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.

*** *** ***

DYNAMIC SCIENCE, INC.
In-Depth Accident Investigation

Contract DTNH22-94-D-27058
Case DSI-95-AB-031

[redacted] 1995

This research was supported by the National Highway Traffic Safety Administration (NHTSA), U.S. Department of Transportation, under contract number DTNH22-94-D-27058. The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the NHTSA.

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

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

DYNAMIC SCIENCE, INC.
ACCIDENT INVESTIGATION
CASE NUMBER: DSI-95-AB-031

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TECHNICAL SUMMARY

CONTRACTOR: Dynamic Science, Inc.
CONTRACT NUMBER: DTNH22-94-D-27058
CASE NUMBER: Case DSI-94-AB-031

[redacted]

ACCIDENT EVENTS

This collision occurred at 1330 hours on [redacted], 1995 in the county of [redacted], Arizona. The asphalt roadway was dry and free of defects. The weather was cloudy.

Vehicle 1, a 1995 Hyundai Elantra driven by a 21-year-old male, was traveling eastbound on a four-lane, divided interstate roadway at a police estimated speed of 121 KPH (75 MPH). Vehicle 2, a 1990 Ford Taurus driven by a 43-year-old male, was traveling eastbound in the same lane and in front of Vehicle 1 at a police estimated speed of 105 KPH (65 MPH). As Vehicle 1 closed with Vehicle 2 it appears that the driver braked and steered to the left. The right front corner of Vehicle 1 struck the left rear bumper corner of Vehicle 2. There was minimal crush on Vehicle 1(and most of this was above the bumper through the softer sheet metal). The driver's side air bag did not deploy. The missing vehicle algorithm was run and yielded a longitudinal speed change of -14 KPH (-9 MPH) for Vehicle 1 and speed change of 12 KPH (8 MPH) for Vehicle 2. Vehicle 1 began a clockwise rotation, crossed the adjacent travel lane, and came to rest, facing southeast, on the dirt-covered median. Vehicle 2 began to rotate, crossed the adjacent travel lane, and came to rest, facing northwest, on the median.

According to the police, neither party was injured. Both parties were wearing their lap and shoulder belts. Both vehicles were towed from the scene due to damage.

VEHICLES

	Vehicle 1	Vehicle 2
Description:	1995 Hyundai Elantra 4DR sedan	1990 Ford Taurus GL 4DR sedan
Odometer:	13,031 km (8,097 mi)	Unknown
Engine:	1.6L EFI	3.0L EFI / V6
Vehicle Modifications:	None	Unknown
Tire Condition:	Good	Unknown
Manual Restraints:	Manual lap and shoulder	Manual lap and shoulder
Automatic Restraints:	Supplemental Restraint System (driver's air bag)	Supplemental Restraint System (driver's air bag)
Reported Defects:	None	None
Cargo:	None noted	Unknown
Windshield Damage:	Slight crack near base of right-hand A-pillar.	Unknown
Fleet:	None	None
Tow Status:	Towed, due to damage	Towed, due to damage

VEHICLE DAMAGE

	VEHICLE 1	VEHICLE 2
Object Struck:	Vehicle 2	Vehicle 1
Event Number:	01	01
CDC:	12FREE3	Unknown
Maximum Crush:	14.0 cm (5.69 in.)	Unknown

VEHICLE VELOCITY ESTIMATES

	VEHICLE 1	VEHICLE 2
Impact Speed: (estimated)	121 KPH (75 MPH)	105 KPH (65 MPH), based on driver's statement that the speed control had been set.
Total Delta V:	14 KPH (9 MPH)	12 KPH (8 MPH)
Longitudinal Delta V:	-14 KPH (-9 MPH)	12 KPH (8 MPH)
Lateral Delta V:	-1 KPH (-1 MPH)	-1 KPH (-1 MPH)
Energy Dissipation:	9,231.5 NT-M (6,809.5 FT-LBS)	13,191.8 NT-M (9,730.4 FT-LBS)

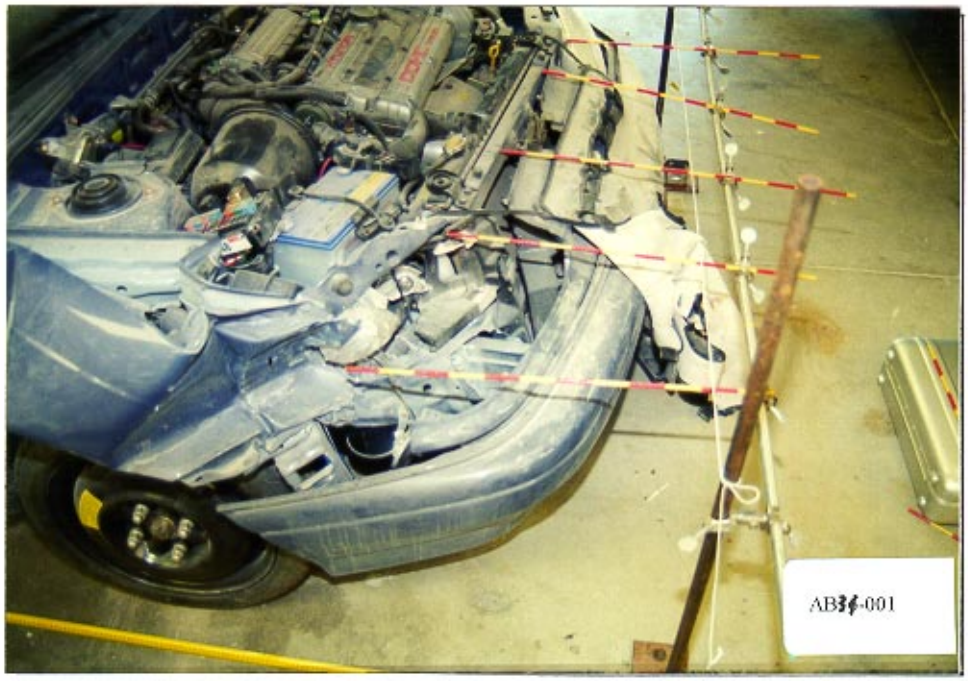
SUPPLEMENTAL RESTRAINT SYSTEM / EVALUATION

Vehicle 1 was equipped with a supplemental restraint system (driver's air bag) that did not deploy during this collision. The restraint system self test was initiated by engaging the ignition. A total of four flashes were counted prior to the light going off. According to Hyundai service personnel, this is the normal operating mode.

The calculated longitudinal velocity change was not of sufficient magnitude as to deploy the air bag.

PHOTO INDEX

PHOTO NO.	VEHICLE NO.	DIRECTION OF PICTURE	SUBJECT MATTER
1-18	1	CW	Exterior views of Vehicle 1.
19-26	1	NA	Interior views of Vehicle 1.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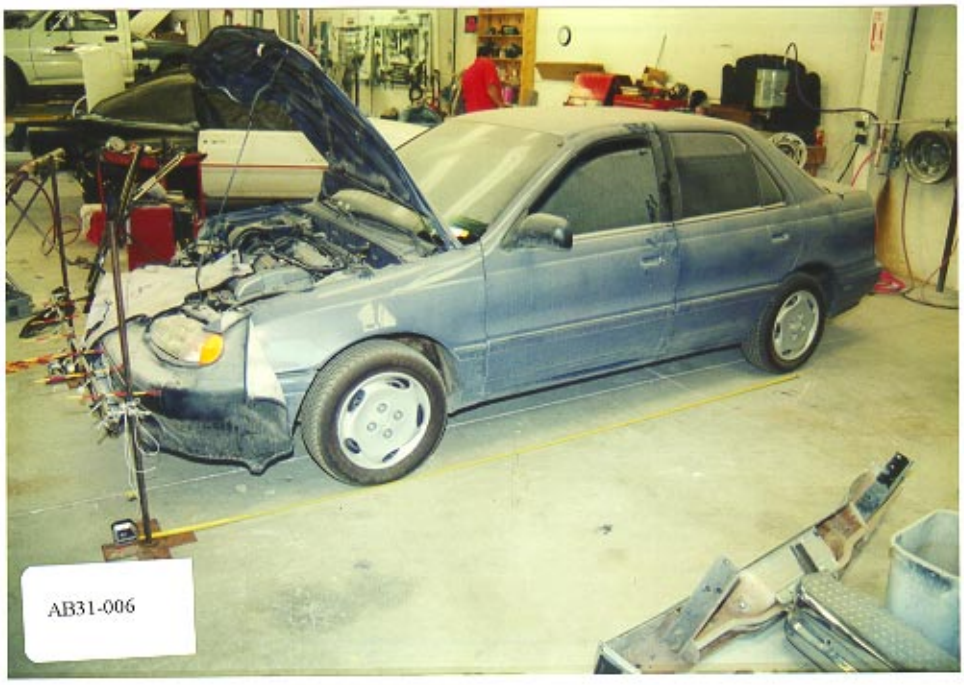
AB31-002


AB31-003


AB31-004


AB31-005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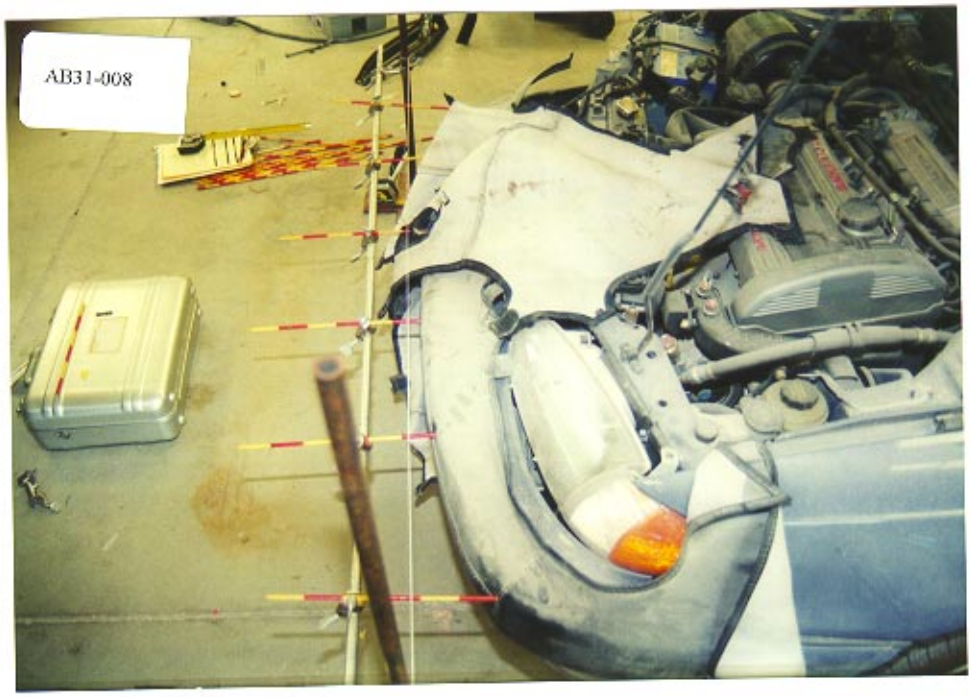
AB31-007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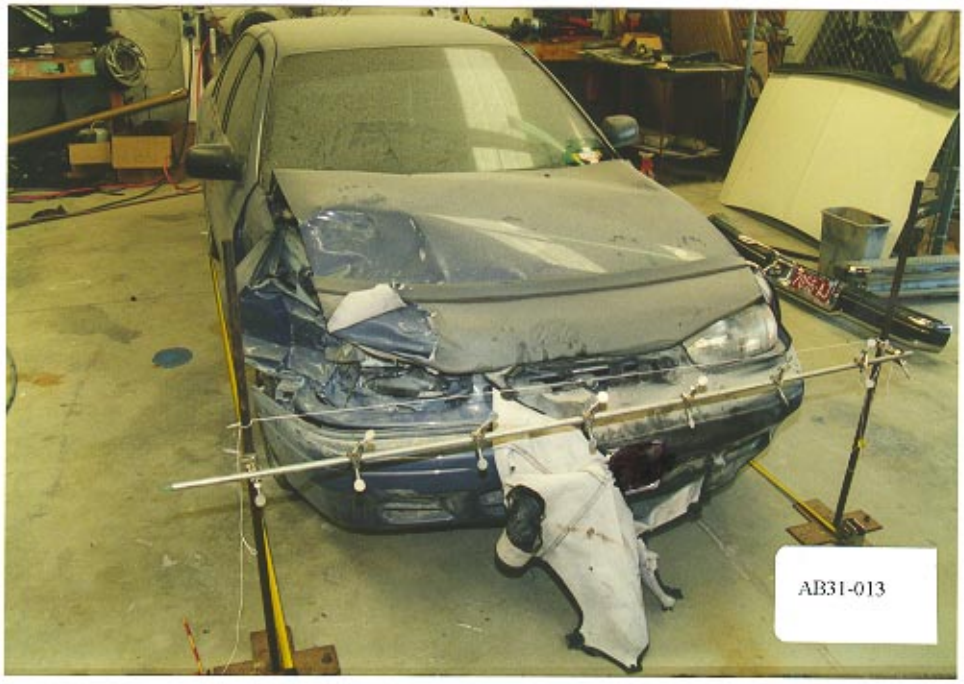
AB31-009


AB31-010


AB31-011


AB31-012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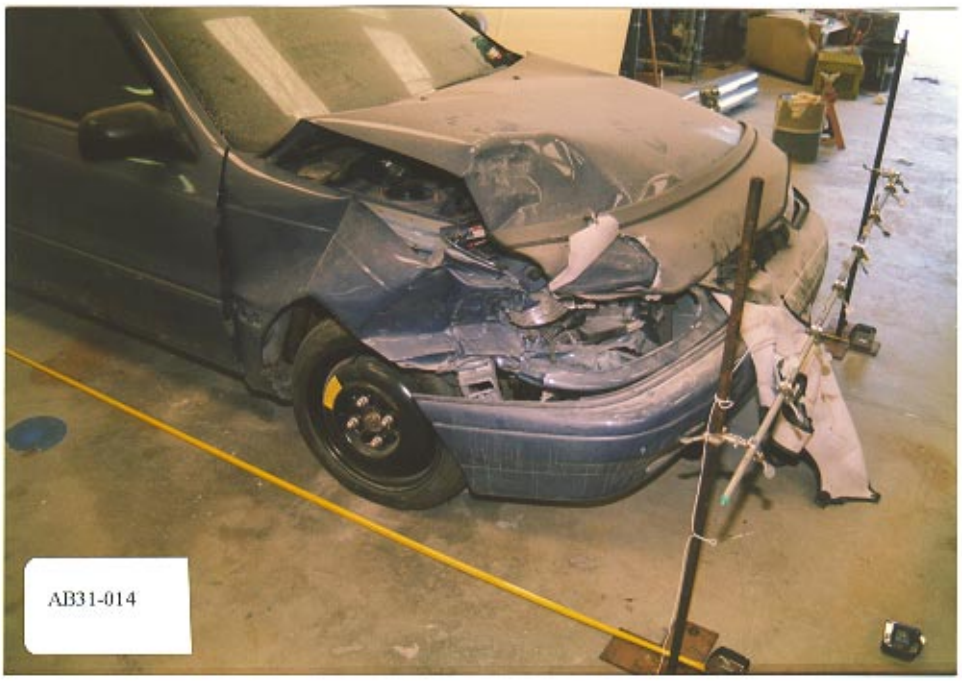
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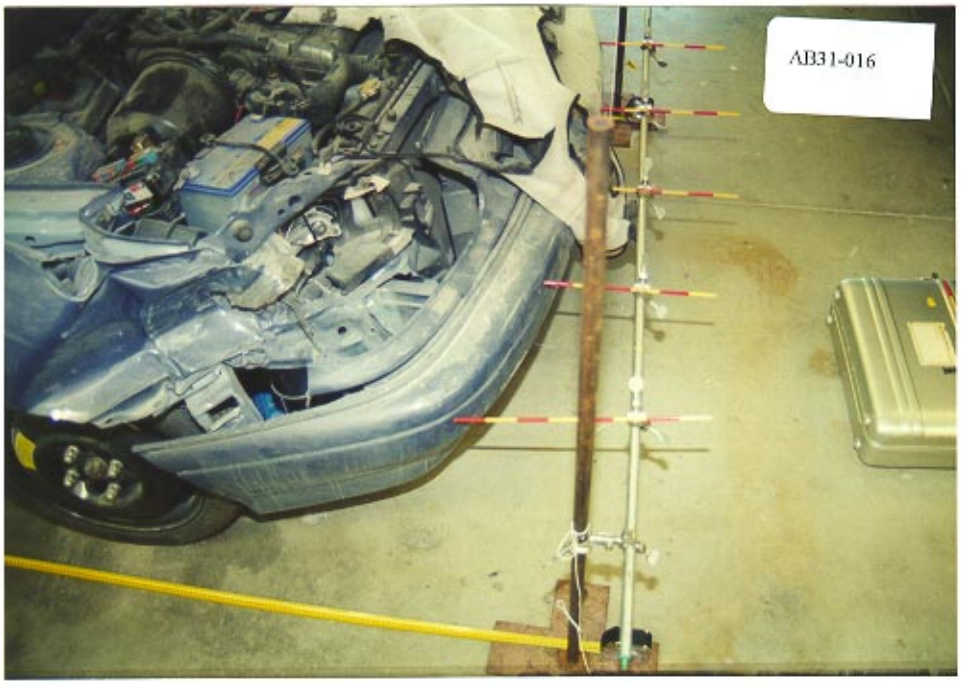
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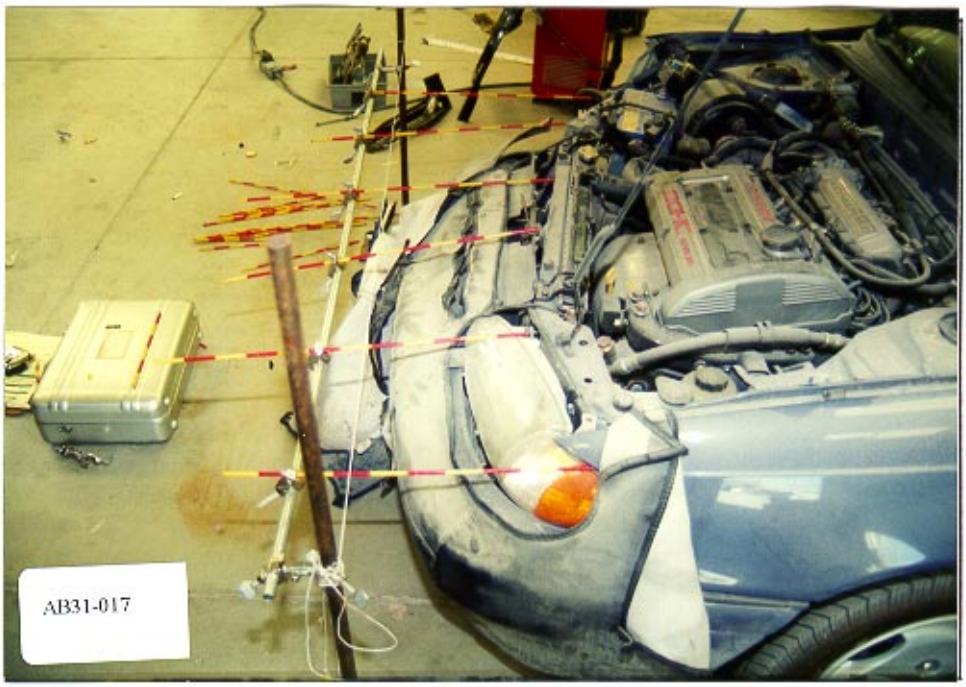
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HONDA
DOHC
VTEC
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AB31-026

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

EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number ____
2. Case Number - Stratum A B 3 1
3. Vehicle Number 0 1

VEHICLE IDENTIFICATION

VIN K M H J F 2 3 R 8 S U X X X X X X Model Year 9 5

Vehicle Make (specify): HYUNDAI Vehicle Model (specify): ELANTRA 4DR

LOCATOR

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

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
1	@ RF BUMPER CORNER →		C-6

CRUSH PROFILE IN CENTIMETERS / INCHES

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

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage Width (CDC)	Direct Damage Max Crush	Field L	C_1	C_2	C_3	C_4	C_5	C_6	±D	
1	BUMPER	11.0	8.46	54.3	4.72	1.77	.98	1.97	3.9	8.46	+23.0	
			-4.9		-4.9	-.78	0	0	-.78	-4.9		
			3.56		0	.99	.98	1.97	3.12	3.56		AVERAGE
1	ABOVE BUMPER		21.6		13.77	10.6	12.2	13.9	16.5	21.6		
	(UPPER RADIATOR		-13.77		-13.77	-10.6	-12.2	-12.2	-10.6	-13.77		
	SUPPORT)		7.83		0	0	0	1.7	5.9	7.83		
1	FINAL	11.0		54.3	0	.99	.98	1.97	3.12	5.69	+23.0	
1	FINAL	28		138	0	3	2	5	8	14	+58	

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE

	a. Rotation physically restricted	b. Tire deflated
RF	1?	SPARE ON
LF	2	2
RR	2	2
LR	2	2

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

TYPE OF TRANSMISSION

☑ Manual ☐ Automatic

END SHIFT ≥ 10 CM

☐ Yes ☑ No

ORIGINAL SPECIFICATIONS

Wheelbase	250	cm
Overall Length	439	cm
Maximum Width	169	cm
Curb Weight	1122	kg
Average Track	143	cm
Front Overhang	90	cm
Rear Overhang	99	cm
Undeformed End Width	(57) 145	cm
Engine Size: cyl./displ.		L

WHEEL STEER ANGLES

(For locked front wheels or displaced rear axles only)

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

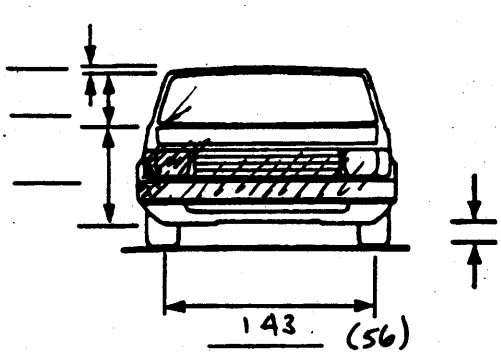
Within ± 5 degrees

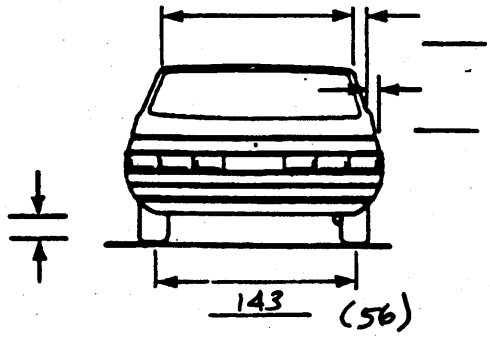
DRIVE WHEELS

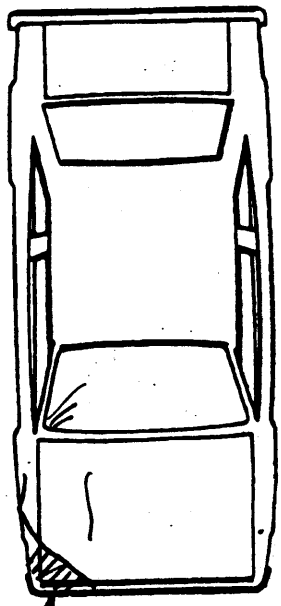
☑ FWD ☐ RWD ☐ 4WD

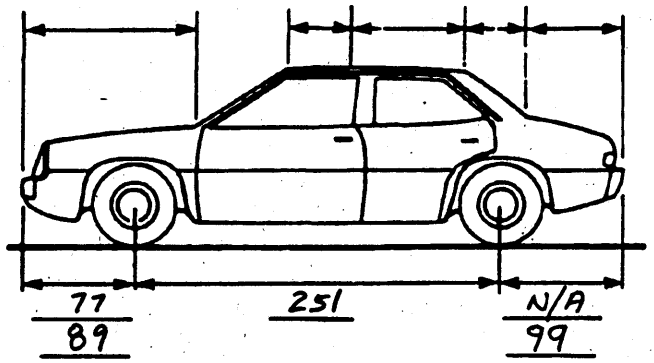
Approximate Cargo Weight NONE VISIBLE kg

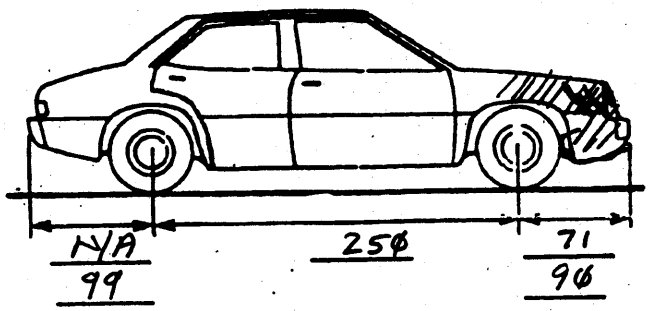
MEASUREMENTS IN CENTIMETERS











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

MAX CRUSH

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

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

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

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

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

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

DEFORMATION CLASSIFICATION BY EVENT NUMBER

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01	02	005	00	F	R	E	E	03

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. Ø1	5. Ø2	6. 12	7. F	8. R	9. E	10. E	11. Ø3

Second Highest Delta "V"

12.	13.	14.	15.	16.	17.	18.	19.

CRUSH PROFILE IN CENTIMETERS

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

HIGHEST DELTA "V"

20. L	21. C_1	C_2	C_3	C_4	C_5	C_6	22. ±D
145	ØØØ	Ø03	Ø02	Ø05	ØØ8	Ø14	+Ø58

Second Highest Delta "V"

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

26. Undeformed End Width (Coded when highest severity impact is an end plane impact.) 145
____ Code to the nearest centimeter
(250) 250 centimeters or more
(998) No highest severity end plane impact
(999) Unknown

27. Direct Damage Width (For highest severity impact) Ø28
____ Code to the nearest centimeter
(250) 250 centimeters or more
(999) Unknown

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

29. Original Average Track Width 143
____ Code to the nearest centimter
(185) 185 centimeters or more
(999) Unknown
___.__ inches X 2.54 = ____ centimeters

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

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

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

FIRE OCCURRENCE

33. Fire Occurrence Φ
(0) No fire

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

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

FUEL SYSTEM

35. Location of Fuel Tank-1 Filler Cap 4

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

37. Type of Fuel Tank-1 1

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

39. Location of Fuel Tank-1 4

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

41. Damage to Fuel Tank-1 1

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

43. Leakage Location of Fuel System-1 1

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

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

45. Fuel Type-1 Φ 1

46. Fuel Type-2 Φ Φ

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

   Electric Powered or Electric/Solar Powered Vehicles
   (10) Lead Acid Battery
   (11) Nickel-Iron Battery
   (12) Nickel-Cadmium Battery
   (13) Sodium Metal Chloride Battery
   (14) Sodium Sulfur Battery
   (18) Other (Specify):_____

   (98) Other Hybrid (specify):
   _____

   (99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks? Φ
   (0) No (one or two tanks only)

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

COMMENTS

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

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

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.

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

INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number ____
2. Case Number - Stratum A B 3 1
3. Vehicle Number 0 1

INTEGRITY

4. Passenger Compartment Integrity 0 0
(00) No integrity loss

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

(99) Unknown

Door, Tailgate or Hatch Opening

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

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

(9) Unknown

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

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

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

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

(9) Unknown

GLAZING

Type of Window/Windshield Glazing

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

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

(9) Unknown

Window Precrash Glazing Status

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

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

Glazing Damage from Impact Forces

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

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

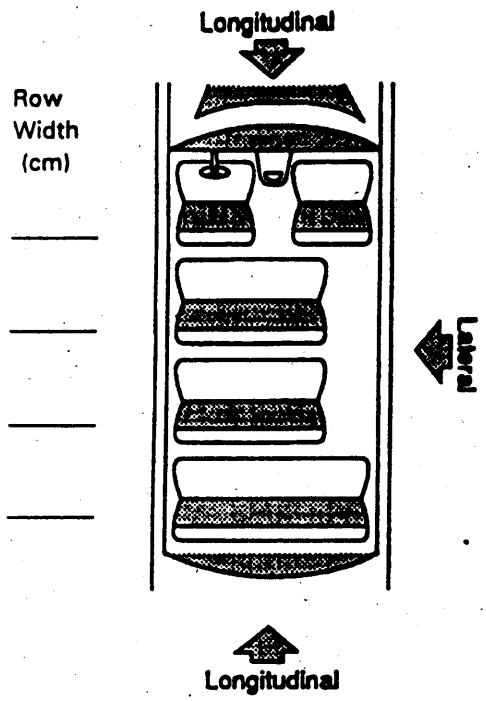
Glazing Damage from Occupant Contact

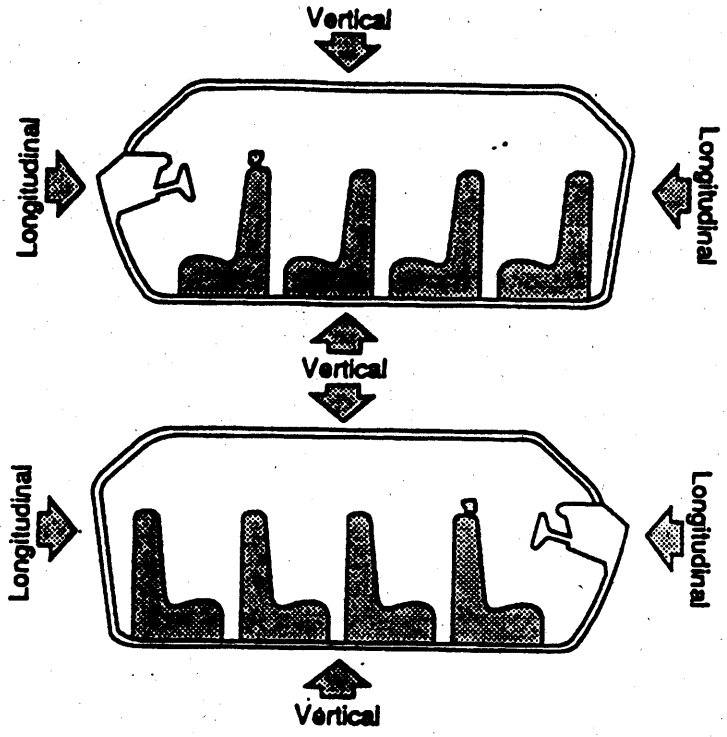
39. WS 1 40. LF 1 41. RF 1 42. LR 1 43. RR 1
44. BL 1 45. Roof 0 46. Other 1

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

INTRUSION WORKSHEET

Note: Sketch intruded areas





(All Measurements Are In Centimeters)

LOCATION OF INTRUSION	INTRUDED COMPONENT	COMPARISON VALUE	—	INTRUDED VALUE	=	INTRUSION	DOMINANT CRUSH DIRECTION
			—		=		
			—		=		
			—		=		
			—		=		
			—		=		
			—		=		
			—		=		
			—		=		
			—		=		
			—		=		
			—		=		
			—		=		
			—		=		
			—		=		
			—		=		

Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

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

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

LOCATION OF INTRUSION

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

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

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

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

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

INTRUDING COMPONENT

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

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

MAGNITUDE OF INTRUSION

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

DOMINANT CRUSH DIRECTION

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

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

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

STEERING COLUMN

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

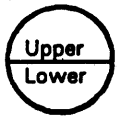
88. Tilt Steering Column Adjustment — 2
   (0) No tilt steering column
   (1) Full up
   (2) Between full up and center
   (3) Center
   (4) Between center and full down
   (5) Full down
   (9) Unknown

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

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

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

   Quarter Sections
   (01) Section A
   (02) Section B
   (03) Section C
   (04) Section D



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

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

INSTRUMENT PANEL

92. Odometer Reading — Ø 1 3 ,000
   ____ kilometers
   Code to the nearest 1,000 kilometers
   (000) No odometer
   (001) Less than 1,500 kilometers
   (500) 499,500 kilometers or more
   (999) Unknown
   8,097 miles X 1.6093 = 13,030 kilometers

   Source: VEH. INSPECTION

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

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

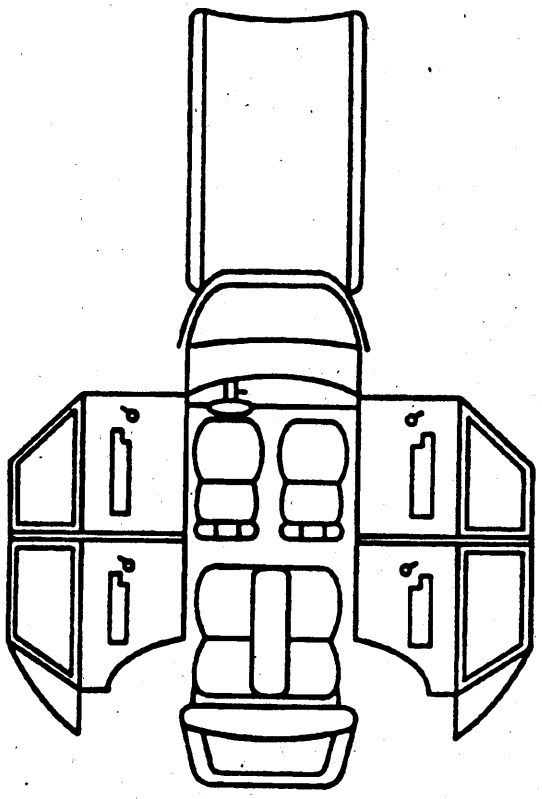
95. Knee Bolsters Deformed from Occupant Contact? — Ø
   (0) No knee bolster
   (1) No deformation
   (2) Yes - deformation
   (9) Unknown

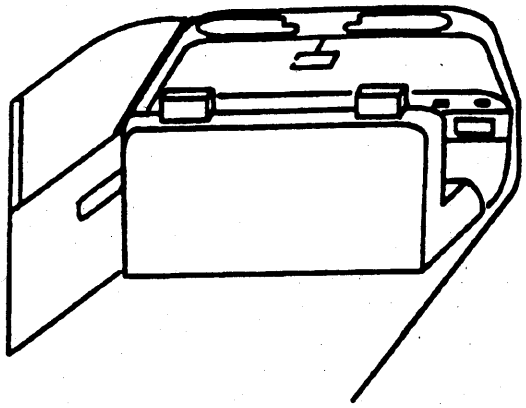
96. Did Glove Compartment Door Open During Collision(s)? — 1
   (0) No glove compartment door
   (1) No - door did not open
   (2) Yes - door opened
   (9) Unknown

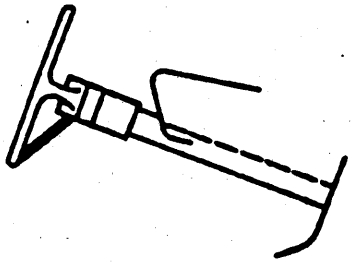
97. Adaptive (Assistive) Driving Equipment — Ø
   (0) No adaptive driving equipment
   (1) Adaptive driving equipment installed (Check all that apply.)
   [ ] Hand controls for braking/acceleration
   [ ] Steering control devices (attached to OEM steering wheel
   [ ] Steering knob attached to steering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

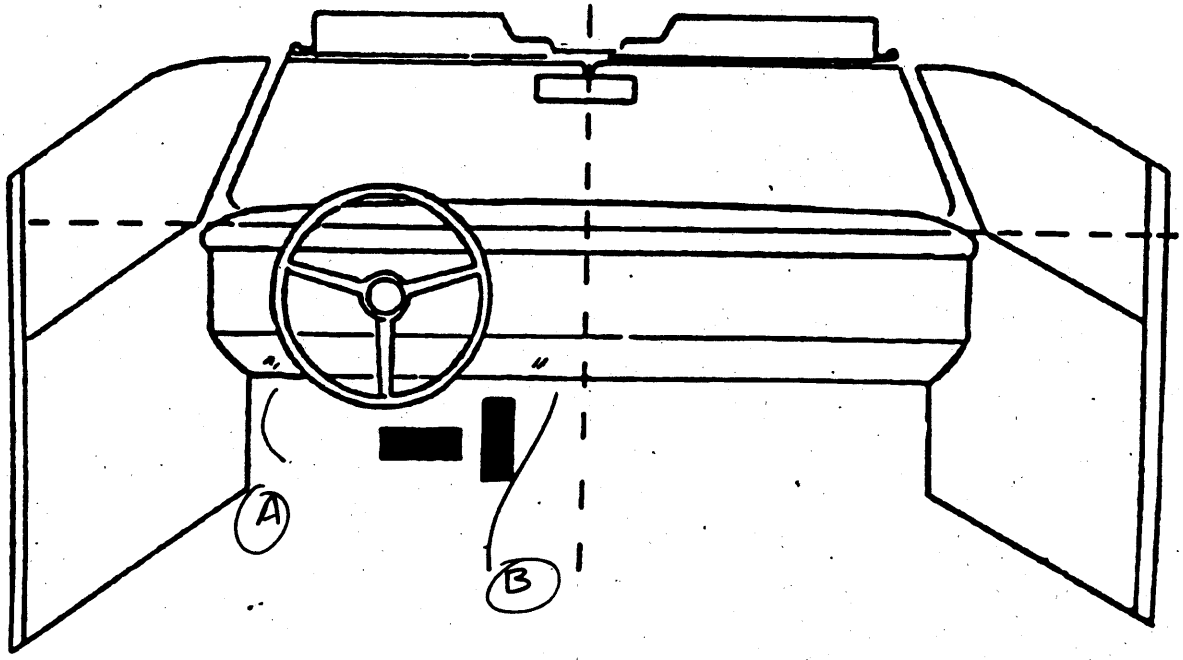
VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment









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

MANUAL RESTRAINTS

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

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

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

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

Manual (Active) Belt System Availability

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

Integral Belt Partially Destroyed

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

Manual (Active) Belt System Use

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

Proper Use of Manual (Active) Belts

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

Belt Used Improperly

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

Manual (Active) Belt Failure Modes During Accident

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

Shoulder Belt Upper Anchorage Adjustment

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

Adjustable shoulder Belt Upper Anchorage

(2) In full up position
(3) In mid position
(4) In full down position
(5) Position unknown
(9) Unknown if position has adjustable upper anchorage adjustment

AUTOMATIC RESTRAINTS

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

AIR BAGS

		Left Front	Right Front	Other
FIRST	Availability/Function	1		
	Deployment	7		
	Failure	7		

Air Bag System Availability/Function
(0) Not equipped/not available
(1) Air bag

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

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

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

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

AUTOMATIC BELTS

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

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

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

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

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

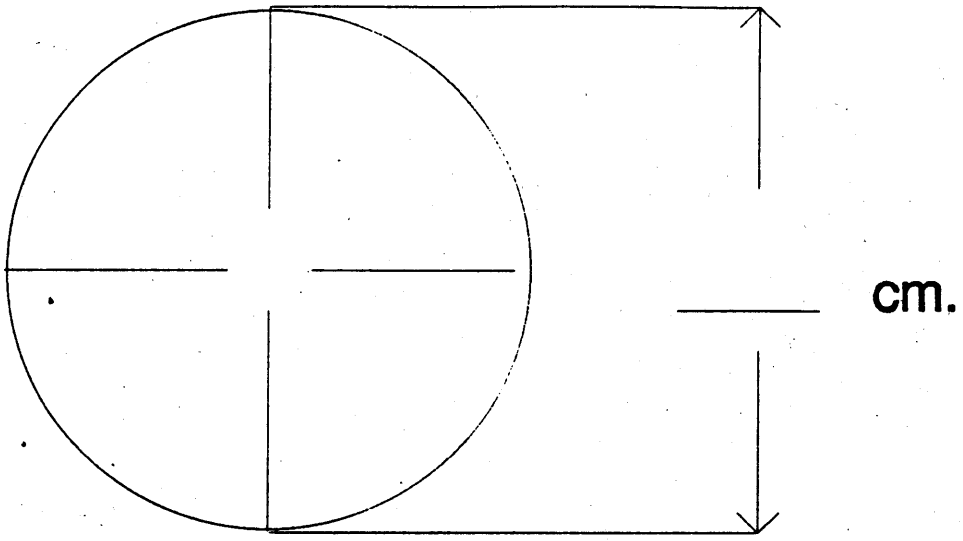
Proper Use of Automatic (Passive) Belt System
(0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

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

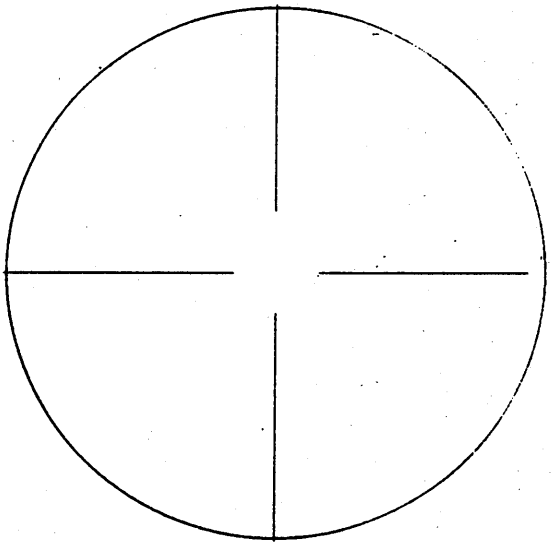
Automatic (Passive) Belt Failure Modes During Accident
(0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify): _____
(6) Broken retractor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

DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

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

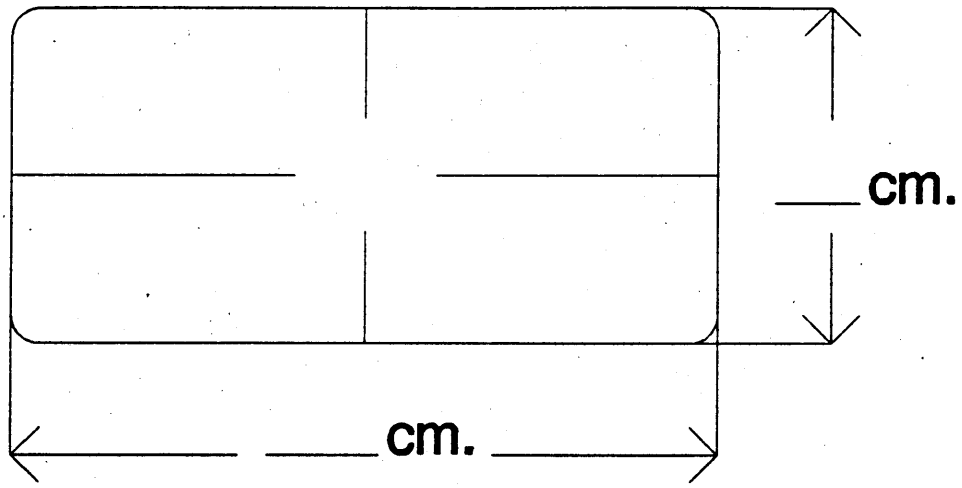


SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)

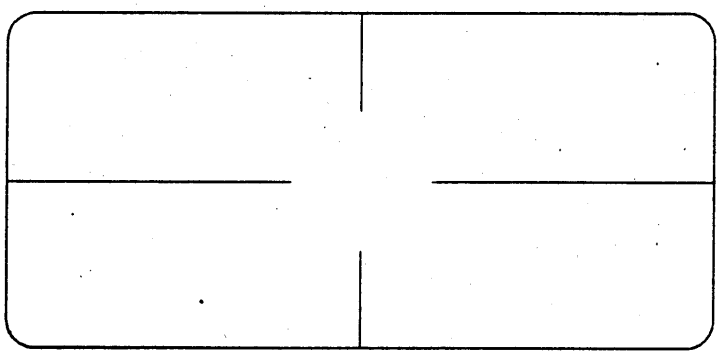


PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

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



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



"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES

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

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

HEAD RESTRAINTS/SEAT EVALUATION

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

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3		3
	Seat Type	02		02
	Seat Performance	1		1
	Seat Orientation	1		1
	Seat Track Position	5		–
	Seat Back Incline Pre/Post Impact	9 - MOVED		
SECOND	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
	Seat Track Position			
	Seat Back Incline Pre/Post Impact			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE

(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

HEAD RESTRAINTS/SEAT EVALUATION

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

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

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

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

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

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

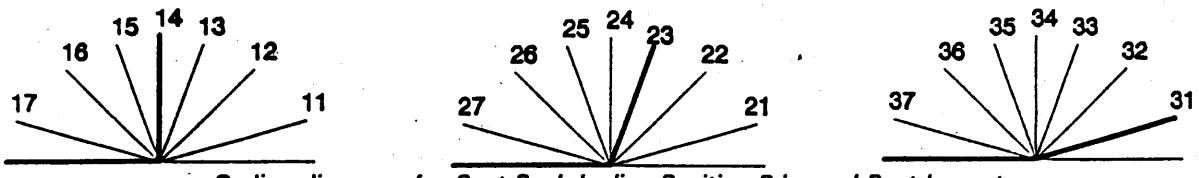
Seat Back Incline Prior and Post Impact
(00) Occupant not seated or no seat
(01) Not adjustable

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

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

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

(99) Unknown



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

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

EJECTION/ENTRAPMENT DATA

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

EJECTION No [✓] Yes [ ]

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

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

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

Ejection Area
(1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear
(7) Roof
(8) Other area (e.g., back of pickup, etc.) (specify): _____
(9) Unknown

Ejection Medium
(1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify): _____
(5) Integral structure
(8) Other medium (specify): _____
(9) Unknown

Medium Status (Immediately Prior to Impact)
(1) Open
(2) Closed
(3) Integral structure
(9) Unknown

ENTRAPMENT No [✓] Yes [ ]

Describe entrapment mechanism: _____

Component(s): _____

(Note in vehicle interior diagram)

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

OLDMISS PROGRAM SUMMARY

(All Measurements In Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

Identifying Title

Primary Sampling Unit	Case No.-Stratum	Accident Event Sequence No.	Date (Month, day, year) of Run
	AB31	01	[redacted] 95

OLDMISS Vehicle Identification

	Year	Make	Model	NASS Veh. No.
Vehicle 1	1995	HYUNDAI	ELANTRA	1
Vehicle 2	1990	FORD	TAURUS	2

GENERAL INFORMATION

VEHICLE 1	VEHICLE 2
Size: 2	Size: 3
Weight: ~80 kg 2468 (Curb) + 176 (Occupant(s)) + — (Cargo) = 2644 lbs / kg	Weight: ~72 kg 2954 (Curb) + 159 (Occupant(s)) + — (Cargo) = 3113 lbs / kg
Damaged Area of Vehicle (F = Front, L = Left, R = Right, B = Back): F (Vehicle 1)	Damaged Area of Vehicle (F = Front, L = Left, R = Right, B = Back): B (Vehicle 2)
Vehicle Heading Angles At Impact, in Degrees: + 352 ° (Vehicle 1)	Vehicle Heading Angles At Impact, in Degrees: + 0 ° (Vehicle 2)
Stiffness Category for Vehicle: 2 (Vehicle 1)	Stiffness Category for Vehicle: 3 (Vehicle 2)

DAMAGE INFORMATION

For Which Vehicle Is The Damage Known: 1

PDOF for Known Vehicle in Degrees (-180 to +180): ± 045 °

Damage Length (L) for Known Vehicle: 57 ~~cm~~ in

Crush Measurements Known Vehicle:

C_1	0 in
C_2	.99 cm
C_3	.98 cm
C_4	1.97 ~~cm~~
C_5	3.12 cm
C_6	5.69 ~~cm~~

Damage Midpoint Offset for Known Vehicle: D ± 023 in ~~cm~~

Estimated Damage Midpoint Offset for Unknown Vehicle: D ± 23 in ~~cm~~

SUMMARY OF OLDMISPC RESULTS·

CASE NO. AB31 - IMPACT NO. 1 - HYUNDAI ELANTRA V. FORD TAURUS

SPEED CHANGE (DAMAGE)

	RESULTANT MPH (KPH)	LONGITUDINAL MPH (KPH)	LATERAL MPH (KPH)	PDOF DEG
VEH #1 (KNOWN)	8.86 (14.25)	-8.82 (-14.20)	-.77 (-1.24)	5.00
VEH #2 (ESTIMATED)	7.52 (12.10)	7.51 (12.09)	-.39 (-.63)	177.00

	ENERGY FT-LBS (NT-M)	FORCE LBS (NT)
VEH #1 (KNOWN)	6809.5 (9231.5)	19738.9 (87798.6)
VEH #2 (ESTIMATED)	9730.4 (13191.3)	24178.6 (107546.3)

SUMMARY OF DAMAGE DATA

VEHICLE #1 (KNOWN DAMAGE DIMENSION)	IN	(CM)	VEHICLE #2 (ESTIMATED DAMAGE DIMENSION)	IN	(CM)
L----------	57.0	144.8	L----------	57.6	146.2
C1---------	.0	.0	C1---------	.0	.0
C2---------	1.0	2.5	C2---------	.0	.0
C3---------	1.0	2.5	C3---------	.0	.0
C4---------	2.0	5.0	C4---------	.0	.0
C5---------	3.1	7.9	C5---------	.0	.0
C6---------	5.7	14.5	C6---------	2.1	5.3
D----------	23.0	58.4	D----------	-7.5	-19.1

(DOFF ADJUSTED .2 INCHES
TO MATCH VEHICLE DIMENSION)

VEHICLE INFORMATION

VEHICLE #1 (FRONT DAMAGE KNOWN)	VEHICLE #2 (REAR DAMAGE UNKNOWN)
SIZE------ 2	SIZE------ 3
STIFFNESS- 2	STIFFNESS- 3
SIDE------ F	SIDE------ B
HANGL----- 352.0 DEG	HANGL----- .0 DEG
WEIGHT---- 2644.0 LBS (1199.1 KG)	WEIGHT---- 3113.0 LBS (1411.8 KG)
MASS------ 6.843 LB-SEC**2/IN	MASS------ 8.056 LB-SEC**2/IN
(77.31 NT-SEC**2/CM)	(91.02 NT-SEC**2/CM)
RADIUS	RADIUS
GYRATION-- 2951.0 IN**2	GYRATION-- 3324.0 IN**2
(19038.7 CM**2)	(21445.1 CM**2)

1 FORWARD COPY TO
ACCIDENT RECORDS ANALYSIS UNIT 064R
ARIZONA DEPARTMENT OF TRANSPORTATION
206 S. 17th AVE., PHOENIX, ARIZONA 85007-3233

YEAR	MONTH	DAY	REPORT ID HOUR	NCIC NO.	OFFICERS ID NO.	Agency Report Number

2 Total Units: TWO | Total Injuries: 0 | Total Fatalities: 0 | Estimated Total Damage: ☒ Over Minimum ☐ Under Minimum | ☐ Fatal ☐ Hit/Run ☐ Govt. Prop. | Total No. of Sheets: 3

3 LOCATION
On Highway/Road/Street: E/B | ☐ Inside ☒ Outside City | District or Grid No: 0403 | County
Intersecting Street, Road / M.P. or R.P.: ☒ At ☐ From 79.4 | ☐ North ☐ South ☐ East ☐ West | ☐ Plus ☐ Minus | Distance | ☐ Miles ☐ Feet

TRAFFIC UNIT NO. 1

State | Class: A | End.: 3 | License or Social Security Number | ☒ Driver ☐ Pedestrian ☐ Pedalcyclist | Name

Restrictions: 0 | Date of Birth: 52 | Address | City | State | Zip Code | Telephone Number | Sex: M | Inj: 1

Plate Number | State | Year: 95 | ☐ Same as Driver | Owner/Carrier Name | Address | City | State | Zip Code

Body Style: TAURUS | ☐ Camper | Make: FORD | Color: BRN | Year: 90 | VIN: 1FACP52U4L | Safety Device Code: 3

Removed to | Removed by | Orders of

Insurance Company | Telephone Number | Policy Number | Posted Speed Limit: 65 | O/c Est Speed: 65 | O/c Est Reas: 65 | Eff Date / Exp Date

Trailer (Other Unit) Plate No. | State | Year | Description of Trailer or Other Unit
Repaired Some - went to — driven by (d1) -

U.S. Government Permits (Issuer and Number)
U.S. DOT: | ICC MC | * Vehicle Type | Number of Axles | G.V.W. (Registered)

HAZARDOUS MATERIALS PLACARD NUMBER:
1) 4-Digit Placard number: | 2) 1-Digit Placard number: | Was Hazardous Cargo from the placarded truck released? (Do not include fuel from the vehicle fuel tank.) Yes ☐ No ☐

4 TRAFFIC UNIT NO. 2

State | Class: OP | End.: 3 | License or Social Security Number | ☒ Driver ☐ Pedestrian ☐ Pedalcyclist | Name

Restrictions: 0 | Date of Birth: 73 | Address | City | State | Zip Code | Telephone Number | Sex: M | Inj: 1

Plate Number | State | Year: 95 | ☒ Same as Driver | Owner/Carrier Name | Address | City | State | Zip Code

Body Style: 4DR | ☐ Camper | Make: HYUNDAI | Color: BLU | Year: 95 | VIN: KMHJF23R8SU | Safety Device Code: 3

Removed to | Removed by | Orders of

Insurance Company | Telephone Number: UNK | Policy Number | Posted Speed Limit: 65 | O/c Est Speed: 75 | O/c Est Reas: 65 | Eff Date / Exp Date

Trailer (Other Unit) Plate No.: → TPD | State | Year | Description of Trailer or Other Unit: (OK)

U.S. Government Permits (Issuer and Number)
U.S. DOT: | ICC MC | * Vehicle Type: 8130 | Number of Axles | G.V.W. (Registered)

HAZARDOUS MATERIALS PLACARD NUMBER:
1) 4-Digit Placard number: | 2) 1-Digit Placard number: | Was Hazardous Cargo from the placarded truck released? (Do not include fuel from the vehicle fuel tank.) Yes ☐ No ☐

Seating Position Diagram

07	04	01
08	05	02
09	06	03

10 Not in Passenger Compart.
11 Motorcycle, Bus
12 Other
13 Unknown
14 Pedalcyclist

Safety Devices
1 - None used
2 - Lap belt
3 - Lap & shoulder
4 - Airbag deployed
5 - Child restraint
6 - Protective helmet
7 - Passive belt
8 - Passive & lap
9 - Other
0 - Unknown

Injured Taken to / by

5 PASSENGERS

Unit #	Seat Pos	SD	Name	Address	City	State	Age	Sex	Inj
W/B		V1 - 106	106.0						
		V2 -	98.4						
d1 →	(1)	170 16	5'7" Mex-Male - alone at Line E/B exit						
3/23/95		company car - hit in Back - seven damage							
		scene (S/C)							

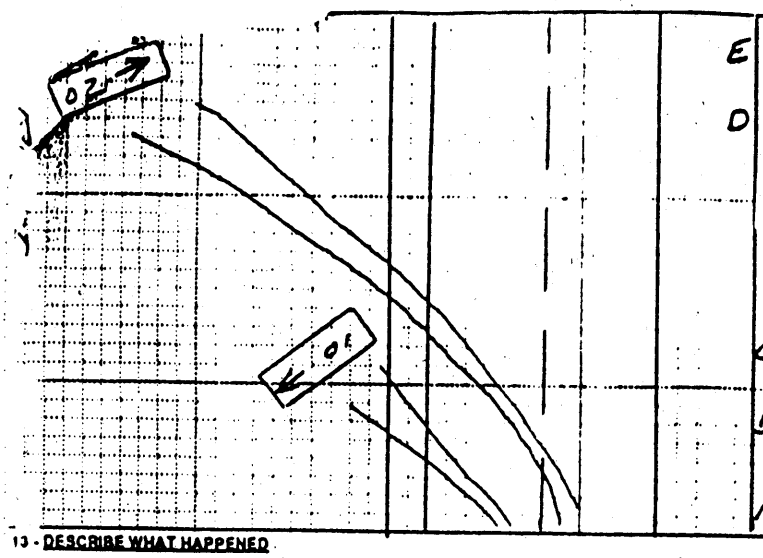
6 Other Property Damage (Describe)
Owner's Name | City | State | Telephone Number

7 WITNESSES
Name | Address | City | State | Telephone Number | Age

8 Photos Taken ☐ Yes ☒ No | Photographer's Name, ID Number, and Agency
Invest. at Scene ☒ Yes ☐ No | Date Invest. | Time Invest.
Agency | Date Completed

01-2704 7/92 * Codes for these Items are available in Glossary Manual

[redacted] BEST AVAILABLE COPY



10 - INDICATE NORTH

11 - SKIDDING OCCURRED: ■ YES ☐ NO — INDICATE WHICH VEHICLES SKIDDED BY NUMBER: 01 & 02

12 - CITATIONS

UNIT NO	A.R.S. NO OR CITY CODE
02	701.A

13 - DESCRIBE WHAT HAPPENED

NO INJURIES WERE REPORTED AS A RESULT OF THIS ACCIDENT. VEHICLE 02 OF THIS REPORT, A 1995 HYUN. WAS DRIVEN BY ADMITTED DRIVING FASTER THAN THE LEGAL LIMIT. AT MP 794, VEHICLE 02 STRUCK VEHICLE 01 IN THE REAR. THIS ACCIDENT WAS CAUSED DUE TO INATTENTION ON THE PART OF . BOTH VEHICLES WERE TOWED TO OF . WAS TRANSPORTED TO BY OFFICER WHILE THE DRIVER OF VEHICLE 01 WAS TRANSPORTED TO . WITH THE SCENE WAS CLEARED AT 1503 HRS.

14 - CLASSIFICATION BY TYPE

☐ YES ■ NO — RAN OFF ROADWAY PRIOR TO FIRST HARMFUL EVENT

COLLISION BETWEEN A MOTOR VEHICLE IN TRANSPORT AND
1 ☐ PEDESTRIAN
2 ■ MOTOR VEHICLE
3 ☐ RAILWAY TRAIN
4 ☐ PEDALCYCLIST
5 ☐ ANIMAL
6 ☐ FIXED OBJECT
7 ☐ OTHER OBJECT

NONCOLLISION INVOLVING A MOTOR VEHICLE IN TRANSPORT
8 ☐ OVERTURNING
9 ☐ OTHER NONCOLLISION

15 - LIGHT CONDITION (CHECK ONLY ONE)
1 ☐ DAYLIGHT
2 ☐ DAWN OR DUSK
3 ☐ DARKNESS

NO
1 ■ STREET LIGHT
2 ☐ STREET LIGHT FUNCTIONING

16 - WEATHER CONDITIONS (CHECK ONLY ONE)
1 ☐ CLEAR
2 ☐ RAINING
3 ☐ CLOUDY
4 ☐ SNOWING
5 ☐ STRONG WIND
6 ☐ DUST
7 ☐ FOG

17 - ROAD SURFACE TYPE (CHECK ONLY ONE)
1 ■ ASPHALT
2 ☐ CONCRETE
3 ☐ GRAVEL
4 ☐ DIRT
5 ☐ OTHER

18 - TYPE OF LOCATION (CHECK ONLY ONE)
1 ☐ INTERSECTION
2 ☐ JUNCTION AREA
3 ■ NON-JUNCTION AREA
4 ☐ DRIVEWAY ACCESS
5 ☐ ALLEY ACCESS

19 - INTERSECTION RELATED
YES ☐ NO ■

20 - SPECIAL LOCATION (CHECK ONLY ONE)
1 ☐ SCHOOL CROSSING
2 ☐ PEDESTRIAN CROSSWALK (STRIPED)
3 ☐ PEDESTRIAN CROSSWALK (NO STRIPING)
4 ☐ BRIDGE
5 ☐ TUNNEL
6 ☐ RR CROSSING
7 ☐ ALLEY
8 ☐ BIKE PATH
9 ☐ 2-WAY LEFT TURN LANE

21 - UNUSUAL ROAD CONDITION (CHECK ONLY ONE)
1 ☐ UNDER CONSTRUCTION-TRAFFIC ALLOWED
2 ☐ UNDER CONSTRUCTION-NO TRAFFIC ALLOWED
3 ☐ UNDER REPAIRS
4 ☐ HOLES, RUTS, BUMPS
5 ☐ OBSTRUCTION-PROTECTED
6 ☐ OBSTRUCTION-UNPROTECTED
7 ☐ OBSTRUCTION-UNLIGHTED AT NIGHT
8 ☐ DEFECTIVE SHOULDERS
9 ☐ CHANGING ROAD WIDTH
10 ☐ FLOODED
11 ☐ TEMPORARY LANE CLOSURE

22 - TRAFFIC CONTROL DEVICES LEGEND: A-DEVICE PRESENT B-DAMAGED OR NON FUNCTIONAL PRIOR TO ACCIDENT (CHECK ANY THAT APPLY)

	A	B
1 STOP AND GO SIGNAL	☐	☐
2 YIELD SIGN	☐	☐
3 STOP SIGN	☐	☐
4 WARNING SIGN	☐	☐
5 RAILROAD SIGNAL	☐	☐
6 FLASHING SIGNAL	☐	☐
7 FLAGMAN OR OFFICER	☐	☐

23 - NON INTERSECTION ROAD CHARACTER (CHECK ONLY ONE)
1 ☐ 2 WAY STRIPED CENTERLINE
2 ☐ 2 WAY NO STRIPE
3 ☐ 2 WAY PAINTED MEDIAN
4 ☐ 2 WAY RAISED MEDIAN
5 ☐ 2 WAY BARRIER MEDIAN
6 ■ 2 WAY DEPRESSED MEDIAN
7 ☐ 2 WAY EXTENDED MEDIAN
9 ☐ 1 WAY STREET

24 - ROAD GRADE (CHECK ONLY ONE)
1 ■ LEVEL
2 ☐ DOWNGRADE
3 ☐ UPGRADE
4 ☐ HILLCREST
5 ☐ DIP

25 - UNUSUAL ROAD SURFACE CONDITION (CHECK ONLY ONE)
1 ☐ WET
2 ☐ LOOSE SAND, DIRT OR GRAVEL
3 ☐ SNOWY ICY
4 ☐ FRESH OIL
5 ☐ OTHER
6 ☐ UNKNOWN

26 - PHYSICAL CONDITION (TWO CHOICES PER PERSON MAY BE SELECTED)

	1	2
1 NO APPARENT DEFECTS	■	■
2 HAD BEEN DRINKING	☐	☐
3 APPEARED TO BE UNDER INFLUENCE OF DRUGS	☐	☐
4 ILL/ABILITY INFLUENCED	☐	☐
5 SLEEPY/FATIGUED	☐	☐
6 OTHER BODILY DEFECTS/INFIRMITIES	☐	☐
7 UNKNOWN	☐	☐

27 - VIOLATIONS/BEHAVIOR (TWO CHOICES PER PERSON MAY BE SELECTED)

	1	2
1 NO IMPROPER DRIVING	☐	☐
2 SPEED TOO FAST FOR CONDITIONS	■	■
3 EXCEEDED LAWFUL SPEED	☐	☐
4 FAILED TO YIELD RIGHT-OF-WAY	☐	☐
5 FOLLOWED TOO CLOSELY	☐	☐
6 RAN STOP SIGN	☐	☐
7 DISREGARDED TRAFFIC SIGNAL	☐	☐
8 MADE IMPROPER TURN	☐	☐
9 DROVE IN OPPOSING TRAFFIC LANE	☐	☐
10 KNOWINGLY OPERATED WITH FAULTY OR MISSING EQUIPMENT	☐	☐
11 REQUIRED MOTORCYCLE SAFETY EQUIPMENT NOT USED	☐	☐
12 PASSED IN NO PASSING ZONE	☐	☐
13 UNSAFE LANE CHANGE	☐	☐
14 OTHER UNSAFE PASSING	☐	☐
15 INATTENTION	☐	☐
16 DID NOT USE CROSSWALK	☐	☐
17 WALKED ON WRONG SIDE OF ROAD	☐	☐
18 OTHER	☐	☐
19 UNKNOWN	☐	☐

28 - VEHICLE CONDITION (TWO CHOICES PER VEHICLE MAY BE SELECTED)

	1	2
1 NO APPARENT DEFECTS	■	■
2 DEFECTIVE BRAKES	☐	☐
3 DEFECTIVE STEERING	☐	☐
4 DEFECTIVE HEADLIGHTS	☐	☐
5 DEFECTIVE TAIL LIGHTS	☐	☐
6 DEFECTIVE TURN SIGNAL	☐	☐
7 PUNCTURE OR BLOWOUT	☐	☐
8 ONE OR MORE SMOOTH TIRES	☐	☐
9 FIRE	☐	☐
10 DEFECTIVE WINDSHIELD WIPER	☐	☐
11 DEFECTIVE EXHAUST SYSTEM	☐	☐
12 OTHER DEFECTS	☐	☐
13 NO TRAILER BRAKES	☐	☐
14 UNKNOWN	☐	☐

29 - TRAFFIC UNIT ACTION (CHECK ONE PER UNIT)

	1	2
1 GOING STRAIGHT AHEAD	■	■
2 SLOWING IN TRAFFICWAY	☐	☐
3 STOPPED IN TRAFFICWAY	☐	☐
4 MAKING LEFT TURN	☐	☐
5 MAKING RIGHT TURN	☐	☐
6 MAKING U TURN	☐	☐
7 ENTERING ALLEY OR DRIVEWAY	☐	☐
8 LEAVING ALLEY OR DRIVEWAY	☐	☐
9 OVERTAKING/PASSING	☐	☐
10 CHANGING LANES	☐	☐
11 BACKING	☐	☐
12 AVOIDING VEHICLE, OBJECT, PEDESTRIAN	☐	☐
13 ENTERING PARKING POSITION	☐	☐
14 LEAVING PARKING POSITION	☐	☐
15 PROPERLY PARKED	☐	☐
16 IMPROPERLY PARKED	☐	☐
17 DRIVERLESS MOVING VEHICLE	☐	☐
18 CROSSING ROAD	☐	☐
19 WALKING WITH TRAFFIC	☐	☐
20 WALKING AGAINST TRAFFIC	☐	☐
21 STANDING	☐	☐
22 LYING	☐	☐
23 GETTING ON OR OFF VEHICLE	☐	☐
24 WORKING ON OR PUSHING VEHICLE	☐	☐
25 WORKING ON ROAD	☐	☐
26 OTHER	☐	☐
27 UNKNOWN	☐	☐

30 - VISION OBSCUREMENT (CHECK ONE PER UNIT)

	1	2
1 NOT OBSCURED	■	■
2 BY PARKED / STOPPED VEHICLE	☐	☐
3 BY MOVING VEHICLE	☐	☐
4 BY BUILDING	☐	☐
5 BY EMBANKMENT	☐	☐
6 BY SIGNBOARD	☐	☐
7 BY HILLCREST	☐	☐
8 BY LOAD ON VEHICLE	☐	☐
9 BY TREES, BUSHES	☐	☐
10 BY HEADLIGHT	☐	☐
11 BY SUN GLARE	☐	☐
12 BECAUSE OF BAD WEATHER	☐	☐
13 OTHER	☐	☐
14 RAIN, SNOW, FOG ON WINDSHIELD	☐	☐
15 WINDSHIELD OBSCURED OTHER	☐	☐
16 UNKNOWN	☐	☐

FOR ADOT USE

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DEPARTMENT OF PUBLIC SAFETY

VEHICLE REMOVAL REPORT

LOCATION

HIGHWAY/STREET/PRIVATE PROPERTY | MILEPOST: 78

IN/OUTSIDE CITY | COUNTY

LICENSE/VEHICLE DESCRIPTION

LICENSE/NO. | STATE | YEAR: 95 | TYPE: PASS | ☐ FRONT PLATE ☒ REAR PLATE

VEHICLE COLOR (top/btm): PURPLE | YEAR: 95 | MAKE: HYUNDAI | MODEL: ELANTRA | STYLE: 4DR

VEHICLE IDENTIFICATION NO. (VIN): KMHJF23R8SU | ODOMETER - no tenths: 8097

SPECIAL MARKINGS (damaged, customized, etc.): RIGHT FRONT ACCIDENT DAMAGE

DATE OF FIRST CONTACT WITH VEHICLE: | TIME | ☐ VEHICLE REMOVAL NOTICE AFFIXED

DAY OF WEEK (circle One): S M (T) W T F S

STOLEN VEHICLE: ☐ YES ☒ NO

VEHICLE CONDITION: ☐ DRIVEABLE ☐ BURNED ☐ STRIPPED ☐ VANDALIZED ☒ WRECKED ☐ SEE REMARKS

TOWING AND STORAGE INFORMATION

TOWING COMPANY NAME | OFFICER ID NO. FROM STICKER

STORAGE YARD ADDRESS: S

DATE CALLED | TIME ARRIVED | SERVICE TYPE: ☐ ROTATION ☐ AGREEMENT ☐ OPERATOR'S REQUEST

DRIVER'S/OWNER'S NAME | ADDRESS

STATE | ZIP CODE | TELEPHONE NO.

REASON

- ☒ ACCIDENT
- ☐ > 2 hrs. METRO FWY.
- ☐ > 4 hrs. RURAL FWY.
- ☐ > 48 hrs. OTHER HWY.
- ☐ ARREST
- ☐ SEIZURE
- ☐ MOTORIST ASSIST
- ☐ OTHER (Specify)

ACCESSORY CONDITION

I = Installed; M = Installed but missing; D = Damaged

	I	M	D
DRIVING LIGHTS			✓
GRILL			✓
HOOD			✓
R/SIDE MIRROR	✓		
RF TIRE			✓
RR TIRE	✓		
R SIDE			✓
TRUNK LID	✓		
L/SIDE MIRROR	✓		
SPOTLIGHT			
LF TIRE	✓		
LR TIRE	✓		
L SIDE	✓		
TOP	✓		
GLASS			✓
TRUNK ☒ Locked	✓		
SPARE			
JACK			
MECHANICAL			
ENGINE	✓		
BATTERY	✓		
TRANSMISSION ☒ Stand. ☐ Auto	✓		
INTERIOR ☐ LOCKED	✓		
GLOVEBOX ☐ LOCKED	✓		
CB RADIO			
STEREO (Tape)	✓		
RADIO ☒ AM ☒ FM	✓		
CLOCK	✓		
FRONT SEAT	✓		
REAR SEAT	✓		
R/VIEW MIRROR	✓		

WHEEL TYPE: STEEL | HUBCAPS (# 4): PLASTIC

☒ IGNITION KEY
☐ REGISTRATION
☐ FIREARMS ☐ CAMPER
☐ CARGO
☐ VESSEL AS LOADED

VEHICLE REMOVAL AUTHORIZATION

AS OPERATOR OF THE ABOVE, DESCRIBED VEHICLE, I REQUEST THAT THE VEHICLE BE:

- ☐ REMOVED TO:
- ☐ SECURED AND LEFT TEMPORARILY AT THE SCENE.
- ☐ RELEASED TO:

AUTHORIZED SIGNATURE: | TIME: ☐ AM ☐ PM

REMARKS

- Document vehicle inventory on the Evidence or Nonevidentiary Property Inventory Supplement, DPS 802-01825.

  Attach original copy of the Vehicle Removal Report to the appropriate Evidence Control or the Nonevidentiary Property Control form and submit the forms along with your evidence or property items.
- The officer is to distribute the report copies based on the enforcement action taken.

REMARKS:

1 GRN DUFFEL BAG (PERSONAL CLOTHING)
1 BLK HANGING BAG (PERSONAL CLOTHING)
1 BRN BAG MISC (PERSONAL EFFECTS)
TRUNK FILLED WITH PERSONAL CLOTHES AND EFFECTS.
SONY DISCMAN PORTABLE CD PLAYER

OFFICER'S NAME | ID NO. | LOCATION CODE

Distribution: yellow - Evidence; pink - Department Records; green - District Office/Prosecutor; white - Towing Company/District

DPS 802-01285 12/9

BEST AVAILABLE COPY

DEPARTMENT OF PUBLIC SAFETY
VEHICLE REMOVAL REPORT

LOCATION

HIGHWAY/STREET/PRIVATE PROPERTY: —
MILEPOST: 79.4
IN/OUT OF CITY:
COUNTY:

LICENSE/VEHICLE DESCRIPTION

LICENSE/NO.	STATE	YEAR	TYPE	
—	—	95	961	☐ FRONT PLATE ☑ REAR PLATE

VEHICLE COLOR (top/btm)	YEAR	MAKE	MODEL	STYLE
BRN	90	FORD	TAURUS	4DR

VEHICLE IDENTIFICATION NO. (VIN): 1FACP52U4LG.
ODOMETER - no tenths: 84278
SPECIAL MARKINGS (damaged, customized, etc.): NONE

DAY OF WEEK (circle One)	STOLEN VEHICLE	VEHICLE CONDITION
S M T W T F S	☐ YES ☑ NO	☐ DRIVEABLE ☐ BURNED ☐ STRIPPED ☐ VANDALIZED ☑ WRECKED ☐ SEE REMARKS

DATE OF FIRST CONTACT WITH VEHICLE:	TIME	☐ VEHICLE REMOVAL NOTICE AFFIXED
—		

REASON

- ☑ ACCIDENT
- ☐ >2 hrs. METRO FWY.
- ☐ >4 hrs. RURAL FWY.
- ☐ >48 hrs. OTHER HWY.
- ☐ ARREST
- ☐ SEIZURE
- ☐ MOTORIST ASSIST
- ☐ OTHER (Specify)

TOWING AND STORAGE INFORMATION

TOWING COMPANY NAME: —
OFFICER ID NO. FROM STICKER:
STORAGE YARD ADDRESS:

CALLED	TIME ARRIVED	SERVICE TYPE:	
400	1430	☑ ROTATION ☐ AGREEMENT	☐ OPERATOR'S REQUEST

DRIVER'S/OWNER'S NAME: —
ADDRESS:
STATE: ZIP CODE: TELEPHONE NO.:

ACCESSORY CONDITION

I = Installed; M = Installed but missing; D = Damaged

	I	M	D
DRIVING LIGHTS		—	
GRILL	X		
HOOD	X		
R/SIDE MIRROR	X		
RF TIRE	X		
RR TIRE	X		
R SIDE			X
TRUNK LID			X
L/SIDE MIRROR	X		
SPOTLIGHT	—		
LF TIRE	X		
LR TIRE	X		
L SIDE			X
TOP			X
GLASS			X
TRUNK ☐ locked			X
SPARE	X		
JACK	X		
MECHANICAL ENGINE	X		
BATTERY	X		
TRANSMISSION ☐ Stand. ☑ Auto	X		
INTERIOR ☐ LOCKED	X		
GLOVEBOX ☐ LOCKED	X		
CB RADIO	—		
STEREO (Tape)	—		
RADIO ☐ AM ☐ FM	X		
CLOCK	X		
FRONT SEAT	X		
REAR SEAT	X		
R/VIEW MIRROR	X		

WHEEL TYPE: STEEL
HUBCAPS (# 4)
☐ IGNITION KEY
☐ REGISTRATION
☐ FIREARMS ☐ CAMPER
☐ CARGO
☐ VESSEL AS LOADED

VEHICLE REMOVAL AUTHORIZATION

AS OPERATOR OF THE ABOVE, DESCRIBED VEHICLE, I REQUEST THAT THE VEHICLE BE:

- ☐ REMOVED TO: —
- ☐ SECURED AND LEFT TEMPORARILY AT THE SCENE.
- ☐ RELEASED TO: —

AUTHORIZED SIGNATURE: — TIME: — ☐ AM ☐ PM

REMARKS

- Document vehicle inventory on the Evidence or Nonevidentiary Property Inventory Supplement, DPS 802-01825.

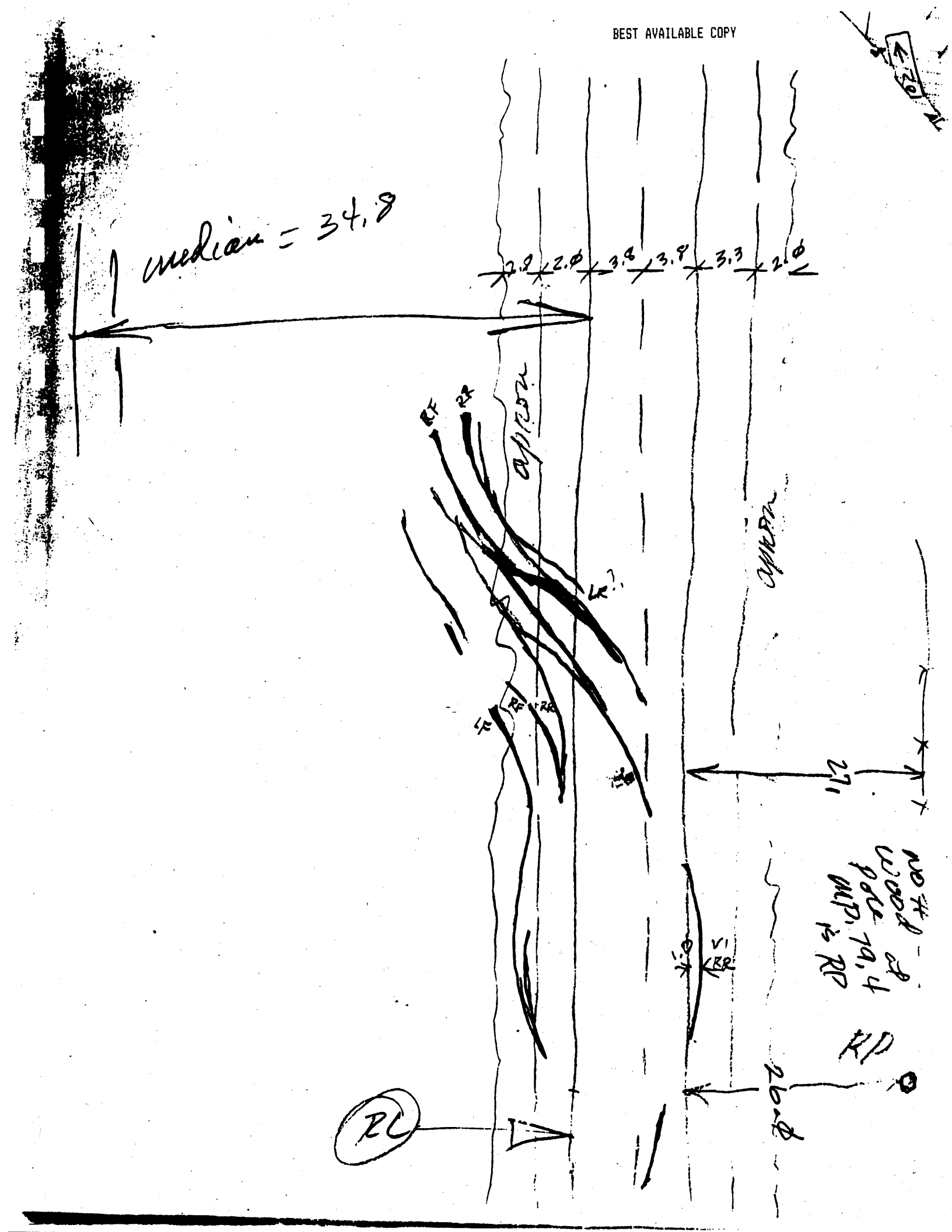
  Attach original copy of the Vehicle Removal Report to the appropriate Evidence Control or the Nonevidentiary Property Control form and submit the forms along with your evidence or property items.
- The officer is to distribute the report copies based on the enforcement action taken. *

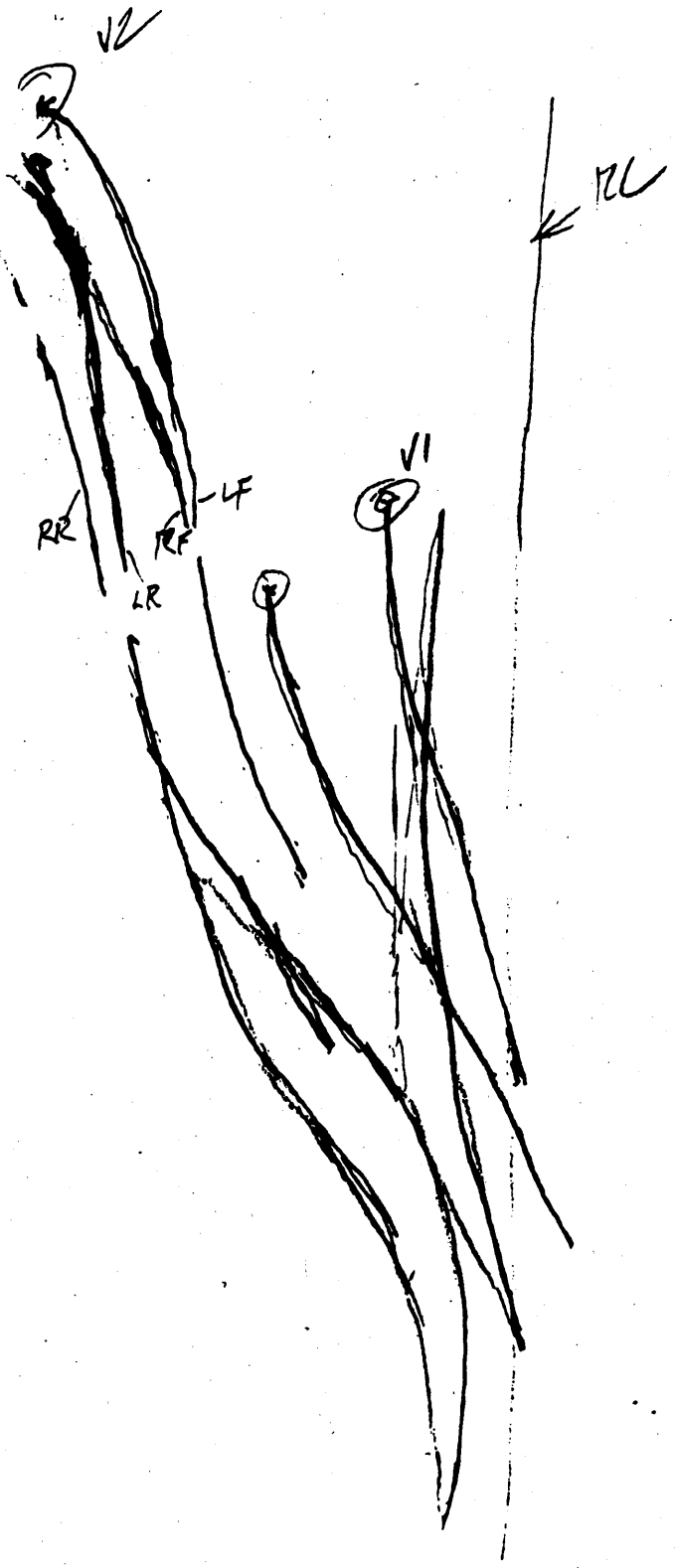
REMARKS: DRIVER REMANDED WITH VEHICLE

OFFICER'S NAME: — ID NO.: — LOCATION CODE:

Distribution: yellow - Evidence; pink - Department Records; green - District Office/Prosecutor; white - Towing Company/District

DPS 802-01286 12/91





RF (WEST)

Begin (V1) scuff - 17.9 W - 4.8 S.
End V1 " - 2.3 W - 5.1 S.

0 (EAST) -

Begin V2 (LF/LR) sep pt. - 6.0 E - 1.6 N.
Begin V1 (RR) scuff - 9.0 (ON S. EQ-line - 8.0 (SO)
Imp V2 LF - 24.6 - 2.6 N.
Imp V2 LR - 24.6 - 3.3 N.
X's SO. Eqline (Ends) - 32.6 - 7.6 SO)
Imp V2 LR - 32.6 - 3.4 N.
Begin (R) on CL - 41.0 - 3.8 SO)
V2 LR - 41.0 - 3.2 (N)
Imp V2 RF/RR @ sep. - 44.9 - 1.7 N)
End V2 L - 44.9 - 3.1 (N.)
Imp V1 - R - 44.9 - 3.0 (SO)
Begin V1 (R) on CL - 51.3 - 3.8 SO)
Imp V2 RR - 51.3 - 1.6 N.
" RF - 51.3 - 2.0 N.
" " LR - 51.3 - 3.4 N,
" V1 - R - 51.3 - 1.3 (SO)
Sep pt. V1 RF/LF - 54.6 - .5 SO)
" V1 - RR - 54.6 - 3.1 SO)
Imp V2 RR - 54.6 - 1.7 N.
" " RF - 54.6 - 2.5 N.
" " LF - 54.6 - 3.9 N
" RF XS EL - 55.9 - 0.0
" LF XS RL - 56.8 - 0.0
" RR X's RL - 64.6 E - 0.0
" V2 LF - 64.6 - 1.6 N.
[redacted]
" RF - V2/RR - X'over - 64.6 - 2.6 N
" V2 RF - 64.6 - 4.2
" " LF - 64.6 - 5.4
Begin V1 LR on RL - 66.8 E - 0.0 on RL
Imp V1 RR - 66.8 - .8 No.
" V1 LF - 66.8 - 2.0 No
" V1 - RF - 66.8 - 3.0 N.
" V2 RR - 66.8 - 3.0 N.
" V2 RF - 66.8 - 4.6 N.
End V2 LF - 66.8 - 5.8 N.
Imp V1 LR - 75.6 - 2.1 (N)
X'over V1 - RR/LF - 75.6 - 3.5 N)
X'over V1 - RF/V2 RR - 75.6 - 4.9 N)
Imp V2 - RF - 75.6 - 6.4 N
" V2 - LF - 75.6 - 7.6 N

Imp V1 LR - 82.0 - 3.7 (N)
Imp V1 LF - 82.0 - 4.7 "
" V1 - RR - 82.0 - 5.2 "
" V1 - RF - 82.0 - 6.3"
X'over V1 - RF/V2 (LR) - 82.0 - 6.3
Imp V2 (LF) - 82.0 - 9.0 (N)
End V2 (RF) - 82.0 - 9.6 (N)

[redacted]
Imp V1 - LR - 90.0 - 5.7 (N)
" V1 - LF - 90.0 - 6.3 "
" V1 - RR - 90.0 - 7.2 "
" V1 - RF - 90.0 - 7.9 "
" V2 - L - 90.0 - 9.5 "
" V2 - R - 90.0 - 11.5 "

Begin V2 (L) - 97.6 - 11.1 (N)

X'over V1 - RR/LF - 97.6 - 8.3 (N)
End (LF) V1 - 99.0 - 9.3 (N.)
End (RF) V1 - 99.8 - 10.4 (N)
End (LR) V1 - 100.4 - 7.4 N
End (RR) V1 - 101.1 - 8.5 N.
Imp V2 (RR) - 101.1 - 11.8 N.
Imp V2 - (RF/LR) X'over - 101.1 - 13.3 N

Imp V2 - LF - 107.8 - 12.7 (N)
Begin V2 - LR - 107.8 - 13.3 (N)
Imp V2 RF - 107.8 - 14.3 (N)
Begin V2 (RR) - 109.1 - 15.1 (N)

Imp V2 - LF - 120.5 - 16.4 (N)
" " X'over - LR/RF - 120.5 - 17.6 (N)
" " RR - 120.5 - 19.0 (N)
Imp - V2 LF - 123.5 - 18.5 (N)
" X'over - LR/RF - 123.5 - 19.8 (N)
" V2 - RR - 123.5 - 21.3 (N)
End (FRP) V2 - RR - 131.0 - 30.0 (N)
" " " - LR - 131.9 - 30.9 (N)
" " " - RF - 132.5 - 28.4 N)
" " " - LF - 133.3 - 29.9 N)

3-

AutoNet Vehicle Data Sheet

AutoNet Vehicle Data Sheet

Hyundai 1995 Elantra

Step-Up Korean Subcompact
Hyundai added the subcompact Elantra to its product line for model year 1992. Fitting between the company's subcompact Excel and midsize Sonata sedans, the Elantra is built on a 98.4-inch wheelbase and has an overall length of 171.6 inches.
Elantra uses a 1.6-liter, 16-valve four cylinder of 113-HP, mated to a five-speed manual transmission. Optional is a larger, 1.8-liter, 16-valve 124-HP power plant that can be had with either the five-speed manual or a four-speed automatic transmission. The Elantra is available in GL and GLS trim levels; the larger engine is standard on the GLS.
Hyundai gave the Elantra a slight facelift for model year 1994, with a revised front end, including new headlamps, and redesigned taillights. Overall, the effect was to add a bit more roundness and detail design flair to the Elantra's conservative exterio design. A driver's-side airbag was also introduced at that time; antilock brakes are an option on the better-equipped GLS version..
Minor color and trim changes mark the 1995 Elantra, as Hyundai gears up to introduce an all-new version of this model in the fall of this year as a new '96.
Hyundai Elantra buyers averaged about 36 years of age in 1994; some thirty percent were younger than 30. Most Elantra drivers--over 60 percent--were women.

	Hyundai Elantra Base 4DR 5M SDN 40423A	Hyundai Elantra GLS 4DR 5M SDN 40443A
Prices and Standard Engine:		
Base Price	$ 10,199.00	$ 11,599.00
Dealer Invoice	$ 9,207.00	$ 10,234.00
Destination Charge	$ 405.00	$ 405.00
Package Required	No	No
Standard Engine	1.6L I4	1.8L I4
Standard Trans.	5 Speed Manual	5 Speed Manual
Sales and Origin:		
Sales Volume	45056	45056
Where Built	Korea	Korea
Company Ctry	Korea	Korea
Exterior Dimensions & Weight:		
Curb Weight (MT/AT)	2500/2628	2582/2628
Wt Dist Manual	NL	NL
Wt Dist Auto	NL	NL
Wheelbase	98.4	98.4
Track (Fr/Rr)	56.9/56.3	56.9/56.3
Length	172.8	172.8
Width	66.1	66.1
Height	52.0	52.0
Top Type	HF	HF
Top Type-Opt	NA	NA
Capacity & Volume:		
Cargo Vol EPA	12	12
Cargo Vol Mfr	11.8	11.8
Fuel Capacity	13.7	13.7
Tow Capac. (Std/Max)	1000/1000	1000/1000
Seating (Std)	5	5
Seating (Opt)	NA	NA
EPA Class	COMPACT	COMPACT
Pass. Vol (EPA)	90	90
Pass. Vol (Mfr)	90.2	90.2
Interior Dimensions:		
Head Room (Fr/Rr)	38.4/37.6	38.4/37.6
Leg Room (Fr/Rr)	42.6/33.4	42.6/33.4
Shldr Room (Fr/Rr)	54.3/53.4	54.3/53.4
Hip Room (Fr/Rr)	50.9/54.7	50.9/54.7
Steering, Suspension, Brakes:		
Steer Diam.(Curb)	33.8	33.8
Engine Loc	FR	FR
Engine Drv	FWD	FWD
Brakes (Fr)	Disc	Disc
Brakes (Rr)	Drum	Drum
Steering	R&P	R&P
Suspension (Fr)	Ind	Ind
Suspension (Rr)	Ind	Ind

Tires	175/65R14	185/60R14

Warranty:

Basic Time (Mos)	36	36
Basic Miles	36000	36000
Pwrtrain Time (Mos)	60	60
Pwrtrain Miles	60000	60000
Rust Time (Mos)	60	60
Rust Miles	100000	100000

ENGINES:

Engine	Displace. / Fuel Sys / Horsepower	Valves / Fuel / Torque	BorexStroke / Transmission / Final Drive	Compression / Turbo / Fuel Ec.(cty/hwy)
1.6L I4	1596/97	16	3.24x2.95	9.2
	MPFI	Gas	5Spd Man OD	No
	113 @ 6000	102 @ 5000	4.59	22/29
1.8L I4	1796/110	16	3.17x3.46	9.2
	MPFI	Gas	5Spd Man OD	No
	124 @ 6000	116 @ 4500	4.59	21/28
1.8L I4	1796/110	16	3.17x3.46	9.2
	MPFI	Gas	4Spd Auto OD	No
	124 @ 6000	116 @ 4500	4.06	22/29

Customer Rebates and Incentives:

Year	Amount	Expires	Comments
1994	$1,000*	5/31/95	*Buyer may choose an extra $250 rebate or free service for 2 years.
1995	$750	5/31/95	

STANDARD EQUIPMENT for Hyundai Elantra:
[Applies to All unless otherwise noted]
Feature [Applicability]

COMFORT AND CONVENIENCE
Ashtrays, Front Illuminated & Dual Rear
Assist Grips, FR & RR (3)
Cigarette Lighter, Illuminated
Climate Controls, Rotary Type
Clock, Digital Quartz
Door Locks, Power
[GLS]
Heater Ducts, Rear Seat
Steering Wheel, Tilt
[GLS]
Windows, Power
[GLS]

CUSTOMER ASSISTANCE/WARRANTY
Hyundai 24 Hour Roadside Assistance Program, 36 Months/36,000 Miles

DECOR AND TRIM
Carpeting, Cargo Area Side Trim
[GLS]
Door Trim, Carpeted Kick Panels
[GLS]
Door Trim, Full W/Cloth Inserts
Seat Trim, Full Face Cloth
[BASE]
Seat Trim, Deluxe Full Cloth
[GLS]
Steering Wheel, Color Keyed 4 Spoke W/ Supplemental Drivers Side Air Bag
Grille, Bodycolor
[BASE]
Grille, Bodycolor With Charcoal Accent
[GLS]
Moldings, Bodycolor Bodyside W/Black Accent
[BASE]
Moldings, Bodycolor Bodyside W/Bright Accent
[GLS]
Moldings, Bright Side Window Accents
[GLS]
Moldings, Bodycolor Rocker Panel Molding
[GLS]
Tailpipe, Bright Trim
[GLS]

DOORS
Door Handle, Bodycolor

ENGINES
Engine, 1.6L I4 DOHC 16V
[BASE]
Engine, 1.8L I4 DOHC 16V
[GLS]

EXTERIOR LIGHTING
Headlamps, Aerodynamic Halogen

FLOOR COVERING
Carpeting, Cargo Area Floor
Carpeting, Cut Pile
[BASE]
Carpeting, Deluxe Cut Pile
[GLS]

GLASS AND MIRRORS
Defoggers, Front Side Windows
Defroster, Electric Rear Window
Mirrors, Passengers Visor Vanity
Glass, Tinted
Glass, Windshield Sunshade Band
Mirrors, Dual Remote Control Black
[BASE]
Mirrors, Dual Power Remote Control Body Color
[GLS]

INSTRUMENTATION
Gauges, Tachometer
[GLS]
Gauges, Temperature & Trip Odometer
Warning Lights, Door Ajar, Trunk Open
Warning Lights, Low Fuel

INTERIOR LIGHTING
Door Trim, Front Courtesy Lamps
[GLS]
Illumination, Cargo Area
Illumination, Front Map Light's (2)
[GLS]
Illumination, Overhead Courtesy

MECHANICAL AND BODY
Battery, 12 Volt, Maintenance Free
Body Construction, Unitized
Front Wheel Drive
Fuel Injection, Electronic Multi Port
Bumpers, Bodycolor W/Charcoal Accent
[BASE]
Bumpers, Bodycolor W/Bright Accent
[GLS]
Alternator, 75 AMP
Electronic Distributionless Ignition

REMOTES AND RELEASES
Remote, Fuel Door & Hood Releases
Remote, Trunk Release

SAFETY
Door Locks, Rear Child Safety
Seat Belts, Color Keyed (5)
Seat Belts, Front 3 Point Passive, Passengers Side
Seat Belts, Front 3 Point Non Passive Drivers Side
Seat Belts, Rear 3 Point (2)
Seat Belts, Rear 2 Point, Center
Steering Wheel, Collapsible Steering Column
Wipers, Front Variable Intermittent

SEATS
Seats, Drivers 6 Way Adjustable
[GLS]
Seats, Front Reclining Buckets W/ Adjustable Headrests
Seats, Rear, 60/40 Split Fold Down
[GLS]

SOUND SYSTEM AND CLOCK
Audio System, AM/FM ETR 40 Watt Stereo Cassette W/4 Speakers
[GLS]
Antenna, Fixed Mast

STEERING, BRAKING, TRACTION
Brakes, Front Ventilated Power Assisted Discs
Brakes, Rear Self Adjusting Drums With Wear Warning Sensor
Steering, Power Rack & Pinion

STORAGE
Coin Box
Console, Full Center W/Storage Box
Console, Full Center W/Covered Storage Box
[GLS]
Cupholder, Dual

Door Trim, Front Map Pockets
[GLS]
Glove Box, Lockable

SUSPENSION
Stabilizer Bars, FR & RR
Suspension, Front Independent MacPherson Strut With Coil Springs
Suspension, Rear Independent 3-Link Torsion Beam With Coil Springs and Lateral Rod
Shock Absorbers, Oil/Hydropneumatic Damping Front & Rear
[BASE]
Shock Absorbers, Gas Pressurized Oil Filled Front & Rear
[GLS]

TRANSMISSIONS
Transmission, 5 Speed Manual W OD

WHEELS AND TIRES
Tires, SBRP175/65R14 With Full Wheel Covers, 5.5JX14 Steel Wheels
[BASE]
Tires, SBRP185/60HR14 With Deluxe Full Wheel Covers, 5.5JX14 Steel Wheels
[GLS]

OPTIONAL EQUIPMENT for Hyundai Elantra:
[Applies to All unless otherwise noted]

ID	Option/Package/[Applicability]	MSRP/Invoice
	PEP OR PEG PACKAGES	
02AB	Base Package 2 [BASE] - ETR AM/FM Stereo Cassette W 4 Speakers	$ 350/268
03AC	Base Package 3 [BASE] - ETR AM/FM Stereo Cassette W 4 Speakers - Air Conditioning, Non-CFC	$ 1245/998
04AD	Base Package 4 [BASE] - ETR AM/FM Stereo Cassette W 4 Speakers - Air Conditioning, Non-CFC - Cruise Control	$ 1465/1178
10AJ	GLS Package 10 [GLS] - Air Conditioning, Non-CFC - Cruise Control - ETR AM/FM Stereo Cassette W 4 Speakers	$ 1303/1053
11AK	GLS Package 11 [GLS] - ETR AM/FM Stereo Cassette W 4 Speakers - Air Conditioning, Non-CFC - Cruise Control - 5.5JX14 Alloy Wheels	$ 1643/1330
12AL	GLS Package 12 [GLS] - ETR AM/FM Stereo Cassette W 4 Speakers - Air Conditioning, Non-CFC - Cruise Control - Sunroof, Power Tilt/Slide Glass W Inner Sunshade - Front Map Lights (2)	$ 1813/1469
13AM	GLS Package 13 [GLS] - ETR AM/FM Stereo Cassette W 4 Speakers - Air Conditioning, Non-CFC - Cruise Control - 4 Wheel Antilock Brake System	$ 2078/1764
14AN	GLS Package 14 [GLS] - ETR AM/FM Stereo Cassette W 6 Speakers - Air Conditioning, Non-CFC - 5.5JX14 Alloy Wheels - Cruise Control - Sunroof, Power Tilt/Slide Glass W Inner Sunshade - Front Map Lights (2) - 4 Wheel Antilock Brake System	$ 3120/2605
15AO	GLS Package 15	$ 2345/1894

[GLS]
- ETR AM/FM Stereo Cassette W 6 Speakers
- Air Conditioning, Non-CFC
- 5.5JX14 Alloy Wheels
- Cruise Control
- Sunroof, Power Tilt/Slide Glass W Inner Sunshade
- Front Map Lights (2)

DOORS		
DG	PIO - Door Edge Guards	$ 36/23
EMISSIONS AND EXHAUST		
CA	California Emissions	$ NC/NC
FLOOR COVERING		
CF	PIO - Carpeted Floor Mats	$ 58/38
MISCELLANEOUS EXTERIOR		
MG	PIO - Mud Guards	$ 78/47
WD	PIO - Sunroof Wind Deflector [GLS]	$ 52/30
SOUND SYSTEM AND CLOCK		
CD	PIO - CD Player	$ 395/290
STORAGE		
AR	PIO - Console Armrest	$ 108/70
TRANSMISSIONS		
ATR1	Transmission, 4 Speed Electronically [BASE] Controlled W Lock-Up Torque Converter & Power/Economy Dual Mode 1.8L Engine I4 DOHC 16V	$ 1300/1169
ATR2	Transmission, 4 Speed Electronically [GLS] Controlled W Lock-Up Torque Converter & Power/Economy Dual Mode	$ 725/651