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**National Highway
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Administration**

NHTSA

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Special Crash Investigations Remote Non-Traffic Surveillance Hyperthermia Fatality Investigation Vehicle: 2001 Honda Accord Location: Florida Incident Date: July 2016

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12. Sponsoring Agency Name and Address National Highway Traffic Safety Administration 1200 New Jersey Avenue SE Washington, DC 20590		*13. Type of Report and Period Covered* Technical Report Incident Date: July 2016 *14. Sponsoring Agency Code*	
15. Supplementary Note An investigation of the circumstances surrounding the hyperthermia fatality of a 3-year-old child in a parked 2001 Honda Accord in Florida. Each crash represents a unique sequence of events, and generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicles or their safety systems. This report and associated case data are based on information available to the Special Crash Investigation team.			
16. Abstract This report documents this remote investigation and the circumstances surrounding the hyperthermia-related fatality of a 3-year-old male who was found inside a 2001 Honda Accord that was parked in the driveway of his home. The police determined after a review of a surveillance video taken from a neighboring property that the child entered the vehicle via the driver's door during the mid-day hours. After his entry, the door then closed. The child was found unconscious inside the vehicle approximately three hours later by his caregiver at the home. The responding emergency medical service (EMS) transported the child to a nearby hospital where he was subsequently transferred to a trauma center and placed on a ventilator. The child expired 2.5 days following the incident. The cause of death was ruled environmental hyperthermia.			
17. Key Words hyperthermia rocker switch door release lever locking stalk		*18. Distribution Statement* Document is available to the public from the National Technical Information Service, www.ntis.gov.	
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SPECIAL CRASH INVESTIGATIONS
CASE NO. CR16033
REMOTE HYPERTHERMIA FATALITY INVESTIGATION
VEHICLE: 2001 HONDA ACCORD
LOCATION: FLORIDA
INCIDENT DATE: JULY 2016

BACKGROUND

This report documents this remote investigation and the circumstances surrounding the hyperthermia-related fatality of a 3-year-old male found inside a 2001 Honda Accord (**Figure 1**) parked in the driveway of his home. The police determined after a review of a surveillance video taken from a neighboring property that the child entered the vehicle via the driver's door during mid-day hours. After his entry, the door then closed. The child was found unconscious inside the vehicle approximately 3 hours later by his caregiver at the home. The responding emergency medical service (EMS) transported the child to a nearby school where he was transferred to a helicopter for transport to a trauma center and placed on a ventilator. The child expired 2.5 days following the incident. The cause of death was ruled environmental hyperthermia.

Figure 1: West-facing, left-side view of the 2001 Honda Accord. Image supplied by the police investigator.

The incident was identified by the National Highway Traffic Safety Administration and assigned to the Special Crash Investigations (SCI) group for further research in November 2016. This research was aimed to chronicle the circumstances of these types of incidents and provide direction to potential countermeasures. Approximately 700 children have died due to hyperthermia over a 19-year period (1998 to 2016) with 28 percent of these deaths attributed to children playing in unattended vehicles.[1]

The SCI team contacted the involved police agency and interviewed the investigating officer to obtain the circumstances of the incident. This interview, an exemplar vehicle inspection, supplemental internet research and the medical record data provided the basis for this remote SCI

[1] Null, J. (n.a.). Hyperthermia Deaths of Children in Vehicles (Web page of NoHeatStroke.org, Department of Meteorology & Climate Science). San Jose, CA: San Jose State University Retrieved from http://noheatstroke.org/

investigation. The criminal aspects of this incident were still open at the time of his report; therefore, a copy of the surveillance video was not available.

INCIDENT SCENE

This incident occurred on private property in a residential neighborhood during daylight summer hours. The five-bedroom, single-family residence was built in 2014 and consisted of a one-story floor plan constructed on the south side of an east/west two lane street. An attached two-car garage was on the west side of the residence with a concrete driveway that extended from the garage to the street. A curved concrete sidewalk provided a walkway from the driveway to the front door of the residence. The areas surrounding the driveway and the residence were grass. The investigating officer stated that the front door of the residence was configured with a keyless touch pad lock. **Figure 2** is a view of the Honda parked on the driveway of the residence.

Figure 2. East-facing view of the Honda parked on the driveway of the residence. Image provided by the investigating police department.

The Honda was parked on the driveway facing south with the front of the vehicle positioned near the garage door on the west side of the driveway. All windows of the vehicle were closed. The terrain of the residence was flat with a slight negative grade of the driveway toward the street.

At the time of the incident, the police reported the weather conditions as overcast and dry. An officer assisting with the investigation observed a digital temperature display of 34.4 ºC (94 ºF) at a local school. Historical weather data from a neighboring city to the location of the incident reported ambient temperatures ranging from 30 ºC (86 ºF) to 31.7 ºC (89.1 ºF) throughout the 3-hour duration of this incident. Heat indices were reported at 33.8-36.1 ºC (93 to 97 ºF) with winds ranging from 10.6 to 14.8 km/h (6.9 to 9.2 mph) for the same time period. Humidity throughout this time ranged from 65 to 73 percent.

2001 HONDA ACCORD

Description

The case vehicle was a 2001 Honda Accord EX 4-door sedan identified by the Vehicle Identification Number 1HGCG16551xxxxxx. The Honda was powered by a 3.0 liter, V-6 gasoline engine linked to a 4-speed automatic transmission with a console mounted shifter. The interior configuration consisted of front bucket seats with adjustable head restraints and a three-passenger rear bench seat with split, forward folding seat backs. Integrated head restraints were provided for the second row left and right positions. All seating surfaces were leather. A rear-

facing infant child restraint system (CRS) was secured to the second row left position by the vehicle's manual seat belt system. The forward aspect of the CRS was wedged against the front row left seat back. **Figures 3 and 4** show the interior of the 2001 Honda Accord.

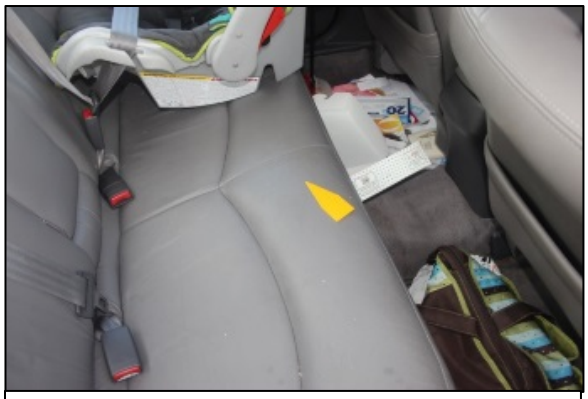

Figure 3. Second row seat area of the 2001 Honda. Image provided by the investigating police department.

Figure 4. Front row of the 2001 Honda. Image provided by the investigating police department.

Glazing

The Honda's glazing consisted of a fixed AS1 laminated windshield, AS2 operable door windows, small AS2 triangular quarter windows fixed in the aft aspect of the rear door frames, and a fixed AS2 backlight. There was no aftermarket tint applied to the Honda's glazing.

Power Window Operation

The Honda was equipped with power windows. A master switch panel was located on the mid-aspect of the driver's door panel that provided operation of all four door windows and a lock-out switch for the rear door windows. The switch panel was mounted on the horizontal surface of the sloped extension of the integrated armrest and door closer pull handle **(Figure 5)**. The driver's window was configured with a one touch auto-down and auto-up feature. All four power window switches required a push force to lower the respective window and a pull force to raise and close the windows. The front right and both second row door panels were configured with power window switches for the respective window only. The switches operated in the same manner as the driver switches and were located in a similar position on the horizontal surface of the door armrests. The front door windows could fully retract into the door while the rear door windows did not fully open due to the contour of the rear door at the lower C-pillar. At the time of this incident, all four door windows

Figure 5. Power window switch panel on the driver's door of an exemplar vehicle.

were reportedly closed. It should be noted that the power windows only operated with the keyed ignition switch rotated to the accessory or run positions.

Door Locking System

The Honda was equipped with a power locking system with a remote key fob. The lock button of the key fob required a single engagement to lock all four doors. The unlock button would unlock the driver's door on the first push of the button and the remaining right front and rear doors unlocked on two pushes of the key fob button. On the interior of the Honda, a vertically-mounted switch was positioned immediately forward of the door release lever **(Figure 6)**. The switch had a tab that measured 2 cm (0.75 in) horizontally and protruded 1 cm (0.25 in) toward the interior to provide a finger touch for the switch. Downward pressure on the switch would lock all four doors while an upward pressure would unlock the doors. The rear doors were not equipped with power door lock switches. Unlike the power windows, the power door lock switches remained active at all times without energizing the ignition switch. All four doors were configured with plunger-type lock stalks that were located on the top surface of the door panels at the aft aspect. The cylindrical stalks extended 3 cm (1.2 in) above the door panels in the unlock mode and retracted 1 cm (0.5 in) when the power locks were enabled. In the locked position, the lock stalks protruded above the door panels to allow a person to pull the stalk upward to unlock the door. In the locked position, the front doors could not be opened from the inside by pulling on the door release lever. The lever action did not override the locking system. The rear doors remained locked in this scenario, as the locking stalk had to be lifted to open the doors.

Figure 6. Front row locking system of an exemplar 2001 Honda Accord.

Exterior Door Handles

The four doors of the Honda were equipped with flush-mounted exterior door handles that required an upward pull force to open **(Figure 7)**. The bottom edge of the front door handles on an exemplar 2001 Honda Accord were 75 cm (29.4 in) above the pavement while the rear handles were 78 cm (30.75 in) above the pavement. The vertical pull of the handle required approximately 2 cm (0.9 in) of upward lift to release the door latch and to open the doors. Both front doors were configured with key-operated locks.

Figure 7. Exterior door handles of the 2001 Honda. Image provided by the investigating police department.

Interior Door Release Levers

The interior door release levers were flush mounted to the upper mid-aspects of the front doors and the upper forward aspects of the rear doors. The levers were 11 cm (4.25 in) in length and were chrome plated, surrounded by a recessed pocket of the matching interior gray color to facilitate the operator's finger grip on the lever. All doors required a horizontal pull force to open the doors. **Figures 8 and 9** are images of the interior door release levers of an exemplar 2001 Honda Accord.

Figure 8. Driver's door release lever of an exemplar 2001 Honda Accord.

Figure 9. Left rear door release lever of an exemplar 2001 Honda Accord.

INCIDENT

Both teenage caregivers stated to the investigating police officers that they were away from the home during the early morning hours on the day of the incident and returned between 0130 and 0230 hours. The 18-year-old male parked the Honda on the concrete driveway in front of the closed garage door on the west side of the driveway at the family residence. The caregivers further stated to the police that the doors of the Honda were locked in its parked position on the driveway. The 18-year-old male stated that he remained awake throughout the remainder of the night. The 19-year-old female apparently went to sleep following their return to the residence. The daytime morning hours were unremarkable as no specific activity was reported to the police. The 45-year-old grandmother routinely departed for work at 0930 hours, and on this day left the twins and the 3-year-old in the care of the 18- and 19-year-old adults. The 18-year-old male later stated to police that he began to sleep during the morning hours. The female caregiver told the investigating officer that she prepared the three children (including the 3-year-old child) for their naps at 1200 hours. Her twin children slept in a separate room from the 3-year-old male. Inconsistent statements were later made to the police officers regarding the caregiver's activities during the afternoon "napping" hours, as she stated she was cleaning the residence. The police theorized both caregivers fell asleep and were not in direct supervision of the children.

A neighboring residence to the east of the incident-involved property had an outdoor security camera positioned where it recorded activities in the vicinity of the parked 2001 Honda. During the police investigation, the security camera recording was reviewed. The time stamp reported by the video was verified as being accurate. The camera recorded the 3-year-old child approaching

the left side of the Honda at approximately 1130 hours. The child opened the left front door of the Honda, looked in the vehicle and returned toward the front door of the family residence. He then returned to the Honda, entered the vehicle through the left front door and closed the door. The security camera recorded the child moving from the front seat to the back seat, back and forth as if in an attempt to exit the vehicle. This activity continued for approximately 20 minutes.

The investigating officer theorized that the caregivers fell asleep while the child remained awake in the residence during his nap. The child then exited the residence through the front door. He either closed the house door or the door closed itself, thus locking him out of the residence. The digital keypad lock then prevented the child from reentering the residence.

At approximately 1420 hours, the 18-year-old male was recorded by the security camera exiting the front door of the family residence and walked to the street to retrieve the trash receptacle. He carried the trash receptacle past the right side of the parked Honda and placed it at the side of the attached garage. He reentered the residence though the front door.

At approximately 1440 hours, the security camera recorded the 19-year-old female caregiver exit the front door of the residence and walk up to the parked Honda. She opened the right rear door and found the 3-year-old child unresponsive on the second row seat, lying on the right and center positions. She removed him from the vehicle and carried him into the residence. At that point, she instructed the 18-year-old male to call the emergency response system.

The emergency response system operator instructed the caregiver to lay the child on his side. His clothing was removed and cold water was sprayed on him in an attempt to lower his body temperature. The police and emergency medical services (EMS) personnel arrived on-scene. The child was evaluated and placed in an ambulance for transport to a designated landing site for helicopter-transfer to a regional trauma center. The child arrived at the trauma center in critical condition and placed on a ventilator. He expired without improvement in his condition after 2.5 days. An autopsy was performed. The autopsy report was not released to the SCI team; however, the autopsy findings were summarized in the police incident report. The autopsy identified petechial rash on the child's chest, right side, and thighs and his right ear and surrounding areas of the face were blistered. The cause of death was ruled as environmental hyperthermia.

The 19-year-old female caregiver was subsequently charged with child neglect resulting in great bodily harm. The charge was later upgraded to aggravated manslaughter.

NON-MOTORIST DEMOGRAPHICS

The child involved in this hyperthermia fatality investigation was a 3-year-old (39 months) male. The autopsy reported height was 100 cm (39.5 in) with a weight of 16 kg (35.5 lb). At the time of the incident he was dressed in a red T-shirt, gray underpants, and sandals. His 45-year-old

grandmother had full custody and he lived in the single-family residence with the grandmother, her 19-year-old daughter, the daughter's 18-year-old husband, and the daughter's 1-year-old twins. The grandmother worked during the day; therefore, the 18- and 19-year-old adults were the daytime caregivers for the three children living in the home.

NON-MOTORIST INJURIES

Injury No.	Injury	AIS 2015	Involved Physical Component (IPC)	IPC Confidence Level
1	Hyperthermia	010200.1	Entrapment in the vehicle	Certain
2	Petechial rash of the torso	410099.1	Thermal-related from direct contact with the seat cushion	Certain
3	Petechial rash of the right thigh	810099.1	Thermal-related from direct contact with the seat cushion	Certain
4	Petechial rash of the left thigh	810099.1	Thermal-related from direct contact with the seat cushion	Certain
5	Blistering of the face	210099.1	Thermal-related from direct contact with the seat cushion	Certain
6	Blistering of the right ear	210099.1	Thermal-related from direct contact with the seat cushion	Certain

Source: Police Offense Report

INCIDENT SITE DIAGRAM

Incident Site:
Private Property

V1: 2001 Honda Accord

	NHTSA www.nhtsa.gov
Case Number:	CR16033

APPENDIX A:
Non-Traffic Surveillance Forms

Not Applicable ☐

Reset Values | Print Forms

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

SCENE FORM

Special Crash Investigations
Non-Traffic Surveillance

IDENTIFICATION

1. Case Number

C R 1 6 0 3 3

2. Date of Crash 0 7 / x x / 1 6

3. Time of Crash 1 4 4 0

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) N/A
- ☐ 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) N/A
- ☐ Unknown

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

- ☐ None
- ☐ Other vehicles
- ☐ Building
- ☐ Trees
- ☐ Shrubbery
- ☐ Utility poles
- ☐ Signs
- ☐ Glare
- ☉ Other (specify) N/A
- ☐ Unknown

11. Grade at parked position + / - 9 9 9 %

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 +/ - 9 9 9 %

15. Estimated distance from impact to vehicle final rest

0 0 0 . 0 m

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

Revised January 2018

Not Applicable ☐

Reset Values

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

VEHICLE FORM

Special Crash Investigations
Non-Traffic Surveillance

1. Case Number C R 1 6 0 3 3

VEHICLE IDENTIFICATION

2. VIN 1 H G C G 1 6 5 5 1 A X X X X X X

3. Model Year 2 0 0 1

4. Vehicle Make (specify): Honda

5. Vehicle Model (specify): Accord

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	☐	Not inspected
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 P205/65R15

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	Not inspected by SCI team.
Front Middle	0	☐	☐ ☐ ☐ Full Down / Mid / Full Up	
Front Right	1	☑	☐ ☑ ☐ Full Down / Mid / Full Up	
2nd Left	5	☐	☐ ☐ ☐ Full Down / Mid / Full Up	
2nd Middle	5	☐	☐ ☐ ☐ Full Down / Mid / Full Up	
2nd Right	5	☐	☐ ☐ ☐ Full Down / Mid / Full Up	
3rd Left		☐	☐ ☐ ☐ Full Down / Mid / Full Up	
3rd Middle		☐	☐ ☐ ☐ Full Down / Mid / Full Up	
3rd Right		☐	☐ ☐ ☐ 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			Not inspected by SCI team.
Top of trunk/tailgate			
Bottom of bumper			
Trailer hitch (if applicable)			
Undercarriage			
	Sway bar		
	Axle		
	Differential		
	Other (specify):		
Sensor Height (if equipped)			
Camera Height (if equipped)			

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
Non-Traffic Surveillance

1. Case Number

C R 1 6 0 3 3

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

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DRIVER FORM

Special Crash Investigations
Non-Traffic Surveillance

1. Case Number

C R 1 6 0 3 3

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

Revised January 2018

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
Non-Traffic Surveillance

1. Case Number
C R 1 6 0 3 3

NON-MOTORIST PROFILE

2. Non-motorist's Age
99 = Unknown
0 3 ☐ Months ☉ Years

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

4. Non-motorist's Height
999 = Unknown
1 0 0 cm

5. Non-motorist's Weight
999 = Unknown
0 1 6 kg

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: Hyperthermia
☐ 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) N/A
☐ 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): N/A
☐ Unknown

12. Non-motorist approach relative to rear of vehicle
☐ Stationary
☐ From left
☐ From right
☐ From behind
☉ Other (specify): N/A
☐ 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): N/A
☐ 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) N/A
☐ 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				
UPPER BODY	Short Sleeve	Red	Unknown	Unknown	Unknown
	Long Sleeve				
	Light Jacket				
	Heavy Jacket				
	Other (Specify): _____				
	Unknown				
LOWER BODY	Shorts	Unknown	Unknown	Unknown	Unknown
	Pants				
	Shoes				
	Other (specify): underpants	Charcoal gray	Unknown	Unknown	Unknown
	Unknown				

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**National Highway
Traffic Safety
Administration**

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