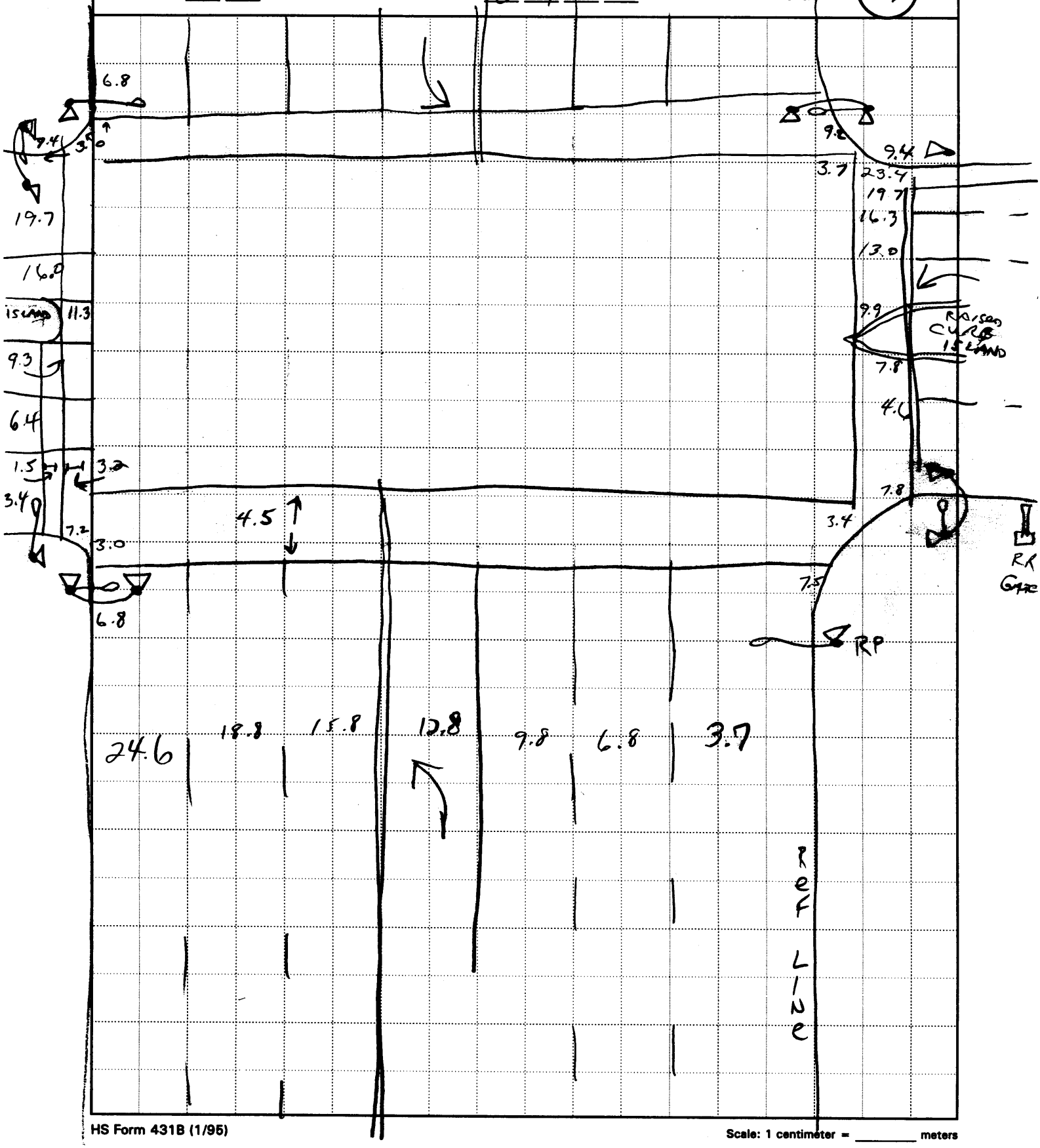
ACCIDENT COLLISION DIAGRAM

FIELD SKETCH

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

PSU No. 79 Case Number—Stratum 0910

Indicate North



HS Form 431B (1/95)

Scale: 1 centimeter = _____ meters

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

ACCIDENT COLLISION MEASUREMENT TABLE

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

Primary Sampling Unit Number 79 | Case Number—Stratum 0910

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., speed limit)
- 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

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	32°	270°	
Surface Type	ASPHALT		
Surface Condition	WORN		
Coefficient of Friction	.7	.7	
Grade (v/h) Measurement (between impact and final rest)	0/61	0/61	
Grade (v/h) Measurement (at location of rollover initiation)	0/61	N/A	

Reference Point: GLOBE LIGHT ON N/E CORNER

Reference line: NORTH EDGE OF E/W STREET

Item	Distance and Direction from Reference Point	Distance and Direction from Reference Line
RP 7.2 E OF N/E CURB INTERSECT	—	.7 N
V1 GOUGE NEAR POI #1	15.0 W	1.9 S
#2	15.2 W	1.1 S

HS Form 431A (1/95)

Item	Distance and Direction from Reference Point	Distance and Direction from Reference Line

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

ACCIDENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 79
2. Case Number - Stratum: 091D

IDENTIFICATION

3. Number of General Vehicle Forms Submitted: 02
4. Date of Accident (Month,Day,Year): [redacted] / 95
5. Time of Accident: 1705

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 _____: 0

NUMBER OF EVENTS

11. Number of Recorded Events in This Accident: 02

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 columnns.

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. 01	13. 01	14. 14	15. R	16. 02	17. 01	18. F
19. 02	20. 01	21. 14	22. T	23. 31	24. 00	25. N
26. 03	27.	28.	29.	30.	31.	32.
33. 04	34.	35.	36.	37.	38.	39.
40. 05	41.	42.	43.	44.	45.	46.

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

CODES FOR CLASS OF VEHICLE

(00) Not a motor vehicle
(01) Subcompact/mini (wheelbase < 254 cm)
(02) Compact (wheelbase ≥ 254 but < 265 cm)
(03) Intermediate (wheelbase ≥ 265 but < 278 cm)
(04) Full size (wheelbase ≥ 278 but < 291 cm)
(05) Largest (wheelbase ≥ 291 cm)
(09) Unknown passenger car size
(14) Compact utility vehicle
(15) Large utility vehicle (≤ 4,500 kgs GVWR)
(16) Utility station wagon (≤ 4,500 kgs GVWR)
(19) Unknown utility type
(20) Minivan (≤ 4,500 kgs GVWR)
(21) Large van (≤ 4,500 kgs GVWR)
(24) Van Based school bus (≤ 4,500 kgs GVWR)
(28) Other van type (≤ 4,500 kgs GVWR)
(29) Unknown van type (≤ 4,500 kgs GVWR)
(30) Compact pickup truck (≤ 4,500 kgs GVWR)
(31) Large pickup truck (≤ 4,500 kgs GVWR)
(38) Other pickup truck (≤ 4,500 kgs GVWR)
(39) Unknown pickup truck type (≤ 4,500 kgs GVWR
(45) Other light truck (≤ 4,500 kgs GVWR)
(48) Unknown light truck type (≤ 4,500 kgs GVWR)
(49) Unknown light vehicle type
(50) School bus (excludes van based)(> 4,500 kgs GVWR)
(58) Other bus (> 4,500 kgs GVWR)
(59) Unknown bus type
(60) Truck (> 4,500 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

(0) 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

(0) 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

PSU 79-091D
V-01

PRECRASH ENVIRONMENTAL DATA

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

Non-Interchange junctions
(2) Intersection related
(3) Driveway, alley access related
(4) Other junction (specify) _____
(5) Unknown type of junction

(9) Unknown

20. Trafficway Flow — 0
(0) Not physically divided (two way traffic)
(1) Divided trafficway-median strip without positive barrier
(2) Divided trafficway-median strip with positive barrier
(3) One way traffic
(9) Unknown

21. Number Of Travel Lanes — 7
(1) One
(2) Two
(3) Three
(4) Four
(5) Five
(6) Six
(7) Seven or more
(9) Unknown

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

23. Roadway Profile — 1
(1) Level
(2) Uphill grade (>2%)
(3) Hill crest
(4) Downhill grade (>2%)
(5) Sag
(9) Unknown

24. Roadway Surface Type — 2
(1) Concrete
(2) Bituminous (asphalt)
(3) Brick or block
(4) Slag, gravel, or stone
(5) Dirt
(8) Other (specify): _____
(9) Unknown

25. Roadway Surface Condition — 1
(1) Dry
(2) Wet
(3) Snow or slush
(4) Ice
(5) Sand, dirt, or oil
(8) Other (specify): _____
(9) Unknown

26. Light Conditions — 1
(1) Daylight
(2) Dark
(3) Dark, but lighted
(4) Dawn
(5) Dusk
(9) Unknown

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

28. Traffic Control Device — 1
(0) No traffic control(s)
(1) Traffic control signal (not RR crossing)

Regulatory
(2) Stop sign
(3) Yield sign
(4) School zone sign
(5) Other regulatory sign (specify): _____
(6) Warning sign (not RR crossing)
(7) Unknown sign
(8) Miscellaneous/other controls including RR controls (specify): _____
(9) Unknown

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

PSU 79-091D
V-01

OCCUPANT RELATED

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

38. Number of Occupants This Vehicle: 01
(00-96) Code actual number of occupants for this vehicle
(97) 97 or more
(99) Unknown

39. Number of Occupant Forms Submitted: 01

AIR BAG RELATED

40. Is this an AOPS Vehicle? 0
(0) No (includes unknown)
(1) Yes - researcher determined
(2) VIN determined air bag system
(3) VIN determined automatic (passive) belts
(4) VIN determined air bag and automatic (passive) belts

41. Air Bag(s) Deployment, First Seat Frontal: 0
(0) Not equipped or not available
(1) No air bags deployed

Single Air Bag Vehicle
(2) Driver air bag deployed
(3) Driver air bag, unknown if deployed

Multiple Air Bag Vehicle
(4) Driver side only deployed
(5) Passenger side only deployed
(6) Driver and passenger side deployed
(7) Driver and passenger side unknown if deployed
(8) Air bag(s) deployed, details unknown
(9) Unknown

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

Specify type of "other" air bag present: _____

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight: 1,710
____ Code weight to nearest 10 kilograms.
(045) Less than 450 kilograms
(610) 6,100 kilograms or more
(999) Unknown
3,769 lbs X .4536 = 1,705 kgs
Source: 1995 [redacted]

44. Vehicle Cargo Weight: 0,000
____ Code weight to nearest 10 kilograms.
(000) Less than 5 kilograms
(450) 4,500 kilograms or more
(999) Unknown
____,____ lbs X .4536 = ___,___ kgs
Source: [redacted]

ROLLOVER DATA

45. Rollover: 02
(00) No rollover (no overturning)

Rollover (primarily about the longitudinal axis)
(01-16) Code the number of quarter turns
(17) Rollover, 17 or more quarter turns
(specify): _____
(98) Rollover--end-over-end (i.e., primarily about the lateral axis)
(99) Rollover (overturn), details unknown

46. Rollover Initiation Type: 07
(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: 1
(0) No rollover
(1) On roadway
(2) On shoulder—paved
(3) On shoulder—unpaved
(4) On roadside or divided trafficway median
(8) Rollover--end-over-end
(9) Unknown

48. Rollover Initiation Object Contacted: 02
(Note: Applicable codes on back of page)

49. Location on Vehicle Where Initial Principal Tripping Force Is Applied: 2
(0) No rollover
(1) Wheels/tires
(2) Side plane
(3) End plane
(4) Undercarriage
(5) Other location on vehicle (specify):
_____
(6) Non-contact rollover forces (specify):
_____
(8) Rollover--end-over-end
(9) Unknown

50. Direction of Initial Roll: 2
(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

PSU 79-091D
V-01

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

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

EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 79	3. Vehicle Number: 01
2. Case Number - Stratum: 0910	

VEHICLE IDENTIFICATION

VIN JT3VN29V2S[redacted] Model Year 95

Vehicle Make (specify): TOYOTA Vehicle Model (specify): 4-RUNNER 4DR SR5

LOCATOR

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

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
01	BEGIN 47 CM REAR OF LT AXEL RF	BEGIN 44 CM REAR OF LT AXEL RF	AT C-4

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 Width (CDC)	Direct Damage Max Crush	Field L	C_1	C_2	C_3	C_4	C_5	C_6	±D
01	(R) SILL	161	27	164	11	22	21	27	19	19	+7
	FREESPACE	—	8	—	9	8	8	8	8	2	
	RESULT	161	19	164	2	14	13	19	11	17	+7
02	N/A		8 CM								

ORIGINAL SPECIFICATIONS WORK SHEET

1995 AUTO NEWS

Wheelbase	103.3	inches	x 2.54	=	262 cm
Overall Length	176.0	inches	x 2.54	=	447 cm
Maximum Width	66.5	inches	x 2.54	=	169 cm

1995 GAS TRUCK

Curb Weight	~~3800~~ OK ~~3760~~	pounds	x .4536	=	1705 kg

1995 CANAM

Average Track	___.___	inches	x 2.54	=	148 cm
Front Overhang	___.___	inches	x 2.54	=	76 cm
Rear Overhang	___.___	inches	x 2.54	=	111 cm
Undeformed End Width	___.___	inches	x 2.54	=	___ cm
Engine Size: cyl./displ. V6	____	cc	x .001	=	3.0 L
	___	CID	x .0164	=	___ L

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE

a. Rotation physically restricted

RF 2
LF 2
RR 2
LR 2

b. Tire deflated

RF 2
LF 1
RR 2
LR 2

(1) Yes (2) No (8) NA (9) Unk.

TYPE OF TRANSMISSION

☐ Manual ☒ Automatic

END SHIFT ≥ 10 CM

☐ Yes ☒ No

ORIGINAL SPECIFICATIONS

Wheelbase	262	cm
Overall Length	447	cm
Maximum Width	169	cm
Curb Weight	1705	kg
Average Track	148	cm
Front Overhang	76	cm
Rear Overhang	111	cm
Undeformed End Width	162	cm
Engine Size: cyl./displ.	V6 3.0	L

WHEEL STEER ANGLES

(For locked front wheels or displaced rear axles only)

RF ± ___ ___ o
LF ± ___ ___ o
RR ± ___ ___ o
LR ± ___ ___ o

Within ± 5 degrees

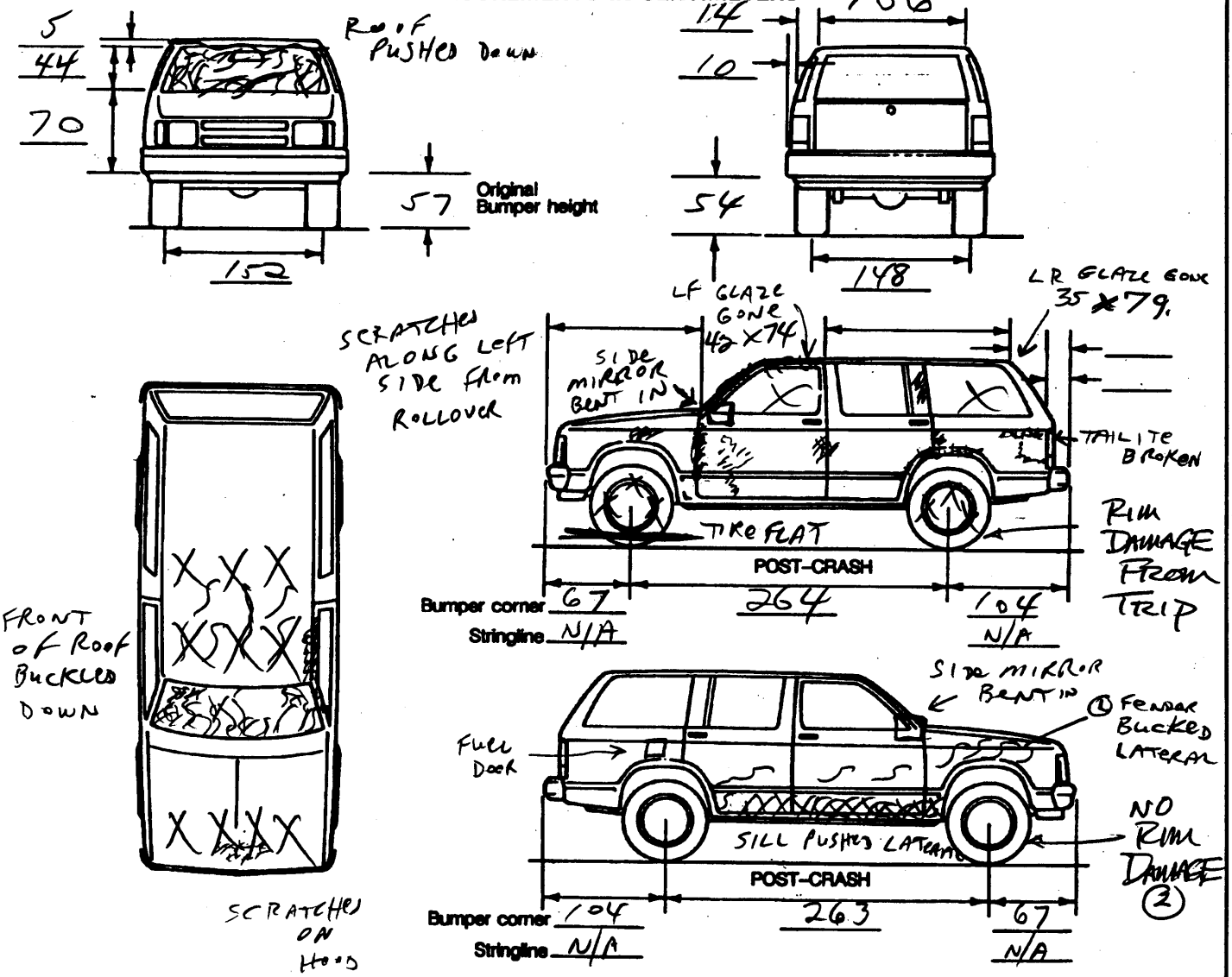
DRIVE WHEELS

☐ FWD ☒ RWD ☐ 4WD

Approximate Cargo Weight

Ø kg

MEASUREMENTS IN CENTIMETERS



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

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

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision
- (31) Overturn — rollover (excludes end-over-end)
- (32) Rollover—end-over-end
- (33) Fire or explosion
- (34) Jackknife
- (35) Other intraunit damage (specify): _____
- (36) Noncollision injury
- (38) Other noncollision (specify): _____
- (39) Noncollision — details unknown

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

Nonbreakaway Pole or Post
- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail) (specify): _____
- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____
- (69) Unknown fixed object

Collision with Nonfixed Object
- (70) Passenger car, light truck, van, or other vehicle not in-transport
- (71) Medium/heavy truck or bus not in-transport
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance
- (75) Vehicle occupant
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): _____
- (89) Unknown nonfixed object
- (98) Other event (specify): _____
- (99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

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

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. 01	5. 02	6. 02	7. R	8. ~~X~~ Y	9. 4 E	10. W	11. 02

Second Highest Delta "V"

12. 02	13. 31	14. ~~00~~	15. T	16. ~~X~~ Y	17. D	18. 0	19. 03

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
164	002	014	013	019	011	012	+007

Second Highest Delta "V"

23. L	24. C_1	C_2	C_3	C_4	C_5	C_6	25. ±D
							+ −

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

27. Direct Damage Width (For highest severity impact) 161
- ___ Code to the nearest centimeter
- (250) 250 centimeters or more
- (999) Unknown

28. Original Wheelbase 262
- ___ Code to the nearest centimeter
- (650) 650 centimeters or more
- (999) Unknown

103.3 inches X 2.54 = 262 centimeters

29. Original Average Track Width 150
- ___ Code to the nearest centimter
- (185) 185 centimeters or more
- (999) Unknown

___.__ inches X 2.54 = ___ centimeters

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

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

32. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? 0
(0) No post manufacturer modifications
(1) Yes - post manufacturer modifications (specify): _____
(Include photograph of CERTIFICATION PLACARD in case report)
(9) Unknown if vehicle is modified

FIRE OCCURRENCE

33. Fire Occurrence 0
(0) No fire

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

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

FUEL SYSTEM

35. Location of Fuel Tank-1 Filler Cap 7

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

37. Type of Fuel Tank-1 1

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

39. Location of Fuel Tank-1 6

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 2

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 02

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.

U.S. Department of Transportation

National Highway Traffic Safety Administration

INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 79
2. Case Number - Stratum 0910
3. Vehicle Number 01

INTEGRITY

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

   Yes, Integrity Was Lost Through LF & LR
   (01) Windshield
   (02) Door (side)
   (03) Door/hatch (back door)
   (04) Roof
   (05) Roof glass
   (06) Side window
   (07) Rear window (backlight)
   (08) Roof and roof glass
   (09) Windshield and door (side)
   (10) Windshield and roof
   (11) Side and rear window (side window and backlight)
   (12) Windshield and side window
   (13) Door and side window
   (98) Other combination of above (specify): _____
   (99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 1 8. RR 1 9. TG/H 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 4 17. RF 4 18. LR 3 19. RR 3
20. BL 2 21. Roof 0 22. Other 4 1/4

(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 4 29. Roof 0 30. Other 1

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

Glazing Damage from Impact Forces

31. WS 2 32. LF 6 33. RF 1 34. LR 6 35. RR 1
36. BL 1 37. Roof 0 38. Other 1

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

Glazing Damage from Occupant Contact

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

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

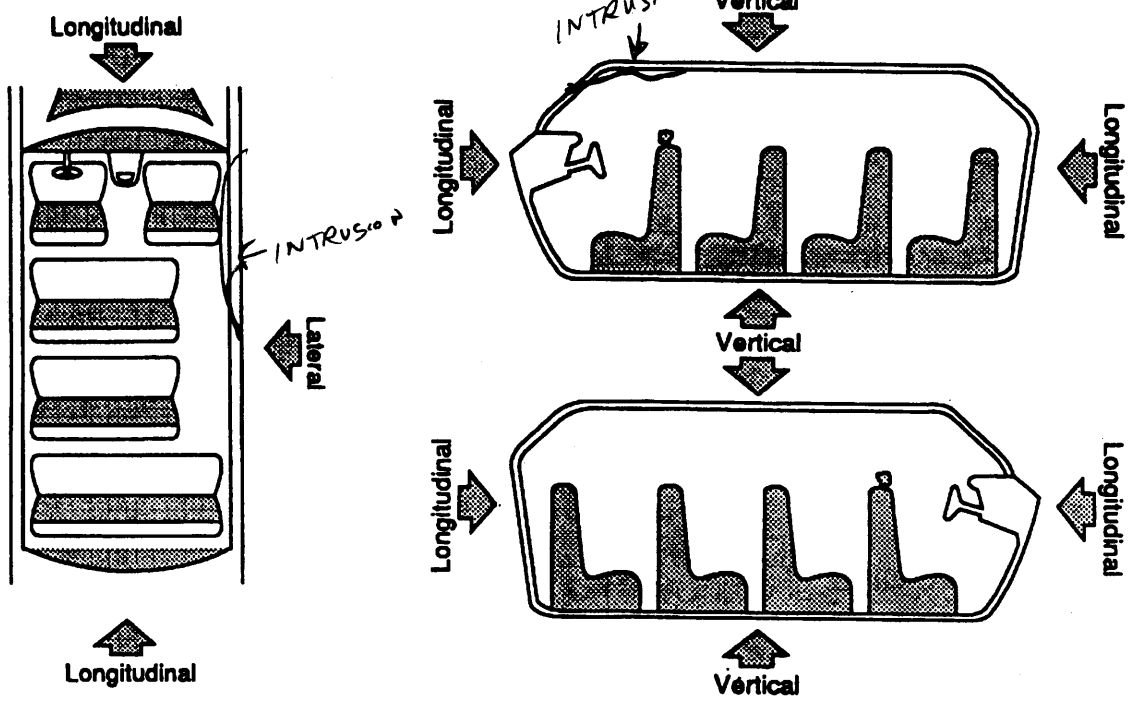
INTRUSION WORKSHEET

Note: Sketch intruded areas

Row Width (cm)

136

136



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters) COMPARISON VALUE	–	INTRUDED VALUE	=	INTRUSION	DOMINANT CRUSH DIRECTION	
23	SILL	66	–	57	=	9	LAT	1
23	DOOR	68	–	64	=	4	LAT	6
13	DOOR	68	–	63	=	5	LAT	4
11	~~HEADER~~ WINDSHIELD	74	–	70	=	4	VERT	7
12	HEADER	74	–	70	=	4	VERT	8
11	ROOF	79	–	73	=	6	VERT	3
13	SILL	70	–	61	=	9	LAT	2
23	B-PILLAR	66	–	61	=	5	LAT	5
			–		=			
			–		=			
			–		=			
			–		=			
			–		=			
			–		=			
			–		=			

Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

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

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. 23	48. 18	49. 2	50. 3
2nd	51. 13	52. 18	53. 2	54. 3
3rd	55. 11	56. 13	57. 1	58. 1
4th	59. 13	60. 11	61. 1	62. 3
5th	63. 23	64. 07	65. 1	66. 3
6th	67. 23	68. 11	69. 1	70. 3
7th	71. 11	72. 16	73. 1	74. 1
8th	75. 12	76. 16	77. 1	78. 1
9th	79.	80.	81.	82.
10th	83.	84.	85.	86.

LOCATION OF INTRUSION

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

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

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

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

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

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

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

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

STEERING COLUMN

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

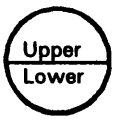
88. Tilt Steering Column Adjustment — 4
(0) No tilt steering column
(1) Full up
(2) Between full up and center
(3) Center
(4) Between center and full down
(5) Full down
(9) Unknown

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

INSTRUMENT PANEL

92. Odometer Reading — 0 1 5 ,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
9168 miles X 1.6093 = 14754 kilometers
Source: [redacted]

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

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

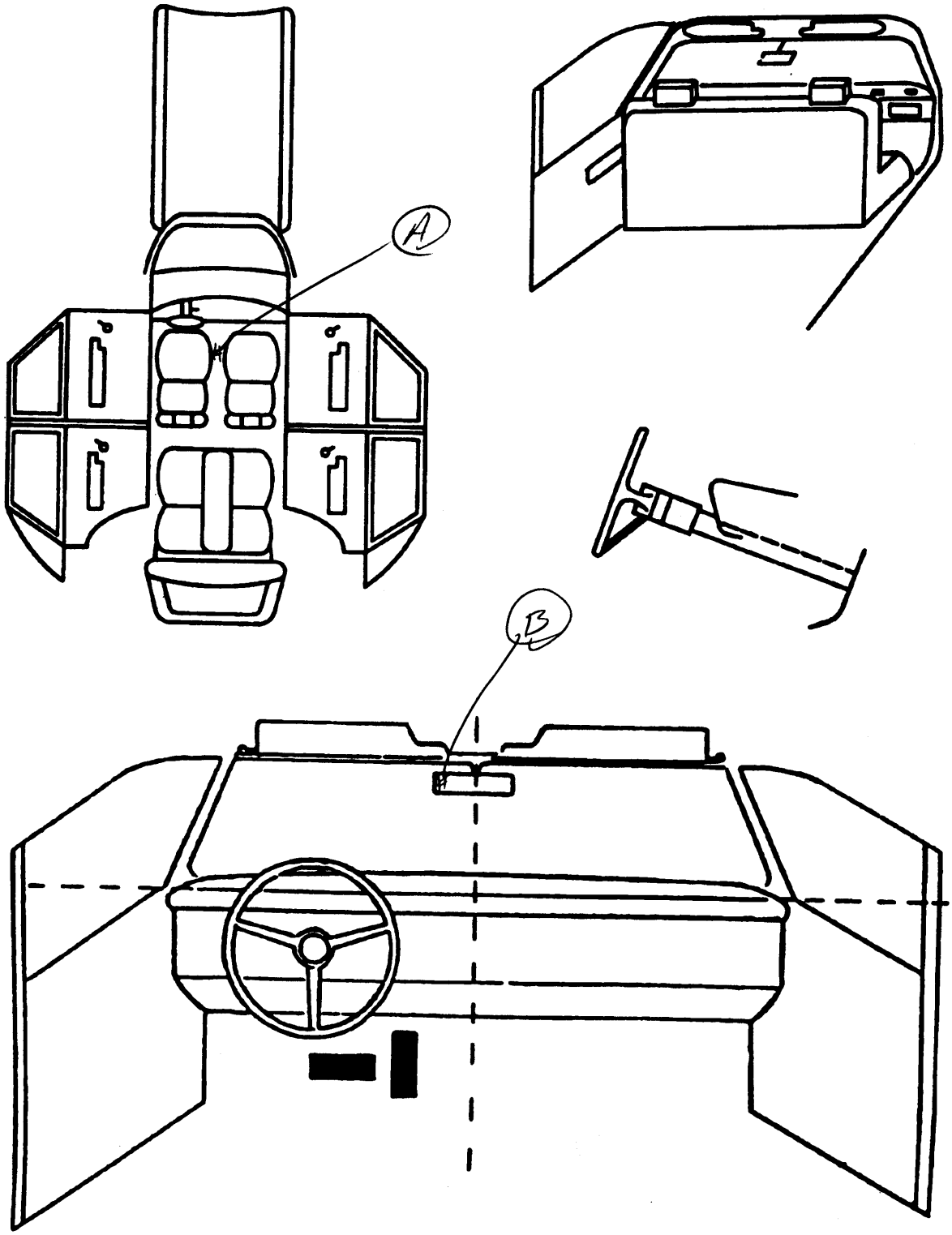
95. Knee Bolsters Deformed from Occupant Contact? — 0
(0) No knee bolster
(1) No deformation
(2) Yes - deformation
(9) Unknown

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

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

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



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

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	163	1	TORSO	CENTER ARMREST BENT / DEFORMED	1
B	002	1	HAND	MIRROR BENT	2
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): CENTER ARMREST

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.

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

		Left	Center	Right
FIRST	Availability	4		4
	Evidence of usage	Yes		Yes
	Used in this crash?	04		00
	Proper Use	1		0
	Failure Modes	1		0
	Anchorage Adjustment	1		1
SECOND	Availability	4	3	4
	Evidence of usage	NO	NO	NO
	Used in this crash?	00	00	00
	Proper Use	0	0	0
	Failure Modes	0	0	0
	Anchorage Adjustment	1	0	1
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
	Anchorage Adjustment			

Manual (Active) Belt System Availability

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

Integral Belt Partially Destroyed

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

Manual (Active) Belt System Use

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

Proper Use of Manual (Active) Belts

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

Belt Used Improperly

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

Manual (Active) Belt Failure Modes During Accident

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

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

REAR BELTS FOLDED UNDER REAR SEAT

AUTOMATIC RESTRAINTS

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

AIR BAGS

		Left Front	Right Front	Other
FIRST	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

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

Frontal 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

Air Bag(s) Deployment, *Other* Than First Seat Frontal (This Occupant Position)
(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

AUTOMATIC BELTS

		Left	Right
FIRST	Availability/Function		
	Use		
	Type		
	Proper Use		
	Failure Modes		

Automatic (Passive) Belt System Availability/Function
(0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

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

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

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

Proper Use of Automatic (Passive) Belt System
(0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

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

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

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
Type of air bag?		
Flaps open at tear points?		
Flaps damaged?		
Air bag damaged?		
Source of air bag damage		
Air bag tethered?		
Air bag have vent ports?		
Other occupant contact air bag?		
Occupant wearing eyewear?		

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

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

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

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

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

Was The Air Bag Tethered?
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps): _____
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

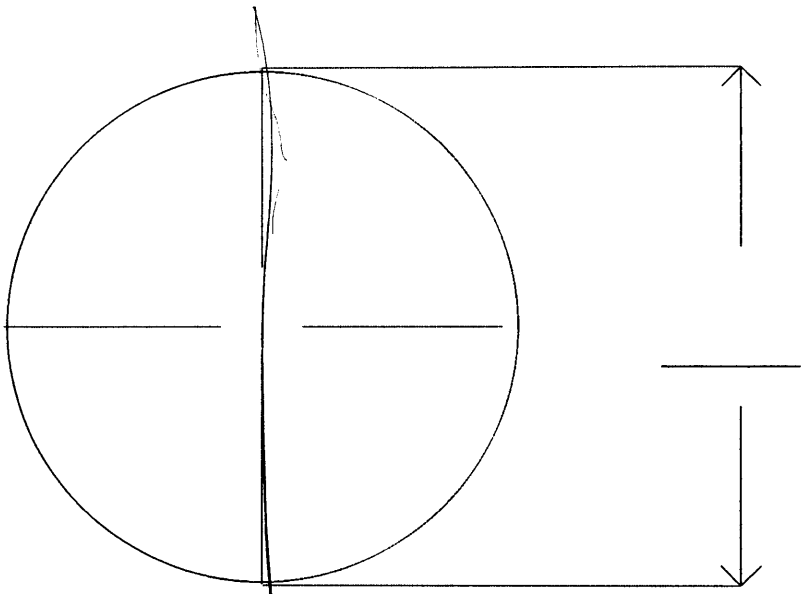
Did The Air Bag Have Vent Ports?
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports): _____
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

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

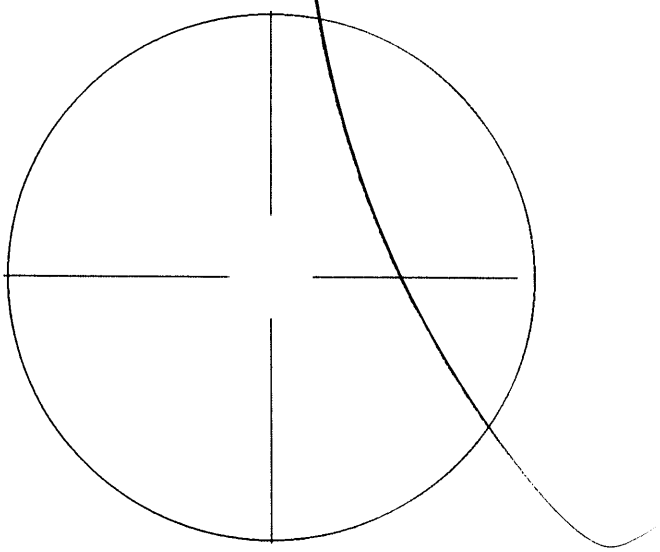
Was This Occupant Wearing Eye-wear?
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

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 (DOUBLE)

a. Upper Flap

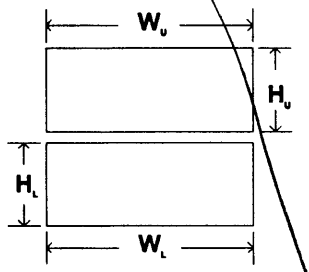
width (W_U) _____

height (H_U) _____

b. Lower Flap

width (W_L) _____

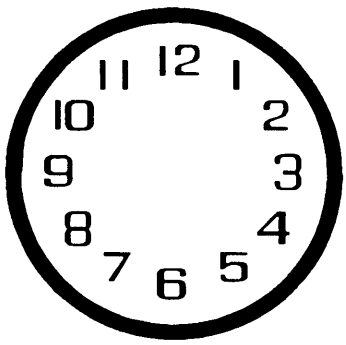
height (H_L) _____



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

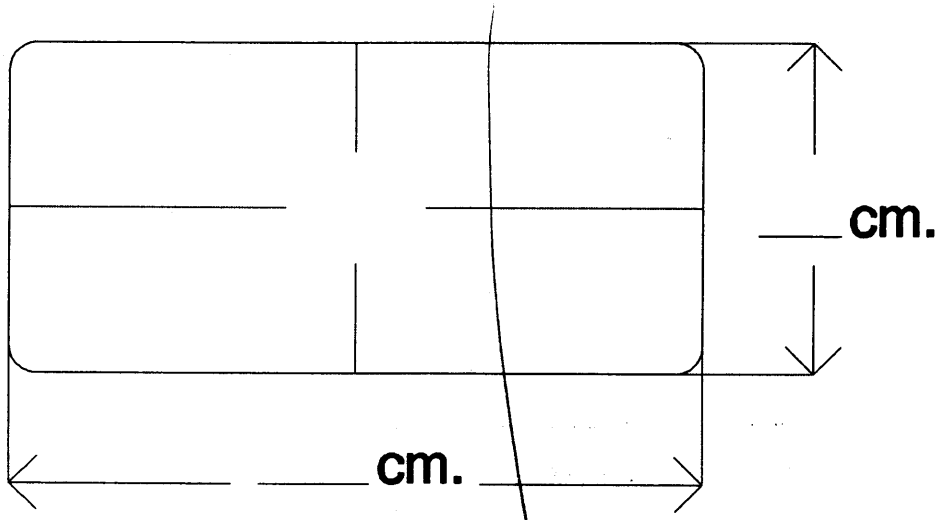
5. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

6. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS

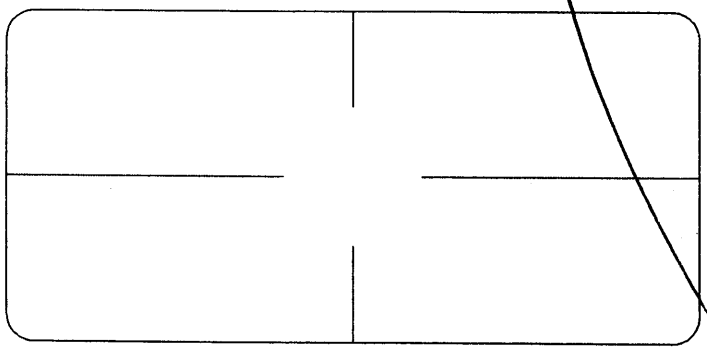


PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

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



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



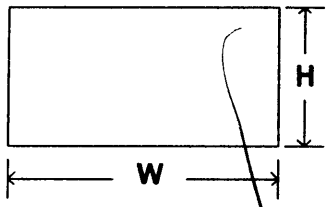
PASSENGER AIR BAG SKETCHES (Cont'd)

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

a. Flap

width (W) _____

height (H) _____



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

a. Upper Flap

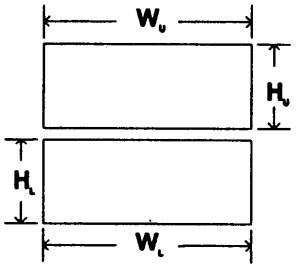
width (W_U) _____

height (H_U) _____

b. Lower Flap

width (W_L) _____

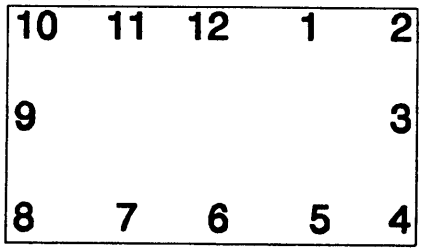
height (H_L) _____



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



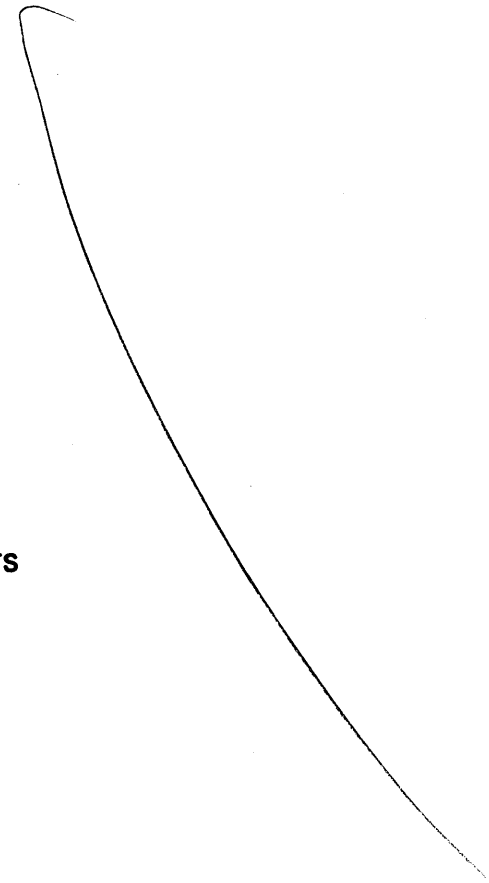
"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES

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	Head Restraint Type/Damage	3		3
	Seat Type	01		01
	Seat Performance	1		1
	Seat Orientation	1		1
	Seat Track Position	5		6
	Seat Back Incline Pre/Post Impact	23		23
SECOND	Head Restraint Type/Damage	3	0	3
	Seat Type	05	05	05
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
	Seat Track Position	1	1	1
	Seat Back Incline Pre/Post Impact	01	01	01
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE

(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

HEAD RESTRAINTS/SEAT EVALUATION

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

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

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

Seat Performance (this Occupant Position)
(0) Occupant not seated or no seat
(1) No seat performance failure(s)
(2) Seat adjusters failed
(3) Seat back folding locks or "seat back" failed (specify):

(4) Seat tracks/anchors failed
(5) Deformed by impact of occupant
(6) Deformed by passenger compartment intrusion (specify):
(7) Combination of above (specify):

(8) Other (specify):

(9) Unknown

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

(9) Unknown

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

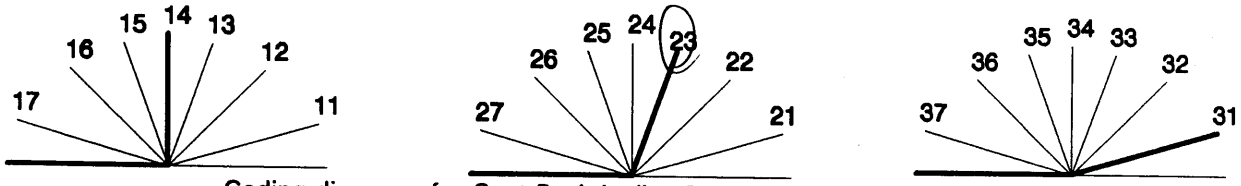
Seat Back Incline Prior and Post Impact
(00) Occupant not seated or no seat
(01) Not adjustable

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 postion
(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



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

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

CHILD SAFETY SEAT FIELD ASSESSMENT

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

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
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 [1] Yes [ ]

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

POSSIBLE PARTIAL THROUGH LF GLAZING

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 [Y] Yes [ ]

Describe entrapment mechanism: _____

Component(s): _____

(Note in vehicle interior diagram)

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

OCCUPANT ASSESSMENT FORM

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

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 79
2. Case Number - Stratum: 0910
3. Vehicle Number: 01
4. Occupant Number: 01

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age: 24
Code actual age at time of accident.
(00) Less than one year old (specify by month): _____
(97) 97 years and older
(99) Unknown

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

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

8. Occupant's Weight: 086
Code actual weight to the nearest kilogram.
(999)Unknown
190 pounds X .4536 = 086 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

This report is authorized by P.L. 89-563, Title 1, Section 106, 108, and 112. While you are not required to respond, your cooperation is needed to make the results of this data collection effort comprehensive, accurate, and timely.

EJECTION/ENTRAPMENT

12. Ejection 0 8
    (0) No ejection
    (1) Complete ejection
    (2) Partial ejection
    (3) Ejection, unknown degree
    (9) Unknown

13. Ejection Area 0 9
    (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 9
    (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 9
    (0) No ejection
    (1) Open
    (2) Closed
    (3) Integral structure
    (9) Unknown

16. Entrapment 0 9
    (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 disoriented
    (2) Removed from vehicle due to injuries
    (3) Exited vehicle with some assistance
    (4) Exited vehicle under own power
    (5) Occupant fully ejected
    (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 1
(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. Shoulder Belt Upper Anchorage Adjustment 1
(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

23. Automatic (Passive) Belt System Availability/ Function 0
(0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

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

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

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

26. Proper Use of Automatic (Passive) Belt System 0
(0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

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

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

POLICE REPORTED RESTRAINT USE

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

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

Check the Primary Source Used In Determining Belt Use.

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

AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System Availability/Function (This Occupant Position) 0
    (0) Not equipped/not available
    (1) Air bag

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

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

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0
    (0) Not equipped/not available
    (1) Air bag

    Non-functional
    (2) Air bag disconnected (specify): _____
    (3) Air bag not reinstalled
    (9) Unknown
    Specify type of "other" air bag present:

    _____

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

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

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

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

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

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

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

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

39. CDC For Air Bag Deployment Impact 0
    (0) Not equipped/not available
    (1) Highest delta V
    (2) Second highest delta V
    (3) Other non-coded delta V (specify): _____
    (6) Deployed, unknown event
    (7) Not deployed
    (8) Unknown if deployed
    (9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact +0000
    (_000) Not equipped/not available
    Code the value of the delta V for the impact that initiated the air bag deployment
    (_996) Deployment, unknown longitudinal Delta V
    (_997) Not deployed
    (_998) Unknown if deployed
    (_999) Unknown

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

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

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

    Yes - Air Bag Damage
    (02) Ruptured
    (03) Cut
    (04) Torn
    (05) Holed
    (06) Burned
    (07) Abraded
    (88) Other damage (specify): _____
    (95) Damaged, details unknown
    (96) Deployed, unknown if damaged
    (97) Not deployed
    (98) Unknown if deployed
    (99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION *continued*

44. Source of Air Bag Damage 0 0
(00) Not equipped/not available
(01) Not damaged
(02) Object worn by occupant, (specify):
(03) Object carried by occupant, (specify):
(04) Adaptive/assistive controls, (specify):
(05) Fire in vehicle
(06) Thermal burns
(07) Rescue or emergency efforts
(88) Other damage source (specify):
(95) Damaged, unknown source
(96) Deployed, unknown if damaged
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

45. Was The Air Bag Tethered? 0
(0) Not equipped/not available
(1) No
(2) Yes (specify number of tether straps):
(3) Deployed, unknown if tethered
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

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

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

48. Was This Occupant Wearing Eye-wear? 0
(0) Not 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

HEAD RESTRAINT AND SEAT EVALUATION

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

50. Seat Type (this Occupant Position) 0 1
(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 5
(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

NO INTERVIEW,
DRIVER IS 5'9"

HEAD RESTRAINT AND SEAT EVALUATION *continued*

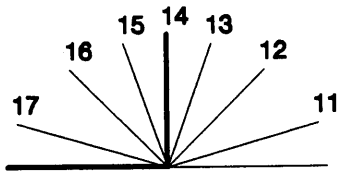
53. Seat Back Incline Prior and Post Impact 23
(00) Occupant not seated or no seat
(01) Not adjustable

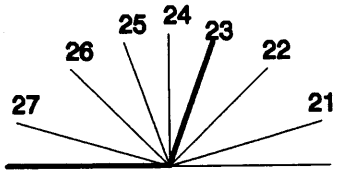
Upright prior to impact
(11) Moved to completely rearward position
(12) Moved to rearward midrange position
(13) Moved to slightly rearward position
(14) Retained pre-impact position
(15) Moved to slightly forward position
(16) Moved to forward midrange position
(17) Moved to completely forward position

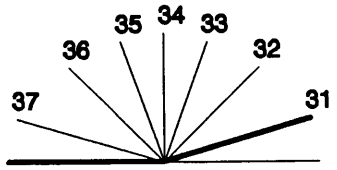
Slightly reclined prior to impact
(21) Moved to completely rearward position
(22) Moved to rearward midrange position
(23) Retained pre-impact position
(24) Moved to upright position
(25) Moved to slightly forward position
(26) Moved to forward midrange position
(27) Moved to completely forward position

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 0 0 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 0 0
(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 0 0

59. Child Safety Seat Shield Usage 0 0

60. Child Safety Seat Tether Usage 0 0

Note: Options below applicable to Variables OA58-OA60.
(00) No child safety seat

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

Designed With Harness/Shield/Tether
(11) Harness/shield/tether not used
(12) Harness/shield/tether used
(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether
(21) Harness/shield/tether not used
(22) Harness/shield/tether used
(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES

61. Injury Severity (Police Rating) 2

(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 8

(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):
_____ 00
(9) Unknown

64. Hospital Stay 9 9

(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 9 9

____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

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

TRAUMA DATA

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

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) – HCO_3 97
(00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO_3
(96) ABGs reported , HCO_3 unknown
(97) Injured, details unknown
(99) Unknown if injured

BELT USE DETERMINATION

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

PSU NUMBER 79

CASE NUMBER 091D

VEHICLE NUMBER 01

OCCUPANT NUMBER 01

OCCUPANT INJURY FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

[✓] ENTIRE FORM

[] PAGE NUMBER (S) _____

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V-02

PRECRASH ENVIRONMENTAL DATA

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

Non-Interchange junctions
(2) Intersection related
(3) Driveway, alley access related
(4) Other junction (specify)
_____
(5) Unknown type of junction

(9) Unknown

20. Trafficway Flow — 0
(0) Not physically divided (two way traffic)
(1) Divided trafficway-median strip without positive barrier
(2) Divided trafficway-median strip with positive barrier
(3) One way traffic
(9) Unknown

21. Number Of Travel Lanes — 7
(1) One
(2) Two
(3) Three
(4) Four
(5) Five
(6) Six
(7) Seven or more
(9) Unknown

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

23. Roadway Profile — 1
(1) Level
(2) Uphill grade (>2%)
(3) Hill crest
(4) Downhill grade (>2%)
(5) Sag
(9) Unknown

24. Roadway Surface Type — 2
(1) Concrete
(2) Bituminous (asphalt)
(3) Brick or block
(4) Slag, gravel, or stone
(5) Dirt
(8) Other (specify): _____
(9) Unknown

25. Roadway Surface Condition — 1
(1) Dry
(2) Wet
(3) Snow or slush
(4) Ice
(5) Sand, dirt, or oil
(8) Other (specify): _____
(9) Unknown

26. Light Conditions — 1
(1) Daylight
(2) Dark
(3) Dark, but lighted
(4) Dawn
(5) Dusk
(9) Unknown

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

28. Traffic Control Device — 1
(0) No traffic control(s)
(1) Traffic control signal (not RR crossing)

Regulatory
(2) Stop sign
(3) Yield sign
(4) School zone sign
(5) Other regulatory sign (specify):
_____
(6) Warning sign (not RR crossing)
(7) Unknown sign
(8) Miscellaneous/other controls including RR controls (specify):
_____
(9) Unknown

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

PSU 79-091D
V-02

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? 30
(0) No (includes unknown)
(1) Yes - researcher determined
(2) VIN determined air bag system
(3) VIN determined automatic (passive) belts
(4) VIN determined air bag and automatic (passive) belts

41. Air Bag(s) Deployment, First Seat Frontal: 0
(0) Not equipped or not available
(1) No air bags deployed

Single Air Bag Vehicle
(2) Driver air bag deployed
(3) Driver air bag, unknown if deployed

Multiple Air Bag Vehicle
(4) Driver side only deployed
(5) Passenger side only deployed
(6) Driver and passenger side deployed
(7) Driver and passenger side unknown if deployed
(8) Air bag(s) deployed, details unknown
(9) Unknown

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

Specify type of "other" air bag present: _____

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight: 0,78 0
____ Code weight to nearest 10 kilograms.
(045) Less than 450 kilograms
(610) 6,100 kilograms or more
(999) Unknown
1,713 lbs X .4536 = 0,777 kgs
Source: 1988 [redacted]

44. Vehicle Cargo Weight: 9,9 9 0
____ Code weight to nearest 10 kilograms.
(000) Less than 5 kilograms
(450) 4,500 kilograms or more
(999) Unknown
9,999 lbs X .4536 = 9,999 kgs
Source: NONE

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

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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

PSU NUMBER 79

CASE NUMBER 091D

VEHICLE NUMBER 02

EXTERIOR VEHICLE FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

[✓] ENTIRE FORM

[ ] PAGE NUMBER (S) _____

PSU NUMBER 79

CASE NUMBER 091D

VEHICLE NUMBER 02

INTERIOR VEHICLE FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

[✓] ENTIRE FORM

[ ] PAGE NUMBER (S) _____

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

OCCUPANT ASSESSMENT FORM

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

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number: 29
2. Case Number - Stratum: 0910
3. Vehicle Number: 02
4. Occupant Number: 01

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age: 21
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: 185
Code actual height to the nearest centimeter.
(999) Unknown

73 inches X 2.54 = 185 centimeters

8. Occupant's Weight: 084
Code actual weight to the nearest kilogram.
(999)Unknown

185 pounds X .4536 = 084 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

This report is authorized by P.L. 89-563, Title 1, Section 106, 108, and 112. While you are not required to respond, your cooperation is needed to make the results of this data collection effort comprehensive, accurate, and timely.

EJECTION/ENTRAPMENT

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

13. Ejection Area 9
    (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 9
    (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) 9
    (0) No ejection
    (1) Open
    (2) Closed
    (3) Integral structure
    (9) Unknown

16. Entrapment 9
    (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 disoriented
    (2) Removed from vehicle due to injuries
    (3) Exited vehicle with some assistance
    (4) Exited vehicle under own power
    (5) Occupant fully ejected
    (9) Unknown

BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 9
(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 99
(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 9
(0) None used or not available
(1) Belt used properly
(2) Belt used properly with child safety seat

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

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

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 9
(0) No manual belt used or not available
(1) No manual belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify):

(6) Broken retractor
(7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Shoulder Belt Upper Anchorage Adjustment 9
(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

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

26. Proper Use of Automatic (Passive) Belt System 9
(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 9
(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

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

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

Check the Primary Source Used In Determining Belt Use.

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

AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System Availability/Function (This Occupant Position) 0
    (0) Not equipped/not available
    (1) Air bag

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

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

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 9
    (0) Not equipped/not available
    (1) Air bag

    Non-functional
    (2) Air bag disconnected (specify): _____
    (3) Air bag not reinstalled
    (9) Unknown
    Specify type of "other" air bag present: _____

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

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

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

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

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

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

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

38. Air Bag Deployment Accident Event Sequence Number 0 0
(00) Not equipped/not available
_____ Code the accident event sequence number that initiated the air bag deployment
(96) Deployed, unknown event
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

39. CDC For Air Bag Deployment Impact 0
(0) Not equipped/not available
(1) Highest delta V
(2) Second highest delta V
(3) Other non-coded delta V (specify): _____
(6) Deployed, unknown event
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + - 0 0 0
(_000) Not equipped/not available
Code the value of the delta V for the impact that initiated the air bag deployment
(_996) Deployment, unknown longitudinal Delta V
(_997) Not deployed
(_998) Unknown if deployed
(_999) Unknown

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

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

43. Was There Damage To The Air Bag? 0 0
(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 0 0
(00) Not equipped/not available
(01) Not damaged
(02) Object worn by occupant, (specify):
(03) Object carried by occupant, (specify):
(04) Adaptive/assistive controls, (specify):
(05) Fire in vehicle
(06) Thermal burns
(07) Rescue or emergency efforts
(88) Other damage source (specify):
(95) Damaged, unknown source
(96) Deployed, unknown if damaged
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

45. Was The Air Bag Tethered? 0
(0) Not equipped/not available
(1) No
(2) Yes (specify number of tether straps):
(3) Deployed, unknown if tethered
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

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

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

48. Was This Occupant Wearing Eye-wear? 0
(0) Not 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

HEAD RESTRAINT AND SEAT EVALUATION

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

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

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

52. Seat Track Adjusted Position Prior To Impact 9
(0) Occupant not seated or no seat
(1) Non-adjustable seat track

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

HEAD RESTRAINT AND SEAT EVALUATION *continued*

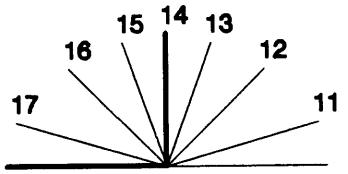
53. Seat Back Incline Prior and Post Impact 97
    (00) Occupant not seated or no seat
    (01) Not adjustable

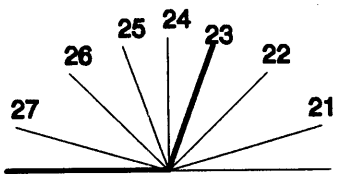
    Upright prior to impact
    (11) Moved to completely rearward position
    (12) Moved to rearward midrange position
    (13) Moved to slightly rearward position
    (14) Retained pre-impact position
    (15) Moved to slightly forward position
    (16) Moved to forward midrange position
    (17) Moved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

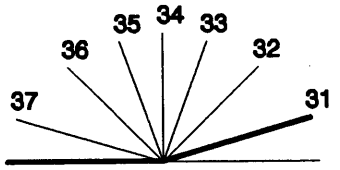
    Slightly reclined prior to impact
    (21) Moved to completely rearward position
    (22) Moved to rearward midrange position
    (23) Retained pre-impact position
    (24) Moved to upright position
    (25) Moved to slightly forward position
    (26) Moved to forward midrange position
    (27) Moved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

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

    (99) Unknown







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

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 0 0 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 0 0
(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 0 0

59. Child Safety Seat Shield Usage 0 0

60. Child Safety Seat Tether Usage 0 0

Note: Options below applicable to Variables OA58-OA60.
(00) No child safety seat

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

Designed With Harness/Shield/Tether
(11) Harness/shield/tether not used
(12) Harness/shield/tether used
(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether
(21) Harness/shield/tether not used
(22) Harness/shield/tether used
(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES

61. Injury Severity (Police Rating) 3

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

62. Treatment - Mortality 4

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

_____

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

_____

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

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

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

_____

(9) Unknown

64. Hospital Stay 0 0

(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 9 9

_____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

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

97

70. Number of Recorded Injuries for This Occupant — 01
_____Code the actual number of injuries recorded for this occupant.
(00) No recorded injuries
(97) Injured, details unknown
(99) Unknown if injured

TRAUMA DATA

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

9+

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

97

73. Arterial Blood Gases (ABG) – HCO_3 — ~~01~~
(00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO_3
(96) ABGs reported , HCO_3 unknown
(97) Injured, details unknown
(99) Unknown if injured

BELT USE DETERMINATION

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

PSU NUMBER 79

CASE NUMBER 091D

VEHICLE NUMBER 02

OCCUPANT NUMBER 01

OCCUPANT INJURY FORM

THE FOLLOWING DATA IS NOT INCLUDED IN THIS CASE:

[✓] ENTIRE FORM

[ ] PAGE NUMBER (S) _____

SMASH Program Summary

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

(All Measurements in Metric)

National Accident Sampling System
Crashworthiness Data System

Identifying Title	19	091D	01	[redacted] 95
	PSU	Case No. - Stratum	Sequence No.	Date (month, day, year) of Rpt

General Vehicle Information

	Vehicle 1	Vehicle 2
Year	1995	1988
Make	Toyota	FORD
Model	4-Runner	FESTIVA
Body Style	UV	3H
NASS Veh. No.	1	2
CDC	02RYEW2	Missing
Damaged Side (Missing Veh. Only)		F
PDOF	+50 °	-40 °
HDG Angle	20 °	270 °

Vehicle Specifications

	Vehicle 1	Vehicle 2
Wheelbase	262	229
OAL	447	357
OAW	169	161
Weight:		
	1705 Curb + 0 Cargo + 86 Occupants = 1791 kg	777 Curb + 0 Cargo + 84 Occupants = 861 kg
Engine Displacement	3.0 V6	4/1.3
Drive System	RWD	FWD
Size	3	1
Stiffness	3	1

Damage Information

	Vehicle 1	Vehicle 2
Damage known?	Y	N
Damage length	164 cm	____ cm
Damage offset	± 7 cm	± ____ cm
Crush Depth:		
C1	2 cm	____ cm
C2	14 cm	____ cm
C3	13 cm	____ cm
C4	19 cm	____ cm
C5	11 cm	____ cm
C6	17 cm	____ cm

National Accident Sampling System - Crashworthiness Data System: SMASH Program Summary

Scene Information

Vehicle 1

Rest and Impact Positions [ ]yes [X]no

Rest position X	____m
Rest position Y	____m
Rest position angle	____deg
Impact position X	____m
Impact position Y	____m
Impact position angel	____deg
Slip angle	____deg

Vehicle 2

Rest position X	____m
Rest position Y	____m
Rest position angle	____deg
Impact position X	____m
Impact position Y	____m
Impact position angel	____deg
Slip angle	____deg

Vehicle Motion

Vehicle 1

Vehicle Rotation	[ ]yes [ ]no
Rotation Stop Before Rest	[ ]yes [ ]no
End of Rotation Position	X___ ___ ___ . ___m
	Y___ ___ ___ . ___m
	PSI ___ ___ . ___m
Curved Path	[ ]yes [ ]no
Point on Path	X___ ___ ___ . ___m
	Y___ ___ ___ . ___m
Rotation Direction	[ ]None [ ]CW [ ]CCW
Rotation >360 deg	[ ]yes [ ]no

Vehicle 2

Vehicle Rotation	[ ]yes [ ]no
Rotation Stop Before Rest	[ ]yes [ ]no
End of Rotation Position	X___ ___ ___ . ___m
	Y___ ___ ___ . ___m
	PSI ___ ___ . ___m
Curved Path	[ ]yes [ ]no
Point on Path	X___ ___ ___ . ___m
	Y___ ___ ___ . ___m
Rotation Direction	[ ]None [ ]CW [ ]CCW
Rotation >360 deg	[ ]yes [ ]no

Friction Information

Coefficient of Friction .___ ___ ___

Rolling Resistance Option ___

Vehicle 1 Rolling Resistance

LF___ . ___ ___ RF___ . ___ ___

LR___ . ___ ___ RR___ . ___ ___

Vehicle 2 Rolling Resistance

LF___ . ___ ___ RF___ . ___ ___

LR___ . ___ ___ RR___ . ___ ___

Trajectory Information

Trajectory Data [ ]yes [ ]no

Vehicle 1 Steer Angle

LF___ ___ ___ RF___ ___ ___

LR___ ___ ___ RR___ ___ ___

Vehicle 2 Steer Angle

LF___ ___ ___ RF___ ___ ___

LR___ ___ ___ RR___ ___ ___

Terrain Boundary [ ]yes [ ]no

First Path

X___ ___ ___ . ___m Y___ ___ ___ . ___m

Second Path

X___ ___ ___ . ___m Y___ ___ ___ . ___m

Coefficient of Friction .___ ___ ___

Summary of Results Using Damage

79-091D

Speed Change
(ROLDMISS)

Vehicle #1

Total	7 km/h	(5 mph)	
Longitudinal	-5 km/h	(-3 mph)	
Latitudinal	-6 km/h	(-4 mph)	
PDOF Angle	50 °		
Energy Dissipated	= 14652 Joules	(10806 Ft-Lb)	
Barrier Equivalent Speed	= 13.9 km/h	(8.7 mph)	

Calculated using size and stiffness categories.

Vehicle #2

Total	16 km/h	(10 mph)	
Longitudinal	-12 km/h	(-7 mph)	
Latitudinal	10 km/h	(6 mph)	
PDOF Angle	-40 °		
Energy Dissipated	= 8477 Joules	(6251 Ft-Lb)	
Barrier Equivalent Speed	= 10.4 km/h	(6.5 mph)	

Calculated using size and stiffness categories.

General Information

	Vehicle #1	Vehicle #2
Year	1995	1988
Make	TOYOTA	FORD
Model	4RUNNER	Festiva
CDC	02RYEW2	MISSING
Side Damaged	R	F
PDOF Angle	50 °	-40 °
Heading Angle	20 °	270 °
Calculation method:	Size and Stiffness	Size and Stiffness
Size Category	3	1
Stiffness Category	3	1
Vehicle Weight	1791 kgs (3948 lbs)	861 kgs (1898 lbs)

Damage Information

	Vehicle #1	Vehicle #2
Vehicle Damage Known	Yes	No
Crush Length	164.0 cm (65 in)	0.0 cm (0 in)
C1	2.0 cm (1 in)	0.0 cm (0 in)
C2	14.0 cm (6 in)	0.0 cm (0 in)
C3	13.0 cm (5 in)	0.0 cm (0 in)
C4	19.0 cm (7 in)	0.0 cm (0 in)
C5	11.0 cm (4 in)	0.0 cm (0 in)
C6	17.0 cm (7 in)	0.0 cm (0 in)
D	7.0 cm (3 in)	0.0 cm (0 in)
D'	14.3 cm (6 in)	0.0 cm (0 in)

Vehicle Dimensions

	Vehicle #1	Vehicle #2
Length	447.0 cm (176 in)	357.0 cm (141 in)
Width	169.0 cm (67 in)	161.0 cm (63 in)
Wheelbase	262.0 cm (103 in)	229.0 cm (90 in)
Weight	1791 kgs (3948 lbs)	861 kgs (1898 lbs)
CG to Front of Veh	228.1 cm (90 in)	193.0 cm (76 in)
Engine Displacement	3.0 liters	1.3 liters
Moment of Inertia	323303 kgs (28616 lbs)	99138 kgs (8775 lbs)
Vehicle Mass	1791 kgs (10.3 lb-s^2/in)	861 kgs (4.9 lb-s^2/in)

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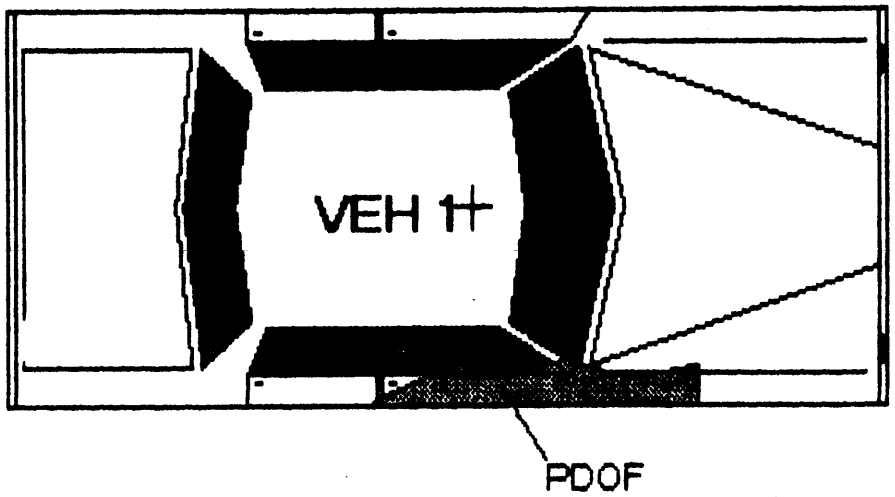
79-091D

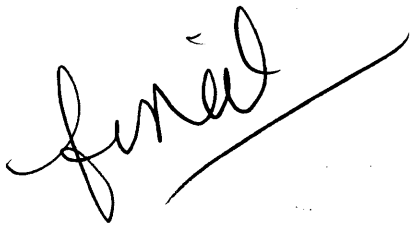
[redacted] 19950A

1988 FORD Festiva
Vehicle number 2 is missing.

1995 TOYOTA 4RUNNER



79-0910 [redacted] 1995



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79091D02010051       8.05 0000000002111850841119999999999999999990100000000000 00
0000000000099999999000000000000342009900000000097979979
79091D00000066       8.05 000000000COMPACT UTIL/CAR -OBTUSE ANGLE
79091D00000171       8.05 000000000V1 was heading east on a 7-lane, undivided, le
vel, dry, asphalt road, in the
79091D00000271       8.05 000000000left turn pocket to head north, at an intersec
tion controlled by overhanging
79091D00000371       8.05 000000000trilights.  V2 was heading west in the #1 lane
 of the same 7-lane road,
79091D00000471       8.05 000000000approaching the same intersection, when the fr
ont of V2 contacted the right
79091D00000571       8.05 000000000side of V1.  This impact caused V1 to roll lef
t, two quarter turns, coming to
79091D00000671       8.05 000000000rest on the roof.  Both vehicles were towed du
e to damage.  The driver of V1
79091D00000771       8.05 000000000was transported with non-serious injuries.  Th
e driver of V2 was transported
79091D00000871       8.05 000000000with serious injuries.

79091D00000181       8.05 00000000001 Compact utility 95/Toyota/4-Runner  Right
    Moderate   None
79091D00000281       8.05 00000000002 Subcompact     88/Ford/Festiva      Front
    Unk        Unk
79091D00000191       8.05 00000000001 Driver   FL          Lap         Injured Seve
rity Unknown
79091D00000291       8.05 000000000                        &Shoulder

79091D00000391       8.05 00000000002 Driver   FL          Unk         Injured Seve
rity Unknown
79091D99999999900000000000000000000000000000000000100000000000000000000000000010000
00000000000000
```

GENERAL VEHICLE Vehicle: 1
11
INTRA ERRORS

0GG0421 2 If ROLLOVER GV45 equals 01-17 or 98, then BASIS FOR DELTA V GV58
GG0422 should equal 04-10.

0
OCCUPANT ASSESSMENT Vehicle: 2 Occupant: 1
11
INTRA ERRORS

0HH0191 2 If OCCUPANT POSITION OA10 equals 11 or 13 and AUTOMATIC BELT
HH0192 AVAILABILITY OA23 does not equal 2, then MANUAL BELT
HH0193 AVAILABILITY OA18 should equal 3 or 4.

01

PSU79 ERROR SUMMARY SCREEN [redacted]/96
CASE 091D
CURRENT VERSION: 8.05

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

0

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

SLIDE INDEX

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

Primary Sampling Unit Number 29 Case Number—Stratum 091D

Slide No.	Vehicle No.	Direction of Picture	Description of Slide Subject Matter
1	—	EAST	REFERENCE POINT + REFERENCE LINE
2-6	1	EAST	DIRECTION OF TRAVEL (DOT)
7	1	N/E	POINT OF IMPACT (POI)
8	1	N/E	FINAL REST POSITION (FRP)
9	1	S/W	OPPOSITE FRP
10	1	S/W	OPPOSITE POI
11	1	WEST	OPPOSITE DOT
12-14	2	WEST	DOT
15	2	WEST	POI
16	2	WEST	FRP
17	2	EAST	OPPOSITE FRP
18	2	EAST	OPPOSITE POI
19	2	EAST	OPPOSITE DOT
20-47	1	—	V, EXTERIOR
48-66	1	—	V, INTERIOR

HS Form 434B (1/95)

Slide No.	Vehicle No.	Direction of Picture	Description of Slide Subject Matter

PSU 79-091D (1995) #1

PSU 79-091D (1995) #2

PSU 79-091D (1995) #3

PSU 79-091D (1995) #4

PSU 79-091D (1995) #5

PSU 79-091D (1995) #6

PSU 79-091D (1995) #7

PSU 79-091D (1995) #8

PSU 79-091D (1995) #9

PSU 79-091D (1995) #10

PSU 79-091D (1995) #11

PSU 79-091D (1995) #12

PSU 79-091D (1995) #13

PSU 79-091D (1995) #14

PSU 79-091D (1995) #15

PSU 79-091D (1995) #16

PSU 79-091D (1995) #17

PSU 79-091D (1995) #18

PSU 79-091D (1995) #19

PSU 79-091D (1995) #20

PSU 79-091D (1995) #21

PSU 79-091D (1995) #22

PSU 79-091D (1995) #23

PSU 79-091D (1995) #24

PSU 79-091D (1995) #25

PSU 79-091D (1995) #26

PSU 79-091D (1995) #27

PSU 79-091D (1995) #28

PSU 79-091D (1995) #29

PSU 79-091D (1995) #30

PSU 79-091D (1995) #31

PSU 79-091D (1995) #32

PSU 79-091D (1995) #33

PSU 79-091D (1995) #34

PSU 79-091D (1995) #35

PSU 79-091D (1995) #36

PSU 79-091D (1995) #37

PSU 79-091D (1995) #38

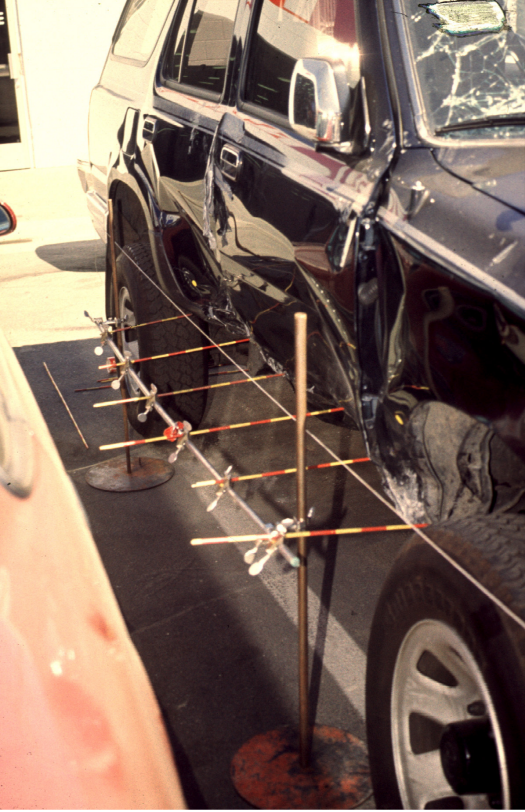
PSU 79-091D (1995) #39

PSU 79-091D (1995) #40

PSU 79-091D (1995) #41

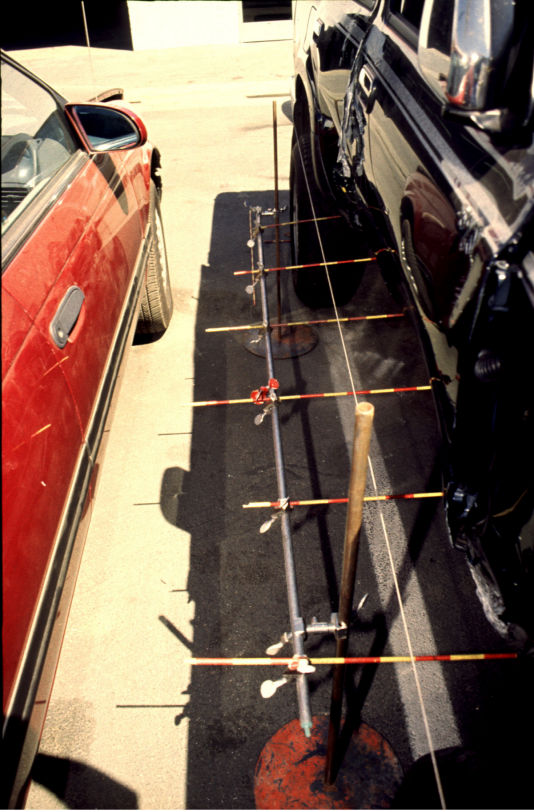
PSU 79-091D (1995) #42

PSU 79-091D (1995) #43



PSU 79-091D (1995) #44

PSU 79-091D (1995) #45



PSU 79-091D (1995) #46

PSU 79-091D (1995) #47

PSU 79-091D (1995) #48
Best Available

PSU 79-091D (1995) #49
Best Available

PSU 79-091D (1995) #50
Best Available

PSU 79-091D (1995) #51

PSU 79-091D (1995) #52
Best Available

PSU 79-091D (1995) #53

PSU 79-091D (1995) #54

PSU 79-091D (1995) #55
Best Available

PSU 79-091D (1995) #56
Best Available

PSU 79-091D (1995) #57

PSU 79-091D (1995) #58

PSU 79-091D (1995) #59

PSU 79-091D (1995) #60

PSU 79-091D (1995) #61

PSU 79-091D (1995) #62

PSU 79-091D (1995) #63

PSU 79-091D (1995) #64

PSU 79-091D (1995) #65

PSU 79-091D (1995) #66