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

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# SPECIAL REMOTE AIR BAG REPORT

Case Number: TSI-94-01

Submitted By:

Transportation Safety Institute Oklahoma

1994

### **DISCLAIMERS**

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

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

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

#### Summary

This report concerns a single vehicle air bag deployment involving a 1993 Toyota Camry on 1994 at approximately 1520 hours. The deployment is reported to have occurred in Oklahoma 2000 on a city street. No police report was filed and there were no witnesses to the deployment.

The driver reported to be traveling north in the inside (second) travel lane of the northbound road. The driver realized that he forgot something at his place of employment (which was several blocks south of his location) and decided to make a U-turn to retrieve the item. The driver attempted to make a left turn into a widemouth, curbed entranceway (driveway) when he reports the air bag deployed inadvertently. The driver then continued for a short distance 3-6 meters (10-20 feet) and came to rest in the middle of the driveway. Although the driver stated that he did not feel any impact with the curb, he got out of his car and looked underneath, where he saw small pieces of concrete stuck in the frame. Subsequent to the deployment and vehicle final rest, the driver drove the vehicle to his residence and later sought medical treatment. The police were not notified of this incident.

The vehicle was inspected on 1994 at a dealership in 1994. Oklahoma. The vehicle sustained undercarriage damage to the front lower facia, the right front tiedown hook, the forward lower plastic splash cover, and the frame structure. The damage was confined to the center and right side of the undercarriage and was assigned a CDC of 12-FZLW-1.

The 1993 Toyota Camry was equipped with a driver side supplemental inflatable restraint system which deployed. The driver of the vehicle, a 58 year-old male, was wearing an active three point restraint at the time of deployment. He sustained minor abrasions to the nose; a minor laceration to the chin; a slight burn to the abdomen in the left lower quadrant; and a strain to the back of the neck, all AIS-1 injury severities.

### ACCIDENT DATA

Location/Street:

City/Township:

Area/Type:

Accident Date and Time:

Investigating Police Agency:

Accident Type:

Occupant Injury Severity:

# AMBIENT CONDITIONS

Light conditions:

Precipitation:

Road Surface:

# ROADWAY

Surface Type:

Vertical Alignment:

City street at a junction with driveway to an office building

Oklahoma

Urban, commercial

1994 at the hours

None

Single vehicle striking curb during a controlled turning maneuver

Abrasions (AIS-1)

Light Clear None

City street at entranceway to driveway

Four lanes undivided

Concrete --

Level

- 2 -

# **ROADWAY** (continued)

Horizontal Alignment:

Traffic Density:

Speed Limit:

Traffic Controls:

Straight

Light

1993

64 kph (40 mph)

Double yellow centerline

# CASE VEHICLE

Year: Make: Model: Body Type: Vehicle Identification Number:

Mileage

Tow Status:

Toyota Camry Four door sedan

4T1SK12E0PU \_\_\_\_\_

38,251 kilometers (23,769 miles)

Not towed from scene

Driver reports inadvertent deployment

# VEHICLE DAMAGE

Object Struck:

Damage Location:

CDC:

Estimated Crush:

Curb

Through frontal plane to undercarriage

12-FZEW-1

No residual crush at bumper; frame structure sustained a snagging tear and scratches

- 3 -

# VEHICLE DAMAGE (continued)

Air bag Diagnostic Module:	The diagnostics module was checked by a dealership mechanic revealing a "Code 14 - Open in Squib Circuit"
Damaged Components:	Front bumper facia; right side tie-down hook; frame assembly, and plastic splash panel
Repair Estimate:	\$4,000.00 (as per driver, from Toyota dealer estimate)
Interior Damage:	Steering wheel (air bag deployment and subsequent removal of assembly)

#### **COLLISION SEQUENCE**

The case vehicle (1993 Toyota Camry) was traveling north in the inside northbound lane of a four lane undivided city street and stopped to attempt a "U" turn utilizing a widemouth driveway. The driver reports: upon startup from a stopped position at approximately 3-5 kilometers per hour (2-3 miles per hour) and in a left turn sequence, the air bag deployed inadvertently. The driver stated, "although startled" he was able to bring the vehicle to a stopped position, momentarily after deployment, with the vehicle's final rest in the middle of the driveway.

The driver reported that subsequent to deployment he drove the vehicle to his residence, then sought medical treatment for his minor injuries.

The inspection of the scene at the reported area of occurrence revealed the following: the roadway is a four lane undivided trafficway, with the aforementioned driveway to the building on the west side of the roadway. Both the north and south sides of the driveway are protected by a barrier curb approximately six inches in height. Although the driveway entrance is due west, the curbing is arced from west to north along the north side of the driveway (and from west to south on the south side of the driveway).

The curb on the northwest corner at the driveway, sustained two significant gouges consistent with the impact to the undercarriage of the vehicle. There was scraping and abrading of the concrete consistent with contact from a pliable surface (i.e., facia). Tire or black rubber transfers were also present on the curb in the area of the gouges.

#### COLLISION SEQUENCE (continued)

The driver reports the supplemental restraint deployed "while in the turn" and does not specifically remember contacting the curb. Based on the driver's report of the accident location, evidence is present on the curbing which is consistent with the undercarriage damage to the vehicle.

The driver of the vehicle, while in the turn, had the steering wheel turned approximately 170 degrees. He was wearing an active three point restraint at the time of deployment. He sustained minor abrasions to the nose; a minor laceration to the chin; a slight burn to the abdomen in the left lower quadrant (**note** - the vent ports are <u>designed</u> at 11 o'clock and at 1 o'clock, however the positioning of the wheel at deployment would then place the vent ports at approximately 6 o'clock and 8 o'clock - therefore indicative of the burn to the lower part of the abdomen); and a strain to the back of the neck, all AIS-1 injury severities. He was not transported to a medical facility from the scene, however, did seek medical treatment at a later time.

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#### **DRIVER DATA**

Age:	
Sex:	Maleas
	, 168 centimeters (66 inches)
Weight:	87 kilograms (192 pounds)
_Occupation:	Currently retired
Active Restraint System/Usage:	3-point lap and shoulder belt / used properly
Eyeglasses:	Sunglasses worn at time of deployment
Vehicle Familiarity:	Well
Route Familiarity:	Well
Trip Plan:	Driving to residence
Manner of Leaving Scene:	Drove case vehicle from scene
Type of Medical Treatment:	Air Force Base hospital - treatment later the same day

# **DRIVER INJURIES**

Injury Source	
그는 그는 것 같은 것 같	
Abrasion to nose 2-9-02-02-1-4 Sunglasses	
Contusions to lips 2-9-04-02-1-8 Air bag	
Burn to left lower	
quadrant of abdomen 5-9-20-02-1-8 Air bag	1.0
Strain to back of neck 6-4-02-78-1-6 Impact forces (from air bag)	dan.

### **ATTACHMENTS**

Selected Photographs Scene Diagram Accident Form Vehicle Forms for Case Vehicle - 1993 Toyota Camry Interview Form Occupant Form for Driver of Case Vehicle

# Selected Photographs Numbered 1-42

A second source of the second



# Vehicle approach northbound

# PHOTOGRAPH # 2



Vehicle turns to northwest



View to northwest approach to curb

# PHOTOGRAPH # 4



View to west - area of contact with curb



# Closeup of contact with curb

# PHOTOGRAPH # 6



Closeup of contact with curb



View to southwest - area of final rest



Lookback from area of final rest to north



Lookback of approach into curb - view to southeast



Overall view of scene - view to southeast



Case vehicle

# PHOTOGRAPH # 12



Case Vehicle



Case vehicle (note scraping on lower right corner of facia)



Case vehicle (no other damage to front end)



Damage to lower right front corner area and underbody

# PHOTOGRAPH # 16



Closeup of damage to facia



Closeup of damage to facia



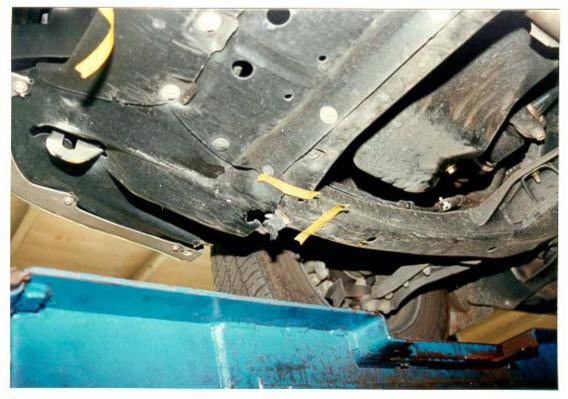
Damage to facia and tie-down hook



Closeup of damage to underbody



Area of damage to underbody



Damage to splash panel and frame

# PHOTOGRAPH # 22



Closeup of damage to right front frame



Closeup of damage to right front frame and splash panel



Closeup of damage to right front frame and splash panel



# Vehicle identification number of case vehicle



Vehicle identification number of case vehicle



Steering assembly and instrument panel



PHOTOGRAPH # 28

Crossing view of steering wheel rim (left to right)



Overhead view of steering wheel rim (top to bottom)



PHOTOGRAPH # 30

Crossing view of steering wheel rim (right to left)



Airbag housing



Reverse side of airbag housing



Airbag (note blood and scuff in right lower quadrant

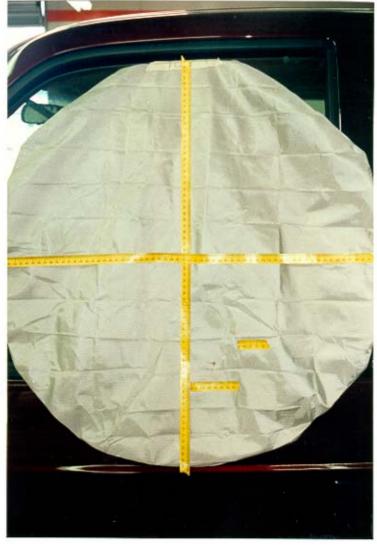
## PHOTOGRAPH # 34



Closeup of blood and scuff



Airbag with blood and scuff highlighted (top of airbag at the top of picture)



### PHOTOGRAPH # 36

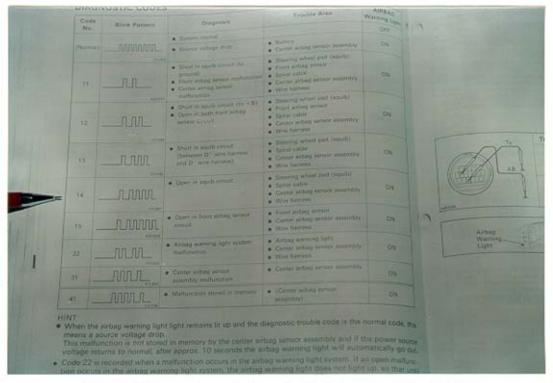
Airbag with blood and scuff highlighted (top of airbag at the top of picture)



Reverse side of airbag (note vent ports are at top position of airbag)



Closeup of vent ports and airbag numbering



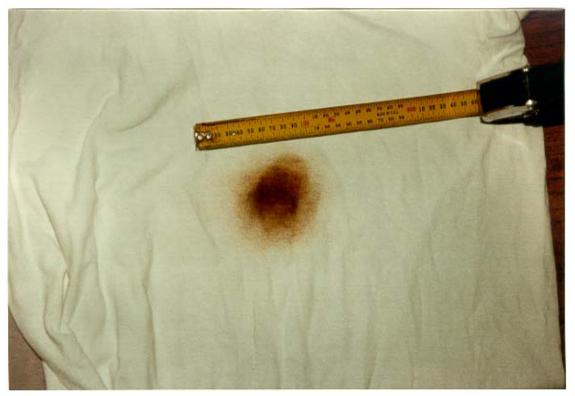
View of diagnostic code from technical manual (code 14)



Front view of driver's shirt (on left) and undershirt



Closeup of burn and blood on driver's shirt

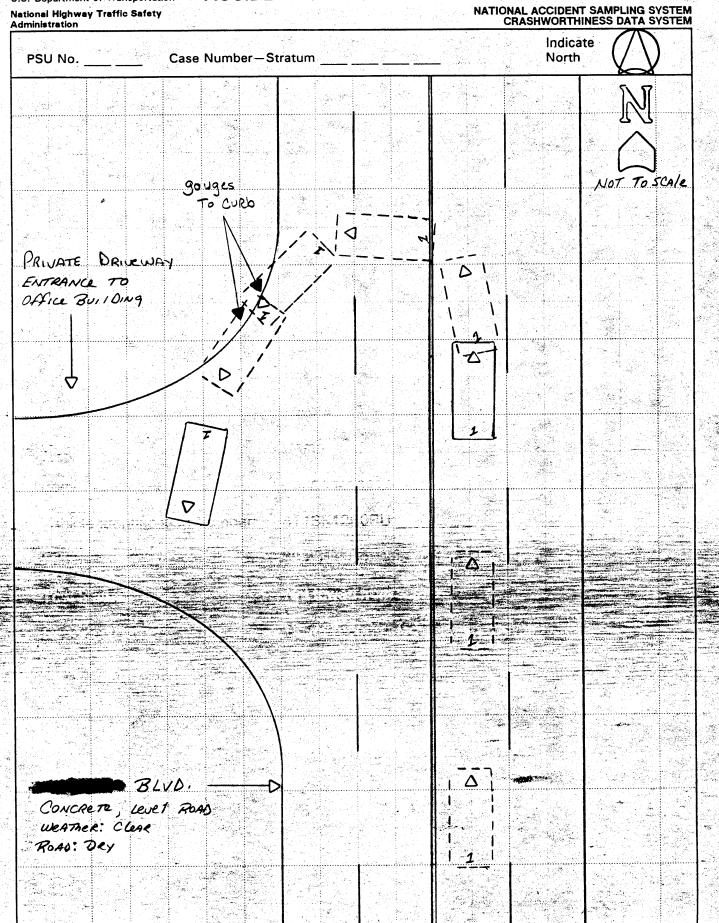


Closeup of burn to driver's undershirt

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# ACCIDENT COLLISION DIAGRAM



HS Form 431B (1/94)

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<b>1</b> 7 (		BEST AVAILABLE
1	J.S. Department of Transportation lational Highway Traffic Safety Administration	NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM
I	1. Primary Sampling Unit Number 75 I	SPECIAL STUDIES - INDICATORS
<b>A</b> .	2. Case Number - Stratum <u>94-01</u>	Check (1) each special study (SS14-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not
	IDENTIFICATION	checked.
	3. Number of General Vehicle Forms Submitted	6SS15 Administrative Use
		7SS16 Pedestrian Crash Data Study
	4. Date of Accident (Month,Day,Year)	8SS17 Impact FiresO
	5. Time of Accident $1520$	9. SS18
*	Code reported military time of accident.	
	NOTE: Midnight = 2400 Unknown = 9999	10
l.		NUMBER OF EVENTS
2 - 49/2 A		11. Number of Recorded Events in This Accident
		Code the number of events which occurred in this accident.

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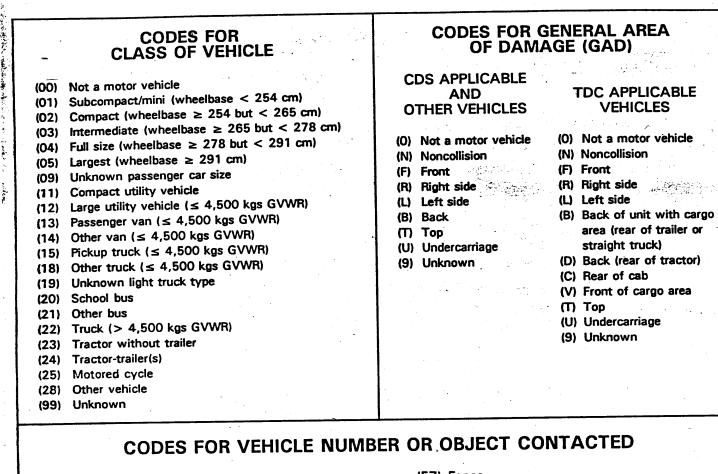
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Berthall March 199

ACCIDENT EVENTS

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

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>0 1</u>	13. <u>0  </u>	14. <u>02</u>	15. <u>F</u>	16. <u>63</u>	17. <u>00</u>	18. <u>0</u>
19. <u>0 2</u>	20	21	22	23	24	25
.26. <u>0 3</u>	27	28	29	30	31	32
33. <u>0 4</u>	34	35	36	37	38	39
40. <u>0 5</u>	41	42	43	44	45	46
······			- 	44 N THE ACCIDENT EV		



(01-30) - Vehicle Number

#### Noncollision

- (31) Overturn rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify):
- (35) Noncollision injury
- (38) Other noncollision (specify):
- (39) Noncollision details unknown

#### **Collision With Fixed Object**

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

(45) Breakaway pole or post (any diameter)

#### Nonbreakaway Pole or Post

- (50) Pole or post ( $\leq$  10 cm in diameter)
- (51) Pole or post (> 10 cm but  $\leq$  30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail) (specify):

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

Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (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

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tional Highway Traffic Safety ministration	ACCIDE	NT LOG	NATIONAL CRA			PLING SYS DATA SYS
TO BE COMPLETED BY TEA	М	DATA STATU	JS OF VARI	ABLE N	UMBER	S 1–81
1. PSU Number		1 2 3	4 5 6	7 8	89	10 11
2. Case Number-Stratum						
3. Assigned Researcher Number				<b></b>	<b>.</b>	<del>است.</del>
4. PSU Reviewer Number			15 16 17	18		
5. Sample Date/	_/					
6. Date Scene Field Work /		19 20 21	22 23 24	25		
7. Number of Scene Slides					•	•
TO BE COMPLETED BY ZONE CI	ENTER	26 27 28	29 30 31	32		、 ·
<ul> <li>8. Type of Scene Inspection</li> <li>(1) No physical evidence</li> <li>(2) Drive by (photos only)</li> <li>(3) Physical evidence present</li> </ul>		33 34 35	36 37 38	39		
<ul> <li>9. Field Documentation Of Physical Plant</li> <li>(0) Not applicable</li> <li>(1) Substandard - beyond researcher control</li> <li>(2) Substandard</li> <li>(3) Standard</li> </ul>			43 44 45			
<ul> <li>10. Field Documentation Of Physical Evidence</li> <li>(0) Not applicable</li> <li>(1) Substandard - beyond researcher control</li> <li>(2) Substandard</li> <li>(3) Standard</li> </ul>	ol		50 51 52 57 58 59			
<ul> <li>11. Quality Of Scene Diagram</li> <li>(0) Not applicable</li> <li>(1) Substandard - beyond researcher contro</li> <li>(2) Substandard</li> <li>(3) Standard</li> </ul>	 ol	61 62 63	64 65 66	67		
<ul> <li>12. Scene Slides Subject Quality</li> <li>(0) Not applicable</li> <li>(1) Substandard - beyond researcher control</li> <li>(2) Substandard</li> <li>(3) Standard</li> </ul>		68 69 70	71 72 73	74		
<ul> <li>13. Scene Slides Quality</li> <li>(0) Not applicable</li> <li>(1) Substandard - beyond researcher contra</li> <li>(2) Substandard</li> <li>(3) Standard</li> </ul>	 ol	75 76 77	78 79 80	81		
14. Number Of Researcher Coded Events		Data Status Cod	es:	v		
15. Number Of Events Added By Zone Center		(Blank) Correct (1) Derived err	or			•
16. Number Of Events Deleted By Zone Center	· • • • • • • • • • • • • • • • • • • •	(2) Non-correc (3) Correctable	e error			
		(4) Change-n				
17. Correct Stratum Character	· /	(5) Sequencing (7) Incorrect e	dit override	•		

5. Department of Transportation	
tional Highway Traffic Safety ministration	GENERAL VEHICLE FORM NATIONAL ACCIDENT SAMPLING SYSTE CRASHWORTHINESS DATA SYSTE
1. Primary Sampling Unit Number	75I     11. Police Reported Alcohol Presence       (0) No alcohol present     7
2. Case Number - Stratum	$\begin{array}{c c} \underline{-9.4-0.1} \\ \underline{-0.1} \\ -$
3. Vehicle Number	(c) children born
VEHICLE IDENTIFIC	Note: See variables 37 through 55 H 00
<ol> <li>Vehicle Model Year</li> <li>Code the last two digits of the (99) Unknown</li> </ol>	(Page 4) for information on Other Drugs model year 12. Alcohol Test Result For Driver Code actual value (decimal implied
5. Vehicle Make (specify):	4 9 (95) Test refused (96) None given
Applicable codes are found in y NASS Data Collection, Coding a Editing Manual.	
(99) Unknown	Source:
6. Vehicle Model (specify):	Ry 040 ACCIDENT RELATED
Applicable codes are found in y NASS Data Collection, Coding Editing Manual. (999) Unknown	your (000) No statutory limit
<ol> <li>Body Type Note: Applicable codes may be the back of this page.</li> </ol>	e found on mph X 1.6093 = kph 14. Attempted Avoidance Maneuver (01) No avoidance actions (02) Braking (no lockup)
8. Vehicle Identification Number $\frac{4}{1} \frac{7}{2} \frac{5}{3} \frac{K}{4} \frac{7}{5} \frac{2}{6} \frac{2}{7} \frac{E}{8} \frac{P}{9} \frac{1}{10} \frac{1}{11}$	U (03) Braking (lockup) (04) Braking (lockup unknown) (05) Releasing brakes (06) Steering left (07) Steering right
Left justify; Slash zeros and let No VIN—Code all zeros Unknown—Code all nines OFFICIAL RECO	(10) Accelerating (11) Accelerating and steering left (12) Accelerating and steering right
<ol> <li>9. Police Reported Vehicle Dispos</li> <li>(0) Not towed due to vehicle d</li> <li>(1) Towed due to vehicle dama</li> </ol>	sition (99) Other action (specify): damage (99) Unknown
(9) Unknown Ref 10. Police Reported Travel Speed	PORT FILD 15. Accident Type Applicable codes may be found on the back of page two of this field form
Code to the nearest kph (NOT less than 0.5 kph) (160) 159.5 kph and above	Dest describes the accident circumstance
(999) Unknown mph X 1.6093 =	(99) Unknown

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# CODES FOR BODY TYPE

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## CDS APPLICABLE VEHICLES

#### **Automobiles**

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify):

#### (09) Unknown automobile type

#### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

## Utility Vehicles (≤ 4,500 kgs GVWR)

- (14) Compact utility (Jeep CJ-2 CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

### Van Based Light Trucks (≤ 4,500 kgs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq$  4,500 kgs GVWR)
- (23) Van based motorhome ( $\leq$  4,500 kgs GVWR)
- (24) Van based school bus ( $\leq$  4,500 kgs GVWR)
- (25) Van based other bus (≤ 4,500 kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify):
- (29) Unknown van type

# Light Conventional Trucks (Pickup style cab, ≤ 4,500 kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500,)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

# Other Light Trucks ( $\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## **OTHER VEHICLES**

#### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify):
- (59) Unknown bus type

Medium/Heavy Trucks (> 4,500 kgs GVWR) (60) Step van (> 4,500 kgs GVWR)

- (61) Single unit straight truck (4,500 kgs < GVWR ≤ 8,850 kgs)
- (62) Single unit straight tručk (8,850 kgs < GVWR ≤ 12,000 kgs)
- (63) Single unit straight truck (> 12,000 kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

# Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

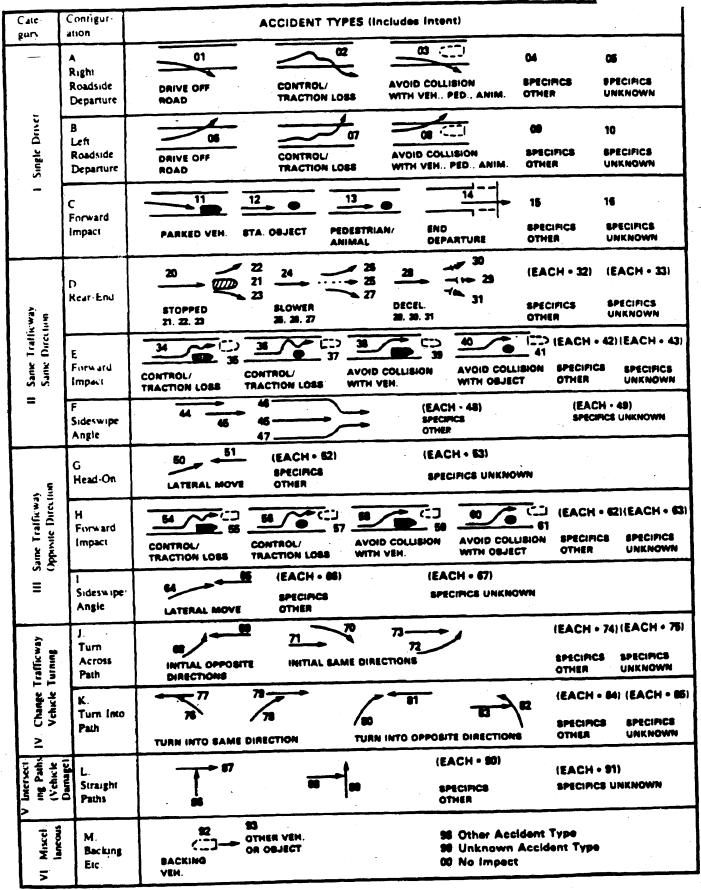
- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (89) Unknown motored cycle type

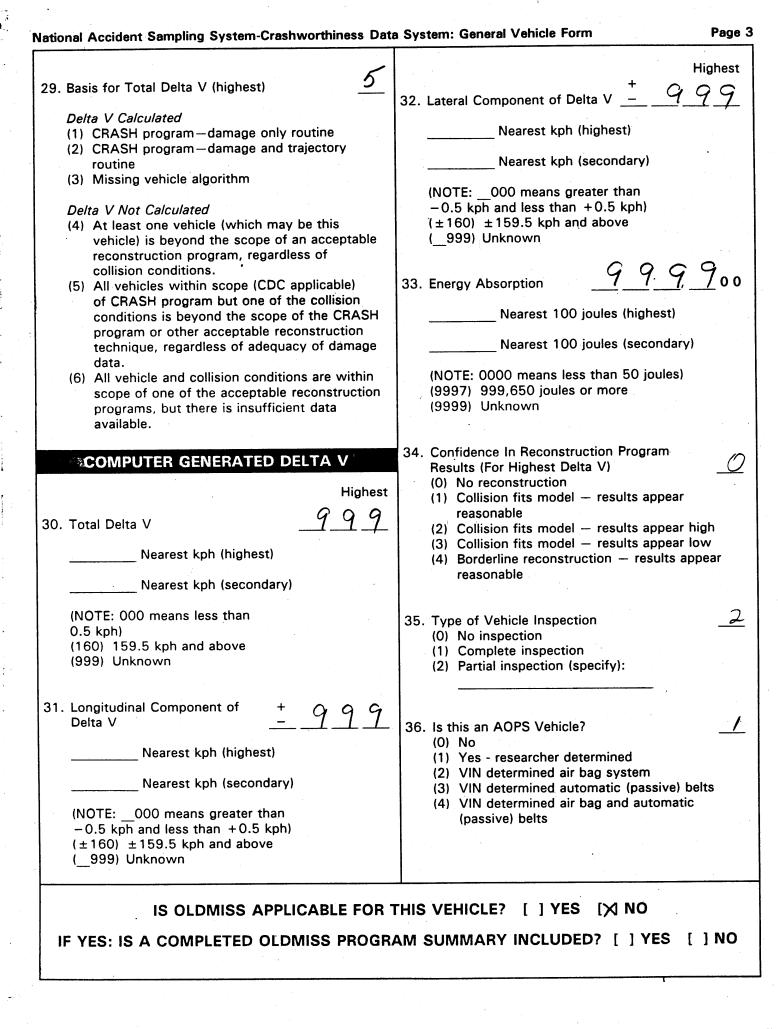
#### Other Vehicles

- 90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

	onal Accident Sampling System-Crashworthiness Dat	a Syste	em: General Vehicle Form Page
	OCCUPANT RELATED	24 0	collover
16.	Driver Presence in Vehicle (0) Driver not present (1) Driver present (9) Unknown	(0 <i>R</i> (1 (2	Collover (no overturning) Collover (primarily about the longitudinal axis) 1) Rollover, 1 quarter turn only 2) Rollover, 2 quarter turns 3) Rollover, 3 quarter turns
	Number of Occupants This Vehicle (00-96) Code actual number of occupants for this vehicle (97) 97 or more (99) Unknown Number of Occupant Forms Submitted	(4 (5	<ul> <li>4) Rollover, 4 or more quarter turns (specify):</li> <li>5) Rolloverend-over-end (i.e., primarily about the lateral axis)</li> <li>9) Rollover (overturn), details unknown</li> </ul>
	VEHICLE WEIGHT ITEMS	0	VERRIDE/UNDERRIDE (THIS VEHICLE)
19.	Vehicle Curb WeightO Code weight to nearest		ront Override/Underride (this Vehicle) <u>6</u>
	10 kilograms. (045) Less than 450 kilograms (610) 6,100 kilograms or more (999) Unknown		<ul> <li>No override/Underride (this Vehicle)</li> <li>No override/underride, or not an end-to-end impact</li> </ul>
20.	$\underline{ 0, 0} 0$ $\underline{ 0, 0} 0$ $\underline{ 0, 0} 0$	(* (2	Override (see specific CDC) 1) 1st CDC 2) 2nd CDC 3) Other not automated CDC (specify):
	10 kilograms. (000) Less than 5 kilograms (450) 4,500 kilograms or more (999) Unknown lbs X .4536 = kgs	(4 (5	Inderride (see specific CDC) 4) 1st CDC 5) 2nd CDC 6) Other not automated CDC (specify):
21.	RECONSTRUCTION DATA Towed Trailing Unit		7) Medium/heavy truck or bus override 9) Unknown
	<ul> <li>(0) No towed unit</li> <li>(1) Yes-towed trailing unit</li> <li>(9) Unknown</li> </ul>		HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V
22.	Documentation of Trajectory Data for This Vehicle (0) No (1) Yes		Values: (000)-(359) Code actual value (997) Noncollision (998) Impact with object (999) Unknown
23.	<ul> <li>Post Collision Condition of Tree or Pole</li> <li>(For Highest Delta V)</li> <li>(0) Not collision (for highest delta V) with tree or pole</li> <li>(1) Not damaged</li> <li>(2) Cracked/sheared</li> <li>(3) Tilted &lt;45 degrees</li> <li>(4) Tilted ≥45 degrees</li> <li>(5) Uprooted tree</li> <li>(6) Separated pole from base</li> <li>(7) Pole replaced</li> </ul>		leading Angle For This Vehicle <u>998</u> leading Angle For Other Vehicle <u>998</u>
	(8) Other (specify):		

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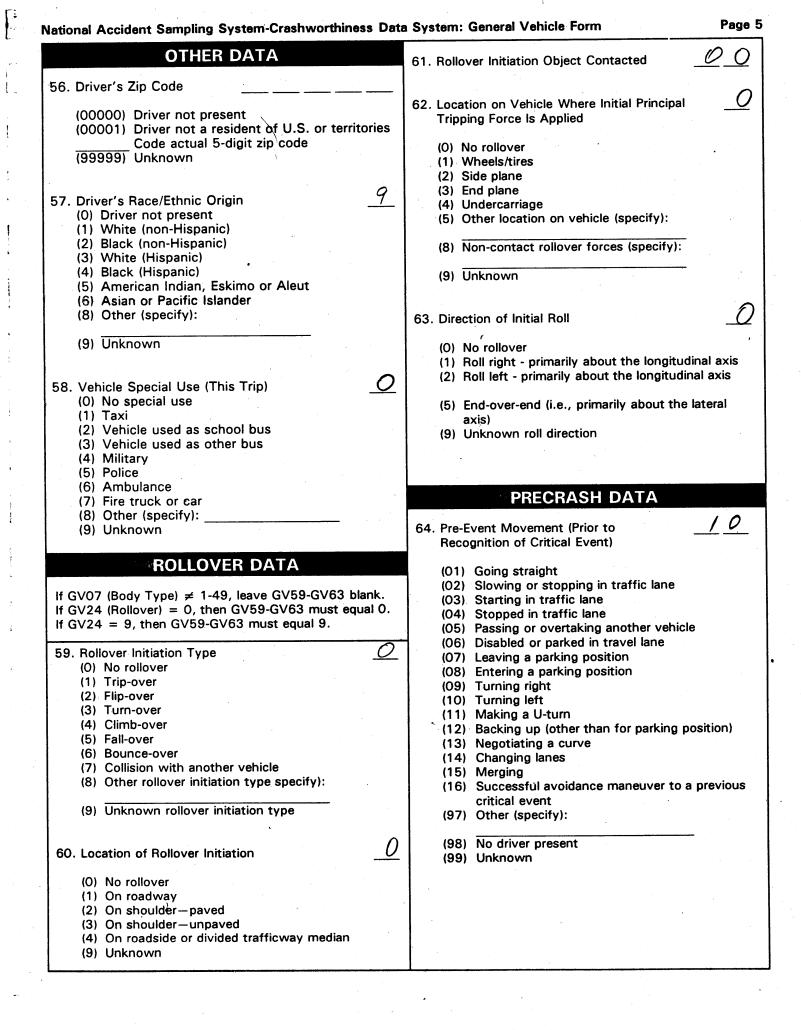


# National Accident Sampling System-Crashworthiness Data System: General Vehicle Form

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Page 4

<ul> <li>37. Police Reported Other Drug Presence <ul> <li>(0) No other drug(s) present</li> <li>(1) Yes [other drug(s) present]</li> <li>(7) Not reported</li> <li>(8) No driver present</li> <li>(9) Unknown</li> </ul> </li> <li>38. Police Reported Drug Evaluation Classification <ul> <li>(DEC) Test For Driver</li> <li>(0) No DEC process available or given</li> <li>(1) DEC process given, results known</li> <li>(2) DEC process given, results unknown</li> <li>(3) DEC process available, unknown if given</li> <li>(8) No driver present</li> </ul> </li> <li>39. Other Drug Specimen Test Type For Driver <ul> <li>(0) No appecimen test given</li> </ul> </li> </ul>	DRUG EVALUATION CLASSIFICATION OTHER DRUGS TEST RESULTS FOR DRIVER         DEC       Specimen Test         Test       Test         Results       Results         Narcotic Drug       40.       41.         Depressant Drug       42.       43.         Stimulant Drug       44.       45.         Hallucinogen Drug       46.       47.         Cannabinoid Drug       48.       49.         Phencyclidine (PCP)       50.       51.         Inhalant Drug       52.       53.         Other Drug (Excluding       54.       55.         Nicotine, Aspirin, Alcohol,       Drugs Administered Post-Crash)         Codes For DEC Test Results       (0) No DEC test given         (1) Passed DEC test       55.
<ul> <li>(0) No specimen test given</li> <li>(1) Blood test</li> <li>(2) Urine test</li> <li>(3) Other specimen tests (specify):</li> <li>(7) Unspecified specimen test</li> <li>(8) No driver present</li> <li>(9) Unknown if specimen test given</li> </ul>	<ul> <li>(2) Failed DEC test</li> <li>(3) DEC test given—results unknown</li> <li>(8) No driver present</li> <li>(9) Unknown if DEC test given</li> <li>Codes for Specimen Test Results</li> <li>(0) No specimen test given</li> <li>(1) Drug not found in specimen</li> <li>(2) Drug found in specimen</li> <li>(3) Specimen test given, results unknown or not obtained</li> <li>(8) No driver present</li> <li>(9) Unknown if specimen test given</li> </ul>



# CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

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

Noncollision

- (31) Turn-over fall-over (33) Jackknife
- Collision With Fixed Object
  - (41) Tree ( $\leq$  10 cm in diameter)
  - (42) Tree (> 10 cm in diameter)
  - (43) Shrubbery or bush
  - (44) Embankment
  - (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

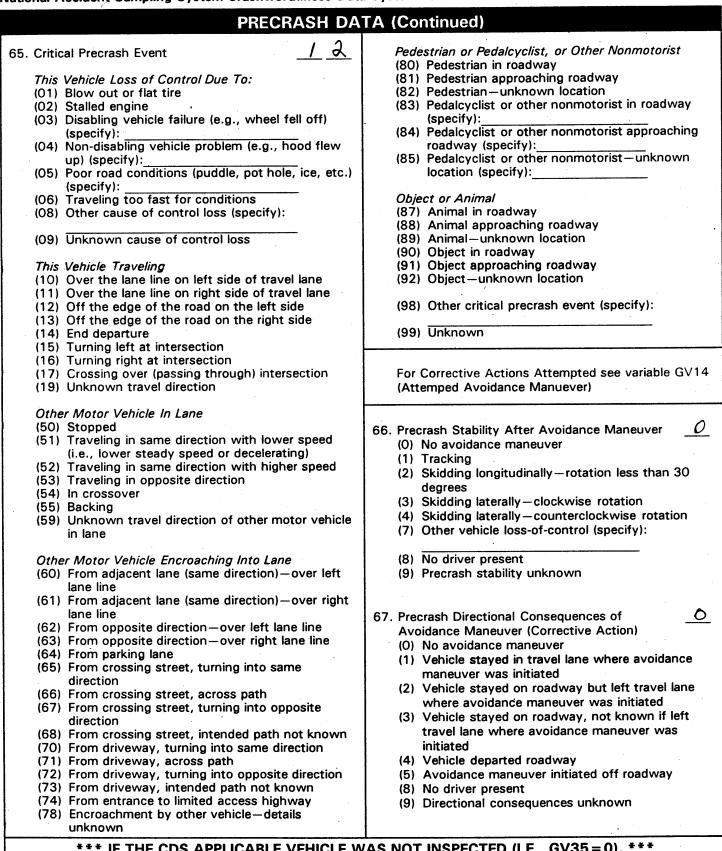
- (50) Pole or post ( $\leq$  10 cm in diameter)
- (51) Pole or post (> 10 cm but  $\leq$  30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail) (specify):

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

Collision with Nonfixed Object

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

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

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

U.S. Department of Transportation National Highway Traffic Safety

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GENERAL VEHICLE LOG

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

TO BE COMPLETED BY TEAM	TO BE COMPLETED BY THE ZONE CENTER
1. PSU Number	<ul> <li>10. Reconstruction Program (Most Severe Impact)</li> <li>(0) Not present</li> <li>(1) Added</li> <li>(2) Dropped</li> <li>(3) Changed</li> <li>(4) Correct</li> </ul>
4. Vehicle Number	11. Reason(s) Program Results Dropped Or Changed
<ul> <li>5. Vehicle Disposition/Type <ul> <li>(1) Towed, CDS applicable</li> <li>(2) Non-towed, CDS applicable (not AOPS)</li> <li>(3) Non-CDS applicable</li> <li>(4) Non-towed AOPS—CDS applicable</li> </ul> </li> <li>6. Reason Vehicle Inspection Not Completed <ul> <li>(00) Non-CDS applicable vehicle</li> <li>(01) Complete inspection</li> <li>(02) Partial inspection under repair</li> </ul> </li> </ul>	<ul> <li>a. Algorithm choice</li> <li>b. Collision type</li> <li>c. Vehicle type</li> <li>d. Size / stiffness / weight</li> <li>e. Improved PDOF</li> <li>f. CDC</li> <li>g. Trajectory data</li> <li>h. Damage data</li> <li>i. Heading angle for Oldmiss</li> </ul>
<ul><li>(03) Partial inspection repaired</li><li>(04) Partial inspection other (specify):</li></ul>	a b c d e f g h i
<ul> <li>(05) Vehicle cannot be located</li> <li>(06) Vehicle destroyed</li> <li>(07) Vehicle outside of study area</li> <li>(08) Vehicle impounded</li> <li>(09) Vehicle sold</li> <li>(10) Uit end sup wahiele</li> </ul>	(Blank) Correct or no reconstruction (1) Incorrect
(10) Hit and run vehicle (11) Owner could not be located	DATA STATUS OF VARIABLE NUMBERS 3-67
<ul> <li>(12) Owner refusal</li> <li>(13) Insurance company refusal</li> <li>(14) Attorney refusal or litigation</li> <li>(15) Repair or tow facility refusal</li> <li>(16) Stolen</li> </ul>	3 4 5 6 7 8 9 10 11 12 13
<ul> <li>(17) Wrong name and address on PAR</li> <li>(18) Caseload / staff turnover</li> <li>(19) Other (specify):</li></ul>	14 15 16 17 18 19 20 21 22 23 24
7. Knowledge Of Highest Delta V Results	25 26 27 28 29 30 31 32 33 34 35
<i>Known</i> (01) CRASH-PC damage only (02) CRASH-PC damage and trajectory (03) OLDMISS (completed by Zone Center)	25 26 27 28 29 30 31 32 33 34 35
Unknown	36 37 38 39 40 41 42 43 44 45 46
<ul> <li>(04) Rollover</li> <li>(05) Other non-horizontal force</li> <li>(06) Sideswipe type damage / severe override</li> </ul>	
<ul> <li>(07) Vehicle out of scope / pedestrian</li> <li>(08) Yielding object</li> </ul>	47 48 49 50 51 52 53 54 55 56 57
<ul> <li>(09) Overlapping damage</li> <li>(10) Insufficient data</li> <li>(11) Other (specify):</li> </ul>	
(11) Other (specify): (12) OLDMISS form - pending review by Zone Center	58 59 60 61 62 63 64 65 66 67
<ul> <li>8. Presence Of Non-coded Reconstruction Program?</li> <li>(0) No</li> <li>(1) Yes</li> </ul>	
<ul> <li>9. Data Obtained for This Vehicle's Most Severe Impact (Regardless of Usage)</li> <li>(0) No data obtained</li> <li>(1) CDC data only</li> <li>(2) Trajectory data only</li> <li>(3) CDC and crush profile only</li> <li>(4) CDC and trajectory data only</li> <li>(5) CDC, crush profile, and trajectory data</li> </ul>	Data Status Codes: (Blank) Correct (1) Derived error (2) Non-correctable error (3) Correctable error (4) Change—no error (7) Incorrect edit override (8) MDE error (9) Unknown coded

(Rev. 1/94)

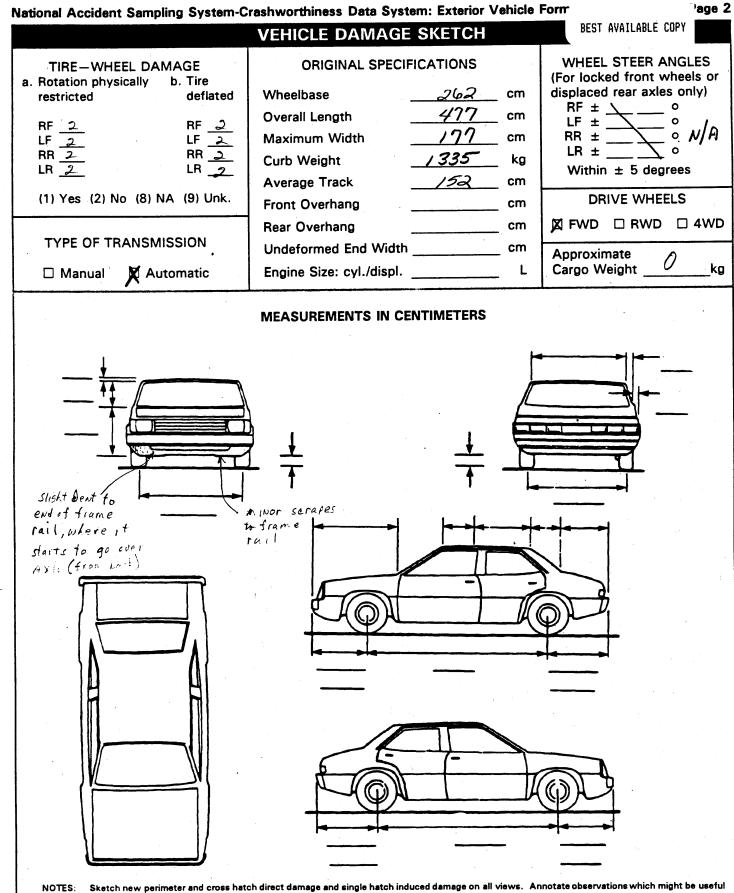
lational Highw	t of Transportation	EV	TEDIOD				NAT	IONAL A		AMPLING	SYSTEM
dministration	ay Traffic Safety	EX	TERIOR	VEHIC		URIVI			WORTHIN		
1. Primar	y Sampling Unit Nur	nber	TSI	_ 3.	Vehicle	Numbe	er			_0	1
2. Case M	Number - Stratum		4-01	_				* 		· -	
			VEHICLE	DENTI	FICATI	ON					
VIN 4	<u>TISK</u>	126	EOP	IL a		2	State and a second of	<b>K</b>	Model Y	ear 9	3
	ke (specify): <u>To</u>		-			Model (s	pecify):	•			
		/ • · · · ·		DCATO			•		)		
l ocate the	end of the damage	with respec				center	line or b	umper o	corner fo	or end in	npacts
or an unda	maged axle for side	impacts.									
Specific I	mpact No.	Location	of Direct D	amage			Lc	cation	of Field	L	
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	37.0 0	In From	RIGHT FR	ONT C	œvee						
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	dentify the plane at		SH PROF								
	Measure C1 to C6 fr	om driver t	o passenge				imum cr pacts ar	•	to front	in side	
i 1 1	Measure C1 to C6 fr mpacts. Free space value is o he individual C locat side taper, etc. Rec Use as many lines/co	defined as t tions. This ord the valu plumns as r	he distance may includ Je for each necessary to	r side in betwee e the fol C-measu	front or n the ba lowing: irement	rear im seline a bumper and ma	pacts ar nd the c lead, b ximum c	nd rear t original l umper t	body ço	ntour ta	ken a usion,
i 1 Specific Impact	mpacts. Free space value is c he individual C loca side taper, etc. Reco	defined as t tions. This ord the valu blumns as r Direct I Width	he distance may includ le for each necessary to Damage Max	r side in betwee e the fol C-measu	front or n the ba lowing: irement	rear im seline a bumper and ma	pacts ar nd the c lead, b ximum c	nd rear t original l umper t	body ço	ntour ta	usion,
i 1 5 Specific	mpacts. Free space value is o the individual C locat side taper, etc. Reco Use as many lines/co Plane of Impact	defined as t tions. This ord the valu plumns as r Direct I	he distance may includ ue for each necessary to Damage	r side in betweet e the fol C-measu describ Field	front or n the ba lowing: irement e each o	rear im seline a bumper and ma damage	pacts ar nd the c lead, bi ximum c profile.	nd rear 1 priginal umper t crush.	body co aper, sid	ntour ta de protru	ken an usion, ±D
i 1 Specific Impact	mpacts. Free space value is o the individual C locat side taper, etc. Reco Use as many lines/co Plane of Impact	defined as t tions. This ord the valu blumns as r Direct I Width	he distance may includ le for each necessary to Damage Max	r side in betweet e the fol C-measu describ Field	front or n the ba lowing: irement e each o	rear im seline a bumper and ma damage	pacts ar nd the c lead, bu ximum c profile.	nd rear 1 priginal umper t crush.	body co aper, sid	ntour ta de protru	usion,
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HS Form 435A (Rev. 1/94)

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# **ORIGINAL SPECIFICATIONS WORK SHEET**

Wheelbase $/ 0 3 . /$ inches x 2.54 =	<u>-262</u> cm
Overall Length $\underline{/} \underline{\mathscr{S}} \underline{7} \underline{\mathscr{S}} \underline{7}$ inches x 2.54 =	<u> </u>
Maximum Width $69.7$ inches x 2.54 =	<u> </u>
Curb Weight $2, 943$ pounds x .4536 =	<u>1, 3 3 5 kg</u>
Average Track $\underline{6} \underline{0} \underline{0}$ inches x 2.54 =	cm
Front Overhanginches x 2.54 =	cm
Rear Overhang inches x 2.54 =	cm
Undeformed End Width inches x 2.54 =	cm
Engine Size: cyl./displ cc x .001 =	<u> </u>
CID x .0164 =	L



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.

National Accident Sampling System-Crashworthiness Data System: Exterior Vehicle Form

# CDC WORKSHEET

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CODES FOR OBJECT CONTACTED

(01-30) - Vehicle Number

Noncollision

- (31) Overturn rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify):
- (35) Noncollision injury
- (38) Other noncollision (specify):
- (39) Noncollision details unknown

### **Collision With Fixed Object**

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

### Nonbreakaway Pole or Post

- (50) Pole or post ( $\leq$  10 cm in diameter)
- (51) Pole or post (> 10 cm but  $\leq$  30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail) (specify):

- (57) Fence
  (58) Wall
  (59) Building
  (60) Ditch or culvert
  (61) Ground
  (62) Fire hydrant
  (63) Curb
  (64) Bridge
  (68) Other fixed object (specify):
  (69) Unknown fixed object
  Collision with Nonfixed Object
  (71) Motor vehicle not in-transport
  (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

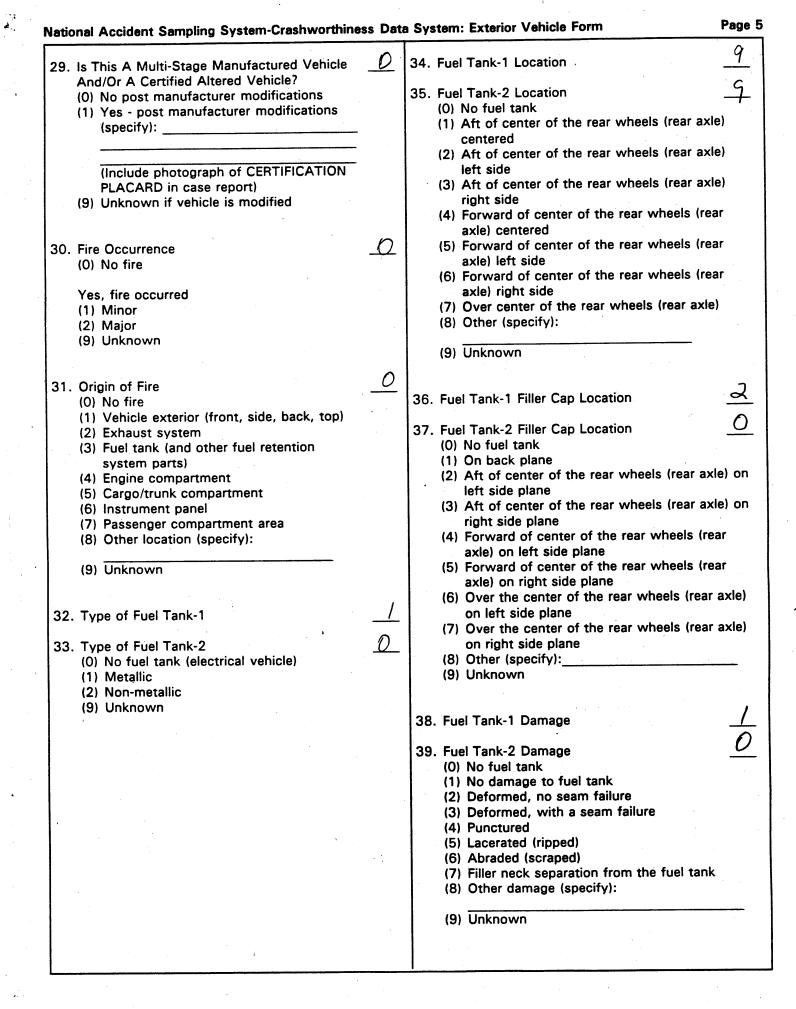
## DEFORMATION CLASSIFICATION BY EVENT NUMBER

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	63	360	00	<u> </u>	Ŧ	L	W	01
01	63	360	00	<u> </u>	F	2	<u></u>	01
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		······						
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Page 3

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ational Accid			hworthiness Dat				Page
		COLLISIO	N DEFORMA	TION CLAS	SIFICATIO	N	
HIGHEST I	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	5	6	7	8	9	10	11
Second Hi	ghest Delta "V	/"					
2	13	14	15	16	17	18	19
		CRU	SH PROFILE	IN CENTIM	IETERS		
	The crush pro in the app	ofile for the d ropriate spac	amage described e below. (ALL N	I in the CDC(s) MEASUREMENT	above should IS ARE IN CE	be documente NTIMETERS.)	ed
HIGHEST	DELTA "V"			· · ·			
20. 	21. C1	C2		C4	C <sub>5</sub>	C <sub>6</sub>	22. 
						х 	t i
	······, -·····		<u> </u>		 1		
Second Hi	ighest Delta "\	/"					
23. L	24. 	C <sub>2</sub>		C4	С <sub>Б</sub>	C <sub>6</sub>	25. D
				4 			+
		<u> </u>			<u> </u>	·	
but Not	Cs Documented Coded on The Inted File?	<u> </u>	. Researcher's As of Vehicle Dispo (0) Not towed d vehicle dama (1) Towed due vehicle dama (9) Unknown	osition lue to age to		al Wheelbase _Code to the nearest centime Unknown	<u>262</u> eter
	•				inches X 2	.54 =	centimeters



## National Accident Sampling System-Crashworthiness Data System: Exterior Vehicle Form 44. Is This Vehicle Equipped With More Than 40. Location of Fuel System-1 Leakage Two Fuel Tanks? (0) No (one or two tanks only) 41. Location of Fuel System-2 Leakage (0) No fuel tank Yes - More Than Two Tanks (1) No fuel leakage (1) Yes -- no damage to any tank or filler cap and no fuel system leakage Primary Area Of Leakage (2) Yes -- no damage to any tank or filler (2) Tank cap but there is fuel system leakage (3) Filler neck (specify leakage location): (4) Cap (5) Lines/pump/filter (3) Yes -- damage to an additional tank or (6) Vent/emission recovery filler cap and there is fuel system leakage (8) Other (specify): (specify the following): Type of tank (9) Unknown Tank location Filler cap location Tank damage 42. Fuel Type-1 Location of leakage Type of fuel 43. Fuel Type-2 (9) Unknown if more than two tanks Single Fuel Type (00) No fuel tank (01) Gasoline COMMENTS (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

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

Page 6

TO BE COMPLETED BY TEAM	13. Number of Coded CDCs (0,1,2)
1. PSU Number	- 14. Number of Coded Crush Profiles (0,1,2)
2. Case Number-Stratum	_
3. Researcher Completing Form	_
4. Vehicle Number	- DATA STATUS OF VARIABLE NUMBERS 4-32
5. Date Vehicle Inspected///	- Highest CDC
6. Number of Exterior Vehicle Slides	
TO BE COMPLETED BY ZONE CENTER	
7. Applicable Precrash Measurements	Secondary CDC
(0) Not applicable (1) Substandard - beyond researcher control	12 13 14 15 16 17 18 19
(2) Substandard (3) Standard	
8. Impact Damage Documentation (0) Not applicable	Highest Crush Profile
<ul> <li>(1) Substandard - beyond researcher control</li> <li>(2) Substandard</li> </ul>	
(3) Standard	
9. Quality Of Vehicle Damage Sketch	Secondary Crush Profile
(0) Not applicable (e.g., repaired vehicle) (1) Substandard - beyond researcher control	 23 24 25
(2) Substandard	
(3) Standard	
0. Exterior Slides Subject Quality	- 26 27 28 29 30 31 32 33
<ul><li>(0) Not applicable</li><li>(1) Substandard - beyond researcher control</li></ul>	
(2) Substandard (3) Standard	
	34 35 36 37 38 39 40 41 42 43 44
1. Exterior Slides Quality	
<ul><li>(1) Substandard - beyond researcher control</li><li>(2) Substandard</li></ul>	
(3) Standard	Data Status Codes
2. Primary Error Source (Vehicle Plane)	Data Status Codes:
(O) No error (1) Front	(Blank) Correct (1) Derived error
(2) Side (left or right)	(2) Non-correctable error (3) Correctable error
(3) Back (rear) (4) Top	(4) Change—no error (5) Sequencing error
(5) Undercarriage (8) Other (specify):	(7) Incorrect edit override
	(8) MDE error (9) Unknown coded

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U.S. Department of Transportation NATIONAL ACCIDENT SAMPLING SYSTEM **INTERIOR VEHICLE FORM** National Highway Traffic Safety CRASHWORTHINESS DATA SYSTEM Administration GLAZING TSI 1. Primary Sampling Unit Number Glazing Damage from Impact Forces 94-01 15. WS 016. LF 017. RF 018. LR 019. RR 0 2. Case Number - Stratum 20. BL ()21. Roof 8 22. Other () 3. Vehicle Number INTEGRITY (0) No glazing damage from impact forces (2) Glazing in place and cracked from impact forces 00 (3) Glazing in place and holed from impact forces 4. Passenger Compartment Integrity (4) Glazing out-of-place (cracked or not) and not holed from (OO) No integrity loss impact forces (5) Glazing out-of-place and holed from impact forces Yes, Integrity Was Lost Through (6) Glazing disintegrated from impact forces (01) Windshield (7) Glazing removed prior to accident (02) Door (side) (8) No glazing (03) Door/hatch (back door) (9) Unknown if damaged (04) Roof (05) Roof glass (06) Side window **Glazing Damage from Occupant Contact** (07) Rear window (backlight) 23. WS 224. LF 25. RF 26. LR 27. RR 6 (08) Roof and roof glass (09) Windshield and door (side) (10) Windshield and roof 28. BL 029. Roof 30. Other 🖒 (11) Side and rear window (side window and backlight) (12) Windshield and side window (O) No occupant contact to glazing or no glazing (13) Door and side window (1) Glazing contacted by occupant but no glazing damage (98) Other combination of above (specify): (2) Glazing in place and cracked by occupant contact (3) Glazing in place and holed by occupant contact (99) Unknown (4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact (5) Glazing out-of-place by occupant contact and holed by occupant contact Door, Tailgate or Hatch Opening (6) Glazing disintegrated by occupant contact (9) Unknown if contacted by occupant 5. LF () 6. RF () 7. LR () 8. RR () 9. TG/H () If No Glazing Damage And No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As Ø (O) No door/gate/hatch (1) Door/gate/hatch remained closed and operational (2) Door/gate/hatch came open during collision Type of Window/Windshield Glazing (3) Door/gate/hatch jammed shut (8) Other (specify): 31. WS 032. LF 033. RF 0 34. LR 035. RR 0 (9) Unknown 36. BL () 37. Roof 38. Other 0 (O) No glazing contact and no damage, or no glazing (1) AS-1 - Laminated Damage/Failure Associated with Door, Tailgate or Hatch (2) AS-2 - Tempered Opening in Collision. If IV05-IV09  $\neq$  2, Then code Ø (3) AS-3 - Tempered-tinted 10. LF 11. RF 012. LR 33. RR 014. TG/H (4) AS-14 - Glass/Plastic (8) Other (specify): (O) No door/gate/hatch or door not opened (9) Unknown Door, Tailgate or Hatch Came Open During Collision (1) Door operational (no damage) Window Precrash Glazing Status (2) Latch/striker failure due to damage 39. WS\_\_\_\_40. LF\_\_\_\_41. RF\_\_\_ 42. LR\_\_\_\_43. RR\_\_\_\_ (3) Hinge failure due to damage (4) Door structure failure due to damage 44. BL\_\_\_\_45. Roof\_\_\_\_46. Other\_\_\_\_ (5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage (6) Latch/striker and hinge failure due to damage (O) No glazing contact and no damage, or no glazing (8) Other failure (specify): (1) Fixed Closed (2) (3) Partially opened (9) Unknown (4) Fully opened (9) Unknown

	Note: Sketch intruc STEERING RIN Ze.0 CM FROM	and the second		
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Document no more than the 15 most severe intrusions

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ote: If no intrusion	s, leave varial	bles IV47-IV	/86 blank.
			Dominant
Location of	Intruding	Megnitude	Crush
Intrusion	Component	of Intrusion	Direction
	·	· · ·	
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ISt 47	40	_ +3	
2nd 51	52	53	54
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	EC	57	59
3rd 55	50	_ 5/	oo
4th 59	60	61	62
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5th 63	64.	65.	66
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oun 07		03	
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7th 71		_ /3	/
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8th 75	76	_ 77	78
9th 79	_ 80	_ 81	82
Oth 83	84	85	86
CATION OF INT	RUSION		
		_	
Front Seat		Seat	
(11) Left (12) Middle		Left Middle	
(12) Middle (13) Right		Right	
(10) mBur		<b>-</b>	·
Second Seat		Catastrop	hic
(21) Left	(98)	Other end	
(22) Middle (23) Right		area (spe	
(	(99)	Unknown	
Third Seat			
(31) Left (32) Middle	•		
(32) Middle (33) Right			
	•		

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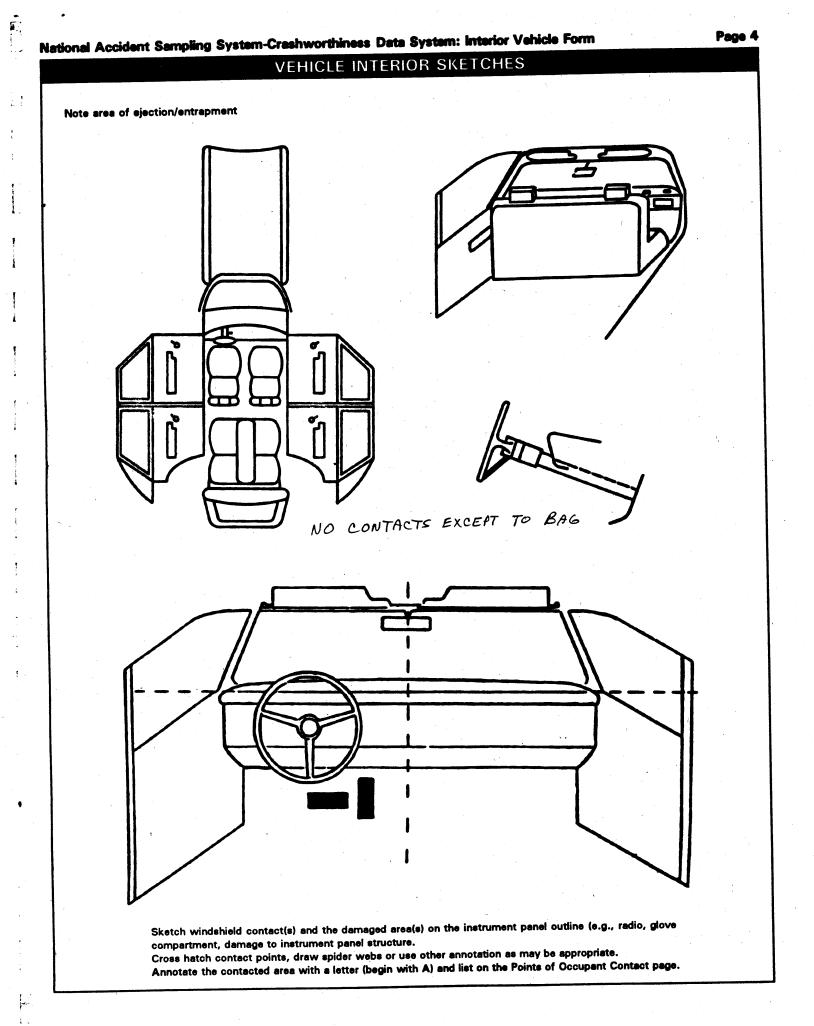
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(All Measurements Are in Centimeters)							
	COMPARISON VALUE	. <b>-</b>	DAMAGE VALU	IE =	ľ	DEFORMATION	
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National Accident Sampling System-Crashworthiness Data System: Interior Vehicle Form BEST AVAILABLE COPY age 3 00 STEERING COLUMN 93. Location of Steering Rim/Spoke Deformation a (00) No steering rim deformation 87. Steering Column Type (1) Fixed column (2) Tilt column Quarter Sections (3) Telescoping column (01) Section A (02) Section B (4) Tilt and telescoping column (03) Section C (8) Other column type (specify): (04) Section D (9) Unknown Half Sections Shear Capsules Not moved (05) Upper half of rim/spoke (06) Lower half of rim/spoke Upper Lower (07) Left half of rim/spoke (08) Right half of rim/spoke XX 88. Blank (09) Complete steering wheel collapse (This variable is left blank (10) Undetermined location so that numbering consistency (99) Unknown can be maintained with the 1988-94 CDS. **INSTRUMENT PANEL** 038,000 X X X 94. Odometer Reading 89. Blank (This variable is left blank kilometers-Code to the so that numbering consistency nearest 1,000 kilometers can be maintained with the (000) No odometer 1988-94 CDS. (001) Less than 1,500 kilometers (500) 499,500 kilometers or more (999) Unknown XXX 90. Blank (This variable is left blank so that numbering consistency can be maintained with the Source: 1988-94 CDS. 95. Instrument Panel Damage from 0 **Occupant Contact?** XXX 91. Blank (0) No (This variable is left blank (1) Yes so that numbering consistency (9) Unknown can be maintained with the 1988-94 CDS. 96. Knee Bolsters Deformed from 8 **Occupant Contact?** (0) No 00 92. Steering Rim/Spoke Deformation (1) Yes Code actual measured (8) Not present deformation to the nearest centimeter (9) Unknown (00) No steering rim deformation (01-14) Actual measured value in centimeters (15) 15 centimeters or more 97. Did Glove Compartment Door Open 0 (98) Observed deformation cannot be measured During Collision(s)? (99) Unknown (0) No \* Note: Dealer claimed wheel bent; not visible to us. (1) Yes (8) Not present (9) Unknown



IOTE	S: Encode the data for each ap below. Restraint systems sh Assessment Form.	plicable front seat position. The attribution ould be assessed during the vehicle in AIR BAGS	Ite for the variables may be found spection then coded on the Occupar
		Left	Right
F	Availability/Function	/	$\bigcirc$
l R	Deployment	(laurenting)	0
S		1 (driver chims 2)	
<u>T</u>	Failure System Availability/Function	I (Lowever, low AV)	Are There Indications of Air Beg
(1) Non- (2) (3)	Not equipped/not available Air bag <i>functional</i> Air bag disconnected (specify): Air bag not reinstalled Unknown	<ul> <li>(0) Not equipped/not available</li> <li>(1) Air bag deployed during accident (as a result of impact)</li> <li>(2) Air bag deployed inadvertently just prior to accident</li> <li>(3) Air bag deployed, accident sequence undetermined</li> <li>(4) Nondeployed</li> <li>(5) Unknown if deployed</li> <li>(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)</li> <li>(9) Unknown</li> </ul>	System Failure? (0) Not equipped/not available (1) No (2) Yes (specify): (9) Unknown
			Right
	Availability/Function		
F	Use	1	· · · · · · · · · · · · · · · · · · ·
Ì		NIA	······································
R S	Туре	/*///	· · · · · · · · · · · · · · · · · · ·
Т	Proper Use		
	Failure Modes		l
Availab (0) (1) (2) (3) <i>Non-</i> (4) (9) Automa (0) (1) (2) Automa (9) Automa	atic (Passive) Belt System Dility/Function Not equipped/not available 2 point automatic belts 3 point automatic belts Automatic belts - type unknown functional Automatic belts destroyed or rendered inoperative Unknown atic (Passive) Belt System Use Not equipped/not available/destroyed or rendered inoperative Automatic belt in use Automatic belt not in use (manually disconnected, motorized track inoperative) Automatic belt use unknown Unknown atic (Passive) Belt System Type Not equipped/not available Non-motorized system Unknown	<ul> <li>Proper Use of Automatic (Passive) Belt System <ul> <li>(0) Not equipped/not available/not used</li> <li>(1) Automatic belt used properly</li> <li>(2) Automatic belt used properly with child safety seat</li> </ul> </li> <li>Automatic Belt Used Improperly <ul> <li>(3) Automatic shoulder belt worn under arm</li> <li>(4) Automatic shoulder belt worn behind back</li> <li>(5) Automatic belt worn around more than one person</li> <li>(6) Lap portion of automatic belt worn on abdomen</li> <li>(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):</li> <li>(8) Other improper use of automatic belt system <ul> <li>(specify):</li> <li>(9) Unknown</li> </ul> </li> </ul></li></ul>	Automatic (Passive) Belt Failure Modes During Accident (0) Not equipped/not available/not in us (1) No automatic belt failure(s) (2) Torn webbing (stretched webbing n 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

# National Accident Sampling System-Crashworthiness Data System: Interior Vehicle Form

age 5

		POIN	TS OF OC	CUPANT CONTAC	CT	BEST AVAILAE	ILE COPY
Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Ph			Confidence Level of Contact Point
Α	45	01	FACE	Scuff, transfer			
В	45	01	Dabdomen	burn thru outer chi	rt. sca	orched under-	1
С	10			Scuff, transfer burn thru outer shi shirt, from ven	ithole		
D							
E							
E						· · · · · · · · · · · · · · · · · · ·	
 G							
- H						······································	
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<u> </u>		<u> </u>					
	+						
N	1	l				<u> </u>	
FRONT (01) Winds (02) Mirros		C	(23) Left B-pill	ERIOR COMPONENTS	(46) (47)	Other occupants (s	
(03) Sunvi (04) Steeri (05) Steeri (06) Steeri		ke ation	(26) Left side one or m frame, w	window glass or frame window glass including ore of the following: indow sill, A (A1/A2)-pillar, or roof side rail.	(48) (49)	Child safety seat (s Other interior objec	
(07) Steen select (08) Add c deck,	ing column, transr tor lever, other att on equipment (e.g. air conditioner)	achment ., CB, tape	(28) Left side	t side object (specify): window sill	ROOF (50) (51) (52)	Rear header Roof left side rail	•
(10) Cente (11) Right (12) Glove	nstrument panel a er instrument panel instrument panel e compartment do	and below	excluding (31) Right side	e interior surface, 1 hardware or armrests 9 hardware or armrest A1/A2)-pillar	(53) (54) FLOOR (56)	Roof or convertible	
of the	bolster shield including or a following: front l 1/A2)-niller instru	header,	(33) Right B-p	÷	(57)		ounted

A (A1/A2)-pillar, instrum mirror, or steering assembly (driver side only)

(15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)

- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify):\_
- (19) Other front object (specify):

### LEFT SIDE

à.,

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

- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.
- (37) Other right side object (specify):
- (38) Right side window sill
- INTERIOR
  - (40) Seat, back support
  - (41) Belt restraint webbing/buckle
  - (42) Belt restraint B-pillar attachment point
  - (43) Other restraint system component (specify):
  - (44) Head restraint system
  - (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

- (58) Parking brake handle
- (59) Foot controls including parking brake

#### REAR

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

#### CONFIDENCE LEVEL OF CONTACT POINT

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

# National Accident Sampling System-Crashworthiness Data System: Interior Vehicle Form

## 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 Ocupant 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
-	Availability	4		. 4
	Evidence of usage	4		0
Ř	Used in this crash?	Yes		D
Ş	Proper Use			0
•	Failure Modes			0
` c	Availability	4	3	4
SE	Evidence of usage	9	9	9
Ç	Used in this crash?	NO	NO	NO
N D	Proper Use	Ō	0	0
D	Failure Modes	0	0	0
~	Availability			
O T	Evidence of usage	· · · · · · · · · · · · · · · · · · ·		
H	Used in this crash?			
E	Proper Use			- 44 
R	Failure Modes			

#### Manual (Active) Belt System Availability

- (0) None available
- (1) Beit 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
- (14) Lap and shoulder belt used with ch safety seat
- (15) Belt used with child safety seat -
- type unknown
  (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

## Proper Use of Manual (Active) Belts

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

#### Belt Used Improperly

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

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

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

#### CHILD SAFETY SEAT FIELD ASSESSMENT "When a child safety seat is present enter the occupations 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 Specify Below for Each Child Safety Seat Make/Model 3. Child Safety Seat Harness Usage 1. Type of Child Safety Seat (0) No child safety seat 4. Child Safety Seat Shield Usage (1) Infant seat (2) Toddler seat 5. Child Safety Seat Tether Usage (3) Convertible seat Note: Options Below Are Used for Variables 3-5. (4) Booster seat (7) Other type child safety seat (specify): (00) No child safety seat Not Designed with Harness/Shield/Tether (8) Unknown child safety seat type (01) After market harness/shield/tether (9) Unknown if child safety seat used added, not used (02) After market harness/shield/tether used 2. Child Safety Seat Orientation (03) Child safety seat used, but no after market (00) No child safety seat harness/shield/tether added (09) Unknown if harness/shield/tether **Designed for Rear Facing for** This Age/Weight added or used (01) Rear facing Designed With Harness/Shield/Tether (02) Forward facing (08) Other orientation (specify): (11) Harness/shield/tether not used (12) Harness/shield/tether used (09) Unknown orientation (19) Unknown if harness/shield/tether used Unknown If Designed With Harness/Shield/Tether **Designed for Forward Facing for This** (21) Harness/shield/tether not used Age/Weight (22) Harness/shield/tether used (11) Rear facing (29) Unknown if harness/shield/tether used (12) Forward facing (18) Other orientation (specify): (99) Unknown if child safety seat used (19) Unknown orientation 6. Child Safety Seat Make/Model Unknown Design or Orientation For This (Specify make/model and occupant number) 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

# 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
e .	Head Restraint Type/Damage	3	0	3
I	Seat Type	1	0	1
R S	Seat Performance	1	0	1
T.	Seat Orientation	1	0	1
S	Head Restraint Type/Damage	1	0	1
E C	Seat Type	3	3	3
Ö N	Seat Performance	1	1	1
D	Seat Orientation	1	1	1
Ŧ	Head Restraint Type/Damage			
Ĥ	Seat Type			
R	Seat Performance			
D	Seat Orientation			
0	Head Restraint Type/Damage	·		
Т	Seat Type			
H	Seat Performance			
R	Seat Orientation			

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

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

## Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- Bucket with folding back (02)
- (03) Bench

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- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- Split bench with separate back cushions (06)
- (07) Split bench with folding back(s)
- Pedestal (i.e., column supported) (08)
- (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)
- Seat adjusters failed (2)
- (3) Seat back folding locks or "seat back" failed specify:
- Seat tracks/anchors failed (4)
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify):
- (7) Combination of above (specify):
- (8) Other (specify):
- (9) Unknown

## Seat Orientation (this Occupant Position)

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

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

# EJECTION/ENTRAPMENT DATA

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

# EJECTION No [X] Yes []

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

				<u></u>
Occupant Number	. *			
Ejection			-	
(Note on Vehicle Interior Sketch) Ejection Area		- ´		
Ejection Medium				
Medium Status	1.1			

### 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

**ENTRAPMENT** 

# No [X] Yes [ ]

,

Describe entrapment mechanism: \_\_\_\_

Component(s):\_\_\_

(Note in vehicle interior diagram)

- (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

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U.S.	Department	of	Transportation

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INTERIOR VEHICLE LOG

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

National Highway Traffic Safety Administration	INTERIOR VI	EHICL	EL.	.OG	N			HWO	RTHI	VESS	DAT	SYS	TE
TO BE COMPLETED BY	ream	DA	TA S	STAT	US C	OF V	ARIA	BLE	NUN	ABER	S 4-	97	
1. PSU Number		Integrit	-		-	•	9	10	11	12	13	14	
2. Case Number-Stratum			5	6	7	8			<u> </u>	<u> </u>		<u> </u>	
3. Researcher Completing Form								1		1		]	
4. Vehicle Number		Glazing	3										
5. Number of Interior Vehicle Slides		15	16	17	18	19	20	21	22	23	24	25	
TO BE COMPLETED BY ZON	E CENTER	26	27	28	29	30	31	32	33	34	35	36	
6. Documentation Of Integrity							,						
7. Documentation Of Glazing		37	38	39	40	41	42	43	44	45	46	]	
8. Documentation of Intrusions							L	L		]	L	]	
9. Documentation of Steering Column/W	'heel	Intrus 47	ion 48	49	50	51	52	53	54	55	56	57	<b>,</b> '
10. Documentation of Occupant Contacts	· · · · · · · · · · · · · · · · · · ·									<u> </u>	<u> </u>		j
11. Documentation of Restraint Systems		58	59	60	61	62	63	64	65	66	67	68	
12. Documentation of Seats	· · · · · · · · · · · · · · · · · · ·	69	70	71	72	73	74	75	76	77	78	79	7
13. Interior Slides Subject Quality										<u> </u>			
14. Interior Slides Quality		80	81	82	83	84	85	86	1				
Codes For Log Variables 6-14			J	1	.1		4					÷	
(0) Not applicable (1) Substandard - beyond researcher	control	Steer 87		•	/Whe 90		d insti 92				96	97	
(2) Substandard (3) Standard								T	T	T	T	T	1
				1		1	1	<u> </u>	_ <b>I</b>	<b>, I</b>	- <b>I</b>		-
15. Number of Coded Intrusions						-							
		(E (1) (2) (3) (4) (5)	Blank) ) Der ) Nor ) Cor ) Cha 5) Sec	Corre rived n-corr rrecta ange- quenc		le en rror error rror				•			
		i i	3) MD	)E err									

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Interviewee(s) Role or Name(s):	
Case Number - Stratum <u>94-01</u> . Case Number <u>01</u> . Vehicle Number <u>01</u> teview all available information and interview questions prior to conducting interview (a cquisition of all pertinent data. If the driver was not the person interviewed, was an appointment made for a follow-up DRIVER'S DESCRIPTION OF ACCIDENT EVENTS Im <u>Cast the draw by at </u> Im <u>Cast the draw by at </u> interviewed, was an appointment made for a follow-up DRIVER'S DESCRIPTION OF ACCIDENT EVENTS Im <u>Cast the draw by at the draw by a prior or a calendarianter interviewed, When do the draw brake palse region interviewed, when do the draw brake palse region interviewed, when do the base didn't police report interviewed, when do the base didn't police prior interviewed, police didn't police police prior interviewed, police didn't police poli</u>	DRIVER
Vehicle Number <u>O1</u> teview all available information and interview questions prior to conducting interview(acquisition of all pertinent data. If the driver was not the person interviewed, was an appointment made for a follow-up <b>DRIVER'S DESCRIPTION OF ACCIDENT EVENTS</b> In <u>attract</u> to turn left at <u>I</u> turn around (2-3 mph), Stop in middle of a interiment interviewed, was an appointed and a interiment interviewed, was an appointment made for a follow-up interiment (2-3 mph), Stop in middle of a distribution of 1993, Hod to have brake pade replace Research 15 = 0 <sup>FH</sup> on <u>1994</u> . No police report distribution of a back indicator hight, Wante new and research for the back indicator hight, Wante new deartistic possible Startistic possible	
teview all available information and interview questions prior to conducting interview (acquisition of all pertinent data. If the driver was not the person interviewed, was an appointment made for a follow-up DRIVER'S DESCRIPTION OF ACCIDENT EVENTS In tarted to turn left at torn around (2-3 mpl). Stop in mittile of torn around (2-3 mpl). No prior or idente torn around (2-3 mpl). No police report to a start of 1993. Had to have brake pade report to a start of the torn of the torn of the torn of the around torn around the torn of the torn of the torn of the torn to a start of the torn of the torn of the torn to a start of the torn of the torn of the torn to a start of the torn of the torn of the torn to a start of the torn of the torn of the torn to a start of the torn of the torn of the torn to a start of the torn of the torn of the torn to a start of the torn of the torn of the torn to a start of the torn of the torn of the torn to a start of the torn of the torn of the torn to a start of the torn of the torn of the torn to a start of the torn of the torn of the torn of the torn to a start of the torn of the torn of the torn of the torn to a start of the torn of the torn of the torn of the torn to a start of the torn of the torn of the torn of the torn to a start of the torn of the torn of the torn of the torn to a start of the torn of the torn of the torn of the torn to a start of the torn of the torn of the torn of the torn to a start of the torn of the torn of the torn of the torn of the torn to a start of the torn	
cquisition of all pertinent data. If the driver was not the person interviewed, was an appointment made for a follow-up DRIVER'S DESCRIPTION OF ACCIDENT EVENTS Den tarted to turn left at turn around (2-3 mph). Stop in middle of inter i for the back inder the back pade replace inter i for the back to have brake pade replace Dental 15:0° on 1/94. No police report to the neuron of the back inder did not police report to the neuron of the back inder did not police any 2 onthe neuron of the back inder did not police any 2 onthe neuron of possible States hereing on fort shirt - wearing sungless - possible with a	
DRIVER'S DESCRIPTION OF ACCIDENT EVENTS in tarted to turn left at turn around (2-3 mpt). Stop in middle of d inte i fullying. No prior accidento inte i figg3. Had to have brake pale replace Meneri 15:0 <sup>PP</sup> on 1994. No police report Chicking in the inter did not police report inter recent of his bac indicator light, Wante new dearlisoted of possible Slosere horging on fort shirt - wearing sunglises - possible	s) to ensure the
In acound (2-3 mph). Stop in mille of de two acound (2-3 mph). Stop in mille of de into i fillering. No prior occidento into i fillering. No prior occidento into i fillering on fight. No police report tati i in into the to could any police report tati i in into the to be could any prior inter record to Air bac indicator light, Wante new dearlierted of possible	o interview?
In a cound (2-3 mpl). Stop in milite of de tor acound (2-3 mpl). Stop in milite of de inte i Duilding. No prior accidento inte i 1993. Had to have brake pade reglae Merrel 15=0 <sup>th</sup> on 1994. No police regort tation in the day of a light any produce some z orthe respect to Air bac indicator light, Wante new deartworked for the day indicator light, Wante new deartworked for the day indicator light, Wante new	A
inte i de buildinge No prior scaidente 1011 1 15 : 0 PP on Mare brake pade reglae Mener 1 15 : 0 PP on Mar / 2 No colice regort disting in the de te bar did not expire reguener. When started bar did not policic some of orth respont to Air bac, indicator light, Wante new dearti soletil possible dearti soletil possible	ulaing to
Slower having on front shirt - wearing surgines -	rive going
Heren 15:0° m 1/94. No colice report districtions in the de la souda anjure resconer. When do the bar did not police sory of orthe rescont to Air bac indicator light, Wanto new diantivated of possible Startivated of possible Stores having on front shirt - wearing sunglass -	Brighter
Heren 1 12 - 50 m 1/4 4 . No conce report der coner. When to the fact did not police sorry 2 with recent to Air bac indicator light, Wante new deartionted of possible Stantionted of possible	al a 3000 mile
Josee harging on fort shirt - wearing surglass -	No witnesses
Slosere hanging on front shirt - wearing sunglass -	and const
Startivates & possible Startivates & possible	in a hours
Slosses hanging on front which - wearing surglass -	- Aac .
rest -	
	nose price spice
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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.

# ACCIDENT DIAGRAM

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The use of this diagram is optional. It may serve to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.

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5. Department of Transportation tional Highway Traffic Safety INTE	BEST AVAILABLE COPY ERVIEW FORM (B) NATIONAL ACCIDENT SAMPLING SYSTI
ministration	CRASHWORTHINESS DATA SYST
1. Primary Sampling Unit Number	Interviewee(s) Role or Name(s):
2. Case Number - Stratum	-
3. Vehicle Number	
ACCIDE	ENT DATA QUESTIONS
1. Can you tell me in <u>which direction you were t</u>	traveling? 6a. What actions did you take?
[ ] North [ ] South [ ] East [ ] West	[] Braking with lock-up
(Optional - Where were you coming from or g	aoing to? [] Releasing brakes
	[ ] Accelerating
	[ ] Steering left [ ] Steering right
2. In which lane were you traveling?	[] Other (specify):
(Note: Lane 1 is designated as the right curb	lane.)
[1] (2) [3] [4] [ ] Other (specify):	deploym
	7. Where was your vehicle at the time of the collision?
3. Can you remember your <u>estimated travel speed</u> per hour) before the accident? 	[ ] Off roadway to left [ ] Other (specify):
4. Just before the accident, can you tell me what	
intending to do or were doing?	[ ] Higher [ ] Unknown
[] Going straight       [] Stopped         [] slowing       [] Accelerating         [] Turning left       [] Turning right         [] Changing lanes to left       [] Changing lane         [] Backing       [] Other (specify):	tt <u>collision?</u>
5. Did you experience any loss of control due to conditions or mechanical problems?	9. Immediately following the collision, can you describe how your vehicle moved to its stopped position? Notled with some bracking to For
[/] No [] Yes (If yes, describe below)	Staling truthing.
6. Did you have to take any <u>avoidance actions p</u>	10. Can you tell me how many collisions your vehicle had during the accident and the source of the collisions?
accident?	
[ ] No - Go to question 7 [ ] Yes - Go to question 6a	

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National Accident Sampling System-Crashworthiness Data System: Interview Form (B) BEST AVAILABLE COPY Page 2 3. Vehicle Number 1. Primary Sampling Unit Number 4. Occupant Number 2. Case Number - Stratum VEHICLE/DRIVER DATA QUESTIONS 7b. Were any of the belts removed or not functional prior 1. Can you tell me the year, make, model of your vehicle? to the accident? <u>1992, Toy</u>, <u>Cam Ny</u> Year <u>Make</u> Model ·[] No . [] Yes (If "Yes", specify which belt and describe problem) 2. Can you describe the damage to your vehicle? No visual damage underreath 8/Do any of the front belts move along a motorized trackwhen the door is opened or closed? 3. Was there any previous damage to your vehicle that is not related to this accident? [] No (If "No", go to question 9) [] Yes (If "Yes", what seat location?) [ V No [] Yes (If "yes", describe below) [ ] Left Front [ ] Right Front 8a. Were the motorized belts working properly before the Did any of the doors (hatch, tailgate) open during the accident? [] No (If "No", describe condition below) accident? [ ] No [] Yes (If "Yes", describe below) [] Yes 8b. Were the belts connected to the track prior to the 5. Did any of the windows break during the accident? / accident? [ ] No [ ] No [] Yes [] Yes (If "Yes", describe below) [] Unknown 9. Do any of the front "seat" belts attach to the door such 6. Does your vehicle have a glove compartment? that when the door is opened the belt travels with the door? [ ] No [] No (go to question 10) []Yes [] Yes 6a. Did the glove compartment door come open during the 9a. Does this belt come across the \_ 7 accident? [] Chest only [ ] No [] Yes [] Lap and chest [] Unknown 9b. Was this belt connected prior to the accident? 7. Does your vehicle have "seat belts"? [ ] No [] No (If "No", go to question 7b) [] Yes [] Unknown [] Yes (If "Yes", go to question 7a) 7a. Can you describe the type of seat belt for each seat? AIR BAGS [] Lap [] Lap and shoulder Driver's seat Front seat middle []Lap [] Lap and shoulder 10. Is your vehicle equipped with a driver's side air bag? Front seat right []Lap [ ] Lap and shoulder [] No (go to question 11) Rear seat left []Lap [] Lap and shoulder [/ Yes (go to question 10a) Rear seat middle [] Lap [] Lap and shoulder [] Unknown (go to question 11) Rear seat right []Lap [] Lap and shoulder 10a. Did the air bag inflate during the accident? (Identify seat belts for third row and beyond []\_No (go to questions 10b and 10c) [/] Yes (go to question 10e)

1. Primary Sampling	Unit Number	3. Vehicle Number
2. Case Number - St	ratum	4. Occupant Number
	VEHICLE/DRIVER D	ATA QUESTIONS (CONTINUED)
Ob. Was the air bag	wiring disconnected prior	to the CHILD SAFETY SEAT
accident?		GINED OATETT GEAT
[/ No		2. Was there a person in a child safety seat in your
[] Yes (If "Yes"	, describe previous condition)	vehicle?
		$\sim$ [] No (If "No", go to question 13)
[] Unknown	<u></u>	
	•	[ \] Unknown
c. Was your vehicle	involved in any accidents prio	to this 12 Confurne tell me the manufacturer and foodel of the
accident which in	flated the air bag?	1 12a. Canyou ten me manufacturer and moder of the
[ I No (go to qu	lestion 11)	child safety seat?
[] Yes (go to q	uestion 10d)	· · · · · · · · · · · · · · · · · · ·
[] Unknown		/
		12b. Can you describe the type of child safety seat?
	e-installed after the accident?	[] Infant
[] No (go to qu	lestion 11)	
[] Yes		[] Convertible
[] Unknown		Booster
<b>m</b> 1 1 1	<b>A</b> -4	[] Other (specify):
	flate as you expected?	[] Unknown
[ ] No (lf "No"	describe delow)	
		12c. Where was the child safety/seat(s) located?
[] Yes		[12] [13]
[] Unknown		[21] [22] [23]
l le vour vehicle ea	uipped with a passenger side	air bao? [31] [32] [38]
I. IS YOU VEHICLE EQ	, go to question 12)	[Other] (specify):
	, go to question 11a)	
	f "Unknown", go to question	12) 12d. Can you tell me which direction the child safety sea
		was facing prior to une accident
a. Did the passenge	r air bag inflate during the ac	cident? [] Rear facing
[] No (go to qu		
[] Yes (go to d		[] Other (specify)://
		[] Unknown
	er air bag wiring disconnected	prior to 12e. Was a seat belt used to pold the child seat in place?
the accident?		[] No (If "No"/go to question 12g)
[ ] No		[] Yes (If "Yes", go to question 12f)
[ ] Yes (If "Yes	s", describe below)	[] Unknown /
[ ] []		12f. Can you describe how the seat belt was secured to th
[] Unknown		child seat? /
10 Was the passo	nger air bag inflated in a	previous [] Looped through designated rear framing struts?
accident?	וארי מוו המא וווופובה וו פ	[] Looped through arm rest slots?
[] No (go to q	uestion 12)	[ ] Belt agross safety shield?
[] No (go to q [] Yes (go to (		[ ] Looped through rear frame outside the designate
[] Unknown	4	framing struts?
		[ ] Other (specify):
1d. Was the passe	nger air bag re-installed a	fter the [] Unknown
accident?		
[] No (go to q	uestion 12)	12g. What was the child safety seat equipped with at the
[] Yes		time of purchase? (check all that apply)
[] Unknown		[] Hamess
•.	• • • • • • •	[] Shield
1e. Did the passenge	er air bag inflate as you expec	ted? [] Tether strap
	" describe below)	If any box is checked, ask questions 12h - 12i.
		I IT ANY DOX IS CHECKED, ASK QUESTIONS I ZH - NZI.
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
[] Yes		

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Primary Sampling Unit Number	3. Vehicle Number
2. Case Number - Stratum	4. Occupant Number
VEHICLE/DRIVER DATA	QUESTIONS (CONTINUED)
<ul> <li>2h. Were any of these items added after you owned the child safety seat? <ol> <li>Yes</li> <li>(specify</li> <li>No</li> </ol> </li> <li>2i. Were any of these items used during the accident? <ol> <li>Yes (If "Yes", check all that apply)</li> <li>Harness</li> <li>Shield</li> <li>Tether strap)</li> </ol> </li> <li>10 No </li> <li>10 Unknown </li> </ul> <li>2ARGO-WEIGHT AND MILEAGE </li> <li>13. Was there any cargo in your vehicle? <ol> <li>No (If "No", go to question 14)</li> <li>Yes (If "Yes", go to question 13a)</li> <li>Unknown</li> </ol> </li>	OPTIONAL If you do not know where the vehicle is or if the owner's permission is needed for inspection. 15. Do you know where the vehicle is currently located? 16. May I take a look at your vehicle to assess the damage? [] No [] Yes DRIVER ONLY 17. What race to you consider yourself? [] White [] Black [] American Indian, Eskimo or Aleut, Asian or Pacific Islander [] Other (specify.)
3a. Can you estimate the weight of the cargo?	[] Unknown.
lbs.	18. Are you of hispanic origin?
Cargo description	[] No [] Yes
·	
14. Can you tell me the mileage on the vehicle?	
·	
14. Can you tell me the mileage on the vehicle?	
14. Can you tell me the mileage on the vehicle?	
14. Can you tell me the mileage on the vehicle?	
14. Can you tell me the mileage on the vehicle?	
4. Can you tell me the mileage on the vehicle?	
14. Can you tell me the mileage on the vehicle?	
4. Can you tell me the mileage on the vehicle?	
14. Can you tell me the mileage on the vehicle?	

1. Primary Sampling Unit Number 3. Vel	nicle Number
2. Case Number - Stratum 4. Oc	cupant Number
VEHICLE ROLLOVER	R/FIRE QUESTIONS
ROLLOVER QUESTIONS	FIRE QUESTIONS
<ol> <li>Did the vehicle rollover during the accident?         <ol> <li>No (If "No", go to question 2.)</li> <li>Yes</li> <li>Unknown (skip to question 2)</li> </ol> </li> <li>a. Describe where the rollover began.         <ol> <li>On roadway</li> <li>On roadside or median</li> <li>Unknown</li> </ol> </li> <li>b. What caused the vehicle to rollover?         <ol> <li>Other vehicle (specify vehicle number):</li> <li>Contacted object (specify):</li> <li>Other cause (specify):</li> <li>Other cause (specify):</li> <li>Unknown</li> </ol> </li> <li>c. Describe which direction the vehicle rolled.         <ol> <li>Toward the right</li> <li>Toward the left</li> <li>End-over-end</li> <li>Unknown</li> </ol> </li> <li>d. Estimate the number of sides (including the top and bottom) which contacted the ground during the rollover?             <ol> <li>1 side</li> <li>2 sides</li> <li>3 sides</li> <li>Unknown</li> </ol> </li> <li>t. a sides</li> <li>Unknown</li> <li>t. bid the vehicle roll over more than one complete turn</li> </ol>	FIRE QUESTIONS         2. Did the vehice experience a fire?         [] No (If "No", skip to Occupant Data Questions)         [] Yes         [] Unknown         2a. Describe where the fire started or where smoke was first seen.         [] Under the hood         [] Behind the instrument panel         [] In the passenger compartment         [] In the trank/cargo area         [] Under the vehicle         [] Under the vehicle         [] Under the start with the electrical system?         [] No         [] Yes (specify):         [] Unknown         2c. Did the fire start with the fuel system?         [] No (If "No", skip to Occupant Data Questions)         [] Yes (go to question 2d)         [] Unknown         2d. Describe which part of the fuel system that may ha been involved?         [] No         [] Yes (specify):         [] Unknown         2d. Describe which part of the fuel system that may ha been involved?         [] No         [] Yes (specify):         [] Engine compartment (specify component known)         [] Unknown
(more than 4 sides)? [ ] No (If "No", go to question 1g.) [ ] Yes	(Go To Occupant Data Questions)
1f. Estimate the number of complete turns.         [] No         [] Yes (specify):         [] Unknown	COMMENTS ON ROLLOVERS AND FIRES
<ul> <li>1g. When the vehicle stopped rolling over, which side of the vehicle was in contact with the ground?</li> <li>[ ] Left side</li> <li>[ ] Right side</li> <li>[ ] Top</li> <li>[ ] Wheels</li> <li>[ ] Unknown</li> </ul>	

National Accident Sampling System-Crashworthiness Data	System: Interview Form (E BEST AVAILABLE COPY Page 0
1. Primary Sampling Unit Number	3. Vehicle Number
2. Case Number - Stratum	4. Occupant Number
OCCUPANT DA	TA QUESTIONS
<ol> <li>Was there anyone else in your vehicle at the time of the accident?         <ul> <li>[√] No (If "No", go to question 4)</li> <li>[] Yes (If "Yeş", specify number in question 2 below and then go to question 3)</li> <li>[] Unknown</li> </ul> </li> <li>How many?         <ul> <li>[1] One other person</li> <li>[2] Two other persons</li> <li>[3] Three other persons</li> <li>[4] Four other persons</li> <li>[5] Five other persons</li> <li>[6] Six other persons</li> <li>[7] Seven or more other persons</li> <li>[8] Six other persons sitting? (Circle seating positions)</li> <li>[12] [13]</li> <li>[21] [22] [23]</li> <li>[31] [32] [33]</li> <li>[] Other (specify:)</li></ul></li></ol>	<ul> <li>5d. Were you (Was he/she) <ul> <li>[^] Sitting upright or</li> <li>[] Leaning to left side, or</li> <li>[] Leaning to right side?</li> </ul> </li> <li>OCCUPANT EJECTION </li> <li>6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident? <ul> <li>[^] No (If "No", go to question 7)</li> <li>[] Yes (If "Yes", go to question 6a)</li> <li>[] Unknown</li> </ul> </li> <li>6a. Can you remember out of what area of the vehicle you were (he/she was) thrown? <ul> <li>[] No</li> <li>[] Yes (Describe:)</li></ul></li></ul>
5. Can you tell me how you (he/she was) were sitting in your whicle? <u>yright thraight behind which</u> <u>sait pointion ~ 's back</u> 5a. Can you describe the location of your (his/her) feet just prior to the collision? <u>Left fool ~ floor</u> , <u>R on butic</u> 5b. Can you describe the location of your (his/her) arms? <u>A GALLAN</u> <u>J OCCOR</u> hand	<ul> <li>7b. Can you describe how you were (he/she was) wearing the lap belt? <ol> <li>Across the stomach</li> <li>Low on lap</li> <li>Other (specify:)</li></ol></li></ul>
<u>reculoct</u> + 2 Oclock hand <u>production</u> 5c. Was your (his/her) back resting against the seat back rest? [] No (If "No", describe the position) [] Yes [] Unknown	[] Unknown         OCCUPANT ENTRAPMENT         8. Were you (Was he/she) trapped in the vehicle?         [] No         [] Yes (If "Yes", describe)

National Accident Sampling System-Crashworthiness Data System: Interview Form (B BEST AVAILABLE COPY Page 7 Occupant Number Vehicle Number Case Number-Stratum **PSU Number** INJURY DATA FROM INTERVIEWEE(S) Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s):\_ SOFT TISSUE/INTERNAL INJURIES provellen & bruich (strein) in back of neck, Abs arthritis in - tinder, slight burn D abdomen shoulders + infance No apparent SKELETAL INJURIES The space provided on the back of this page may be used to document injuries noted by the interviewee(s).

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Primary Sampling Unit Number	3. Vehicle Number
Case Number - Stratum	4. Occupant Number
OCCUPANT INJURY	DATA QUESTIONS
1. Were you (Was he/she) injured?	5a. Do you know what caused this injury?
[ ] No (If "No", skip to question 7)	[ ] No
[ 1] Yes (If "Yes", complete Occupant Injury Questions)	[ ] Yes (If "Yes", specify the component(s) on the
[] Unknown	manikin(s).) [ ] Unknown
2. Did you (he/she) receive any cuts, abrasions, or bruises?	
[] No (go to question 3)	
[/ Yes (If "Yes", record the exact location(s) and size	6. Did you (he/she) suffer any joint sprains or muscle
on the manikin(s).)	strains?
[] Unknown	[ No (If "No", go to question 7)
	[ ] Yes (If "Yes", specify on the manikin(s), and then
	go to question 6a.)
2a. Do you know what caused your (his/her) injury(s)?	[] Unknown
[] No	
[ / Yes (If "Yes", specify the component(s) or object(s)	
on the manikin(s).)	6a. Do you know what caused the injury(s)?
[] Unknown	FINO
	Yes (If "Yes", specify the component(s) on the manikin(s).)
3. Did you (he/she) experience any broken bones?	[] Unknown
[ / No (If "No", go to question 4)	
[ ] Yes (If "Yes", record the exact location(s) and type	· · · · · · · · · · · · · · · · · · ·
of fracture(s) on the manikin(s), and then go to	7. Did you (he/she) receive any treatment?
question 3a.)	[] No (If "No", go to question 8)
[] Unknown	Yes (If "Yes", go to question 7a or return to
	question 2.)
3a. Do you know what caused the injury(s)?	To taken was like to take the second to the terms
	7a. Were you (Was he/she) treated by (check all that
[] Yes (If "Yes", specify the component(s) of	apply):
object(s) on the manikin(s).)	[] Hospital/trauma center? (specify hospital name):
[ ] Unknown	Tinker AB - checked inside nover month
	[] Medical clinic pain killers,
	[] Out patient surgery? (specify medical
4. Did you (he/she) injure your (his/her) head? (skull/brain?)	facility:)
[/ No (If "No", go to question 5)	[] Paramedics or first aid at the scene?
[] Yes (If "Yes", describe the type of injury(s) on the	1 A doctor in his/her office? own doctor - took ap
manikin(s), then go to question 4a.)	[ ] Treated at home?
[] Unknown	[ ] None of the above, go to question 8.
	7b. Were you (Was he/she) treated and released from the
4a. Do you know what caused the injury(s)?	emergency room?
[] No	[] No (If "No", go to question 7c.)
[] Yes (If "Yes", specify the component(s) on the	[] Yes (if "Yes", go to question 7e.)
manikin(s).)	· · · · · · · · · · · · · · · · · · ·
[] Unknown	
• • •	7c. Were you (Was he/she) hospitalized?
	[] No (If "No", give an explanation)
5. Were any of your (his/her) internal organs injured?	[] Yes (If "Yes", go to question 7d.)
[/] No (If "No", go to question 6)	( ) res (ii res , go to question /d.)
[] Yes (If "Yes", thoroughly describe the type of	
injury(s) and specify the internal organ(s) injured on a	
the manikin(s), and then go to question 5a.)	
() Unknown	
	7d Llow many days and the first back back to the
	7d. How many days were you (was he/she) in the hospital? days

days

National Accident Sampling System-Crashworthiness Data	System: Interview Form (B) BEST AVAILABLE COPY Page 9
1. Primary Sampling Unit Number	3. Vehicle Number
2. Case Number - Stratum	4. Occupant Number
OCCUPANT INJURY DATA	QUESTIONS (CONTINUED)
7e. Have you (Has he/she) received any follow-up treatment? [] No [] Yes (If "Yes", describe:) <u>won dictor = intarf, pain</u> <u>kille, medicine; tylanol</u> [] Unknown	<ul> <li>8. Have you (he/she) lost any days from work or school (college)? reward <ol> <li>No</li> <li>Yes (If "Yes", determine the number of days lost) (Specify:)</li></ol></li></ul>
<ul> <li>7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?</li> <li>[ ] No</li> <li>[ ] Yes (If "Yes", mail or present the form for signature.)</li> </ul>	

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

## CONTACT LOG

# NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

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 PSU Number
 Case Number – Stratum 3. Vehicle Number - · • . . .

Assigned Researcher Number A

VEHICL	E INSPEC	TION	INTERVIEW		
Date	Time	ID# Contact	Manner Res	UIT Date Time ID# Contact Manner Resu	
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'	;			OCCUPANT INTERVIEW	
/	<u> </u>			_ Occ. No. Date Time ID# Contact Manner Resu	
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/	<b>:</b>				
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//	:	<u> </u>			
/				-   /	
<i>.</i>		·		·	
CONTACT (1) Owner/driver (2) Tow yard (3) Repair facility (4) Salvage yard (5) Police (6) Insurance company (7) Attorney (8) Other (specify):				CONTACT (0) No interview (1) Driver (2) Other occupant (3) Relative or friend (4) Multiple interviewees from above categories	
MANNER (1) Telephone (2) In-person				<ul> <li>(0) Vehicle not occupied</li> <li>(1) Telephone</li> <li>(2) In-person</li> <li>(3) Questionnaire</li> <li>(4) Other (specify):</li></ul>	
<ul> <li>(3) Questionnaire</li> <li>(4) Other (specify):</li> </ul>				RESULT (01) Unable to contact or locate (02) Hit and run	
RESULT (1) Complete inspection (2) Partial inspection (3) Refusal (4) Vehicle moved to kn (5) Vehicle moved to un (6) Vehicle located, no p (7) Vehicle repaired (8) No answer/not home (9) Other (specify):	known locati permission to	ion	•	<ul> <li>(03) Fatal—surrogate not available</li> <li>(04) In intensive care—surrogate not available</li> <li>(05) Out-of-state resident</li> <li>(06) Refused interview</li> <li>(07) Insurance company refusal</li> <li>(08) Attorney refusal or litigation</li> <li>(09) No return of questionnaire</li> <li>(10) Other (specify):</li> <li>(11) Return of completed questionnaire</li> <li>(12) Partial interview</li> <li>(13) Complete interview</li> </ul>	

VEHICLE INSPECTION			OCCUPANT INTERVIEW				
Date	Time		t Manner Result	Ooc. No.	Date	Time	ID# Contact Manner Result
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DR	IVER INTER	VIEW			/		
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OCO	CUPANT	ASSE	SSMENT	FORM
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Form Approved O.M.B. No. 2127-0021

National Highway Traffic Sefety Administration	NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM
1. Primary Sampling Unit Number 75.1	OCCUPANT'S SEATING
2. Case Number - Stratum 94-01	10. Occupant's Seat Position ///
3. Vehicle Number	(11) Left side (12) Middle
4. Occupant Number 01	(13) Right side (14) Other (specify):
OCCUPANT'S CHARACTERISTICS	(15) On or in the lap of another occupant
5. Occupant's Age <u>58</u> Code actual age at time of accident. (00) Less than one year old (specify by month): (97) 97 years and older (99) Unknown	Second Seat (21) Left side (22) Middle (23) Right side (24) Other (specify): (25) On or in the lap of another occupant
6. Occupant's Sex (1) Male (2) Female (9) Unknown	Third Seat (31) Left side (32) Middle (33) Right side (34) Other (specify): (35) On or in the lap of another occupant
7. Occupant's Height $168$ Code actual height to the nearest centimeter. (999) Unknown 66 inches X 2.54 = $168$ centimeters	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):
8. Occupant's Weight <u>087</u> Code actual weight to the nearest kilogram. (999)Unknown	(99) Unknown 11. Occupant's Posture (0) Normal posture
$\frac{292}{pounds \times .4536} = \frac{87}{kilograms}$ 9. Occupant's Role (1) Driver (2) Passenger (9) Unknown	<ul> <li>Abnormal posture <ol> <li>Kneeling or standing on seat</li> <li>Lying on or across seat</li> <li>Kneeling, standing or sitting in front of seat</li> <li>Sitting sideways or turned to talk with another occupant or to look out a rear window</li> <li>Sitting on a console</li> <li>Lying back in a reclined seat position</li> <li>Bracing with feet or hands on a surface in front of seat</li> <li>Other abnormal posture (specify):</li> </ol> </li> </ul>
	(9) Unknown

HS Form 433A (1/94)

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**U.S. Department of Transportation** 

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.

(1) Door/hatch/tailgate (2) Nonfixed roof structure

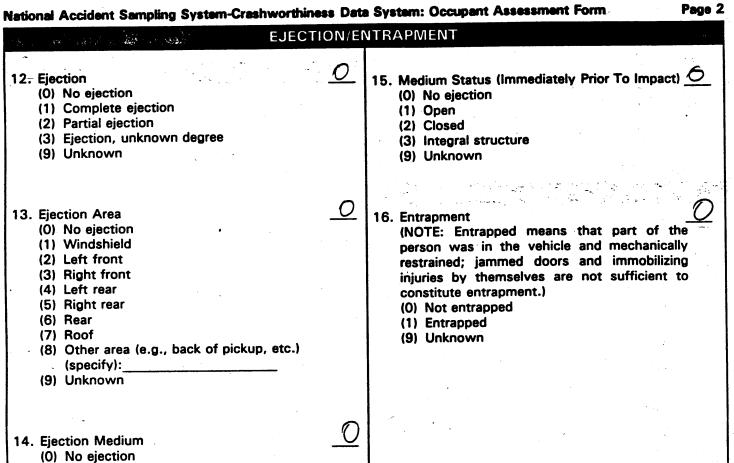
(5) Integral structure

(4) Nonfixed glazing (specify):

(8) Other medium (specify):

(3) Fixed glazing

(9) Unknown



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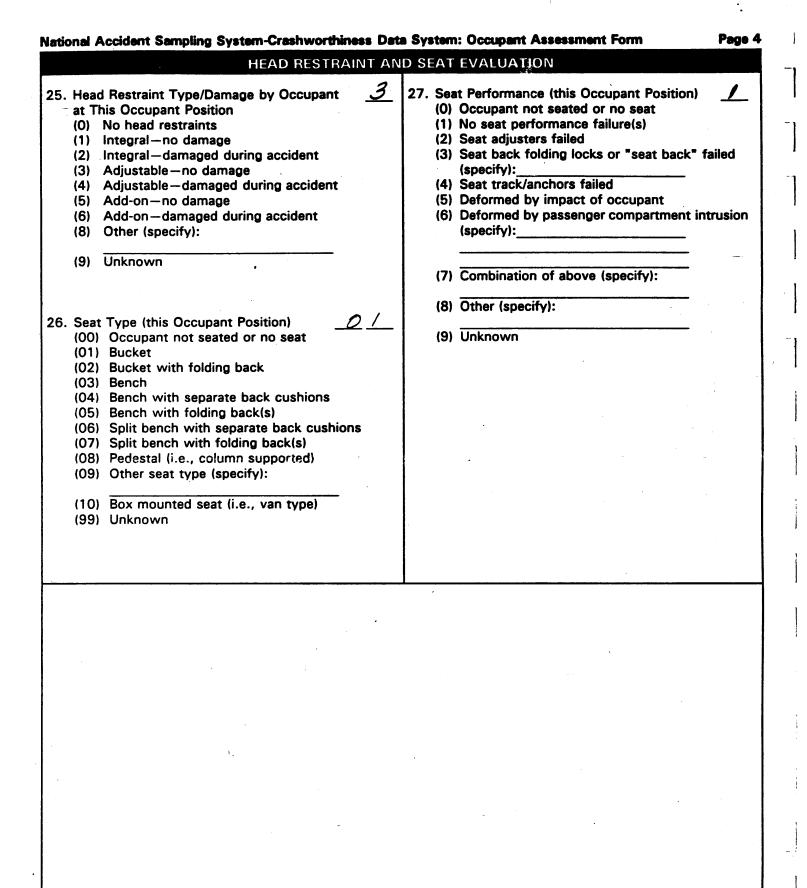
National Accident Sampling	System-Crashworthiness	Data System: Occupant	Assessment rorm
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AIR BA	G DATA
NOTE: COMPLETE THIS SECTION ONLY IF OA28 (AIR BAG SYSTEM AVAILABILITY/ FUNCTION) EQUALS "1" (AIR BAG)	12. Are Air Bag Module Cover Flap(s) Damaged? _/
5. Had Vehicle Been in Previous Accident(s) (0) No	(9) Unknown
<ul> <li>Yes <ol> <li>Previous accident(s) without deployment(s)</li> <li>One previous accident with deployment</li> <li>More than one previous accident with at least one deployment</li> <li>Unknown</li> </ol> </li> <li>6. Type of Air Bag <ol> <li>Original manufacturer installed system</li> <li>Retrofitted air bag</li> <li>Replacement air bag</li> </ol> </li> </ul>	<ul> <li>13. Was There Damage To The Air Bag?</li> <li>(1) Not damaged * cut off at dealer</li> <li>Yes - Air Bag Damage at later date</li> <li>(2) Ruptured</li> <li>(3) Cut</li> <li>(4) Tears</li> <li>(5) Holed</li> <li>(6) Burned</li> <li>(7) Abraded</li> <li>(8) Other (specify):</li></ul>
<ul><li>(9) Unknown</li><li>7. Had Any Prior Maintenance/Service _//</li></ul>	14. Source of Air Bag Damage 7 (1) Not damaged (2) Object worn by occupant
<ul> <li>Been Performed On This Air Bag System</li> <li>(1) No prior maintenance</li> <li>(2) Yes, prior maintenance (specify):</li> <li>(9) Unknown</li> </ul>	<ul> <li>(3) Object carried by occupant</li> <li>(4) Fire in vehicle</li> <li>(5) Thermal burns (i.e., bag against inflator)</li> <li>(6) Rescue or emergency efforts</li> <li>(7) Other (specify): <u>Dealer</u></li> <li>(8) Not deployed</li> <li>(9) Unknown</li> </ul>
<ul> <li>8. Air Bag Deployment Accident Event</li> <li>Sequence Number</li> <li>Code the accident event sequence number</li> <li>that initiated the air bag deployment</li> <li>(97) Not deployed</li> <li>(99) Unknown</li> </ul>	<ul> <li>15. Was The Air Bag Tethered?</li> <li>(1) No</li> <li>(2) Yes (specify number of tether straps):</li> <li>(9) Unknown</li> </ul>
<ul> <li>9. CDC For Air Bag Deployment Impact <ul> <li>(1) Highest delta V</li> <li>(2) Second highest delta V</li> <li>(3) Other non-coded delta V (specify):</li> </ul> </li> <li>(7) Not deployed <ul> <li>(9) Unknown</li> </ul> </li> </ul>	<ul> <li>16. Was The Air Bag Vented?</li> <li>(1) No</li> <li>(2) Yes (specify number of vent ports):</li> <li>2 ports</li> <li>(9) Unknown</li> </ul>
10. Delta V For Air Bag Deployment Impact 96 Code the value of the delta V for the impact that initiated the air bag deployment (96) Outside scope of reconstruction program (specify): Curb/Understructure Impact (97) Not deployed	<ul> <li>17. Was the Air Bag in this Occupant's Position Contacted by Another Occupant?</li> <li>(0) No</li> <li>(1) Yes (specify):</li> <li>(9) Unknown</li> </ul>
<ul> <li>(99) Unknown</li> <li>11. Did Air Bag Module Cover Flap(s) Open At <u>2</u></li> <li>Designated Tear Points?</li> <li>(1) No</li> <li>(2) Yes</li> <li>(9) Unknown</li> </ul>	<ul> <li>18. Was the Occupant Wearing Eyeware?</li> <li>(1) No</li> <li>(2) Eyeglasses/sunglasses</li> <li>(3) Contact lenses</li> <li>(9) Unknown</li> </ul>

National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Form Page 3 **RESTRAINT SYSTEM EVALUATION** 21. Air Bag System Availability/Function 17. Manual (Active) Belt System Availability (O) Not equipped/not available SEE AIRBAN SUPPLEMENT (0)None available Belt removed/destroyed (1) Air bag (1) Shoulder belt (2) (3) Lap belt Non-functional Lap and shoulder belt (2) Air bag disconnected (specify): (4) (5) Belt available-type unknown (3) Air bag not reinstalled Integral Belt Partially Destroyed (9) Unknown Shoulder belt (lap belt destroyed/removed) (6) Lap belt (shoulder belt destroyed/removed) (7) 22. Air Bag System Deployment Other belt (specify): (8) (O) Not equipped/not available (1) Air bag deployed during accident (as a (9) Unknown result of impact) (2) Air bag deployed inadvertently just 04 18. Manual (Active) Belt System Use prior to accident (00) None used, not available, or belt (3) Air bag deployed, accident sequence removed/destroyed undetermined (01) Inoperative (specify): (4) Nondeployed (5) Unknown if deployed (02) Shoulder belt (6) Air bag deployed as a result of a noncollision (03) Lap belt event during accident sequence (e.g., fire, (04) Lap and shoulder belt explosion, electrical) (05) Belt used-type unknown (9) Unknown (08) Other belt used (specify): (12) Shoulder belt used with child safety seat(13) Lap belt used with child safety seat 23. Are There Indications of Air Bag (14) Lap and shoulder belt used with child System Failure? safety seat (O) Not equipped/not available (15) Belt used with child safety seat-type unknown (1) No (18) Other belt used with child safety seat (2) Yes (specify): (specify): (99) Unknown if belt used AdjustED TO LOWEST POSITION (9) Unknown / 19. Proper Use of Manual (Active) Belts (0) None used or not available Note: See Variables 44 through 48 (Page 5) Belt used properly for Information on Automatic Belts (1)(2) Belt used properly with child safety seat Belt Used Improperly 24. Police Reported Restraint Use Shoulder belt worn under arm (3) (O) None used (4) Shoulder belt worn behind back or seat (1) Police did not indicate restraint use (5) Belt worn around more than one person (2) Shoulder belt (6) Lap belt worn on abdomen Lap belt or lap and shoulder belt used (3) Lap belt (7) (4) Lap and shoulder belt improperly with child safety seat (specify): (5) Belt used, type not specified (8) Other improper use of manual belt system Child safety seat (6) (7) Other or automatic restraint (specify): (specify): (9) Unknown (8) Restrained, type unknown (9) Police indicated "unknown" NO POlice Report F.GO 20. Manual (Active) Belt Failure Modes **During Accident** (0) No manual belt used (1) No manual belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): (6) Broken retractor (7) Combination of above (specify):

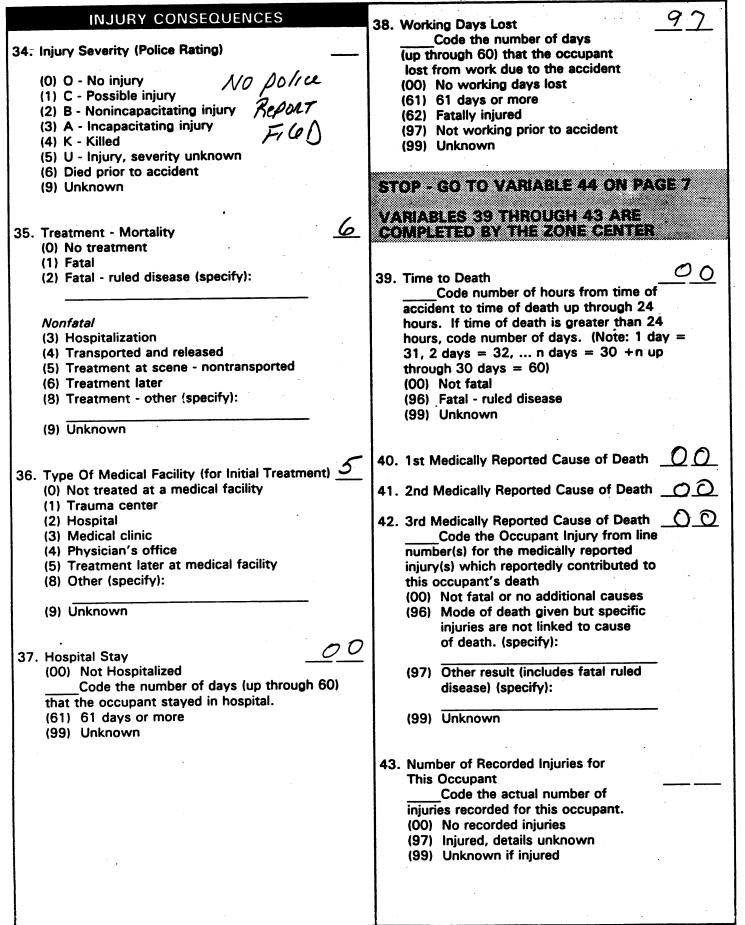
(8) Other manual belt failure (specify):

(9) Unknown



	nal Accident Sampling System-Crashworthiness D CHILD S/	SAFETY SEAT
	Child Safety Seat Make/Model	) 31. Child Safety Seat Harness Usage
	Child Safety Seat Make/ModelO (000) No child safety seat	
	Applicable codes are found in your NASS CDS	
		32. Child Safety Seat Shield Usage
	Data Collection, Coding and Editing	
	(950) Built-in child safety seat	
	(997) Other make/model (specify):	33. Child Safety Seat Tether Usage
	(998) Unknown make/model	
	(999) Unknown if child safety seat used	Note: Options below applicable to
	(355) Unknown ii Child Safety Seat used	Variables OA31-OA33.
		(00) No child safety seat
Q	Type of Child Safety Seat	<b>Not Designed With Harness/Shield/Tether</b>
	(0) No child safety seat	(01) After market harness/shield/tether
	(1) Infant seat	added, not used
	(1) Infant seat (2) Toddler seat	(02) After market harness/shield/tether used
	(2) Toddler seat (3) Convertible seat	(03) Child safety seat used, but no after market
		harness/shield/tether added
	(4) Booster seat	(09) Unknown if harness/shield/tether
	(7) Other type child safety seat (specify):	added or used
	(8) Unknown child safety seat type	Designed With Harness/Shield/Tether
	(9) Unknown if child safety seat used	(11) Harness/shield/tether not used
		(12) Harness/shield/tether used
	<u> </u>	(19) Unknown if harness/shield/tether used
30.	Child Safety Seat Orientation	
	(00) No child safety seat	Unknown If Designed With Harness/Shield/Tethe
		(21) Harness/shield/tether not used
	Designed for Rear Facing for This Age/Weight	(22) Harness/shield/tether used
	(01) Rear facing	(29) Unknown if harness/shield/tether used
	(02) Forward facing	
	(08) Other orientation (specify):	(99) Unknown if child safety seat used
	(09) Unknown orientation	
	(09) Onknown onentation	
	Designed For Forward Facing for This Age/Weight	ht
	(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):	
	(20) Hakaowa orientation	
	(29) Unknown orientation	
	(00) the leasure if shild enforts and used	
	(99) Unknown if child safety seat used	

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



	AUTOMATIC BELT SYSTEM	48. Automatic (Passive) Belt Failure Modes
4.	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	<ul> <li>Automatic (rassive) bet railine modes</li> <li>During Accident</li> <li>(0) Not equipped/not available/not in use</li> <li>(1) No automatic belt failure(s)</li> <li>(2) Torn webbing (stretched webbing not included</li> <li>(3) Broken buckle or latchplate</li> <li>(4) Upper anchorage separated</li> <li>(5) Other anchorage separated (specify):</li> </ul>
	Non-functional (4) Automatic belts destroyed or rendered inoperative (9) Unknown	<ul> <li>(6) Broken retractor</li> <li>(7) Combination of above (specify):</li> <li>(8) Other automatic belt failure (specify):</li> <li>(9) Unknown</li> </ul>
5.	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	49. Seat Orientation (this Occupant Position) (0) Occupant not seated or no seat (1) Forward facing seat
	<ul> <li>disconnected, motorized track inoperative) (specify):</li> <li>(3) Automatic belt use unknown</li> <li>(9) Unknown</li> </ul>	<ul> <li>(2) Rear facing seat</li> <li>(3) Side facing seat (inward)</li> <li>(4) Side facing seat (outward)</li> <li>(8) Other (specify):</li> <li>(9) Unknown</li> </ul>
6.	Automatic (Passive) Belt System Type (0) Not equipped/not available (1) Non-motorized system (2) Motorized system (9) Unknown	Check the Primary Source Used In Determining B
7.	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	<ul> <li>Use.</li> <li>[] Not equipped/not available/destroyed or rendered inoperative</li> <li>[&gt;] Vehicle inspection</li> <li>[] Official injury data</li> <li>[] Driver/occupant interview</li> <li>[] Other (specify):</li> </ul>
	<ul> <li>Automatic Belt Used Improperly</li> <li>(3) Automatic shoulder belt worn under arm</li> <li>(4) Automatic shoulder belt worn behind back</li> <li>(5) Automatic belt worn around more than one person</li> <li>(6) Lap portion of automatic belt worn on abdomen</li> <li>(7) Automatic lap and shoulder belt or</li> </ul>	[ ] Unknown if belt used
	<ul> <li>automatic shoulder belt used improperly with child safety seat (specify):</li> <li>(8) Other improper use of automatic belt system (specify):</li> </ul>	
	(9) Unknown	
-	ARE ALL APPLICABLE MEDICAL RECO WITH INITIAL SUBMISSION?	DRDS INCLUDED NO [ ] YES [ ]
	UPDATE CANDIDATE?	7 NO[] YES[]

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

Page 8

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TOP - VARIABLES 50 THROUGH 53 ARE COMPLETED BY THE ZONE CENTER TRAUMA DATA	<ul> <li>BELT USE DETERMINATION</li> <li>53. Primary Source of Belt Use Determination         <ul> <li>(0) Not equipped/not available/destroyed or rendered inoperative</li> <li>(1) Vehicle inspection</li></ul></li></ul>
<ul> <li>O. Glasgow Coma Scale (GCS) Score <u>9</u> <u>1</u></li> <li>(at Medical Facility)</li> <li>(00) Not injured</li> <li>(01) Injured - not treated at medical facility</li> <li>(02) No GCS Score at medical facility</li> <li>(03-15) Code the actual value of the initial GCS Score recorded at medical facility.</li> <li>(97) Injured, details unknown</li> <li>(99) Unknown if injured</li> </ul>	<ul> <li>(3) Other (specify):</li> <li>(9) Unknown if belt used</li> </ul>
1. Was the Occupant Given Blood? (1) No - blood not given (2) Yes - blood given (specify units): (9) Unknown if blood given	
<ul> <li>Arterial Blood Gases (ABG) - HCO<sub>3</sub> <u>9</u></li> <li>(00) Not injured</li> <li>(01) Injured, ABGs not measured or reported</li> <li>(02-50) Code the actual value of theHCO<sub>3</sub></li> <li>(96) ABGs reported, HCO<sub>3</sub> unknown</li> <li>(97) Injured, details unknown</li> <li>(99) Unknown if injured</li> </ul>	
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National Highway Traffic Safety Administration

# OCCUPANT ASSESSMENT LOG

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

TO BE COMPLETED BY TEAM	14. Was This Occupant Injured?
	(O) No (1) Yes
1. PSU Number	(9) Unknown
2. Case Number-Stratum	
3. Researcher Completing Form	15. Status of Medical Release
	<ul> <li>Occupant not injured or not treated at a medical facility</li> </ul>
4. Vehicle Number	(1) Medical release not required at medical facility
5. Occupant Number	Medical Release Required
6. Interviewer Number	<ul> <li>(2) Required not obtained</li> <li>(3) Required obtained</li> </ul>
7. Date Interview Completed///	16. Injury Treatment Status
	(00) Occupant not injured
8. Date Official Medical Data	(01) No treatment
Requested	(02) Fatal—died before hospitalization (03) Fatal—died after hospitalization
• • • •	(03) Fatal-died after nospitalization (04) Hospitalization
	(04) Hospitalization (05) Emergency room treatment only
9. Date Official Medical Data//	(06) Treatment at physician's office
Obtained	(07) Treatment at scene or self treatment
	(08) Outpatient surgery
10. Occupant's Role	(09) Transported to a medical facility—unknown level of treatment
(1) Driver	(99) Unknown
(2) Passenger	
(9) Unknown	
11. Interviewee For This Occupant	17. Injury Information Form Record Received Status
(0) No interview	Official Received Status
(1) Same person	a. Autopsy (invasive examination)
	b. Post-ER medical record which
Surrogate	includes information about death based on non-invasive examination
<ul><li>(2) Other occupant</li><li>(3) Relative or friend</li></ul>	c. Admission record/summary of
<ul><li>(3) Relative or menu</li><li>(4) Multiple interviewees from above categories</li></ul>	admission/discharge face sheet
(specify):	d. Discharge summary
	e. Operative report
	f. Radiographic record(s) (X-ray,
12. Manner Of Interview	_ CT scan) g. History and physical examination
(0) No attempt (1) Telephone	and/or consultation records
(1) Telephone (2) In-person	h. Emergency room records (includes
(3) Questionnaire	nurses' notes)
(9) Unknown (for Zone Center use only)	j. Private physician
	Unofficial
12 Basule Of Last Interview Attempt	k. Lay coroner
13. Result Of Last Interview Attempt (01) Unable to contact or locate	- I. EMS record
(01) Unable to contact or locate	m. Interviewee
(03) Fatal-surrogate not available	n. Other source (specify):B
(04) In intensive care—surrogate not available	o. Police report _B
(05) Out-of-state resident	(See reverse side of this page for codes for variable 17)
(06) Refused interview	
(07) Insurance company refusal (08) Attorney refusal or litigation	
(09) No return of questionnaire	
(10) Other (specify):	18. 1st Medical Facility Code (initial)
(12) Partial interview	19. 2nd Medical Facility Code
(13) Complete interview	

## CODES FOR OCCUPANT ASSESSMENT LOG VARIABLE 17 (INJURY INFORMATION)

OCCUPANT UPDATE FORM RECEIVED (FIRST COLUMN)

(Blank) No or not applicable

(1) Yes

STATUS OF MEDICAL RECORD (SECOND COLUMN)

(Blank) Not medically treated/record not required

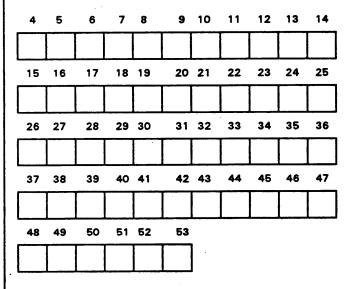
- (01) No record of treatment at medical facility
- (02) Medical release required—not obtained
- (03) Injury not related to accident
- (04) Noncooperative hospital
- (05) Hospital out-of-study area
- (06) Private physician would not release data
- (07) Unknown if medically treated
- (08) To be updated
- (09) Record not received before file closeout
- (10) Record not obtained
- (11) Record obtained
- (12) Partial record obtained-not to be updated
- (13) Partial record obtained-to be updated

## TO BE COMPLETED BY ZONE CENTER

- 20. Documentation of Occupant Interview
  - (Excludes Injury Data) (0) Not applicable -
  - (1) Substandard beyond researcher control
  - (1) Substandard beyond researcher control (2) Substandard

  - (3) Standard

## DATA STATUS OF VARIABLE NUMBERS 4-53



## Data Status Codes:

## (Blank) Correct

- (1) Derived error
- (2) Non-correctable error
- (3) Correctable error
- (4) Change-no error
- (5) Sequencing error
- (7) Incorrect edit override
- (8) MDE error
- (9) Unknown coded

2					•			BE	ST AVAILABLE	COPY	Form App	
).S. Departi lational Hig dministrati	jhway Tra			0	CCUP	ANT II	NJUR	Y FOR		ONAL ACCID CRASHWOR	ENT SAMP	. 2127-0021 LING SYSTEN ATA SYSTEN
1. Prin	nary Sa	mpling l	Jnit Num	ber	T	SI	3. Ve	hicle Nur	nber		-	01
2. Cas	e Numt	ber - Stra	atum	9	4-0	2/	4. 00	cupant N	umber		· · · · ·	01
	, 					NJURY	DAT	A				
sourc	es. Re	member	not to do	ouble cou	unt an inj	ury just i	because	it was id	ified from th entified from e Occupant	n two diffe	rent sour	ial data ces. If
	Source of Injury Data	Body Regior		of Spec nic Anat	omic l	_evel of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ e Indirect Injury	Occupant Area Intrusion Number
AbRASION 1st	5. <u>7</u>	6. <u>2</u>	79	8. <u>Ø</u>	<u>ð</u> 9	02	10/	11.4	12. <u>45</u>	13/	14	15. <u>00</u>
Contration 2nd	NE TO LI 16. 7	рs 17. <u>2</u>	189	19. <u>0</u>	<u>4</u> 20	<u>02</u>	21/	22. 8	23. <u>45</u>		25/	26. <u>00</u>
	27.7		299	30. 2	<u>D</u> 31	02	32. <u>/</u>	33. <u>8</u>	34. <u>93</u>	35. 🔟	36. 🖊	37. <u>0</u> 0
STRAIN 4th	толиск 38. Д	39. (	40. 4	41. <u>O</u>	2 42.	78	43/	446	45. <u>45</u>	46. 🖊	47/	48. <u>00</u>
5th	49	50	51	52	53		<b>54.</b>	55	56	57	58	59
6th	60	61	62	63	64		65	66	67	68	69	70
7th	71	72	73	74			76	77	78	79	80	81
8th	82	83	84	85	86.		87	88	89	90	91	92
9th	93	94	95	96	97.		98	99	100	101	102	103
10th	104	105	106	107	108.		09	110	111	112	113	114
	•	·										

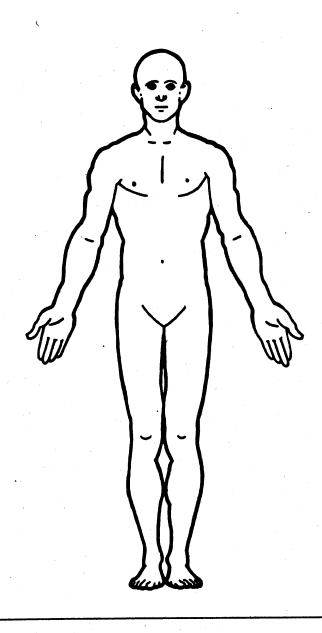
HS Form 433B (1/94)

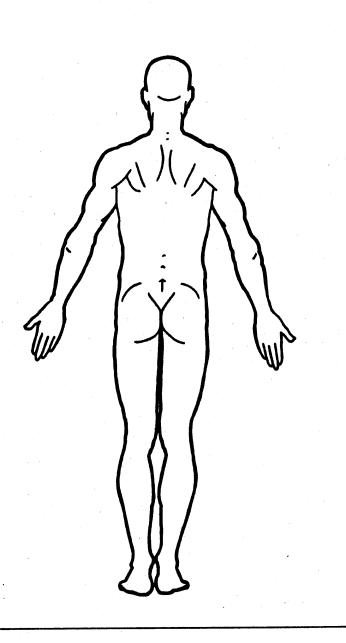
This report is authorized by P.L. 89-563, Title 1, Section 106, 108, and 112. While you are not required to respond, your cooperation is needed to make the results of this data collection effort comprehensive, accurate, and timely.

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## OFFICIAL INJURY DATA - SOFT TISSUE INJURIES

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



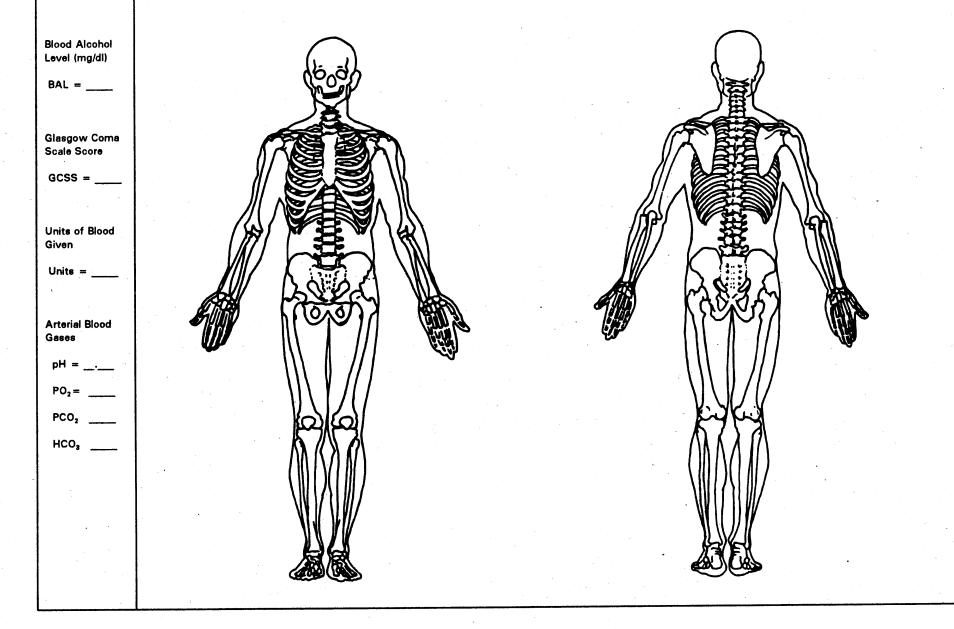


## OFFICIAL INJURY DATA - SKELETAL INJURIES

## **Restrained?**



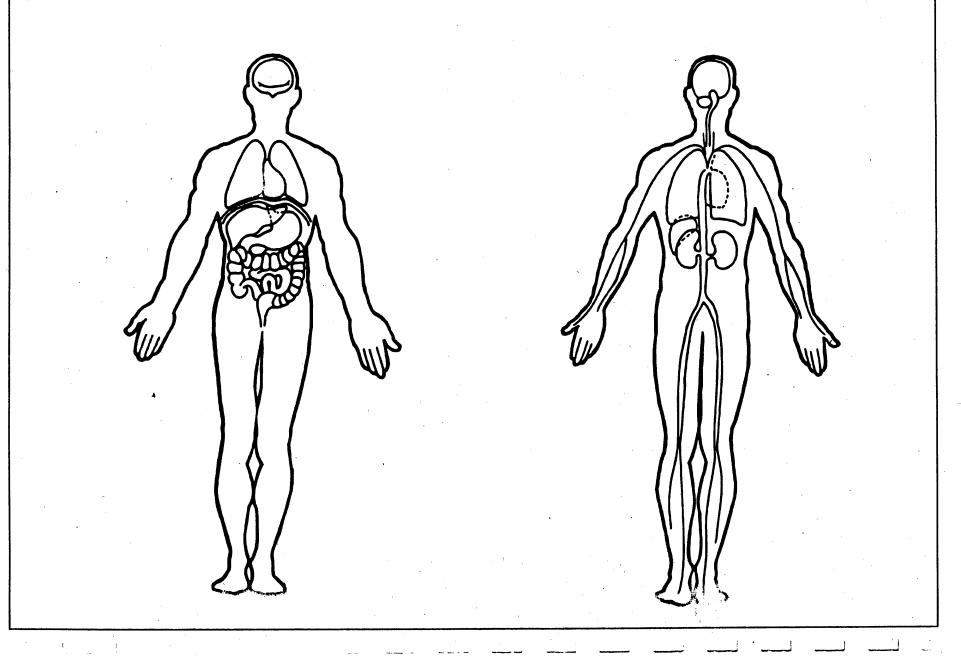
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## OFFICIAL INJURY DATA - INTERNAL INJURIES

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

64.5



### SOURCE OF INJURY DATA OFFICIAL

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

## UNOFFICIAL

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

## **INJURY SOURCE**

## FRONT

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

### LEFT SIDE

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

#### (25) Left side window glass or frame Left side window glass including (26)

- one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail. (27) Other left side object (specify):
- (28) Left side window sill
- RIGHT SIDE
- (30) Right side interior surface.
- excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar (33) Right B-pillar
- (34) Other right pillar (specify):

#### (35) Right side window glass or frame (36)

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

#### (38) Right side window sill

#### INTERIOR

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

Other occupants (specify):

#### ROOF

(46)

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

## FLOOR

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

#### REAR

Specific Anatomic Structure

Whole Area (02) Skin - Abrasion

(04)

inei

(08)

(10)

(20) Burn

(30)

(40)

(50)

(90)

Skin - Contusion

Skin - Laceration

Skin - Avulsion

Amputation

Degloving

Injury - NFS

Trauma, other than mechanical

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

Crush

(60) Backlight (rear window)

## **OCCUPANT INJURY CLASSIFICATION**

## **Body Region**

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

### Type of Anatomic Structure

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

#### Spine (02) Cervical Thoracic (04) (06)Lumbar

Vessels, Nerves, Organs, Bones, Joints are assigned consecutive

two digit numbers beginning with 02

### Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

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

### EXTERIOR of OCCUPANT'S VEHICLE (65) Hood

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

### EXTERIOR OF OTHER MOTOR VEHICLE

(72) Other front of vehicle (specify):

(75) Windshield, roof rail, A-pillar

(78) Other side protrusions (specify)

OTHER VEHICLE OR OBJECT IN THE

(85) Other vehicle or object (specify)

Other noncontact injury source

**INJURY SOURCE CONFIDENCE** 

DIRECT/INDIRECT INJURY

Injured, unknown source

(1)

(2)

(3)

(4)

(5)

(6)

(7)

(1)

(2)

(3)

(4)

(6)

(6)

(7)

(8)

(9)

(0)

Aspect

Right

Bilateral

Central

Anterior

Posterior

Superior

Unknown

Whole region

Inferior

Left

Abbreviated Injury Scale

Moderate injury

Maximum (untreatable)

Injured, unknown severity

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Serious injury

Severe injury

Critical injury

Minor injury

**Direct contact injury** 

Noncontact injury

Indirect contact injury

(86) Unknown vehicle or object

NONCONTACT INJURY

(90) Fire in vehicle

(specify):

(93) Air bag exhaust gases

(97) Injured, unknown source

(91) Flying glass

Certain

Probable

Possible

Unknown

(92)

LEVEL

(1)

(2)

(3)

(9)

(1)

(2)

(3)

(7)

Other exterior of other motor vehicle

(83) Unknown exterior of other motor vehicle

(70) Front bumper (71) Hood edge

(74) Hood ornament

(76) Side surface

(77) Side mirrors

(79) Rear surface

(80) Undercarriage

(specify):

ENVIRONMENT

(84) Ground

Tires and wheels

(73) Hood

(81)

(82)

17

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National Highway Traffic Safety Administration		INJURY LOG NATIONAL ACCIDENT SAMPLING SY CRASHWORTHINESS DATA SY	<b>U</b> IE
TO BE COMPLETED BY Z	ONE CENTER	SECOND LEVEL REVIEW	
<ol> <li>PSU Number</li> <li>Case Number—Stratum</li> </ol>		<ul> <li>16. Documentation of Official Data on Manikin</li> <li>(0) Not applicable</li> <li>(1) Substandard - beyond researcher control</li> </ul>	
3. Vehicle Number		(2) Substandard (3) Standard	
4. Occupant Number		AIS AI 1-7 3-	IS -6
<ul> <li>5. Documentation of Interview Data or Manikin/Listing</li> <li>(0) Not applicable</li> <li>(1) Substandard - beyond research</li> <li>(2) Substandard</li> <li>(3) Standard</li> </ul>		<ul> <li>17. Number of Rows Added by Second</li> <li>Level Reviewer</li> <li>18. Number of Rows Deleted by Second</li></ul>	
	CODING		
Injury Information	Contact Mechanisms & Intrusions	ERROR STATUS FOR INJURY VARIABLES Coding Errors (total number in each column)	
<ol> <li>6. Date Data Included/</li> <li>With Initial Submission Coded</li> <li>7. Coded By (Initials)</li> </ol>		5 6 7 8 9 10 11 12 13 14 15	5
8. Date Update Received Injury Information	Contact Mechanisms & Intrusions	19. Date Of Second Level// Review	
9. Date Data Included// With Updated Submission Coded	//	20. Reviewed By (Initials)	
10. Coded By (Initials)			
	AIS AIS 1-7 3-6		<u>.</u>
11. Number of Injury Rows Coded		• • • •	
12. Number of Unknown Injuries			
13. Number of Unknown Injury Contac Mechanisms	t	<ul> <li>A state of the sta</li></ul>	
UPDATED MDE STA	ATUS		`
14. Date MDE Updated	//		
15. MDE Updated By (Initials)			•

DRIVER AIR BAG (Front)

