Remote Not In Traffic Surveillance Power Window Entrapment Investigation
Dynamic Science, Inc. (DSI), Case Number DS08030
1997 GMC Jimmy
Colorado
July 2008

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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.

Technical Report Documentation Page

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16. Abstract

This remote investigation focused on the injuries to a 4-year-old female rear left passenger of a 1997 GMC Jimmy sport utility vehicle. The child was injured when her neck became entrapped in the power window of the Jimmy. The Jimmy was equipped with power windows with controls mounted on the forward aspect of the second row passenger's armrest. The Jimmy had been driven to the incident site by a 76-year-old female. The 4-year-old female child was positioned in the second row of the vehicle. The incident occurred in the parking lot of an automotive retail store and service facility. The driver exited the vehicle and went inside the business. The vehicle was left running with the air conditioner on. The doors were not locked. The driver stated that she was inside the business for approximately five minutes. When she returned to the vehicle she found the child entrapped by the power window. She was extricated by an employee of the business. CPR was initiated and the child was transported to a local hospital where she was treated and released. She sustained a linear abrasion to the right side of her neck and several contusions. The incident was investigated by the police as a potential child abuse (cruelty toward child) case. The report was not forwarded to the state crash database.

17. Key Words	18. Distribution Statement
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Dynamic Science, Inc.
Crash Investigation
Case Number: DS08030

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Background

This remote Not In Traffic Surveillance (NITS) power window entrapment investigation was initiated in response to an online news article reporting the injury of a 4-year-old female child whose head became entrapped in a power window. The investigation focused on the power window switch configuration and the closing forces of the rear door windows of a 1997 GMC Jimmy sport utility vehicle (**Figure 1**).

Figure 1. Subject vehicle, 1997 GMC Jimmy

This incident was identified by the National Highway Traffic Safety Administration (NHTSA) from a news media source. Details of the incident were forward to DSI on September 4, 2008. DSI contacted the investigating police agency, obtained the incident report, and requested the on-scene photos. The incident was investigated by the police as a potential child abuse (cruelty toward child) case. The report was not forwarded to the state crash database. DSI was assigned the case as a remote investigation on September 10, 2008. The following information was obtained from the police incident report, on-scene photos, and the online news article. An exemplar vehicle was used to determine the closing force of the power window. The result of this test is discussed later in this report.

Summary

Incident Site

This incident occurred in the parking lot of a tire company at approximately 1505 hours. The asphalt surfaced parking lot was level and dry. At the time of the incident, the temperature was 35.6 degrees C (96 degrees F), with a wind speed of 14 km/h (9 mph) and 7% humidity. A satellite image of the incident site is included in this report as Attachment 1.

Figure 2. Location of subject vehicle at time of incident (looking east)

Pre-Incident

The 1997 GMC Jimmy 4-door sport utility vehicle had been driven to the incident site by a 76-year-old female. The 4-year-old female child was positioned in the second row of the vehicle. The incident occurred in the parking lot of an automotive retail store and service facility. The vehicle had been driven to the store earlier in the day for automotive service. When the driver returned to pick up the vehicle she found out that they did not accept checks as payment. She was allowed take the vehicle and go to the bank to get cash.

When she returned she parked the vehicle facing north in front of the front door of the business (**Figure 2**). The vehicle was left running with the air conditioner on. The doors were not locked. The driver stated that she was inside the business for approximately five minutes.

Vehicle Data

The subject vehicle of this investigation was a 1997 GMC Jimmy, 4-door sport utility vehicle. The vehicle was identified by the Vehicle Identification Number (VIN): 1GKDT13W3V2xxxxxx. The Jimmy was powered by a 4.3 liter, 6-cylinder engine that was linked to an automatic transmission. The interior was equipped with front bucket seats and a 3-passenger rear bench seat with forward folding seat backs. Standard features included power windows and power door locks with the master control switch panel located at the forward aspect of the driver's door armrest. The vehicle had a lockout feature on the driver's door to prevent passengers from operating the windows, which was not in use at the time of the incident.

Incident

It appears that in the driver's absence the child placed her head outside the window and activated the window with one of her knees. The average difference between top of the sternum and the top of the tibia for a female child between the ages 3.5-4.5 years was 55.1 cm (21.6 in)[1]. With the child on her knee(s), the child's neck would have been approximately 23.1 cm (9.0 in) above the window frame.

Figure 3. Second row left window

The driver returned to the vehicle but did not close the driver's door. She called out for the child, and when there was no response, she got out of the vehicle and saw the child. She began yelling for help. An employee of the store reported that he heard the driver screaming. He went to the GMC and saw that the child had her head caught in the second row left side window (**Figure 3**). There was what appeared to be dried saliva located on the outside of the window 10 cm (4 in) rear of the forward aspect of the B-pillar. The police reported seeing a smudge in the same general area which they attributed to the child's chin. The employee accessed the window control switch of the driver's door and lowered the second row window. Other employees arrived at that time and caught the child as she came out of the window. The child was placed on the rear seat and was not breathing.

[1]Anthropometry of Infants, Children and Youths To Age 18 For Product Safety Design, SAE International SP-450, p. 516.

Post-Incident

CPR was initially attempted while the child was in the vehicle. This continued for approximately one or two minutes. On the advice of the 911 operator, the child was moved inside the business and placed on the floor. As her head was being positioned to clear her airway, she began breathing on her own. Paramedics arrived shortly thereafter. The child was transported to a local hospital. She arrived at the hospital crying but not otherwise unresponsive. The emergency room physician noted the presence of petechia to her eye and neck areas which he found indicative of a strangulation type incident. There was also a linear abrasion located along the right side of the child's neck (**Figure 4**). The police noted a faint chest contusion, a dime size right shoulder contusion, two small left shoulder contusions, and small marks to the left side of her neck. The child was later flown to a local children's trauma center where she was hospitalized for an unknown number of days (between 1 and 4 days).

Figure 4. Linear abrasion to right side of child's neck

Child Passenger

The left rear child passenger in the GMC Jimmy was a 4-year-old female. The involved 4-year-old child was the great grandchild of the driver. Demographic data was not available

Child Passenger Injuries

Second Row Left Passnger Injuries: Injuries obtained from police report.

Injury	AIS Code	Injury Mechanism	Confidence Level
Linear abrasion, right side of neck	390202.1,1	Side glass	Certain
Chest contusion	490402.1,9	Unknown	Unknown
Contusion, right shoulder	790402.1,1	Door panel	Probable
Contusion, left shoulder	790402.1,2	Unknown	Unknown
Small marks to left side of neck	390099.1,2	Window frame	Probable

Power Window/Switch Configuration

The main power window switch control panel was mounted on the forward aspect of the second row left passenger's armrest in a near horizontal position (**Figure 5**). The switch panel consisted of four rocker-style switches for the four door windows with the front window controls located forward of the rear window controls. The driver's door window switch was equipped with an auto-down feature. According to the owner's manual, the power windows will only work when the ignition has been turned to RUN. Each switch required down pressure to the leading edge to raise the windows and down pressure to the trailing edge to lower the windows. The switches were marked with up and down arrows. This vehicle was equipped with a lockout feature to prevent passengers from operating the windows. The feature is activated by pressing LOCK and is returned to normal operation by pressing NORM. The lockout feature was not actuated at the time of the incident. The left rear power window switch was positioned on top of the door armrest, just forward of the door midpoint (**Figures 6-7**). The rocker-style switch required the same motion to operate the window as the main switch panel on the driver's door rest. The rear door glazing measured 46 cm (18.1 in) wide at the base by 50 cm (19.7 in) high. The rear door panel was configured with an armrest that extended the full length of the door panel. The arm rest was approximately 32 cm (12.6 in) below the level of the side window frame. The door handle was integrated into the door panel and was forward and above the power window button in the arm rest.

Figure 5. Second row left interior door

Figure 6. Second row left power window switch

Figure 7. Driver's power switch control

Power Window Closing Force Test - Exemplar Vehicle

An exemplar 1998 GMC Jimmy was tested to determine the closing force of the second row left power window. The test used an Imada Model DPSH-440R Digital Force Gauge that was last calibrated on 11/29/07. The force gauge was positioned between the window and the window frame **(Figure 8**). With the engine off, a peak closing force of 208 N (46.8 lb) was recorded. With the engine on, a peak closing force of 272 N (61.2 lbs) was recorded (**Figure 9**).

Figure 8. Positioning of force gauge in left rear window

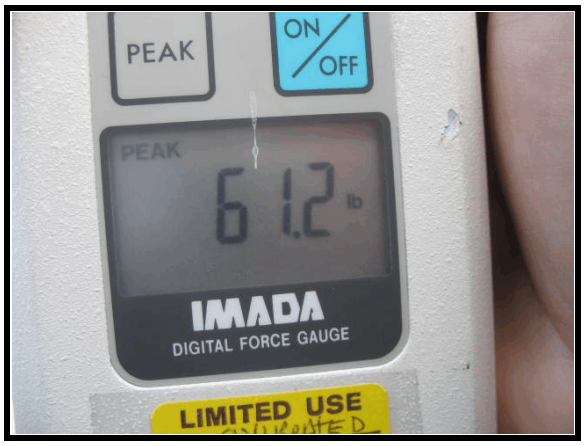
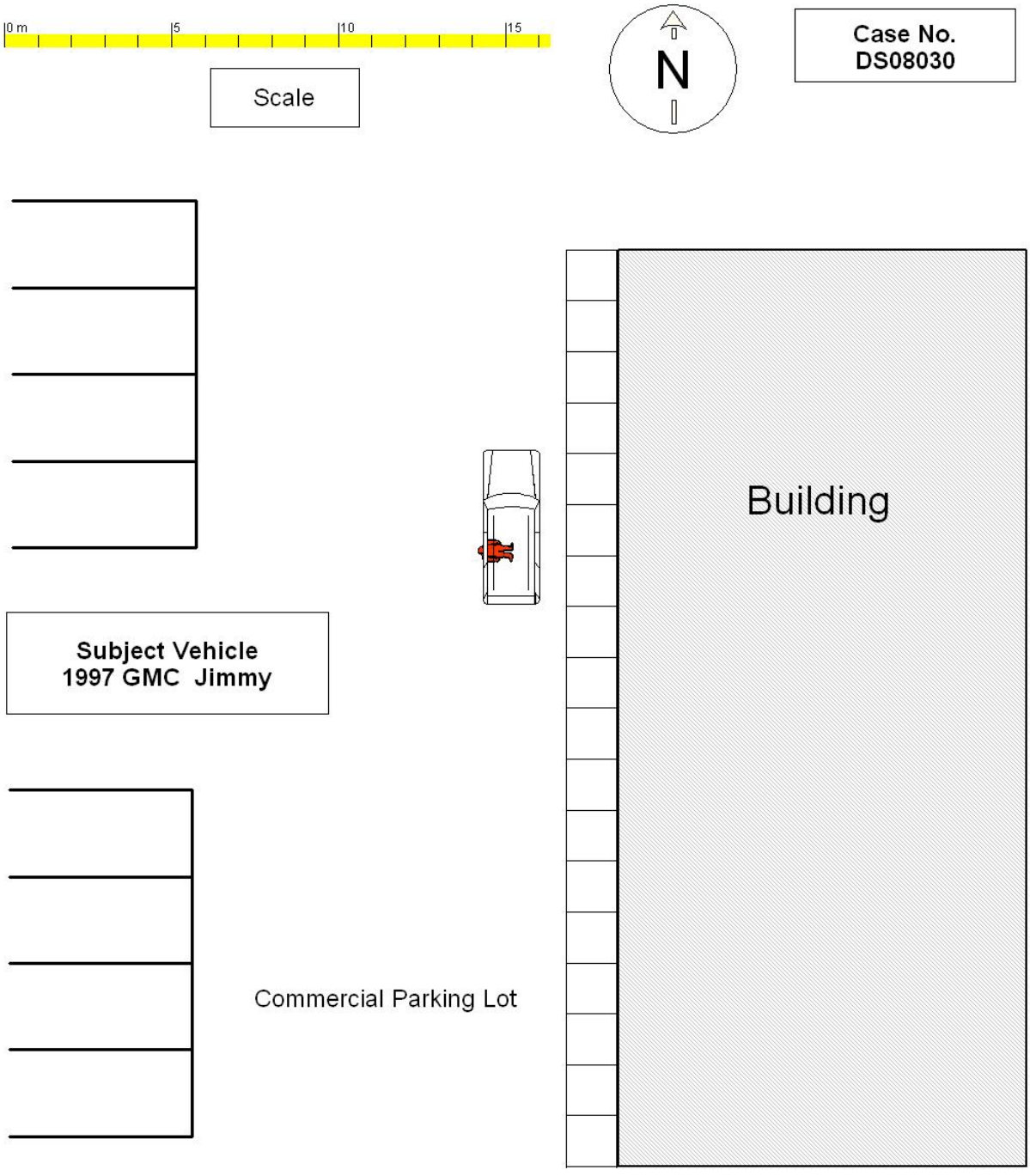


Figure 9. Peak closing force reading of 272 N (61.2 lbs) of the left rear power window with engine running

Attachment 1. Satellite Image

Attachment 2. Scene Diagram



Attachment 3. Data Forms

Not Applicable ☐

Reset Values | Print Forms

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

SCENE FORM

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number

D S 0 8 0 3 0

IDENTIFICATION

2. Date of Crash 0 7 / X X / 0 8

3. Time of Crash 1 5 0 5

Code reported military time of crash.

NOTE: Midnight = 2400
Unknown = 9999

AMBIENT CONDITIONS

4. Light Conditions

- ◉ Daylight
- ☐ Dark
- ☐ Dark but lighted
- ☐ Dawn
- ☐ Dusk
- ☐ Unknown

5. Atmospheric Conditions
(*Select all that apply)*

- ◉ Clear-No adverse conditions
- ☐ Cloudy
- ☐ Rain
- ☐ Snow
- ☐ Fog, Smog, Smoke
- ☐ Sleet, Hail (freezing rain or drizzle)
- ☐ Blowing Snow
- ☐ Severe Crosswinds
- ☐ Blowing Sand, Soil, Dirt
- ☐ Other (specify):_____
- ☐ Unknown

6. Temperature

- ☐ Below 0 degrees Celsius (Below 32 F)
- ☐ 1-10 degrees Celsius (33-50 F)
- ☐ >10-24 degrees Celsius (51-75 F)
- ◉ Over 24 degrees Celsius (Over 75 F)
- ☐ Unknown

SCENE INFORMATION

7. Type of area in which crash occurred
(*Select all that apply)*

- ☐ Single family residential
- ☐ Row houses/townhouses
- ☐ Multi family housing
- ◉ Commercial
- ☐ Industrial
- ☐ Rural
- ☐ Unknown

8. Driver exterior sightline obstructions
(*Select all that apply)*

- ☐ None
- ☐ Other vehicles
- ☐ Building
- ☐ Trees
- ☐ Shrubbery
- ☐ Other (specify)_____
- ☐ Utility poles
- ☐ Signs
- ☐ Glare
- ☐ Unknown
- ◉ No driver present

9. Crash location

- ☐ Driveway
- ◉ Parking Lot
- ☐ Sidewalk
- ☐ Alley
- ☐ Intersection of driveway and sidewalk
- ☐ Road / street
- ☐ Roadside / shoulder
- ☐ Other (specify)_____
- ☐ Unknown

10. Non motorist sightline obstructions
(*Select all that apply)*

- ◉ None
- ☐ Other vehicles
- ☐ Building
- ☐ Trees
- ☐ Shrubbery
- ☐ Utility poles
- ☐ Signs
- ☐ Glare
- ☐ Other (specify) _____
- ☐ Unknown

11. Grade at parked position + / - 0 0 0 %

12. Estimated distance from parked position to impact

0 0 0 . 0 m

13. Estimated speed at impact 0 0 0 kmph

14. Grade at impact +/ - 0 0 0 %

15. Estimated distance from impact to vehicle final rest

0 0 0 . 0 m

Unknown = 999 Reference Items 11,12, 13, 14, 15

Not Applicable ☐

Reset Values

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

VEHICLE FORM

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number D S 0 8 0 3 0

VEHICLE IDENTIFICATION

2. VIN 1 G K D T 1 3 W 3 V 2 X X X X X X

3. Model Year 1 9 9 7

4. Vehicle Make (specify): GMC

5. Vehicle Model (specify): JIMMY

GLAZING

Location	Presence (check)	Status (select)	Clarity (select)	Tint (check)	Glazing Obstructions (specify if present)
Windshield	☑	☑ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
LF	☑	☐ Fixed / ☑ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
RF	☑	☐ Fixed / ☑ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
2nd Left	☑	☐ Fixed / ☐ Closed / ☐ Open / ☑ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☑	
2nd Right	☑	☐ Fixed / ☑ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☑	
3rd Left	☑	☑ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☑	
3rd Right	☑	☑ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☑	
Backlight	☑	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☑	
Left Backlight	☐	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
Right Backlight	☐	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
Roof	☐	☐ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☐ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☐	
Other (specify)	☑	☑ Fixed / ☐ Closed / ☐ Open / ☐ Partially Open / ☐ Unknown	☑ Clear / ☐ Hazy / ☐ Very Dirty / ☐ Unknown	☑	

TIRE DATA

6. Vehicle Manufacturer Recommended Tire Size UNKNOWN

7. LF Tire Size UNKNOWN

8. LR Tire Size UNKNOWN

9. RF Tire Size UNKNOWN

10. RR Tire Size UNKNOWN

Seats / Head Restraint Data

Seat Position	Seat Type (Select from below)	Head Restraint (Check if available)	Head Restraint Adjustment (select)	NOTES:
Front Left	1	☑	☑ Full Down / ☐ Mid / ☐ Full Up	
Front Middle	0	☐	☐ Full Down / ☐ Mid / ☐ Full Up	
Front Right	1	☑	☑ Full Down / ☐ Mid / ☐ Full Up	
2nd Left	4	☐	☐ Full Down / ☐ Mid / ☐ Full Up	
2nd Middle	4	☐	☐ Full Down / ☐ Mid / ☐ Full Up	
2nd Right	4	☐	☐ Full Down / ☐ Mid / ☐ Full Up	
3rd Left	0	☐	☐ Full Down / ☐ Mid / ☐ Full Up	
3rd Middle	0	☐	☐ Full Down / ☐ Mid / ☐ Full Up	
3rd Right	0	☐	☐ Full Down / ☐ Mid / ☐ Full Up	

Seat Type codes:

0 = No seat or seat folded down
1 = Bucket
2 = Bucket w/ folding back
3 = Bench
4 = Bench with folding back cushions
5 = Bench w/ folding back
6 = Split bench w/ separate back cushions
7 = Split bench w/ separate folding back
8 = Pedestal (i.e. column supported)
9 = Box mounted (i.e. van type)
10= Other seat type (specify)
99= Unknown seat type

VEHICLE MEASUREMENTS

Clearance Heights		Measurements (all from ground, and in centimeters	NOTES
Beltline		N/A	
Top of trunk/tailgate		N/A	
Bottom of bumper		N/A	
Trailer hitch (if applicable)		N/A	
Undercarriage			
	Sway bar	N/A	
	Axle	N/A	
	Differential	N/A	
	Other (specify): _____	N/A	
Sensor Height (if equipped)		N/A	
Camera Height (if equipped)		N/A	

Not Applicable ☑

Undo Not Applicable

Reset Values

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

Back Up / Parking Aid Form

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number

D S 0 8 0 3 0

PARKING AID PRESENCE

2. Type of backing/parking aid present

- ☐ OEM camera
- ☐ OEM ultrasonic/radar sensor
- ☐ OEM combination camera-ultrasonic/radar sensor
- ☐ OEM Fresnel lens
- ☐ OEM interior mirrors
- ☐ Aftermarket camera
- ☐ Aftermarket ultrasonic/radar sensor
- ☐ Aftermarket combination camera-ultrasonic radar sensor
- ☐ Aftermarket Fresnel lens
- ☐ Aftermarket interior mirrors
- ☐ Other (specify): _____

CAMERA INFORMATION

Specify field of view measurements on diagram

3. System make/model

_____

4. Video monitor type

- ☐ None present
- ☐ LCD (color)
- ☐ CRT (black & white)
- ☐ Unknown

5. Video display size _____ cm
(Diagonal)

6. Camera location

- ☐ None present
- ☐ Bumper
- ☐ License plate
- ☐ Tailgate/Hatch/Trunk
- ☐ Other (specify): _____

7. Video image quality under scene lighting conditions

- ☐ None present
- ☐ Good
- ☐ Average
- ☐ Poor (specify): _____
- ☐ Unknown

8. Was the camera functioning properly

- ☐ None present
- ☐ Yes
- ☐ No, poor image quality due to glare
- ☐ No, poor image quality due to atmospheric conditions
- ☐ No, camera turned off
- ☐ No, camera inoperable
- ☐ Unknown

ULTRASONIC/RADAR SENSOR

Specify object detection range on diagram

9. System make/model

_____

10. Auditory warning illumination

- ☐ No sensor present
- ☐ Yes
- ☐ No
- ☐ Unknown

11. Number of sensors ____

12. Sensor locations
(Select all that apply)

- ☐ No sensor present
- ☐ Left bumper
- ☐ Center bumper
- ☐ Right bumper
- ☐ License plate area
- ☐ Tailgate/Hatch/Trunk

13. Was warning system functioning properly

- ☐ No sensor present
- ☐ Yes, system alerted driver
- ☐ No, system did not alert driver
- ☐ No, system turned off
- ☐ No, system inoperable
- ☐ Unknown

14. Did driver react to warning

- ☐ No sensor present
- ☐ Yes
- ☐ No
- ☐ Unknown
- ☐ Sensor present, did not sound

15. Did driver report common false warnings

- ☐ No sensor present
- ☐ Yes
- ☐ No
- ☐ Unknown

Not Applicable

No Driver Present ✔

Undo Not Applicable

Reset Values

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

DRIVER FORM

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number

D S 0 8 0 3 0

DRIVER PROFILE

2. Driver's Age ____ ____
   99 = Unknown

3. Driver's Sex
   - ☐ Male
   - ☐ Female
   - ☐ Unknown

4. Driver's Height ____ ____ ____ cm
   999 = Unknown

5. Driver's Weight ____ ____ ____ kg
   999 = Unknown

6. Driver eyewear worn
   (Select all that apply)
   - ☐ None
   - ☐ Eyeglasses
   - ☐ Sunglasses
   - ☐ Contacts
   - ☐ Unknown

7. Driver vision deficiency condition
   (Select all that apply)
   - ☐ None
   - ☐ Near sighted
   - ☐ Far sighted
   - ☐ Astigmatism
   - ☐ Other (specify) _____
   - ☐ Unknown

8. Non motorist's relationship to driver
   - ☐ No relationship
   - ☐ Child
   - ☐ Grandchild
   - ☐ Sibling
   - ☐ Neighbor
   - ☐ Friend
   - ☐ Other (specify): _____
   - ☐ Unknown

DRIVER ACTIONS

9. Driver approach to vehicle for entry
   - ☐ From left front
   - ☐ From left
   - ☐ From left rear
   - ☐ From right rear
   - ☐ From right front
   - ☐ Circled vehicle
   - ☐ Return trip (backing into driveway/lot)
   - ☐ Other (specify): _____
   - ☐ N/A
   - ☐ Unknown

10. Driver entry interruption
    (Select all that apply)
    - ☐ Direct trip from building to vehicle
    - ☐ Loaded items into vehicle
    - ☐ Spoke with family
    - ☐ Spoke with neighbors
    - ☐ Spoke with contacted nonmotorist
    - ☐ Return trip (backing into driveway/lot)
    - ☐ Other (specify): _____
    - ☐ N/A
    - ☐ Unknown

11. Purpose of backing
    - ☐ Leaving parking space in parking lot
    - ☐ Backing onto roadway from driveway
    - ☐ Entering parking space in parking lot
    - ☐ Backing into driveway from roadway
    - ☐ Other (specify): _____
    - ☐ N/A
    - ☐ Unknown

12. Where was driver going
    Description:

    _____

    _____

13. Driver in a hurry
    - ☐ Yes
    - ☐ No
    - ☐ N/A
    - ☐ Unknown

14. How did driver check behind (rear area of vehicle) after vehicle entry
    (Select all that apply)
    - ☐ Did not look
    - ☐ Checked mirrors
    - ☐ Turned right and looked back
    - ☐ Turned left and looked back
    - ☐ Viewed Camera
    - ☐ Listened for auditory/visual warning from system
    - ☐ Other (specify): _____
    - ☐ N/A
    - ☐ Unknown

15. Estimated time between vehicle entry and start of backing
    - ☐ 0-10 Seconds
    - ☐ 11-30 Seconds
    - ☐ 31-60 Seconds
    - ☐ Over 60 Seconds
    - ☐ N/A
    - ☐ Unknown

16. What direction was the driver looking during backing maneuver
(Select all that apply)

- ☐ Straight ahead
- ☐ Right
- ☐ Left
- ☐ Rearward
- ☐ At object inside the car
- ☐ At mirrors
- ☐ Other (specify): _____
- ☐ N/A
- ☐ Unknown

17. Was the driver distracted during back up maneuver
(Select all that apply)

- ☐ No non-driving activities

External

- ☐ Looking at other vehicles
- ☐ Looking at other non motorist
- ☐ Looking at intended turn destination
- ☐ External focus, not specified
- ☐ Other external focus (specify): _____

Internal

- ☐ Looking at other occupant
- ☐ Talking to passenger
- ☐ Dialing phone
- ☐ Talking on phone
- ☐ Listening to radio/cd/portable playback device
- ☐ Adjusting radio/cd player
- ☐ Adjusting climate controls
- ☐ Using a device/controls integral to vehicle (specify): _____
- ☐ Reading/adjusting navigation system
- ☐ Eating or drinking
- ☐ Smoking related
- ☐ Retrieving fallen object (specify): _____
- ☐ Internal focus, not specified
- ☐ Focused on other internal object (specify): _____
- ☐ N/A
- ☐ Unknown

18. Driver avoidance actions prior to impact
(Select all that apply)

- ☐ None
- ☐ Braking
- ☐ Steering left
- ☐ Steering right
- ☐ Accelerating
- ☐ Other (specify): _____
- ☐ N/A
- ☐ Unknown

19. Did driver see struck non motorist prior to impact
(Select all that apply)

- ☐ No, never saw non motorist
- ☐ Saw non motorist prior to entering vehicle
- ☐ Saw non motorist after entering vehicle
- ☐ Other (specify): _____
- ☐ N/A ☐ Unknown

20. Est time between start of backing and impact

- ☐ <2 or = 1 second
- ☐ 2-5 seconds
- ☐ 6-10 seconds
- ☐ > 10 seconds
- ☐ N/A ☐ Unknown

21. Driver interior sightline obstructions
(Select all that apply)

- ☐ Pillar
- ☐ Headrest
- ☐ Cargo
- ☐ Other occupant
- ☐ Other (specify) _____
- ☐ Unknown
- ☐ None

22. Recent experience driving this vehicle

- ☐ More than 10 times the last three months
- ☐ 6-10 times the last three months
- ☐ 2-5 times the last three months
- ☐ Less than 2 times the last three months
- ☐ First time driving this vehicle
- ☐ N/A
- ☐ Unknown

23. Frequency of driving in this parking lot/driveway

- ☐ Daily
- ☐ Weekly
- ☐ Several times a month
- ☐ Monthly
- ☐ Rarely
- ☐ First time in lot/driveway
- ☐ N/A ☐ Unknown

24. Driver Impairment
(Select all that apply)

- ☐ No drugs or alcohol present
- ☐ Alcohol present (specify BAC): _____
- ☐ Drugs present (specify):_____
- ☐ Unknown

25. Source of alcohol/drug results

- ☐ Police reported
- ☐ Medical record
- ☐ Other (specify)_____
- ☐ Not Tested
- ☐ Unknown if tested

Not Applicable ☐

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

Non Motorist Form

Reset Values

Special Crash Investigations
Not In Traffic Surveillance

1. Case Number
D S 0 8 0 3 0

NON-MOTORIST PROFILE

2. Non-motorist's Age — 0 4 ☐ Months ☉ Years
99 = Unknown

3. Non-motorist's Sex
☐ Male
☉ Female
☐ Unknown

4. Non-motorist's Height — 9 9 9 cm
999 = Unknown

5. Non-motorist's Weight — 9 9 9 kg
999 = Unknown

6. Medical outcome

☐ Not injured
☐ ER only
☉ Hospitalized 1-4 days
☐ Hospitalized 5 days or more
☐ Treatment later
☐ Fatal
☐ Unknown

7. Source of most severe injury
☐ Bumper
☐ Tire
☐ Undercarriage
☉ Other Specify: POWER WINDOW
☐ Ground
☐ N/A
☐ Unknown

8. Non-motorist impairment
(Select all that apply)
☉ No drugs or alcohol present
☐ Positive for alcohol (specify BAC): _____
☐ Positive for drugs (specify): _____
☐ Unknown

9. Source of alcohol/drug results
☉ Police reported
☐ Medical Report
☐ Other (specify) _____
☐ Not Tested
☐ Unknown if tested

NON-MOTORIST ACTIONS

10. Non-motorist attitude

☐ Standing
☐ Bending at waist
☐ Sitting
☐ Crouching
☐ Kneeling
☐ On skates/skateboard
☐ On bike/scooter
☉ Other (specify) Head out window
☐ Unknown

11. Non-motorist motion

☐ Not moving
☐ Walking slowly
☐ Walking rapidly
☐ Running or jogging
☐ Skipping/Hopping/Jumping
☐ Falling/Stumbling/Rising
☐ On skates/skateboard
☐ On bike/scooter
☉ Other (specify): looking out window
☐ Unknown

12. Non-motorist approach relative to rear of vehicle

☐ Stationary
☐ From left
☐ From right
☐ From behind
☉ Other (specify): kneeling on armrest
☐ Unknown

13. Non-motorist first avoidance action

☐ No avoidance actions
☐ Stopped
☐ Accelerated pace
☐ Ran away (along vehicle path)
☐ Jumped
☐ Turned away from vehicle
☐ Turned toward vehicle and braced
☐ Dove or fell away from vehicle
☐ Other (specify): _____
☉ Unknown

14. Non-motorist primary focus of attention

☐ Striking vehicle
☐ Play object
☐ Person
☐ Surrounding traffic
☐ Animal
☐ Handheld electronic (phone, MP3 player, etc.)
☐ Other Object (specify) _____
☉ Unknown

15. Were any other Non-motorists present?
(Select all that apply)

☉ Alone
☐ One adult present
☐ One other child present
☐ Multiple adults present
☐ Multiple children present
☐ Unknown

NON MOTORIST CLOTHING

NOTES:

- Specify Color, Fabric and Texture/Weight for outermost layer only
- Indicate "*NONE*" if applicable
- Available codes:

Colors		***Fabrics***	***Textures***	***Weights***
Black	Charcoal gray	Natural	Soft	Heavy
Lt gray/silver	Brown	Synthetic	Slick	Medium
Gold/tan	Purple	Blend	Coarse	Light
Dark blue	Light blue			
Dark green	Light green			
Maroon	Red			
Orange	Yellow			
White	Other (specify)			
Pink				

	Clothing	Color	Fabric	Texture	Weight
HEADWEAR	Hat				
	Helmet				
	Hood				
	Other (specify): _____	Unknown			
	Unknown				
UPPER BODY	Short Sleeve				
	Long Sleeve				
	Light Jacket				
	Heavy Jacket				
	Other (Specify): _____	Unknown			
	Unknown				
LOWER BODY	Shorts				
	Pants				
	Shoes				
	Other (specify): _____	Unknown			
	Unknown				