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Special Crash Investigations: Air Bag Non-Deployment Crash Investigation; Vehicle: 2013 Ram 1500; Location: Oregon; Crash Date: October 2015

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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 on the date this report was published.

16. Abstract

This report documents the on-site investigation of the alleged non-deployment of the air bags in a 2013 Ram 1500 involved in a single-vehicle crash. This investigation was initiated by the Office of Defects Investigation in response to a report from a vehicle owner who alleged that there were no air bag deployments during the rollover crash. The investigation revealed that the vehicle was involved in multiple events, including a non-horizontal impact, a side impact, a rear plane impact, and a front plane impact. There were no air bag deployments. The IC air bags did not deploy because no rollover occurred. The side air bags did not deploy because the delta V was low. The frontal air bags did not deploy because the deployment threshold was not met. This single-vehicle crash occurred off-road next to the westbound lane of an undivided two-lane state highway in rural Oregon. The Ram was being driven by a belted 66-year-old male. The front right seat was occupied by a belted 60-year-old female. The Ram was traveling west and was following a tractor-trailer. The driver attempted to pass the tractor-trailer. The driver lost control due to hydroplaning, and the vehicle spun out, impacting the mountain three times: with its front plane, its left side as it partially overturned, and with its rear plane. The vehicle came to rest in an upright orientation. The driver and passenger sustained minor to moderate injuries. The passenger was transported by ambulance to a local hospital, where she was treated for several hours before being released.

17. Key Words	18. Distribution Statement
Tipping incident, air bag, non-deployment, crash, minor injuries	The document is available to the public from the National Technical Information Service, www.ntis.gov.

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Unclassified	Unclassified	83	

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Special Crash Investigations
Air Bag Non-Deployment Crash Investigation
Office of Defects Investigation
Case Number DS15013
Vehicle: 2013 Ram 1500
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Crash Date: October 2015

BACKGROUND

This report documents the on-site investigation of the alleged non-deployment of the air bags in a 2013 Ram 1500 involved in a single-vehicle crash. (**Figure 1**). This investigation was initiated by the Office of Defects Investigation in response to a report from a vehicle owner who alleged that there were no air bag deployments during the rollover crash. The Special Crash Investigations (SCI) group of the National Highway Traffic Safety Administration assigned the case to Dynamic Science, Inc., in November 2015. The vehicle was inspected in November 2015. The Ram was supported by the Bosch Crash Data Retrieval system, and the vehicle's Event Data Recorder (EDR) was imaged during the inspection. The SCI investigation revealed that the vehicle was involved in multiple events including a non-horizontal impact, a side impact, a rear plane impact, and a frontal impact. There were no air bag deployments. The inflatable curtain (IC) air bags did not deploy because no rollover occurred. The side air bags did not deploy because the delta V was low. The frontal air bags did not deploy because the deployment threshold was not met. Information from the Ram's manufacturer, Fiat Chrysler Automobiles, was not received prior to publication of this report.

Figure 1. The 2013 Ram 1500 pickup.

This single-vehicle crash occurred off-road next to an undivided, two-lane, State highway in rural Oregon during inclement weather. The roadway was bordered by a mountain embankment to the north. The Ram was being driven by a belted 66-year-old male. The front right seat was occupied by a belted 60-year-old female. The Ram was traveling at approximately 64 km/h (40 mph) and was following a tractor-trailer. The driver accelerated to approximately 114 km/h (71 mph) and attempted to pass the tractor-trailer. The driver reported that he began losing control and the vehicle spun out due to hydroplaning. The vehicle struck the mountain with its front plane. The vehicle began a clockwise rotation and struck the mountain with its left side as it partially overturned. The vehicle continued rotating and struck the mountain with its rear plane. The vehicle came to rest facing in its original direction of travel (west) in an upright orientation.

There were no air bag deployments in the crash. The front row seat belt pretensioners actuated during the crash sequence. The driver sustained "C" (possible) injuries that consisted of minor

contusions, abrasions, and strains. He was able to exit the vehicle under his own power. After exiting the vehicle, he opened the right door to check on the passenger. The front right passenger sustained "C" (possible) injuries that consisted of a lacerated tongue, a laceration to the back of her head, contusions to her arms, chest, and abdomen, a cervical strain, and a coccyx contusion. She was unable to get out of the vehicle on her own and was assisted out by emergency personnel and the driver. She was transported by ambulance to a local hospital where she was treated for several hours before being released. She underwent therapy for the injuries to her back. The driver was transported by ambulance with the front right passenger to a local hospital where he was examined and released. The Ram was towed from the scene to a local tow yard.

SUMMARY

Crash Site

The crash occurred in October 2015 during the afternoon on a straight section of an undivided, two-lane, State highway (**Figure 2**). The asphalt roadway had a slight downgrade. It was bordered to the south by a solid white fog line, an asphalt shoulder, and a guardrail. It was bordered to the north by a solid white fog line, an asphalt shoulder, and an ascending mountain embankment. The posted speed limit was 89 km/h (55 mph). The weather at the nearest reporting station was 15 °C (59 °F), 83 percent humidity, 16 km (10 miles) visibility, and the winds were out of the south at 44 km/h (28 mph). The skies were overcast. The driver reported that it was misting at the time of crash and the roadway was wet. A crash diagram is attached at the end of this technical report.

Figure 2. Overview of driver approach westbound (GoogleEarth image).

Pre-Crash

The Ram was traveling at approximately 64 km/h (40 mph) and was following a tractor-trailer. As the vehicles entered a straight area of the roadway where passing was allowed, the driver accelerated to an EDR-reported speed of 114 km/h (71 mph) at 5 seconds prior to algorithm enable (AE), changed lanes to the left, and began to pass the tractor-trailer. At 4.5 seconds the driver began braking. The driver reported that the vehicle was "fishtailing" and he was alternately steering and braking in order to regain control. Fishtailing is a vehicle handling problem that occurs when the rear wheels lose traction, resulting in oversteer. The vehicle crossed back into the westbound travel lane and then departed the roadway to the right.

Crash

The vehicle struck the mountain embankment (Event 1) at an EDR-reported speed of 58 km/h (36 mph). The EDR reported a maximum longitudinal delta V of -27 km/h (-16.8 mph) at 170 ms. There was no reported lateral component. The barrier algorithm of the WinSMASH program calculated a total delta V of 24 km/h (15 mph). The longitudinal and lateral components were -22 km/h (-14 mph) and 8 km/h (5 mph), respectively. The results fit the model and appear reasonable. There were no air bag deployments or seat belt pretensioner actuations.

The Ram began a clockwise rotation, and there was a tipping non-horizontal event (Event 2). The maximum EDR-reported angular rollover rate was -210 deg/sec at 560 ms and dropped to 0 at 600 ms. The left fender, left wheel, mirror, and roof side rail struck the mountain embankment. The time between Event 1 and Event 2 was 0.38 seconds. Both front row seat belt pretensioners actuated during this event. The Ram continued rotating and the rear plane (bed and tailgate) struck the mountain embankment (Event 3). The rotation continued until the vehicle came to rest on the shoulder facing west (**Figure 3**).

Post-Crash

The driver of the Ram sustained minor contusions, abrasions, and strains. He was able to exit the vehicle under his own power. After exiting the vehicle, he opened the right door to check on the passenger. The front right passenger sustained a lacerated tongue, a laceration to the back of her head, contusions to her arms, chest, and abdomen, a cervical strain, and a contusion to the tail bone. She was transported by ambulance to a local hospital where she was treated for several hours before being released. She later underwent therapy for the injuries to her back. The driver was transported by ambulance with the front right passenger to the local hospital where he was examined and released. The Ram was towed from the scene to a local tow yard.

2013 RAM 1500 Laramie 4 x 4 Pickup

Description

The 2013 Ram 1500 Laramie was a 4-wheel drive, 5-passenger crew cab pickup with a 6-foot box. The vehicle was identified by the Vehicle Identification Number 1C6RR7VT9DSxxxxxx and was manufactured in May 2013. The vehicle mileage was 66,863 km (41,546 mi). The vehicle was equipped with a 5.7-liter, 8-cylinder, gasoline engine; a 6-speed automatic transmission; 4-wheel disc brakes with ABS; and front suspension and transfer case skid plates. The vehicle was in two-wheel drive mode at the time of the crash. The vehicle manufacturer's recommended tire size was P275/60R20 with a recommended cold tire pressure of 269 kPa (39 psi). The vehicle was equipped with Goodyear Wrangler tires of the recommended size mounted on aluminum rims. The specific tire information was as follows:

Figure 3. The 2013 Ram 1500, final rest, looking east (driver photo).

Position	Measured Pressure	Measured Tread Depth	Restricted	Damage
LF	Tire Flat	4 mm (5/32 in)	No	Tire de-beaded
LR	241 kPa (35 psi)	2 mm (3/32 in)	No	None
RR	241 kPa (35 psi)	2 mm (3/32 in)	No	None
RF	Tire Flat	4 mm (5/32 in)	Yes	Tire de-beaded

The interior of the Ram was configured with leather surfaced five-passenger seating. The front bucket seats were separated by a center console and equipped with adjustable head restraints. The seats were adjusted to between the middle and rear most track positions. The second row was configured with a 60/40 split bench seat with folding backs.

Exterior Damage

The Ram sustained moderate damage to the front plane during the impact with the mountain embankment (**Figure 4**). The direct damage began at the left front bumper corner and extended 80 cm (31.4 in) to the right. The Field L extended from bumper corner to bumper corner and measured 162 cm (64.0 in). Six crush measurements were taken at the bumper level as follows: C1 = 0 cm, C2 = 0 cm, C3 = 27 cm (10.6 in), C4 = 20 cm (7.8 in), C5 = 9 cm (3.5in), and C6 = 6 cm (72.3in). The Collision Deformation Classification (CDC) was 11FDEW1.

Figure 4. The 2013 Ram 1500, front impact damage.

The Ram sustained moderate direct contact damage to the left fender, left mirror, and left roof side rail. The damage to the fender measured 94 cm (37.0 in) in length and 35 cm (13.7 in) in height and consisted of vertically oriented scratches (**Figure 5**). The damage to the left roof rail measured 140 cm (55.1 in) in length and 13 cm (5.1 in) in width (**Figure 6**). The depth of crush was roughly 7 cm (2.8 in). The CDC was 00LYHW3.

Figure 5. The 2013 Ram 1500, left side damage.

The Ram sustained minor non-horizontal direct contact damage to the rear bed and tailgate (**Figure 7**). The direct damage was 186.0 cm (73.2 in) wide. The right bed was crushed 27.0 cm (10.6 in) forward and the tailgate was partially displaced. The bed was displaced forward and contacted the back plane of the cab. The CDC was 00BDMW1.

Figure 6. The 2013 Ram 1500, left roof rail damage.

Event Data Recorder

The Ram was equipped with an occupant restraint controller (ORC). The ORC had EDR capability and was configured to store pre-crash and crash data. For the pre-crash data, there is a

5-second buffer that records vehicle speed, percent accelerator, percent throttle, service brake, rpm, ABS, stability control, steering input, yaw rate, and wheel speed. The vehicle was also equipped with a rollover sensor (ROS). The ROS records lateral acceleration and roll rate data.

The data from the Rams's EDR was imaged using the Bosch Crash Data Retrieval Tool version 16.2.1 via the diagnostic link connector using vehicle power and reported using version 19.5.3. Three events were recovered for ignition cycle 8,107. The data record reported the status of the driver's and front right occupant's seat belts as "Buckled."

Figure 7. The 2013 Ram 1500, rear plane damage.

The Second Prior Event (Event 1) occurred as the Ram struck the ascending embankment. There were no air bag deployments or pretensioner actuations. The event record reported a maximum longitudinal delta V of -27.0 km/h (-16.8 mph) at 170 ms. The lateral values were reported as 0. The complete file was not recorded. The data for the pre-crash variables was both incomplete and incorrect in this record. Since the time between this event and the following event was only 0.38 seconds the pre-crash data for that record was generally representative for the first crash event and is described here. The pre-crash data recorded at -5.0 second prior to AE reported a vehicle speed of 114 km/h (71 mph), the service brake as being Off, no ABS activity, the stability control was on, and the steering input was -3 degrees. At -2.7 seconds, the vehicle speed was 89 km/h (55 mph), the service brake was on, and the stability control was engaged. During the next 2.5 seconds, the steering input increased to a maximum of 296 degrees (indicating the steering wheel was being turned counterclockwise) and yaw rate increased to a maximum of -327 deg/sec (indicating a clockwise rotation).

The First Prior Event (Event 2) occurred as the Ram began a left side leading tipping event and struck the embankment with its left side. The time between events was 0.38 seconds. The complete file was recorded. Both front row seat belt retractor pretensioners actuated during this event. The event record reported a maximum lateral delta V of -4.0 km/h (-2.5 mph) at 262 ms. The longitudinal values were reported as 0. The maximum angular rate was -210 deg/sec at 560 ms. A negative angular rate indicates a counterclockwise rotation around the longitudinal axis. The last reported speed before the vehicle went into rotation was 19 km/h (12 mph) at -0.2 seconds.

The Most Recent Event was essentially the same event as the first prior event. The time between these events was 0.01 seconds. The pre-crash and velocity change data was identical. This event also reported the front seat belt pretensioner actuations.

The pre-crash data recorded at -0.1 seconds prior to algorithm enable (AE) for the second prior event was as follows:

Vehicle speed (mph[km/h]): 36 [58]
Engine rpm: 0
Accelerator pedal (percentage): 6
Service brake: On

The pre-crash data recorded at -0.2 seconds prior to AE for the first prior event was as follows:

Vehicle speed (mph[km/h]): 12 [19]
Engine rpm: 1,467
Accelerator pedal (percentage): 0
Service brake: On

The pre-crash data recorded at -0.2 seconds prior to AE for the most recent event was as follows:

Vehicle speed (mph[km/h]): 12 [19]
Engine rpm: 1,467
Accelerator pedal (percentage): 0
Service brake: On

Diagnostic Trouble Code (DTC) C10CC-00 ESC sensors were set and present at the start of the most recent event and the first prior event. The ESC (dynamics sensor) is located inside the occupant restraint controller (ORC). The sensor measure side-to-side (lateral) motion and vehicle rotational sensing (how fast the vehicle is turning - yaw). The sensors output is sent to the antilock braking system (ABS) in a CAN bus message. This DTC sets when the occupant restraint controller (ORC) detects an ESC sensor internal conditions that latches the fault for the ignition cycle.

The EDR report is attached at the end of this report.

Interior Damage

The Ram sustained minor interior damage due to occupant contacts and impact from cargo. Blood was located above the left B-pillar on the roof and the center console cover and rear housing were displaced. There were no intrusions or glazing damage. The doors remained closed and operational.

Manual Restraint Systems

The front row was equipped with driver and front right passenger lap and shoulder seat belts. The driver's belt was equipped with continuous loop belt webbing, a sliding latch plate, an emergency locking retractor (ELR), and an adjustable upper anchor that was in the full-up position. The front right passenger's seat belt was equipped the same as the driver's, but had a switchable ELR/automatic locking retractor (ALR). The adjustable upper anchor was in the full-up position. The front seat positions were equipped with retractor-mounted pretensioners which actuated during the crash.

Inspection of the driver's seat belt assembly revealed historical usage scratches on the latch plate and an area of abrasion that was located 22 cm (8.6 in) above the stop loop (**Figure 8**). The belt was locked in the spooled out position and belt webbing was entrapped in the upper anchor D-ring. This evidence indicated that the driver was wearing the restraint at the time of the crash. The vehicle's EDR also reported the driver's belt switch circuit status as "Buckled." Inspection of the front right passenger's seat belt assembly revealed historical usage scratches on the latch plate and an area of abrasion that was located 23 cm (9.0 in) above the stop loop. The belt was locked in the spooled out position. This evidence indicated that the front right passenger was belted at the time of the crash. The vehicle's EDR also reported the front right passenger's belt switch circuit status as "Buckled."

Figure 8. Driver's seat belt, the 2013 Ram 1500.

Supplemental Restraint Systems

This vehicle had advanced frontal air bags for both the driver and front passenger as a supplement to the manual restraint systems. The driver's frontal air bag was mounted in the center of the steering wheel hub. The passenger's frontal air bag was mounted in the instrument panel, above the glove compartment. The vehicle was equipped with inflatable curtain (IC) air bags to protect the driver, front, and rear passengers sitting next to a window. They were located above the side windows and their covers were labeled SRS AIRBAG. They were configured to deploy in side impacts and rollovers. The vehicle was equipped with seat-mounted side-impact air bags that were located in the outboard side of the front seats. Supplemental restraint components were controlled by the ORC. The ORC determines if deployment of the frontal and/or side air bags in a frontal or side collision is required. Based on the impact sensor's signals, a central electronic ORC deploys the frontal air bags, IC air bags, side air bags, and front seat belt pretensioners as required, depending on several factors, including the severity and type of impact. During this crash, there were no air bag deployments.

Air Bag Non-Deployment Discussion

The driver reported that he had purchased the vehicle new and there were no prior crashes or service work performed on the safety systems. A CARFAX report was obtained, and it reported that there had been a previous owner and that the vehicle had been sold to the current owner in 2014. There were no reported issues in the Carfax report. Visual inspections of the steering wheel hub, right instrument panel, outboard seat backs, and roof rails revealed no evidence of damage or potential obstruction that may have prevented deployment of the air bags.

There was one safety system related NHTSA recall in effect for this vehicle at the time of the crash, NHTSA Campaign Number 15V-459 Air Bags: The affected vehicles have a steering wheel wiring harness that may rub against the driver air bag module retainer spring, possibly causing an inadvertent air bag deployment. It is not known if the driver was notified of the issue

or if any action was taken. There was a second recall issued for this vehicle after the crash in May 2017. Recall 17V-302 indicates that the occupant restraint control module may activate a diagnostic trouble code (DTC) due to external stimulus which disables its ability to sense vehicle rollover events. When the DTC is set, air bag and seat belt pretensioner deployment based on rollover sensing is disabled for the ignition cycle in which the DTC was set.

Given the cumulative delta V and impact speed it would appear that the frontal air bags should have deployed in this crash during the impact with the mountain embankment. However, the manual states that "because air bag sensors measure vehicle deceleration over time, vehicle speed and damage by themselves are not good indicators of whether or not an air bag should have deployed." In this crash, the moderate delta V of -27 km/h (-16.8 mph) occurred over a relatively long delta T of 170 ms while impacting the sloped surface. Based on this data it is possible that the crash severity was not severe enough to require the air bags to deploy.

The impact to the left side did not deploy the left side-impact seat-mounted side air bag. This was a low delta V event and a deployment would not be expected.

The IC air bags did not deploy during the tipping incident. The maximum EDR-reported angular rate was -210 deg/sec at 560 ms. A negative angular rate indicates a counterclockwise rotation around the longitudinal axis. The rollover data appears to be questionable for accuracy. Information from FCA was not received prior to publication of this report.

2013 RAM 1500 OCCUPANTS

Driver Demographics

Age/sex:	66 years/male
Height:	183 cm (72 in)
Weight:	102 kg (224 lbs)
Eyewear:	Prescription glasses
Seat type:	Bucket
Seat track position:	Between mid and full rearward
Manual restraint usage:	Lap and shoulder belt used
Usage source:	Vehicle inspection, EDR report
Air bags:	Driver frontal air bag, seat-mounted side air bag, and IC air bag did not deploy
Alcohol/drug data:	None
Egress from vehicle:	Exited vehicle under own power
Transport from scene:	Ambulance, traveled with front right passenger
Type of medical treatment:	Examined at a local hospital and released

Driver Injuries

Injury No.	Injury	Injury Severity AIS 2015	Involved Physical Component (IPC)	IPC Confidence Level
1	Contusion, right shin	810402.1	Left lower instrument panel	Probable
2	Strain, left shoulder	770710.1	Steering wheel rim (indirect)	Probable
3	Strain, neck	640278.1	Seat belt (indirect)	Probable

Source: interview.

Driver Kinematics

The 66-year-old driver of the Ram was seated in an upright posture and was using the available lap and shoulder seat belt. The bucket seat was adjusted to between the mid and full rearward position and the seat back was slightly reclined. Both of his hands were on the steering wheel and his right foot was initially on the accelerator and then on the brake. He was braking and steering throughout the pre-crash sequence. As the Ram passed the tractor-trailer, the driver reported that his vehicle began "fishtailing." As the driver steered back into his initial travel lane, he lost control and the vehicle departed the roadway on the right. At impact with the mountain embankment the driver was displaced forward and loaded the seat belt, causing a neck strain. His right shin contacted the lower instrument panel. His hands were on the steering wheel and he was bracing, which caused a left shoulder strain at impact. After the initial impact, the Ram began a clockwise rotation. The driver was displaced to the left and contacted the left door when the Ram struck the mountain embankment with its left side. The Ram continued its rotation until it struck the embankment with its back plane. The driver was displaced rearward into the seat back. The driver remained buckled in his seat throughout the crash sequence and as the vehicle came to rest. He was able to exit the vehicle under his own power. He was transported by ambulance with the front right passenger to a local hospital where he was examined and released.

Front Row Right Passenger Demographics

Age/sex:	60 years/female
Height:	163 cm (64 in)
Weight:	59 kg (130 lbs)
Eyewear:	Prescription glasses
Seat type:	Bucket
Seat track position:	Between mid and full rearward
Manual restraint usage:	Lap and shoulder belt used
Usage source:	Vehicle inspection, EDR report
Air bags:	Passenger frontal air bag, seat-mounted side air bag and IC air bag did not deploy
Alcohol/drug data:	Unknown
Egress from vehicle:	Removed by emergency personnel
Transport from scene:	Ambulance
Type of medical treatment:	Treated and released

Front Row Right Passenger Injuries

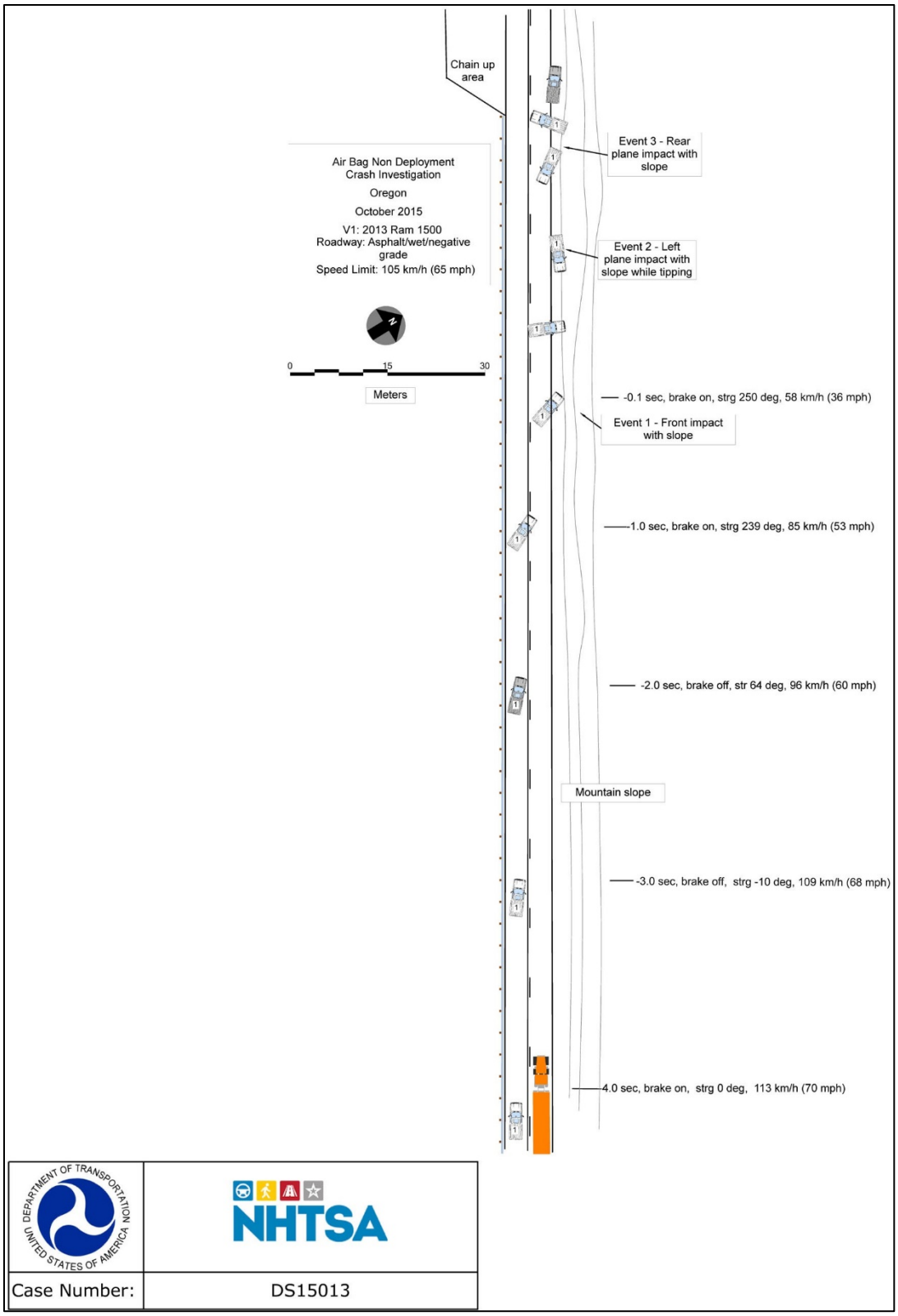
Injury No.	Injury	Injury Severity AIS 2015	Involved Physical Component (IPC)	IPC Confidence Level
1	Tongue laceration	243400.1,8	Impact forces	Probable
2	Laceration, 2.5 cm (1.0 in), back of head	110602.1,6	Luggage	Probable
3	Chest abrasion	410202.1,9	Seat belt webbing	Certain
4	Strain, cervical spine	640278.1,6	Seat belt webbing (indirect)	Probable
5	Tailbone (coccyx) contusion	810402.1,8	Seat cushion	Probable

Source: interview.

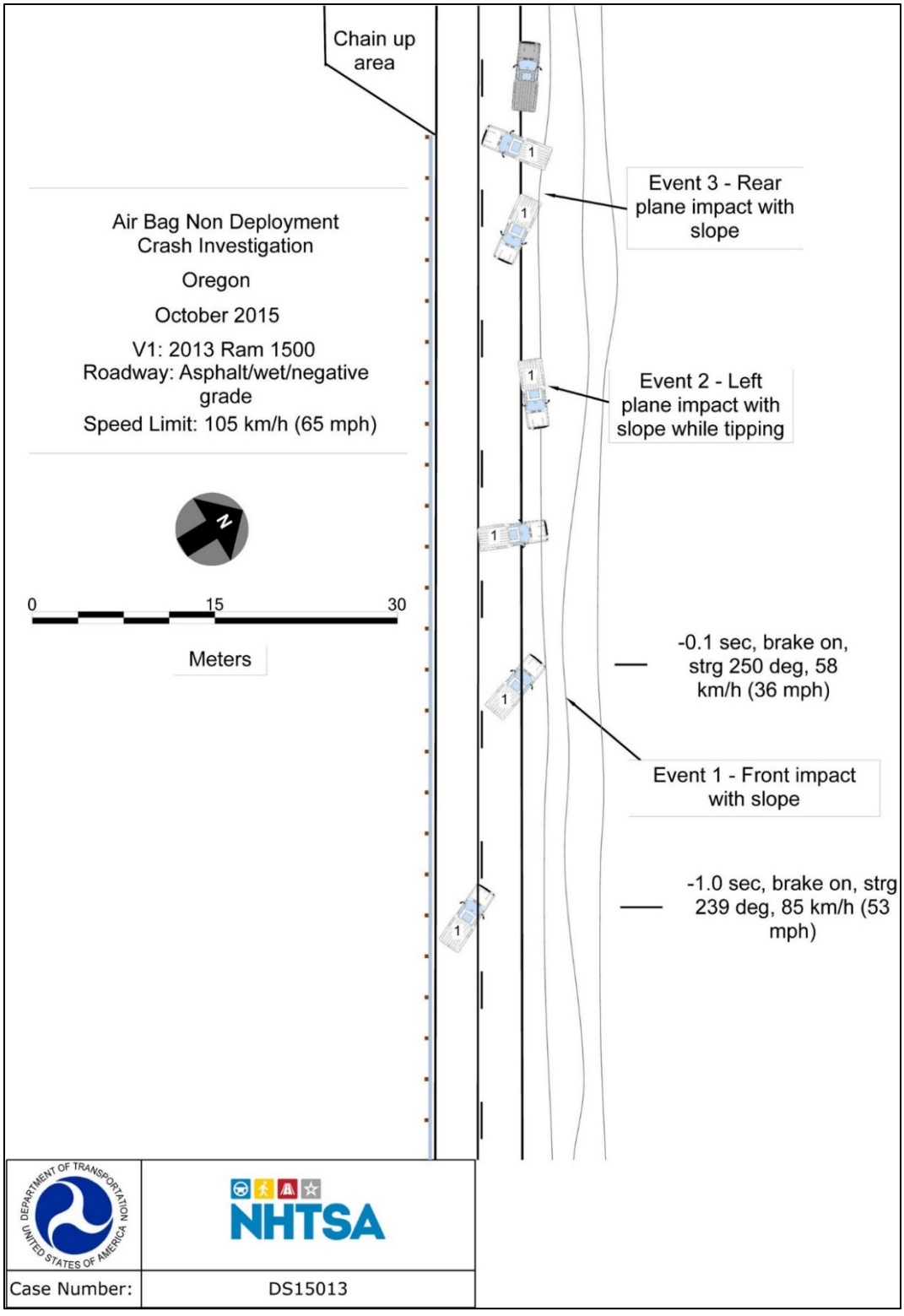
Front Row Right Passenger Kinematics

The 60-year-old front right passenger of the Ram was seated in an upright posture and was using the available lap and shoulder seat belt. The bucket seat was adjusted to between the mid and full rearward position and the seat back was slightly reclined. As the Ram passed the tractor-trailer, the driver reported that his vehicle began "fishtailing." As the driver steered back into his initial travel lane, he lost control and the vehicle departed the roadway on the right. At impact with the mountain embankment the front right passenger was displaced forward, loading the seat belt and causing the chest abrasion, and, indirectly, causing the cervical strain and tongue laceration. Also during this initial impact, she was struck from behind by a loose piece of cargo, causing a head laceration. After the initial impact, the Ram began a clockwise rotation. The front right passenger was displaced to the left and probably contacted the center console when the Ram struck the mountain embankment with its left side. The Ram continued its rotation until it struck the embankment with its back place. The front right occupant was displaced rearward into the seat back and may have injured her tailbone at this time. The front right passenger remained buckled in her seat throughout the crash sequence and as the vehicle came to rest. She was unable to get out of the vehicle on her own and was assisted out by emergency personnel and the driver. She was transported by ambulance to a local hospital where she was treated and released.

Crash Diagram



Crash Diagram: A Detailed View



APPENDIX A: Event Data Recorder Report for 2013 Ram 1500[1]

[1] The EDR report contained in this technical report was imaged using the current version of the Bosch CDR software at the time of the vehicle inspection. The CDR report contained in the associated Crash View application may differ relative to this report.

IMPORTANT NOTICE: Robert Bosch LLC and the manufacturers whose vehicles are accessible using the CDR System urge end users to use the latest production release of the Crash Data Retrieval system software when viewing, printing or exporting any retrieved data from within the CDR program. Using the latest version of the CDR software is the best way to ensure that retrieved data has been translated using the most current information provided by the manufacturers of the vehicles supported by this product.

CDR File Information

User Entered VIN	1C6RR7VT9DS******
User	
Case Number	
EDR Data Imaging Date	
Crash Date	
Filename	201550S3DS15013_V1_ACM.CDRX
Saved on	
Imaged with CDR version	Crash Data Retrieval Tool 16.2.1
Reported with CDR version	Crash Data Retrieval Tool 19.5.3
Reported with Software Licensed to (Company Name)	NHTSA
EDR Device Type	Airbag Control Module
Event(s) recovered	Most Recent Event 1st Prior Event 2nd Prior Event

Comments

No comments entered.

Data Limitations

AIRBAG CONTROL MODULE (ACM) DATA LIMITATIONS:

GENERAL INFORMATION:

CAUTION: During direct-to-module imaging where the Airbag Control Module (ACM) is disconnected and removed from a vehicle, make sure the ACM is not moved, tilted or turned over while connected to and powered by the CDR Interface Module (with appropriate adaptors in place, where required). Also, after a CDR imaging process, wait 2 minutes after power is removed from the ACM before attempting to move the module. Not following these general ACM guidelines for direct-to-module imaging may cause new events to be recorded in the ACM.

- For additional definitions, please refer to the CDR Help File Glossary.
- As the VIN may be used to determine the configuration of the restraint system, it is imperative that the correct VIN be entered into the CDR Tool during the imaging process.
- If a DLC adapter has to be used with the CDR Tool, the "Read VIN from Vehicle" feature in the CDR Tool will not work. The VIN will have to be manually entered.
- If a 2021 or later MY Dodge Durango was imaged with a CDR Tool version 19.4 or older, the ACM will need to be reimaged as not all the peripheral sensor data will have been retrieved.
- The 2019 MY RAM 1500 may take up to 30 minutes to retrieve the EDR data. The ignition will time out within 20 minutes so the vehicle flashers must be turned on within 20 minutes to keep the ignition and communication bus active.
- Lateral Delta V will not be displayed for the 2013 MY Jeep Compass and Patriot.
- Ignition Cycle, download/crash
  - For RAMs and Dodge Vipers, there are 2 internal ignition counters in the ACM. It is possible for the ignition cycles at download to be different than the ignition cycles at event due to the 2 different counters.
  - Note that the ignition cycle count in an ACM may differ from the ignition cycle count in a Pedestrian Protection Module (PPM) in the same vehicle due to the fact that the ACM has an energy reserve while the PPM does not.

The following table provides an explanation of the sign notation for data elements that may be included in this CDR report. All directional references to sign notation are from the perspective of the driver when seated in the vehicle facing the direction of forward vehicle travel.

Data Element Name	**Positive Sign Notation Indicates**
Delta-V, Longitudinal	Forward
Maximum Delta-V, Longitudinal	Forward
Delta-V, Lateral	Left to Right
Maximum Delta-V, Lateral	Left to Right
Angular Rate	Clockwise rotation around the longitudinal axis

Peripheral Sensors, X and Y	Outside to Inside
Pressure Sensors	Compression of air
Internal Y Acceleration	Left to Right
Low-g Z Acceleration	Downward
Steering Input	Steering wheel turned counter clockwise
Yaw Rate	Counter clockwise rotation

CDR FILE INFORMATION:

- An event will be stored when the delta V is approximately 5 mph (8 km/h) or greater within a 150 ms interval.
- For non-NAFTA ACMs that control pedestrian protection devices, a non-deployment event will be stored when the pedestrian protection devices are activated.
- A non-deployment event may be stored with activation of the Active Head Restraints. See AHR explanation under System Configuration at Retrieval/Event section.

Event(s) Recovered definitions:
- None - There are no stored events in the ACM
- Not Retrievable - Event Data may be stored in the ACM but is not retrievable by the CDR Tool.
- Most Recent Event - Data of the most recent event is displayed in the report
- 1st Prior Event - Two events are stored in the ACM, Data displayed is of the first prior event.
- 2nd Prior Event - Three events are stored in the ACM, Data displayed is of the second prior event.
- For 2013 and 2014 MY Dodge Journey and Fiat Freemont:
  - Event Record 1 - Data from an event is stored in the ACM (not necessarily in chronological order)
  - Event Record 2 - Data from another event is stored in the ACM (not necessarily in chronological order)
- For TRW modules:
  - If there is a side impact, two EDR events may be stored for the one side impact event. The second event may be recorded due to the Lateral Delta V exceeding 5 mph (8 km/h) within a 150 ms interval after the side deployment occurred.
- For some Fiat vehicles:
  - Two EDR events may be stored for one impact event. The second event may be recorded due to the deployment of the frontal airbag, 3rd stage passenger.
- During an event, if power to the ACM is lost, all or part of the event data record may not be recorded. An indication may be observed in the recorded data under this condition: The restraint data is recorded first and then the vehicle data.
  - "None" may be displayed in the "Event(s) Recovered" section of the report indicating no pre-crash vehicle data.
  - An event may be displayed in the "Event(s) Recovered" section of the report and "Interrupted" will be displayed for Pre-Crash Recorder Status.

SYSTEM STATUS AT RETRIEVAL:

- Original VIN - The VIN is captured by the ACM and then recorded as the Original VIN after 10 consecutive ignition cycles of capturing the same number. Once it has been recorded, this number cannot be changed.

SYSTEM CONFIGURATION AT RETRIEVAL/EVENT:

- The System Configuration data tables indicate the components that the ACM for a particular vehicle monitors and/or controls.
- Active Head Restraint (AHR) - This refers to some active head restraint systems that are electronically controlled by the ACM. AHRs may activate but not store an EDR Record if the delta V does not exceed the minimum delta V threshold. It is possible that the AHRs may activate after the EDR record has been stored and written, based on achieving the minimum delta V. This condition will result in an EDR but no record of the AHR activation in the CDR report. Activation of only the AHRs, if stored, will be a non-deployment event.

SYSTEM STATUS AT EVENT:

- Number, Total Events - Cumulative number of events that the ACM has recorded, including those non-deployment events that have been overwritten by a subsequent event.
- Occupant Size Classification, Outboard Front Passenger - "Child" status may be used to indicate anything weighing less than a 5th percentile female adult crash dummy, including an empty seat; "Not Child" indicates anything weighing the same as or more than a 5th percentile female adult crash dummy.
- Odometer at Event - Vehicle odometer at the time of the event
- Operation via Energy Reserve Only -"Yes" indicates that the ACM had lost power at or before T0 and was only operating on energy reserve at T0.

- Safety Belt Status, Outboard Front Passenger - For vehicles sold outside of North America which do not contain a buckle switch for the outboard front passenger, the safety belt status, outboard front passenger will default to "not buckled/unbuckled".
- System Voltage at Event, ACM - Voltage at the ACM as measured by the ACM.
- System Voltage at Event, Bused - Voltage of the vehicle system, communicated on the communication bus to other electronic modules in the vehicle.
- Temperature, Outside - Ambient Air Temperature.
- Time, Airbag Warning Lamp On - This is a cumulative time. It indicates the total amount of time that the ACM has requested the Airbag Warning Lamp be turned on.
    - This time does not include the warning lamp bulb check time, which occurs at every ignition cycle
    - For 2013 MY Minivans and new 2017+ MY Jeep Compass, this time is only cumulative for the past 10 ignition cycles.
- Time from event 1 to 2 -
    - If only one event is stored, either a value of 0 or >5 may be displayed for this data element.
    - For the 2018+ MY Promaster and 2019+ MY RAM 1500, a value of 0 may be displayed for the first event or for events >5 seconds apart.
    - If multiple events exist in the EDR, the time from event 1 to event 2 is defined as:
        - For Bosch and TRW modules, the time from the prior recorded event (even if it has been overwritten) to the current recorded event.
        - For Continental modules, the time from the prior existing recorded event (as long as it is still displayed in the CDR report) to the current recorded event. If the prior event in a multi-event condition is overwritten by a subsequent event, the multi-event status will no longer be displayed.
        - For the 2019+ MY RAM 1500, the time from event 1 to 2 may utilize a non-stored event as event 1. In this case, the total number of events and multi-event data elements will not include the non-stored event in the number of events. However, the time from event 1 to 2 will be shown as time from that non-stored event.
- Time, Operation System Time - This is a cumulative lifetime timer for the ACM. It indicates the total amount of time the ACM has been powered up.
    - For 2019 and later MY RAMs, this time is only cumulative for the current ignition cycle.
- VIN at Event, Last 8 Digits- Last 8 digits of the VIN of the vehicle at the time the ACM records the event.

DEPLOYMENT COMMAND DATA:

- A "Yes" for a particular item indicates that the ACM commanded the deployment /activation of the associated device.
- The phrase "Exceeded Storage Range" for a particular time to deploy indicates that the deployment time is equal to or greater than the 255 milliseconds that can be stored.
- If a device is not deployed, the "time to deploy" for that device will display 0, SNA, N/A or 255.
- In vehicles with Bosch ACMs, once a device has been deployed in an ignition cycle, it is possible that the ACM will not attempt to re-deploy any already deployed device during subsequent events in that same ignition cycle.

DTCs PRESENT AT START OF EVENT:

- If any DTCs (diagnostic trouble codes) are present in the ACM at the start of the event, these will be listed in this section. A dealership service manual can be used to decode the DTCs.
    - DTCs Present at Start of Event are not present in the Alfa Romeo Giulia, Fiat 500X, and the Jeep Renegade.

SENSOR DATA:

- The design range for the angular rate data is:
    - +/- 240 deg/sec for Bosch ACMs, unless specifically called out below
    - +/- 300 deg/sec for TRW ACMs, the 2019 MY RAM 1500, and the 2018+ MY Dodge Journey
    - +/- 290 deg/sec for 2008+ MY minivans and 2009-2017 MY Dodge Journey
    - +/- 340 deg/sec for 2017+ MY Chrysler Pacifica and new 2017+ MY Jeep Compass
    - -416.67 deg/sec to +413.41 deg/sec for 2014+ MY Jeep Cherokee
- For vehicles that store peripheral sensor data, t0 for the peripheral sensors is the same as the t0 for the delta V.
- Internal y acceleration is stored prior to t0 so the internal y acceleration data will usually be zero unless the rollover sensing algorithm has triggered storage of the EDR event.
- The words "Sensor Design Range Exceeded" and a vertical line will be displayed on the Longitudinal and Lateral Delta-V graphs the first time the applicable sensor range is exceeded.

PRE-CRASH DATA:

- The recorded Event may contain Pre-Crash data. Pre-Crash data from the various electronic control modules in the vehicle is transmitted to the Airbag Control Module via the vehicle's communication bus.
- In the Pre-Crash Data graph, data transmitted at a rate other than 0.1 seconds will be shown as dots for each available data point. Only data transmitted at a rate of 0.1 seconds will have the dots connected by a line.

(if equip.) - If a parameter name is followed by the words (if equip.), then the parameter is only valid for vehicles equipped with the associated parameter/vehicle system.

- The MIL (Malfunction Indicator Lamp) Status for the various recorded systems indicates the requested state of the applicable malfunction indicator lamp at the time that the data was captured. Note: Some fault codes could be stored due to component/system damage from the accident. The appropriate diagnostic tool should be used to read any stored Diagnostic Trouble Codes (DTC's) in the various electronic modules (ACM, PCM, ABS, TCM, etc., where applicable) for use in interpretation of some vehicle specific recorded data.
- ABS Activity - "Yes" indicates an active ABS event in which the ABS is actively controlling the brakes.
- ABS MIL- This indicates the ABS fault indicator lamp status. It will only be "On" when there is a fault in the ABS system. The Electronic brake module DTC's should be read and recorded for final system interpretation.
- Accelerator Pedal, % Full - This indicates the actual position of the accelerator pedal. It will be "SNA" if the vehicle is in the power free mode which limits acceleration.
- Accelerator Pedal (Derived), % Full - This indicates the calculated value of the accelerator pedal for battery electric vehicles only.
- Accelerator Pedal/Engine Throttle, % Full - This indicates the actual position of the accelerator pedal unless the cruise control is engaged. If the cruise control is engaged, this indicates the actual position of the engine throttle blade.
- Braking System, Maximum Braking -- "Yes" indicates that ABS is active on all 4 wheels at the same time.
- Cruise Control:
    - Note that the following two Cruise Control data elements are only valid for vehicles not equipped with Adaptive Cruise Control (ACC). For vehicles equipped with ACC, the ACC data elements are used for both regular Cruise Control and ACC.
    - Cruise Control System/Lamp Status -"On" indicates that the Cruise Control system is turned on.
    - Cruise Control Engaged Status/Active - "Engaged"/"Yes" indicates the Cruise Control system is actively controlling vehicle speed. "Not Engaged"/"No" indicates the system is NOT controlling vehicle speed.
    - Adaptive Cruise Control (ACC) Status (if equip.)- "Off" indicates that all cruise control functionality is disabled; "NCC_On" indicates that the Normal Cruise Control system is turned on; "NCC_Set" indicates the Normal Cruise Control is actively controlling vehicle speed; "ACC_On" indicates that ACC is turned on; "ACC_Set" indicates that the ACC is actively controlling vehicle speed. If the value is SNA for all time stamps, then the vehicle is not equipped with ACC.
    - ACC Speed Set (if equip.)- This indicates the desired speed in mph that was input by the driver for the ACC system. If the value is SNA for all time stamps, then the vehicle is not equipped with ACC.
    - ACC Faulted - "Yes" indicates that the ACC system will not function and the ACC warning lamp is lit; "No" indicates that the ACC system is functional and the ACC warning lamp is off;
    - For new 2017+ MY Jeep Compass, cruise control data elements are only available for vehicles NOT equipped with ACC.
- Drive Mode - This indicates the driver selected mode of operation (e.g. normal, sport, track, …)
- Electronic Brake/Stability Control information:
    - Stability Control - This is the status of the ESC symbol - "car with squiggly lines" indicator lamp. "On" indicates that the ESC system is functional. "Off" indicates that the ESC system was turned off either by the driver or due to a fault or thermal mode shutdown. "Engaged" indicates an active ESC/TCS event. "Partial Off" indicates that engine management has been turned off but brake traction control is still functional.
        - For the Jeep Renegade, if the Stability Control is "Off", the ESC Button Status is "Disabled", and the vehicle speed exceeds 40 mph, the stability control system will operate in a reduced functionality mode with traction control turned off ("partial off" mode) even though the user disabled it. For all other conditions, when the Stability Control is "Off", the stability control system will be off.
        - ESC Button Status - This indicates the driver selected mode for the ESC system. "Disabled" indicates that the driver pressed the ESC Button to disable engine management. "Enabled" is the default state for the ESC system.
            - SRT and some Fiat products have the ability to fully disable the ESC system if the ESC button has been pressed and held for a specific amount of time. Additional system analysis is required.
        - ESP Feature is Completely Disabled - This indicates that the stability control system has turned off engine management, traction control, and stability control.
        - ESC/ESP MIL - This indicates the ESC/ESP fault indication lamp status. It will only be "On" when there is a fault or thermal mode shutdown in the ESC/ESP system. The ESC/ESP module DTC's should be read and recorded for final system interpretation.
        - Brake Intervention by ESP - "Yes" indicates that the stability control system has engaged the brakes.
        - Engine Torque Applied - "No" indicates no engine torque output was applied (as in Park/Neutral for Automatic transmissions or clutch depressed on manual or during an ESP/Traction Control event). If "Yes", then engine torque output was applied.
        - Traction Control Active - "Yes" indicates that the traction control system is actively controlling the vehicle's wheels.
- Electronic Park Brake (EPB):
    - Park Brake Engaged - "Yes" indicates that the park brake is applied.
    - EPB MIL - "On" indicates that there is a fault in the Electronic Park Brake System.
- Engine RPM - For the RAM ProMaster City, the minimum resolution for Engine RPM is 32 rpm.
- Engine Throttle, % Full - This indicates the actual position of the Engine Throttle blade. This data element is not supported by vehicles with diesel engines. Thus a value of "SNA" will be displayed if the vehicle has a diesel engine.
- ETC Lamp - Lamp "ON "indicates there is an active Electronic Throttle DTC.
- ETC Lamp Flashing - "Yes" indicates that the ETC is in the limp-in mode.
- Forward Collision Warning (FCW) (if equip.):
    - Object of Interest Distance - This indicates the actual forward distance to the main object being tracked by the FCW system. "FCW present but not tracking" indicates that the FCW system is not currently tracking an object. If the value is SNA for all time stamps, then the vehicle is not equipped with FCW.
    - FCW System Operating State - "Off" indicates that the FCW system is off and the FCW Warning Lamp will be "On"; "On" indicates that the FCW system is fully on with active braking as well as the audible and visual warnings enabled.
    - FCW System Status - "Off" indicates that the FCW system is off and the FCW Warning Lamp will be "On". "On-braking" indicates that the FCW system is on with active braking enabled but there will no FCW audible or visual warnings in an FCW event. "On-warning" indicates that the FCW system is on but active braking is disabled. In an FCW event, the driver will only receive FCW audible and visual warnings. "On-full" indicates that the FCW system is fully on with active braking as well as the audible and visual warnings

enabled. SNA indicates that the vehicle is not equipped with FCW.
- Gear Position - For all vehicles except the RAM ProMaster City, this indicates the current transmission gear.
  For the RAM ProMaster City, this indicates the status of the gear shift lever.
- Master Cylinder Pressure - This indicates the brake pressure applied to the brakes through the brake pedal.
- PCM MIL - This indicates the PCM fault indicator lamp status. It will only be "On" when there is a fault in the PCM. "Flashing" indicates misfire detection. The Powertrain Control Module DTC's should be read and recorded for final system interpretation.
- Pre-Crash Recorder Complete - Due to the interruption of data recording in one section, this data element may display "Interrupted" for all sections when some data sections are actually complete.
  - For the 2014 MY Jeep Grand Cherokee and Dodge Durango, if recording of angular rate data is interrupted, the entire EDR record will display "Interrupted" even though the rest of the data may be complete.
- PRND/PRNDL/PRNDS Status - This indicates the status of the Shifter Position.
- Raw Manifold Pressure - This indicates engine load in kPa.
- Reverse Gear - For manual transmission vehicles only, "Yes" indicates the transmission is in the reverse gear.
- Service Brake - "On" indicates that the brake pedal is physically depressed. Braking from the ABS or FCW systems will not be reported in this data element.
- Speed, Vehicle Indicated - This indicates the average of the wheel speeds of the drive wheels.
  - The reporting resolution for Speed, Vehicle Indicated is 1 km/h.
  - To display this data element in mph, the CDR Tool converts the km/h to mph and reports a rounded value in mph.
  - The accuracy of the recorded Speed, Vehicle Indicated may be affected by a significant change of the tire size for the drive wheels or the final drive axle ratio of the transmission from the factory build specifications, wheel lockup, wheel slip, or wheel spin.
  - On some vehicles capable of speeds in excess of 255km/h (about 158mph), the actual vehicle speed may have exceeded the reporting range. It is always prudent to check the reported wheel speeds and other parameters to confirm the Speed, Vehicle Indicated value(s).
- Tire Information:
  - XX where LF = Left Front Tire, RF = Right Front Tire, LR = Left Rear Tire, and RR = Right Rear Tire.
  - Tire X Location - This indicates the location of the tire pressure sensor data being displayed for that time stamp. Default is used to indicate that the location of the tire pressure sensor is unknown or there is no tire pressure sensor in that wheel. Vehicles with Base Tire Pressure Monitoring systems will display SNA for both Tire Locations as these vehicles do not send actual pressure values across the communication bus.
  - Tire X Pressure/Tire Pressure Status, XX -This indicates the actual pressure status of the Tire Location defined in the previous column (Tire X Location) or by the values for XX. Possible values are LOW, NORMAL, HIGH, or SNA for this parameter. Vehicles with Base Tire Pressure Monitoring systems may display NORMAL even though these vehicles do not send actual pressure values across the communication bus.
  - Tire X Pressure/Tire Pressure Value, XX (psi) - This indicates the actual tire pressure value of the Tire Location defined in the previous column (Tire X Location) or by the values for XX. Vehicles with Base Tire Pressure Monitoring systems will display N/A for this parameter as these vehicles do not send actual pressure values across the communication bus.
    - For the following vehicles, the tire location, if displayed, may not be accurate if the tires have been rotated:
      -2013 MY Ram
      -2013-2017 MY Jeep Patriot
      -2013-2014 MY Chrysler 200
      -2013-2017 MY Jeep Compass
      -2013-2016 MY Dodge Dart
    - For the 2013 MY Ram, if the values for tire pressure status and the tire pressure are SNA, the EDR does not store tire pressure monitoring data.
    - Tire pressure is not stored in the EDR for the following vehicles:
      -2014-2018 MY RAM 1500
      -2014+ MY RAM (all but 1500)
      -2013+ MY Jeep Wrangler
      -2013 MY Jeep Grand Cherokee
      -2013 MY Dodge Durango
      -2013-2014 MY Dodge Challenger
      -2013-2016 MY Chrysler Town and Country
      -2013+ MY Dodge Grand Caravan
      -2015+ MY Fiat 500
    - Wheel Speed, XX - This indicates the speed value of a particular tire as denoted by XX.
- Tire Pressure Monitor Indicator Lamp/Faults - "On" indicates a fault in the tire pressure monitoring system. The TPM module DTC's should be read and recorded for final system interpretation.
- "T0" ("Time zero" where '0' is seen as subscript) is defined as "beginning of the crash event". T0 is the time at which the ACM algorithm is activated, a specific Delta-V is exceeded, or a non-reversible restraint device is deployed. T0 may be defined differently for front, side, rear and roll-over events.
  - If multiple algorithm decisions (i.e.: frontal, side, rear and/or rollover) are made before the first recorded event ends, all of those events are part of the same event record and "T0" is defined as the "T0" from the first recorded event.
  - In the Pre-Crash data tables, the relative time marker "-0.1s" or "-0.25s" respectively represents the last set of data captured in the buffer prior to "T0."
- Torque Information:
  - Axle Torque - This indicates the E-Motor Torque multiplied by the gear ratio for battery electric vehicles only.
  - E-Motor Torque - This indicates the calculated torque from the output shaft of the electric motor in battery electric vehicles only.
- Traction Control Intervention Active - "Active" indicates wheel slippage was occurring during vehicle acceleration.

APPLICATION INFORMATION:

- Alfa Romeo Giulia, Alfa Romeo Stelvio, Fiat 500L, Fiat 500X, and Jeep Renegade are only CDR supported in the United States, Canada, and Saudi Arabia markets.
- Fiat 500/500e is only CDR supported in the United States, Canada, Mexico, and Brazil markets.

03002_Chrysler_ r043

System Status at Retrieval

Original VIN	1C6RR7VT9DS******
Ignition Cycle, Download	8110
ACM Part Number	68085881AH
ECU Serial Number	T52MD114300938
ACM Supplier	Bosch
ECU Supply Voltage at Time of Retrieval	11.7

System Configuration at Retrieval

Configured for Driver Frontal Airbag	Yes
Configured for Passenger Airbag	Yes
Configured for Driver Retractor Pretensioner	Yes
Configured for Passenger Retractor Pretensioner	Yes
Configured for Left Side Curtain Airbag	Yes
Configured for Right Side Curtain Airbag	Yes
Configured for Front Left Seat Airbags	Yes
Configured for Front Right Seat Airbag	Yes
Configured for Safety Belt Status, Driver	Yes
Configured for Safety Belt Status, Outboard Front Passenger	Yes
Configured for Seat Track Position Switch, Foremost, Status, Driver	No
Configured for Seat Track Position Switch, Foremost, Status, Outboard Front Passenger	No
Configured for Rollover Sensing	Yes

System Configuration at Event (Most Recent Event)

Configured for Driver Frontal Airbag	Yes
Configured for Passenger Airbag	Yes
Configured for Driver Retractor Pretensioner	Yes
Configured for Passenger Retractor Pretensioner	Yes
Configured for Left Side Curtain Airbag	Yes
Configured for Right Side Curtain Airbag	Yes
Configured for Front Left Seat Airbags	Yes
Configured for Front Right Seat Airbag	Yes
Configured for Safety Belt Status, Driver	Yes
Configured for Safety Belt Status, Outboard Front Passenger	Yes
Configured for Seat Track Position Switch, Foremost, Status, Driver	No
Configured for Seat Track Position Switch, Foremost, Status, Outboard Front Passenger	No
Configured for Rollover Sensing	Yes

System Status at Event (Most Recent Event)

Event Number	3
Multi-Event, Number of Events (1,2)	2
Total number of events	3
Time from Event 1 to 2 (Time since last event)(sec)	0.01
Complete File Recorded (Yes, No)	Yes
Maximum Delta-V Longitudinal (MPH [km/h])	0.0 [0]
Time, Maximum Delta-V, Longitudinal (msec)	0
Maximum Delta-V Lateral (MPH [km/h])	-2.5 [-4]
Time, Maximum Delta-V, Lateral (msec)	262
Ignition Cycle, Crash	8107
Safety Belt Status, Driver	Buckled
Safety Belt Status, Outboard Front Passenger	Buckled
Airbag Warning Lamp, On/Off	Off
Operation System Time (sec)	4532778
Airbag Warning Lamp On Time Before Event (min)	10794
Supply Voltage at Event, ACM (V)	14.8
Operation via Energy Reserve	No
VIN at Event (last 8 digits)	DS******
Odometer at Event (km [miles])	66863 [41546.5]

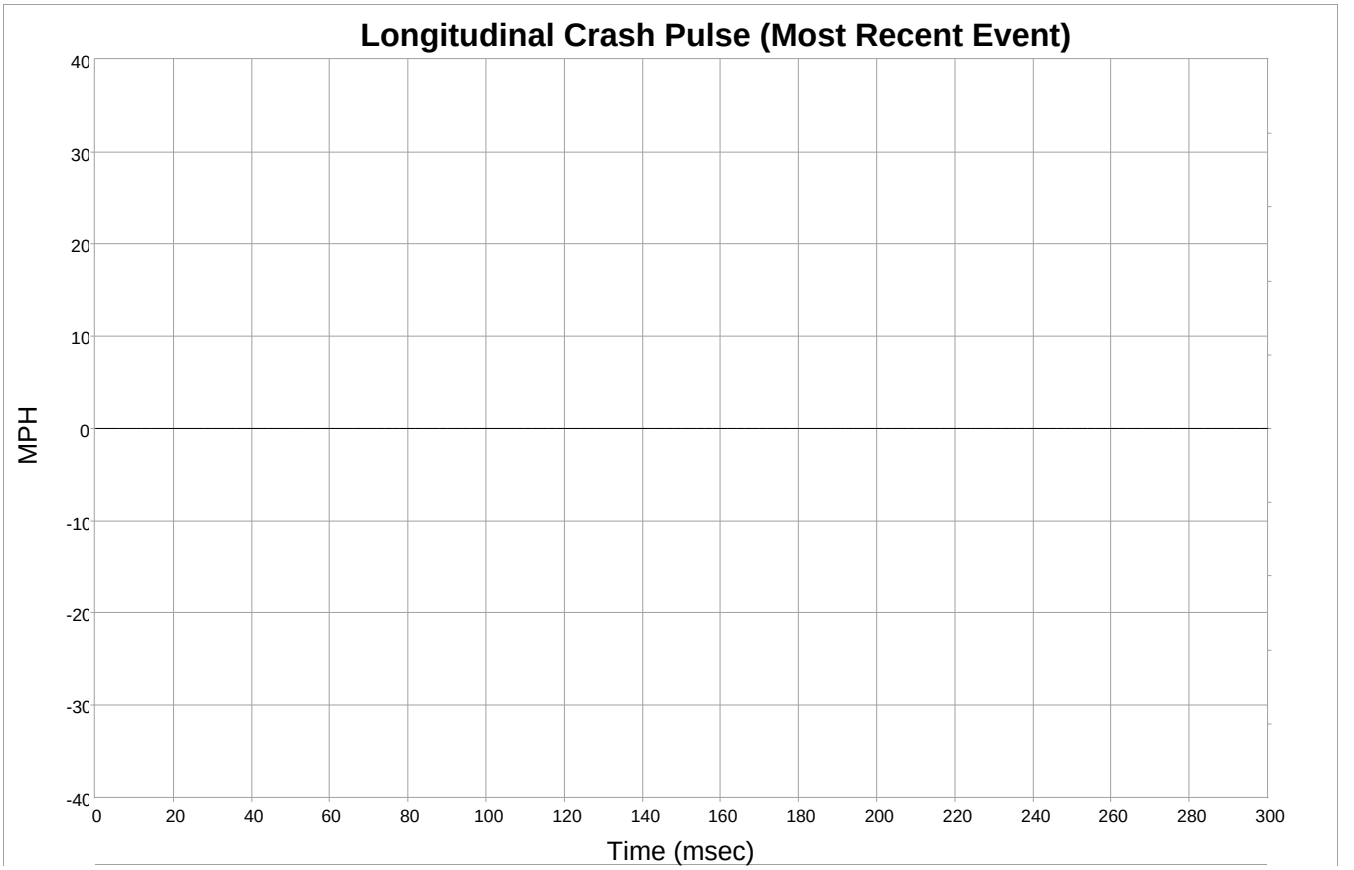
Deployment Command Data (Most Recent Event)

Driver Frontal Airbag Commanded	No
Driver Front Airbag, Time to 1st stage (msec)	0
Driver Front Airbag, Time to 2nd Stage from T0 (msec)	0
Passenger Frontal Airbag Commanded	No
Passenger Front Airbag, Time to 1st stage (msec)	0
Passenger Front Airbag, Time to 2nd Stage from T0 (msec)	0
Commanded Driver Retractor Pretensioner Deployment	No
Commanded Passenger Retractor Pretensioner Deployment	No
Commanded Left Side Curtain Airbag Deployment	No
Commanded Left Seat Airbag Deployment	No
Commanded Right Side Curtain Airbag Deployment	No
Commanded Front Right Side Seat Airbag Deployment	No

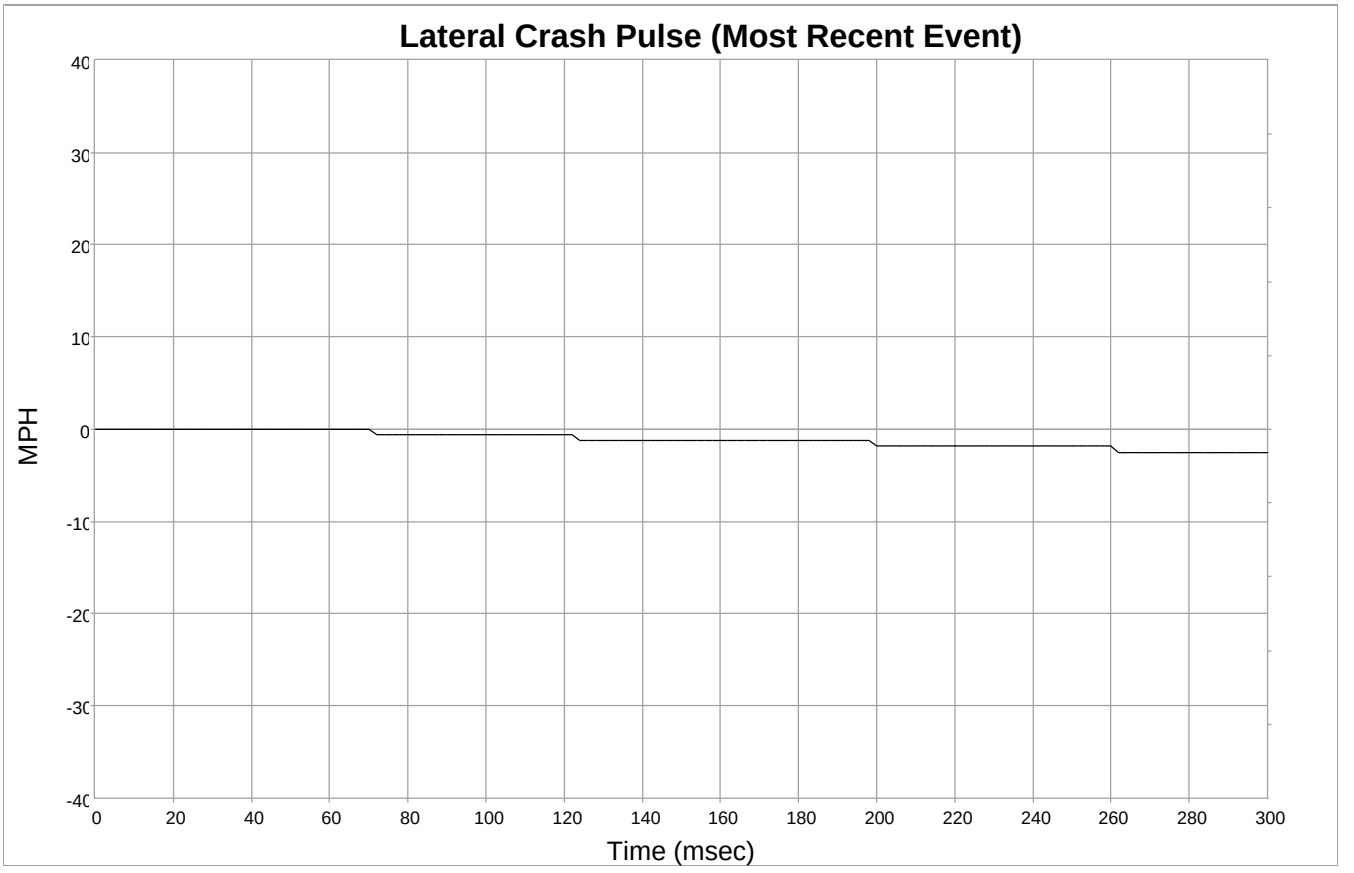
DTCs Present at Start of Event (Most Recent Event)

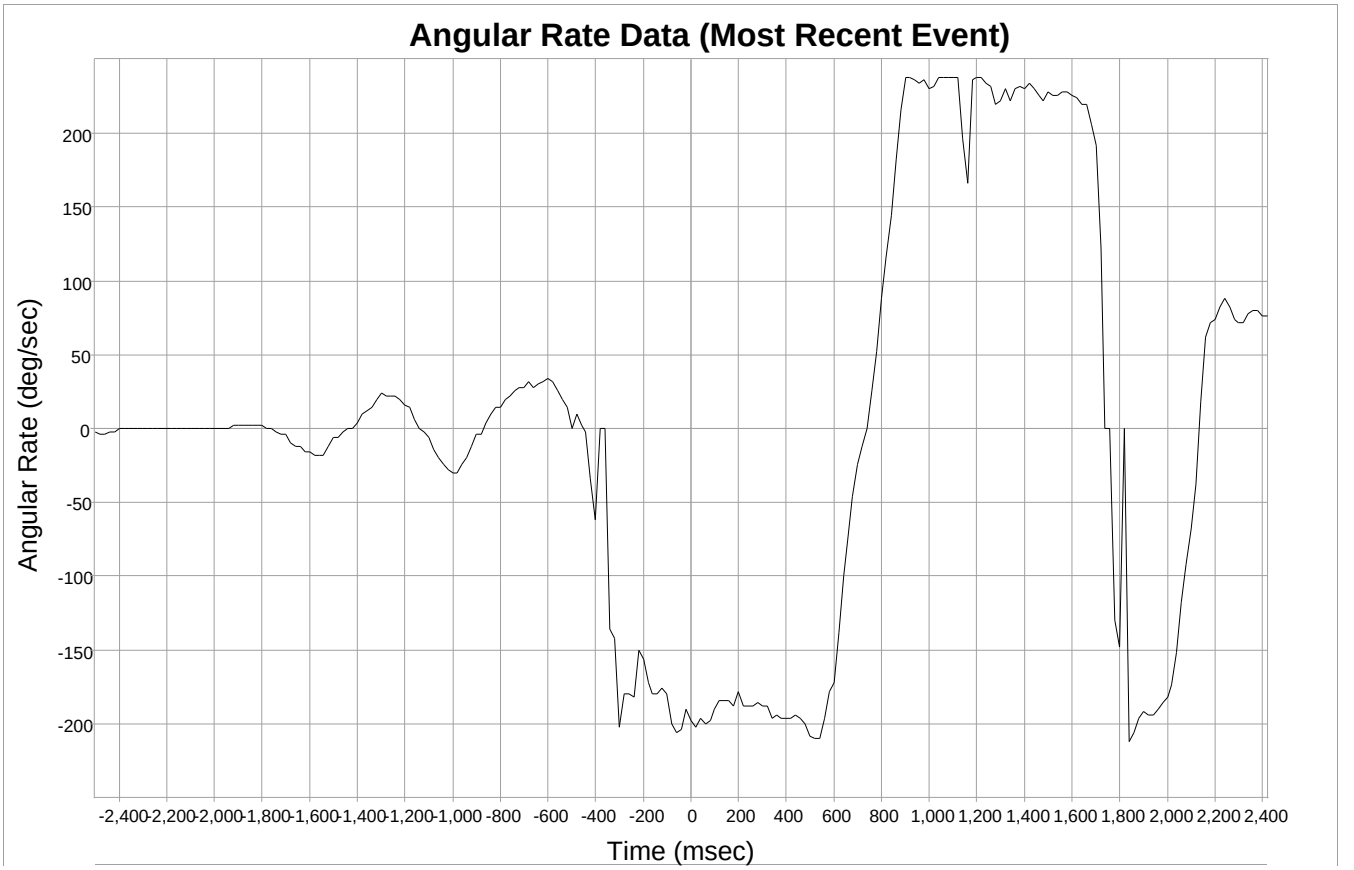
DTC Number	DTC Status
C10CC-00	Active

Longitudinal Crash Pulse (Most Recent Event)



Lateral Crash Pulse (Most Recent Event)




Angular Rate Data (Most Recent Event)
Angular Rate (deg/sec)
200
150
100
50
0
-50
-100
-150
-200
-2,400 -2,200 -2,000 -1,800 -1,600 -1,400 -1,200 -1,000 -800 -600 -400 -200 0 200 400 600 800 1,000 1,200 1,400 1,600 1,800 2,000 2,200 2,400
Time (msec)

Longitudinal Crash Pulse (Most Recent Event)

Time (msec)	Delta-V, Longitudinal (MPH [km/h])
0	0.0 [0]
2	0.0 [0]
4	0.0 [0]
6	0.0 [0]
8	0.0 [0]
10	0.0 [0]
12	0.0 [0]
14	0.0 [0]
16	0.0 [0]
18	0.0 [0]
20	0.0 [0]
22	0.0 [0]
24	0.0 [0]
26	0.0 [0]
28	0.0 [0]
30	0.0 [0]
32	0.0 [0]
34	0.0 [0]
36	0.0 [0]
38	0.0 [0]
40	0.0 [0]
42	0.0 [0]
44	0.0 [0]
46	0.0 [0]
48	0.0 [0]
50	0.0 [0]
52	0.0 [0]
54	0.0 [0]
56	0.0 [0]
58	0.0 [0]
60	0.0 [0]
62	0.0 [0]
64	0.0 [0]
66	0.0 [0]
68	0.0 [0]
70	0.0 [0]
72	0.0 [0]
74	0.0 [0]
76	0.0 [0]
78	0.0 [0]
80	0.0 [0]
82	0.0 [0]
84	0.0 [0]
86	0.0 [0]
88	0.0 [0]
90	0.0 [0]
92	0.0 [0]
94	0.0 [0]
96	0.0 [0]
98	0.0 [0]

Time (msec)	Delta-V, Longitudinal (MPH [km/h])
100	0.0 [0]
102	0.0 [0]
104	0.0 [0]
106	0.0 [0]
108	0.0 [0]
110	0.0 [0]
112	0.0 [0]
114	0.0 [0]
116	0.0 [0]
118	0.0 [0]
120	0.0 [0]
122	0.0 [0]
124	0.0 [0]
126	0.0 [0]
128	0.0 [0]
130	0.0 [0]
132	0.0 [0]
134	0.0 [0]
136	0.0 [0]
138	0.0 [0]
140	0.0 [0]
142	0.0 [0]
144	0.0 [0]
146	0.0 [0]
148	0.0 [0]
150	0.0 [0]
152	0.0 [0]
154	0.0 [0]
156	0.0 [0]
158	0.0 [0]
160	0.0 [0]
162	0.0 [0]
164	0.0 [0]
166	0.0 [0]
168	0.0 [0]
170	0.0 [0]
172	0.0 [0]
174	0.0 [0]
176	0.0 [0]
178	0.0 [0]
180	0.0 [0]
182	0.0 [0]
184	0.0 [0]
186	0.0 [0]
188	0.0 [0]
190	0.0 [0]
192	0.0 [0]
194	0.0 [0]
196	0.0 [0]
198	0.0 [0]

Time (msec)	Delta-V, Longitudinal (MPH [km/h])
200	0.0 [0]
202	0.0 [0]
204	0.0 [0]
206	0.0 [0]
208	0.0 [0]
210	0.0 [0]
212	0.0 [0]
214	0.0 [0]
216	0.0 [0]
218	0.0 [0]
220	0.0 [0]
222	0.0 [0]
224	0.0 [0]
226	0.0 [0]
228	0.0 [0]
230	0.0 [0]
232	0.0 [0]
234	0.0 [0]
236	0.0 [0]
238	0.0 [0]
240	0.0 [0]
242	0.0 [0]
244	0.0 [0]
246	0.0 [0]
248	0.0 [0]
250	0.0 [0]
252	0.0 [0]
254	0.0 [0]
256	0.0 [0]
258	0.0 [0]
260	0.0 [0]
262	0.0 [0]
264	0.0 [0]
266	0.0 [0]
268	0.0 [0]
270	0.0 [0]
272	0.0 [0]
274	0.0 [0]
276	0.0 [0]
278	0.0 [0]
280	0.0 [0]
282	0.0 [0]
284	0.0 [0]
286	0.0 [0]
288	0.0 [0]
290	0.0 [0]
292	0.0 [0]
294	0.0 [0]
296	0.0 [0]
298	0.0 [0]
300	0.0 [0]

Lateral Crash Pulse (Most Recent Event)

Time (msec)	Delta-V, Lateral (MPH [km/h])
0	0.0 [0]
2	0.0 [0]
4	0.0 [0]
6	0.0 [0]
8	0.0 [0]
10	0.0 [0]
12	0.0 [0]
14	0.0 [0]
16	0.0 [0]
18	0.0 [0]
20	0.0 [0]
22	0.0 [0]
24	0.0 [0]
26	0.0 [0]
28	0.0 [0]
30	0.0 [0]
32	0.0 [0]
34	0.0 [0]
36	0.0 [0]
38	0.0 [0]
40	0.0 [0]
42	0.0 [0]
44	0.0 [0]
46	0.0 [0]
48	0.0 [0]
50	0.0 [0]
52	0.0 [0]
54	0.0 [0]
56	0.0 [0]
58	0.0 [0]
60	0.0 [0]
62	0.0 [0]
64	0.0 [0]
66	0.0 [0]
68	0.0 [0]
70	0.0 [0]
72	-0.6 [-1]
74	-0.6 [-1]
76	-0.6 [-1]
78	-0.6 [-1]
80	-0.6 [-1]
82	-0.6 [-1]
84	-0.6 [-1]
86	-0.6 [-1]
88	-0.6 [-1]
90	-0.6 [-1]
92	-0.6 [-1]
94	-0.6 [-1]
96	-0.6 [-1]
98	-0.6 [-1]
100	-0.6 [-1]
102	-0.6 [-1]
104	-0.6 [-1]
106	-0.6 [-1]
108	-0.6 [-1]
110	-0.6 [-1]
112	-0.6 [-1]
114	-0.6 [-1]
116	-0.6 [-1]
118	-0.6 [-1]
120	-0.6 [-1]
122	-0.6 [-1]
124	-1.2 [-2]
126	-1.2 [-2]
128	-1.2 [-2]
130	-1.2 [-2]
132	-1.2 [-2]
134	-1.2 [-2]
136	-1.2 [-2]
138	-1.2 [-2]
140	-1.2 [-2]
142	-1.2 [-2]
144	-1.2 [-2]
146	-1.2 [-2]
148	-1.2 [-2]
150	-1.2 [-2]
152	-1.2 [-2]
154	-1.2 [-2]
156	-1.2 [-2]
158	-1.2 [-2]
160	-1.2 [-2]
162	-1.2 [-2]
164	-1.2 [-2]
166	-1.2 [-2]
168	-1.2 [-2]
170	-1.2 [-2]
172	-1.2 [-2]
174	-1.2 [-2]
176	-1.2 [-2]
178	-1.2 [-2]
180	-1.2 [-2]
182	-1.2 [-2]
184	-1.2 [-2]
186	-1.2 [-2]
188	-1.2 [-2]
190	-1.2 [-2]
192	-1.2 [-2]
194	-1.2 [-2]
196	-1.2 [-2]
198	-1.2 [-2]
200	-1.9 [-3]
202	-1.9 [-3]
204	-1.9 [-3]
206	-1.9 [-3]
208	-1.9 [-3]
210	-1.9 [-3]
212	-1.9 [-3]
214	-1.9 [-3]
216	-1.9 [-3]
218	-1.9 [-3]
220	-1.9 [-3]
222	-1.9 [-3]
224	-1.9 [-3]
226	-1.9 [-3]
228	-1.9 [-3]
230	-1.9 [-3]
232	-1.9 [-3]
234	-1.9 [-3]
236	-1.9 [-3]
238	-1.9 [-3]
240	-1.9 [-3]
242	-1.9 [-3]
244	-1.9 [-3]
246	-1.9 [-3]
248	-1.9 [-3]
250	-1.9 [-3]
252	-1.9 [-3]
254	-1.9 [-3]
256	-1.9 [-3]
258	-1.9 [-3]
260	-1.9 [-3]
262	-2.5 [-4]
264	-2.5 [-4]
266	-2.5 [-4]
268	-2.5 [-4]
270	-2.5 [-4]
272	-2.5 [-4]
274	-2.5 [-4]
276	-2.5 [-4]
278	-2.5 [-4]
280	-2.5 [-4]
282	-2.5 [-4]
284	-2.5 [-4]
286	-2.5 [-4]
288	-2.5 [-4]
290	-2.5 [-4]
292	-2.5 [-4]
294	-2.5 [-4]
296	-2.5 [-4]
298	-2.5 [-4]
300	-2.5 [-4]

Angular Rate Data (Most Recent Event)

Time (msec)	Angular Rate (deg/sec)
-2500	-2.00
-2480	-4.00
-2460	-4.00
-2440	-2.00
-2420	-2.00
-2400	0.00
-2380	0.00
-2360	0.00
-2340	0.00
-2320	0.00
-2300	0.00
-2280	0.00
-2260	0.00
-2240	0.00
-2220	0.00
-2200	0.00
-2180	0.00
-2160	0.00
-2140	0.00
-2120	0.00
-2100	0.00
-2080	0.00
-2060	0.00
-2040	0.00
-2020	0.00
-2000	0.00
-1980	0.00
-1960	0.00
-1940	0.00
-1920	2.00
-1900	2.00
-1880	2.00
-1860	2.00
-1840	2.00
-1820	2.00
-1800	2.00
-1780	0.00
-1760	0.00
-1740	-2.00
-1720	-4.00
-1700	-4.00
-1680	-10.00
-1660	-12.00
-1640	-12.00
-1620	-16.00
-1600	-16.00
-1580	-18.00
-1560	-18.00
-1540	-18.00
-1520	-12.00

Time (msec)	Angular Rate (deg/sec)
-1500	-6.00
-1480	-6.00
-1460	-2.00
-1440	0.00
-1420	0.00
-1400	4.00
-1380	10.00
-1360	12.00
-1340	14.00
-1320	20.00
-1300	24.00
-1280	22.00
-1260	22.00
-1240	22.00
-1220	20.00
-1200	16.00
-1180	14.00
-1160	6.00
-1140	0.00
-1120	-2.00
-1100	-6.00
-1080	-14.00
-1060	-20.00
-1040	-24.00
-1020	-28.00
-1000	-30.00
-980	-30.00
-960	-24.00
-940	-20.00
-920	-12.00
-900	-4.00
-880	-4.00
-860	4.00
-840	10.00
-820	14.00
-800	14.00
-780	20.00
-760	22.00
-740	26.00
-720	28.00
-700	28.00
-680	32.00
-660	28.00
-640	30.00
-620	32.00
-600	34.00
-580	32.00
-560	26.00
-540	20.00
-520	14.00

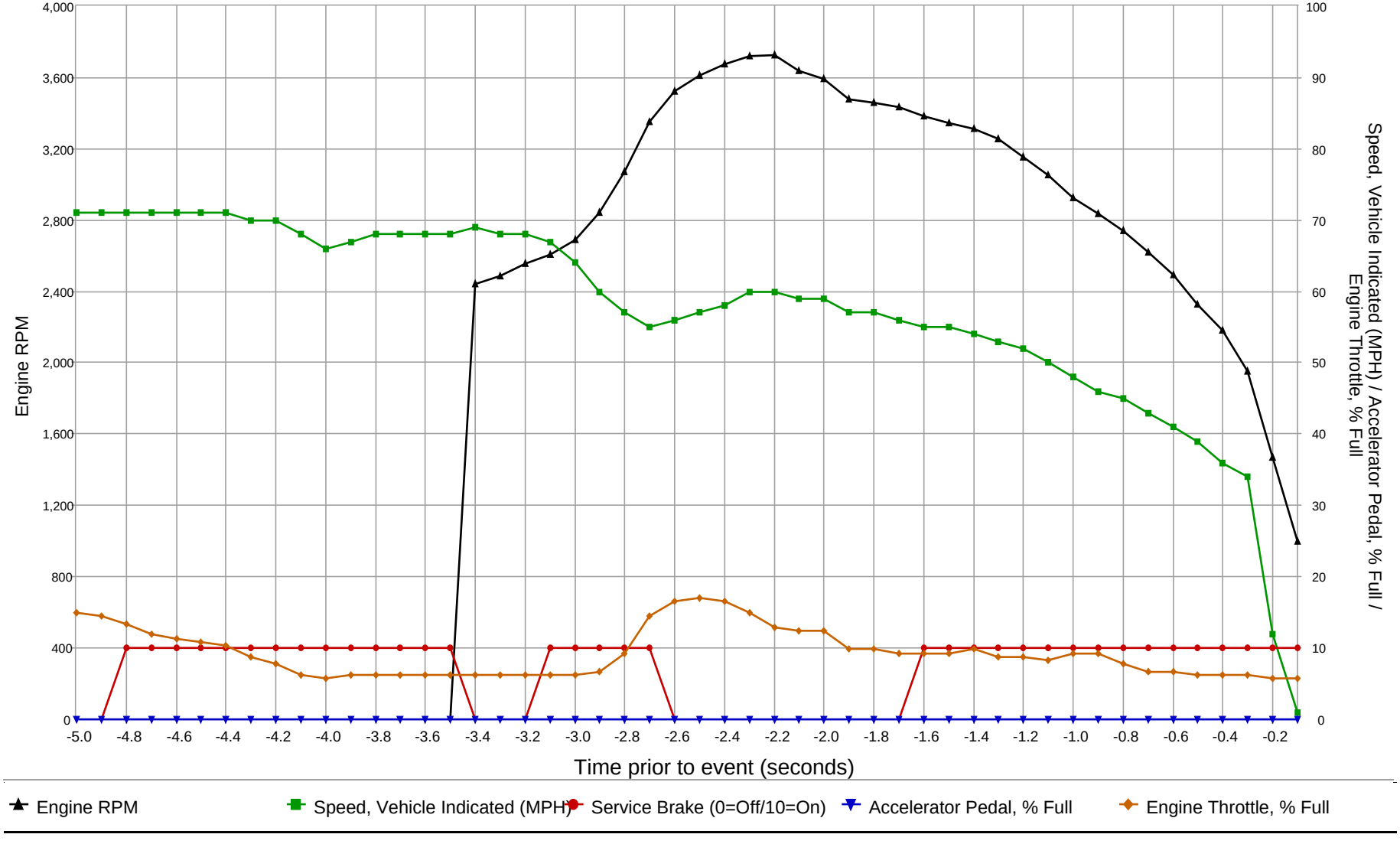
Time (msec)	Angular Rate (deg/sec)
-500	0.00
-480	10.00
-460	2.00
-440	-2.00
-420	-34.00
-400	-62.00
-380	0.00
-360	0.00
-340	-136.00
-320	-142.00
-300	-202.00
-280	-180.00
-260	-180.00
-240	-182.00
-220	-150.00
-200	-156.00
-180	-172.00
-160	-180.00
-140	-180.00
-120	-176.00
-100	-180.00
-80	-200.00
-60	-206.00
-40	-204.00
-20	-190.00
0	-198.00
20	-202.00
40	-196.00
60	-200.00
80	-198.00
100	-190.00
120	-184.00
140	-184.00
160	-184.00
180	-188.00
200	-178.00
220	-188.00
240	-188.00
260	-188.00
280	-186.00
300	-188.00
320	-188.00
340	-196.00
360	-194.00
380	-196.00
400	-196.00
420	-196.00
440	-194.00
460	-196.00
480	-200.00

Angular Rate Data (Most Recent Event)

Time (msec)	Angular Rate (deg/sec)
500	-208.00
520	-210.00
540	-210.00
560	-196.00
580	-178.00
600	-172.00
620	-138.00
640	-100.00
660	-76.00
680	-46.00
700	-24.00
720	-12.00
740	0.00
760	26.00
780	52.00
800	88.00
820	116.00
840	144.00
860	182.00
880	216.00
900	238.00
920	238.00
940	236.00
960	234.00
980	236.00
1000	230.00
1020	232.00
1040	238.00
1060	238.00
1080	238.00
1100	238.00
1120	238.00
1140	196.00
1160	166.00
1180	236.00
1200	238.00
1220	238.00
1240	234.00
1260	232.00
1280	220.00
1300	222.00
1320	230.00
1340	222.00
1360	230.00
1380	232.00
1400	230.00
1420	234.00
1440	230.00
1460	226.00
1480	222.00

Time (msec)	Angular Rate (deg/sec)
1500	228.00
1520	226.00
1540	226.00
1560	228.00
1580	228.00
1600	226.00
1620	224.00
1640	220.00
1660	220.00
1680	206.00
1700	192.00
1720	122.00
1740	0.00
1760	0.00
1780	-130.00
1800	-148.00
1820	0.00
1840	-212.00
1860	-206.00
1880	-196.00
1900	-192.00
1920	-194.00
1940	-194.00
1960	-190.00
1980	-186.00
2000	-182.00
2020	-174.00
2040	-152.00
2060	-118.00
2080	-92.00
2100	-68.00
2120	-38.00
2140	18.00
2160	62.00
2180	72.00
2200	74.00
2220	82.00
2240	88.00
2260	82.00
2280	74.00
2300	72.00
2320	72.00
2340	78.00
2360	80.00
2380	80.00
2400	76.00
2420	76.00

Pre-Crash Data (Most Recent Event)



SNA values will not be plotted on the graph

Pre-Crash Data (Most Recent Event - table 1 of 4)

(the most recent sampled values are recorded prior to the event)

Time Stamp (sec)	Pre-Crash Recorder Status	Speed, Vehicle Indicated (MPH [km/h])	Accelerator Pedal, % Full	Engine Throttle, % Full	Service Brake	Engine RPM	ABS Activity	Stability Control	Steering Input (deg)
-5.0	Complete	71 [114]	0	15	Off	0	No	Off	-250
-4.9	Complete	71 [114]	0	14	Off	0	No	Off	-239
-4.8	Complete	71 [114]	0	13	On	0	No	Off	-220
-4.7	Complete	71 [114]	0	12	On	0	No	Off	-197
-4.6	Complete	71 [114]	0	11	On	0	No	Off	-186
-4.5	Complete	71 [114]	0	11	On	0	No	Off	-178
-4.4	Complete	71 [113]	0	10	On	0	No	Off	-177
-4.3	Complete	70 [113]	0	9	On	0	No	Off	-165
-4.2	Complete	70 [113]	0	8	On	0	No	Off	-133
-4.1	Complete	68 [110]	0	6	On	0	No	Off	-95
-4.0	Complete	66 [107]	0	6	On	0	No	Off	-73
-3.9	Complete	67 [107]	0	6	On	0	No	Off	-46
-3.8	Complete	68 [109]	0	6	On	0	No	Off	-23
-3.7	Complete	68 [110]	0	6	On	0	No	Off	-16
-3.6	Complete	68 [110]	0	6	On	0	No	Off	-11
-3.5	Complete	68 [110]	0	6	On	0	No	Off	-18
-3.4	Complete	69 [110]	0	6	Off	2,444	No	On	-15
-3.3	Complete	68 [109]	0	6	Off	2,486	No	On	-12
-3.2	Complete	68 [109]	0	6	Off	2,558	No	On	-10
-3.1	Complete	67 [108]	0	6	On	2,608	No	On	-8
-3.0	Complete	64 [104]	0	6	On	2,692	Yes	On	-7
-2.9	Complete	60 [96]	0	7	On	2,844	Yes	On	-5
-2.8	Complete	57 [92]	0	9	On	3,073	Yes	On	-2
-2.7	Complete	55 [89]	0	14	On	3,350	No	Engaged	1
-2.6	Complete	56 [90]	0	16	Off	3,523	No	Engaged	6
-2.5	Complete	57 [92]	0	17	Off	3,611	No	Engaged	16
-2.4	Complete	58 [94]	0	16	Off	3,675	No	Engaged	38
-2.3	Complete	60 [96]	0	15	Off	3,722	No	Engaged	64
-2.2	Complete	60 [97]	0	13	Off	3,729	No	Engaged	88
-2.1	Complete	59 [95]	0	12	Off	3,639	No	Engaged	121
-2.0	Complete	59 [94]	0	12	Off	3,595	No	Engaged	157
-1.9	Complete	57 [92]	0	10	Off	3,479	No	Engaged	165
-1.8	Complete	57 [92]	0	10	Off	3,459	No	Engaged	168
-1.7	Complete	56 [90]	0	9	Off	3,435	No	Engaged	175
-1.6	Complete	55 [89]	0	9	On	3,385	No	Engaged	186
-1.5	Complete	55 [88]	0	9	On	3,347	No	Engaged	198
-1.4	Complete	54 [87]	0	10	On	3,313	No	Engaged	209
-1.3	Complete	53 [85]	0	9	On	3,253	No	Engaged	239
-1.2	Complete	52 [83]	0	9	On	3,153	No	Engaged	283
-1.1	Complete	50 [80]	0	8	On	3,051	No	Engaged	296
-1.0	Complete	48 [77]	0	9	On	2,925	No	Engaged	294
-0.9	Complete	46 [75]	0	9	On	2,837	No	Engaged	288
-0.8	Complete	45 [72]	0	8	On	2,738	No	Engaged	282
-0.7	Complete	43 [69]	0	7	On	2,621	No	Engaged	272
-0.6	Complete	41 [66]	0	7	On	2,491	No	Engaged	257
-0.5	Complete	39 [62]	0	6	On	2,326	No	Engaged	247
-0.4	Complete	36 [58]	0	6	On	2,183	No	Engaged	250
-0.3	Complete	34 [54]	0	6	On	1,955	No	Engaged	236
-0.2	Complete	12 [19]	0	6	On	1,467	Yes	Off	-53
-0.1	Complete	1 [2]	0	6	On	997	Yes	Off	-587

Pre-Crash Data (Most Recent Event - table 2 of 4)

(the most recent sampled values are recorded prior to the event)

Time Stamp (sec)	Raw Manifold Pressure (kPa)	PCM MIL	Yaw Rate (deg/sec)	Wheel Speed LF (RPM)	Wheel Speed RF (RPM)	Wheel Speed LR (RPM)	Wheel Speed RR (RPM)	ETC Lamp
-5.0	89.60	Off	SNA	150	138	148	144	Off
-4.9	89.60	Off	SNA	143	136	146	141	Off
-4.8	89.60	Off	SNA	144	138	145	139	Off
-4.7	89.60	Off	SNA	147	137	145	135	Off
-4.6	89.60	Off	SNA	148	139	146	136	Off
-4.5	89.60	Off	SNA	149	139	146	139	Off
-4.4	89.60	Off	SNA	146	137	144	140	Off
-4.3	89.60	Off	SNA	143	137	144	140	Off
-4.2	89.60	Off	SNA	138	135	141	137	Off
-4.1	89.60	Off	SNA	138	135	141	135	Off
-4.0	89.60	Off	SNA	136	135	140	134	Off
-3.9	89.60	Off	SNA	134	136	139	133	Off
-3.8	89.60	Off	SNA	131	128	135	133	Off
-3.7	89.60	Off	SNA	128	134	131	134	Off
-3.6	89.60	Off	SNA	128	127	129	132	Off
-3.5	89.60	Off	SNA	130	126	127	130	Off
-3.4	89.60	Off	SNA	126	126	126	128	Off
-3.3	89.60	Off	SNA	123	123	124	128	Off
-3.2	13.60	Off	-3	718	716	704	710	Off
-3.1	12.80	Off	-3	715	714	694	701	Off
-3.0	12.80	Off	-4	713	708	655	656	Off
-2.9	12.80	Off	-5	710	682	609	610	Off
-2.8	16.00	Off	-7	704	681	587	584	Off
-2.7	20.80	Off	-8	712	645	571	573	Off
-2.6	24.00	Off	-10	704	701	591	581	Off
-2.5	24.80	Off	-14	697	694	605	598	Off
-2.4	24.00	Off	-18	698	690	622	612	Off
-2.3	22.40	Off	-21	696	686	638	620	Off
-2.2	19.20	Off	-24	694	678	631	624	Off
-2.1	16.80	Off	-28	688	670	590	642	Off
-2.0	15.20	Off	-30	658	665	579	631	Off
-1.9	13.60	Off	-32	127	658	560	637	Off
-1.8	13.60	Off	-32	11	652	581	599	Off
-1.7	12.80	Off	-28	390	644	588	579	Off
-1.6	12.80	Off	-28	647	636	582	572	Off
-1.5	12.80	Off	-35	638	551	577	564	Off
-1.4	13.60	Off	-39	572	517	560	556	Off
-1.3	12.80	Off	-40	440	510	543	544	Off
-1.2	12.80	Off	-37	102	569	529	533	Off
-1.1	12.80	Off	-34	282	560	513	522	Off
-1.0	13.60	Off	-32	424	518	485	509	Off
-0.9	14.40	Off	-34	335	494	458	503	Off
-0.8	13.60	Off	-30	288	461	439	487	Off
-0.7	13.60	Off	-26	209	371	420	463	Off
-0.6	13.60	Off	-22	187	336	406	430	Off
-0.5	13.60	Off	-19	222	348	395	394	Off
-0.4	14.40	Off	-15	196	334	372	370	Off
-0.3	15.20	Off	-38	185	125	287	367	Off
-0.2	16.00	Off	SNA	147	32	44	422	Off
-0.1	17.60	Off	SNA	47	9	10	408	Off

Pre-Crash Data (Most Recent Event - table 3 of 4)

(the most recent sampled values are recorded prior to the event)

Time Stamp (sec)	ETC Flashing	Engine Torque Applied	PRNDL Status (if equip.)	Reverse Gear (Manual Only)	Tire Pressure Monitor Indicator Lamp	Tire Pressure Status, LF	Tire Pressure Status, RF	Tire Pressure Status, LR
-5.0	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.9	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.8	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.7	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.6	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.5	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.4	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.3	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.2	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.1	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.0	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.9	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.8	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.7	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.6	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.5	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.4	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.3	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.2	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.1	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.0	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.9	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.8	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.7	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.6	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.5	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.4	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.3	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.2	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.1	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.0	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.9	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.8	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.7	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.6	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.5	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.4	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.3	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.2	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.1	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.0	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.9	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.8	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.7	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.6	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.5	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.4	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.3	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.2	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.1	No	Yes	Drive	No	Off	Normal	Normal	Normal

Pre-Crash Data (Most Recent Event - table 4 of 4)

(the most recent sampled values are recorded prior to the event)

Time Stamp (sec)	Tire Pressure Status, RR	Tire Pressure, LF (psi)	Tire Pressure, RF (psi)	Tire Pressure, LR (psi)	Tire Pressure, RR (psi)	Cruise Control Engaged (if equip.)	Cruise Control Status (if equip.)
-5.0	Normal	39	41	40	41	Not Engaged	Off
-4.9	Normal	39	41	40	41	Not Engaged	Off
-4.8	Normal	39	41	40	41	Not Engaged	Off
-4.7	Normal	39	41	40	41	Not Engaged	Off
-4.6	Normal	39	41	40	41	Not Engaged	Off
-4.5	Normal	39	41	40	41	Not Engaged	Off
-4.4	Normal	39	41	40	41	Not Engaged	Off
-4.3	Normal	39	41	40	41	Not Engaged	Off
-4.2	Normal	39	41	40	41	Not Engaged	Off
-4.1	Normal	39	41	40	41	Not Engaged	Off
-4.0	Normal	39	41	40	41	Not Engaged	Off
-3.9	Normal	39	41	40	41	Not Engaged	Off
-3.8	Normal	39	41	40	41	Not Engaged	Off
-3.7	Normal	39	41	40	41	Not Engaged	Off
-3.6	Normal	39	41	40	41	Not Engaged	Off
-3.5	Normal	39	41	40	41	Not Engaged	Off
-3.4	Normal	39	41	40	41	Not Engaged	Off
-3.3	Normal	39	41	40	41	Not Engaged	Off
-3.2	Normal	39	41	40	41	Not Engaged	Off
-3.1	Normal	39	41	40	41	Not Engaged	Off
-3.0	Normal	39	41	40	41	Not Engaged	Off
-2.9	Normal	39	41	40	41	Not Engaged	Off
-2.8	Normal	39	41	40	41	Not Engaged	Off
-2.7	Normal	39	41	40	41	Not Engaged	Off
-2.6	Normal	39	41	40	41	Not Engaged	Off
-2.5	Normal	39	41	40	41	Not Engaged	Off
-2.4	Normal	39	41	40	41	Not Engaged	Off
-2.3	Normal	39	41	40	41	Not Engaged	Off
-2.2	Normal	39	41	40	41	Not Engaged	Off
-2.1	Normal	39	41	40	41	Not Engaged	Off
-2.0	Normal	39	41	40	41	Not Engaged	Off
-1.9	Normal	39	41	40	41	Not Engaged	Off
-1.8	Normal	39	41	40	41	Not Engaged	Off
-1.7	Normal	39	41	40	41	Not Engaged	Off
-1.6	Normal	39	41	40	41	Not Engaged	Off
-1.5	Normal	39	41	40	41	Not Engaged	Off
-1.4	Normal	39	41	40	41	Not Engaged	Off
-1.3	Normal	39	41	40	41	Not Engaged	Off
-1.2	Normal	39	41	40	41	Not Engaged	Off
-1.1	Normal	39	41	40	41	Not Engaged	Off
-1.0	Normal	39	41	40	41	Not Engaged	Off
-0.9	Normal	39	41	40	41	Not Engaged	Off
-0.8	Normal	39	41	40	41	Not Engaged	Off
-0.7	Normal	39	41	40	41	Not Engaged	Off
-0.6	Normal	39	41	40	41	Not Engaged	Off
-0.5	Normal	39	41	40	41	Not Engaged	Off
-0.4	Normal	39	41	40	41	Not Engaged	Off
-0.3	Normal	39	41	40	41	Not Engaged	Off
-0.2	Normal	39	41	40	41	Not Engaged	Off
-0.1	Normal	39	41	40	41	Not Engaged	Off

System Configuration at Event (1st Prior Event)

Configured for Driver Frontal Airbag	Yes
Configured for Passenger Airbag	Yes
Configured for Driver Retractor Pretensioner	Yes
Configured for Passenger Retractor Pretensioner	Yes
Configured for Left Side Curtain Airbag	Yes
Configured for Right Side Curtain Airbag	Yes
Configured for Front Left Seat Airbags	Yes
Configured for Front Right Seat Airbag	Yes
Configured for Safety Belt Status, Driver	Yes
Configured for Safety Belt Status, Outboard Front Passenger	Yes
Configured for Seat Track Position Switch, Foremost, Status, Driver	No
Configured for Seat Track Position Switch, Foremost, Status, Outboard Front Passenger	No
Configured for Rollover Sensing	Yes

System Status at Event (1st Prior Event)

Event Number	2
Multi-Event, Number of Events (1,2)	2
Total number of events	3
Time from Event 1 to 2 (Time since last event)(sec)	0.38
Complete File Recorded (Yes, No)	Yes
Maximum Delta-V Longitudinal (MPH [km/h])	0.0 [0]
Time, Maximum Delta-V, Longitudinal (msec)	0
Maximum Delta-V Lateral (MPH [km/h])	-2.5 [-4]
Time, Maximum Delta-V, Lateral (msec)	262
Ignition Cycle, Crash	8107
Safety Belt Status, Driver	Buckled
Safety Belt Status, Outboard Front Passenger	Buckled
Airbag Warning Lamp, On/Off	Off
Operation System Time (sec)	4546863
Airbag Warning Lamp On Time Before Event (min)	0
Supply Voltage at Event, ACM (V)	14.8
Operation via Energy Reserve	No
VIN at Event (last 8 digits)	DS******
Odometer at Event (km [miles])	66863 [41546.5]

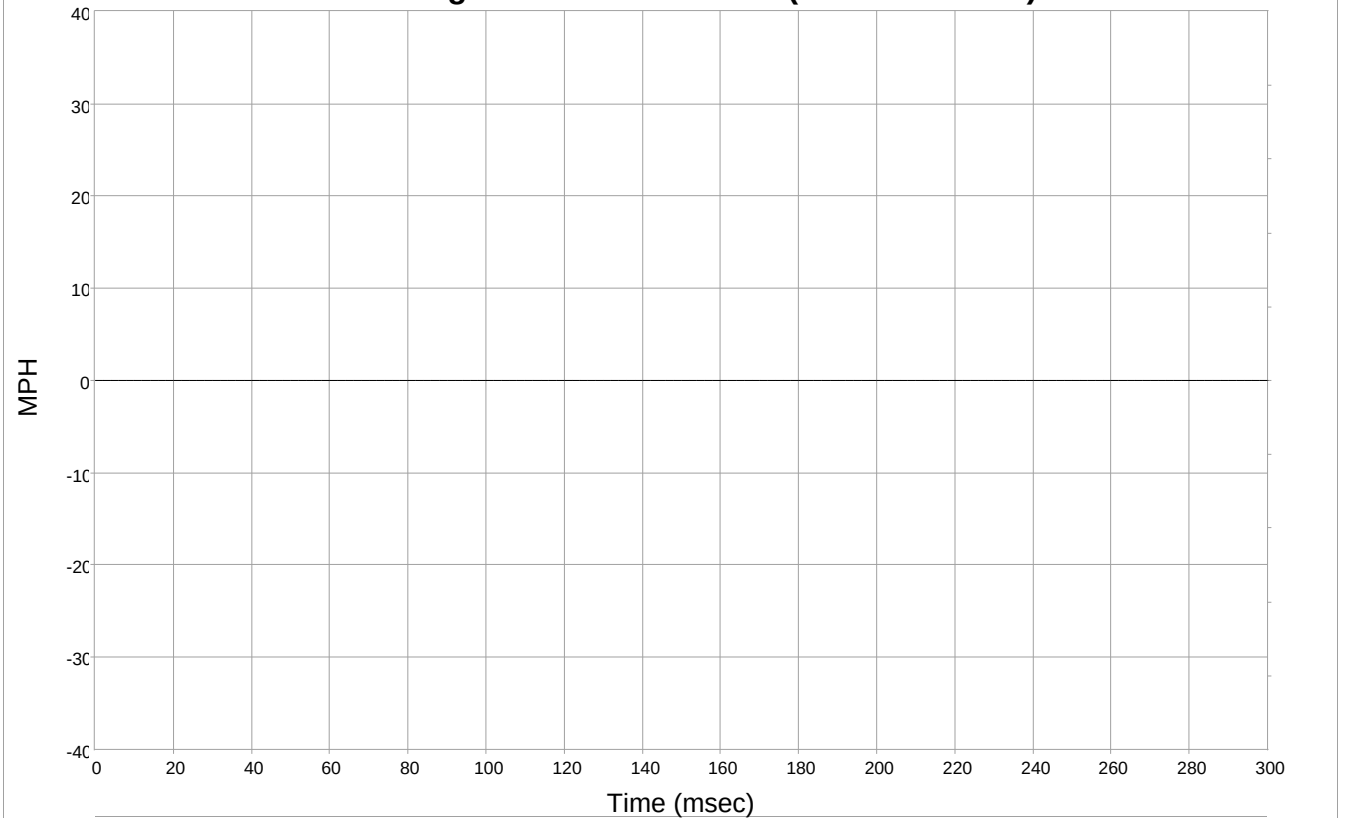
Deployment Command Data (1st Prior Event)

Driver Frontal Airbag Commanded	No
Driver Front Airbag, Time to 1st stage (msec)	0
Driver Front Airbag, Time to 2nd Stage from T0 (msec)	0
Passenger Frontal Airbag Commanded	No
Passenger Front Airbag, Time to 1st stage (msec)	0
Passenger Front Airbag, Time to 2nd Stage from T0 (msec)	0
Commanded Driver Retractor Pretensioner Deployment	Yes
Commanded Passenger Retractor Pretensioner Deployment	Yes
Commanded Left Side Curtain Airbag Deployment	No
Commanded Left Seat Airbag Deployment	No
Commanded Right Side Curtain Airbag Deployment	No
Commanded Front Right Side Seat Airbag Deployment	No

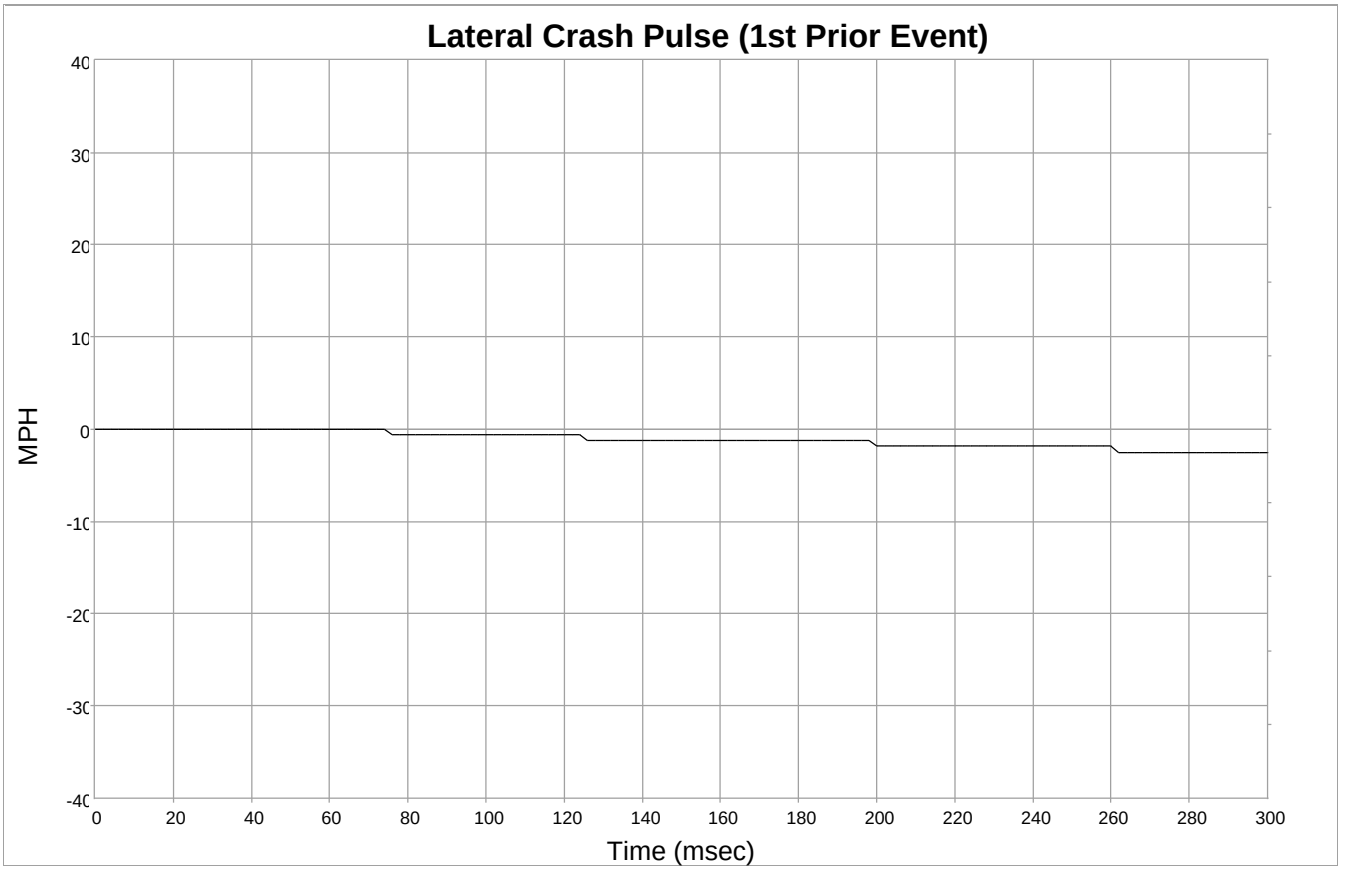
DTCs Present at Start of Event (1st Prior Event)

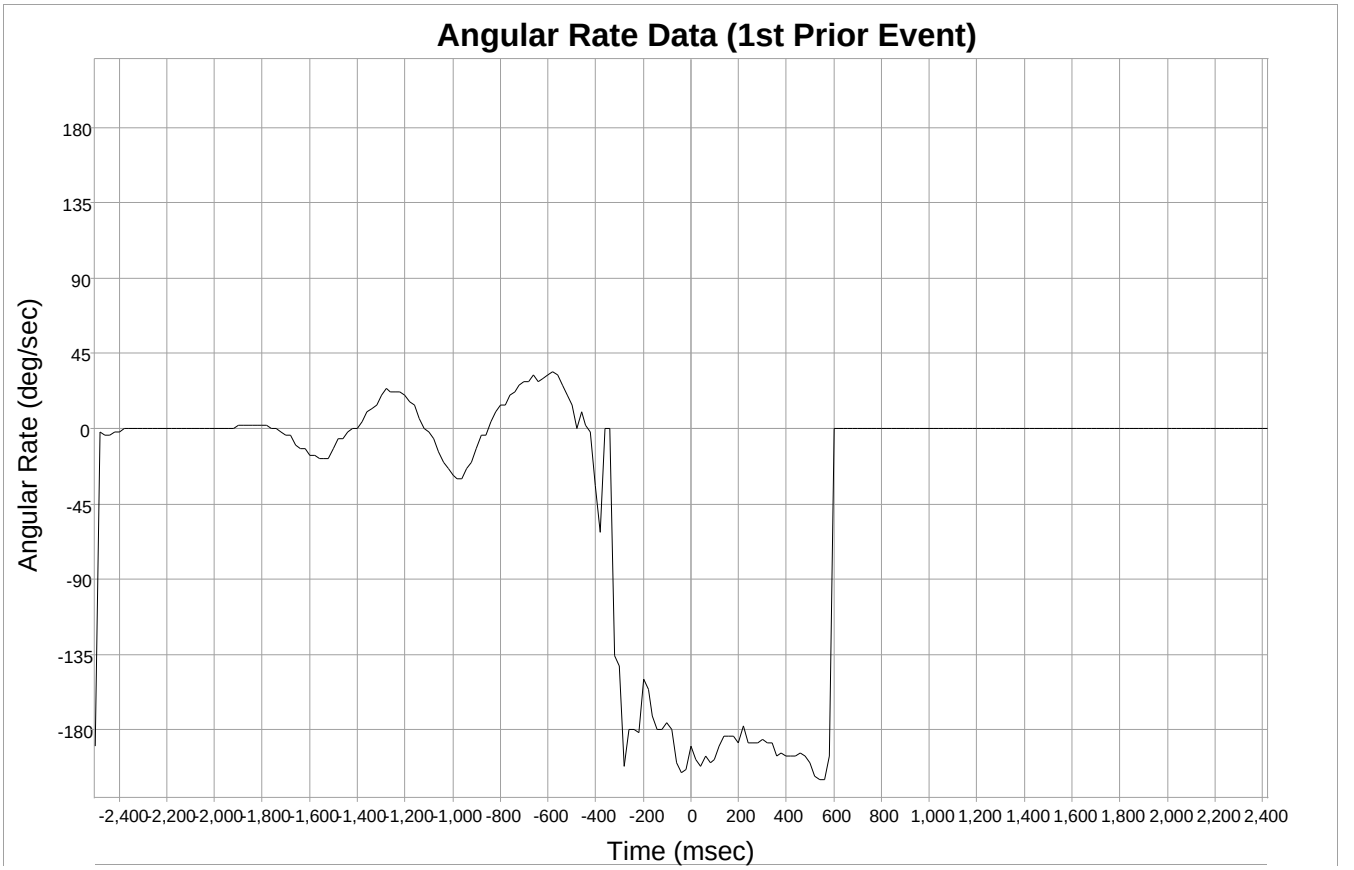
DTC Number	DTC Status
C10CC-00	Active

Longitudinal Crash Pulse (1st Prior Event)



Lateral Crash Pulse (1st Prior Event)




Angular Rate Data (1st Prior Event)
Angular Rate (deg/sec)
180
135
90
45
0
-45
-90
-135
-180
-2,400 -2,200 -2,000 -1,800 -1,600 -1,400 -1,200 -1,000 -800 -600 -400 -200 0 200 400 600 800 1,000 1,200 1,400 1,600 1,800 2,000 2,200 2,400
Time (msec)

Longitudinal Crash Pulse (1st Prior Event)

Time (msec)	Delta-V, Longitudinal (MPH [km/h])
0	0.0 [0]
2	0.0 [0]
4	0.0 [0]
6	0.0 [0]
8	0.0 [0]
10	0.0 [0]
12	0.0 [0]
14	0.0 [0]
16	0.0 [0]
18	0.0 [0]
20	0.0 [0]
22	0.0 [0]
24	0.0 [0]
26	0.0 [0]
28	0.0 [0]
30	0.0 [0]
32	0.0 [0]
34	0.0 [0]
36	0.0 [0]
38	0.0 [0]
40	0.0 [0]
42	0.0 [0]
44	0.0 [0]
46	0.0 [0]
48	0.0 [0]
50	0.0 [0]
52	0.0 [0]
54	0.0 [0]
56	0.0 [0]
58	0.0 [0]
60	0.0 [0]
62	0.0 [0]
64	0.0 [0]
66	0.0 [0]
68	0.0 [0]
70	0.0 [0]
72	0.0 [0]
74	0.0 [0]
76	0.0 [0]
78	0.0 [0]
80	0.0 [0]
82	0.0 [0]
84	0.0 [0]
86	0.0 [0]
88	0.0 [0]
90	0.0 [0]
92	0.0 [0]
94	0.0 [0]
96	0.0 [0]
98	0.0 [0]
100	0.0 [0]
102	0.0 [0]
104	0.0 [0]
106	0.0 [0]
108	0.0 [0]
110	0.0 [0]
112	0.0 [0]
114	0.0 [0]
116	0.0 [0]
118	0.0 [0]
120	0.0 [0]
122	0.0 [0]
124	0.0 [0]
126	0.0 [0]
128	0.0 [0]
130	0.0 [0]
132	0.0 [0]
134	0.0 [0]
136	0.0 [0]
138	0.0 [0]
140	0.0 [0]
142	0.0 [0]
144	0.0 [0]
146	0.0 [0]
148	0.0 [0]
150	0.0 [0]
152	0.0 [0]
154	0.0 [0]
156	0.0 [0]
158	0.0 [0]
160	0.0 [0]
162	0.0 [0]
164	0.0 [0]
166	0.0 [0]
168	0.0 [0]
170	0.0 [0]
172	0.0 [0]
174	0.0 [0]
176	0.0 [0]
178	0.0 [0]
180	0.0 [0]
182	0.0 [0]
184	0.0 [0]
186	0.0 [0]
188	0.0 [0]
190	0.0 [0]
192	0.0 [0]
194	0.0 [0]
196	0.0 [0]
198	0.0 [0]
200	0.0 [0]
202	0.0 [0]
204	0.0 [0]
206	0.0 [0]
208	0.0 [0]
210	0.0 [0]
212	0.0 [0]
214	0.0 [0]
216	0.0 [0]
218	0.0 [0]
220	0.0 [0]
222	0.0 [0]
224	0.0 [0]
226	0.0 [0]
228	0.0 [0]
230	0.0 [0]
232	0.0 [0]
234	0.0 [0]
236	0.0 [0]
238	0.0 [0]
240	0.0 [0]
242	0.0 [0]
244	0.0 [0]
246	0.0 [0]
248	0.0 [0]
250	0.0 [0]
252	0.0 [0]
254	0.0 [0]
256	0.0 [0]
258	0.0 [0]
260	0.0 [0]
262	0.0 [0]
264	0.0 [0]
266	0.0 [0]
268	0.0 [0]
270	0.0 [0]
272	0.0 [0]
274	0.0 [0]
276	0.0 [0]
278	0.0 [0]
280	0.0 [0]
282	0.0 [0]
284	0.0 [0]
286	0.0 [0]
288	0.0 [0]
290	0.0 [0]
292	0.0 [0]
294	0.0 [0]
296	0.0 [0]
298	0.0 [0]
300	0.0 [0]

Lateral Crash Pulse (1st Prior Event)

Time (msec)	Delta-V, Lateral (MPH [km/h])
0	0.0 [0]
2	0.0 [0]
4	0.0 [0]
6	0.0 [0]
8	0.0 [0]
10	0.0 [0]
12	0.0 [0]
14	0.0 [0]
16	0.0 [0]
18	0.0 [0]
20	0.0 [0]
22	0.0 [0]
24	0.0 [0]
26	0.0 [0]
28	0.0 [0]
30	0.0 [0]
32	0.0 [0]
34	0.0 [0]
36	0.0 [0]
38	0.0 [0]
40	0.0 [0]
42	0.0 [0]
44	0.0 [0]
46	0.0 [0]
48	0.0 [0]
50	0.0 [0]
52	0.0 [0]
54	0.0 [0]
56	0.0 [0]
58	0.0 [0]
60	0.0 [0]
62	0.0 [0]
64	0.0 [0]
66	0.0 [0]
68	0.0 [0]
70	0.0 [0]
72	0.0 [0]
74	0.0 [0]
76	-0.6 [-1]
78	-0.6 [-1]
80	-0.6 [-1]
82	-0.6 [-1]
84	-0.6 [-1]
86	-0.6 [-1]
88	-0.6 [-1]
90	-0.6 [-1]
92	-0.6 [-1]
94	-0.6 [-1]
96	-0.6 [-1]
98	-0.6 [-1]
100	-0.6 [-1]
102	-0.6 [-1]
104	-0.6 [-1]
106	-0.6 [-1]
108	-0.6 [-1]
110	-0.6 [-1]
112	-0.6 [-1]
114	-0.6 [-1]
116	-0.6 [-1]
118	-0.6 [-1]
120	-0.6 [-1]
122	-0.6 [-1]
124	-0.6 [-1]
126	-1.2 [-2]
128	-1.2 [-2]
130	-1.2 [-2]
132	-1.2 [-2]
134	-1.2 [-2]
136	-1.2 [-2]
138	-1.2 [-2]
140	-1.2 [-2]
142	-1.2 [-2]
144	-1.2 [-2]
146	-1.2 [-2]
148	-1.2 [-2]
150	-1.2 [-2]
152	-1.2 [-2]
154	-1.2 [-2]
156	-1.2 [-2]
158	-1.2 [-2]
160	-1.2 [-2]
162	-1.2 [-2]
164	-1.2 [-2]
166	-1.2 [-2]
168	-1.2 [-2]
170	-1.2 [-2]
172	-1.2 [-2]
174	-1.2 [-2]
176	-1.2 [-2]
178	-1.2 [-2]
180	-1.2 [-2]
182	-1.2 [-2]
184	-1.2 [-2]
186	-1.2 [-2]
188	-1.2 [-2]
190	-1.2 [-2]
192	-1.2 [-2]
194	-1.2 [-2]
196	-1.2 [-2]
198	-1.2 [-2]
200	-1.9 [-3]
202	-1.9 [-3]
204	-1.9 [-3]
206	-1.9 [-3]
208	-1.9 [-3]
210	-1.9 [-3]
212	-1.9 [-3]
214	-1.9 [-3]
216	-1.9 [-3]
218	-1.9 [-3]
220	-1.9 [-3]
222	-1.9 [-3]
224	-1.9 [-3]
226	-1.9 [-3]
228	-1.9 [-3]
230	-1.9 [-3]
232	-1.9 [-3]
234	-1.9 [-3]
236	-1.9 [-3]
238	-1.9 [-3]
240	-1.9 [-3]
242	-1.9 [-3]
244	-1.9 [-3]
246	-1.9 [-3]
248	-1.9 [-3]
250	-1.9 [-3]
252	-1.9 [-3]
254	-1.9 [-3]
256	-1.9 [-3]
258	-1.9 [-3]
260	-1.9 [-3]
262	-2.5 [-4]
264	-2.5 [-4]
266	-2.5 [-4]
268	-2.5 [-4]
270	-2.5 [-4]
272	-2.5 [-4]
274	-2.5 [-4]
276	-2.5 [-4]
278	-2.5 [-4]
280	-2.5 [-4]
282	-2.5 [-4]
284	-2.5 [-4]
286	-2.5 [-4]
288	-2.5 [-4]
290	-2.5 [-4]
292	-2.5 [-4]
294	-2.5 [-4]
296	-2.5 [-4]
298	-2.5 [-4]
300	-2.5 [-4]

Angular Rate Data (1st Prior Event)

Time (msec)	Angular Rate (deg/sec)
-2500	-190.00
-2480	-2.00
-2460	-4.00
-2440	-4.00
-2420	-2.00
-2400	-2.00
-2380	0.00
-2360	0.00
-2340	0.00
-2320	0.00
-2300	0.00
-2280	0.00
-2260	0.00
-2240	0.00
-2220	0.00
-2200	0.00
-2180	0.00
-2160	0.00
-2140	0.00
-2120	0.00
-2100	0.00
-2080	0.00
-2060	0.00
-2040	0.00
-2020	0.00
-2000	0.00
-1980	0.00
-1960	0.00
-1940	0.00
-1920	0.00
-1900	2.00
-1880	2.00
-1860	2.00
-1840	2.00
-1820	2.00
-1800	2.00
-1780	2.00
-1760	0.00
-1740	0.00
-1720	-2.00
-1700	-4.00
-1680	-4.00
-1660	-10.00
-1640	-12.00
-1620	-12.00
-1600	-16.00
-1580	-16.00
-1560	-18.00
-1540	-18.00
-1520	-18.00

Time (msec)	Angular Rate (deg/sec)
-1500	-12.00
-1480	-6.00
-1460	-6.00
-1440	-2.00
-1420	0.00
-1400	0.00
-1380	4.00
-1360	10.00
-1340	12.00
-1320	14.00
-1300	20.00
-1280	24.00
-1260	22.00
-1240	22.00
-1220	22.00
-1200	20.00
-1180	16.00
-1160	14.00
-1140	6.00
-1120	0.00
-1100	-2.00
-1080	-6.00
-1060	-14.00
-1040	-20.00
-1020	-24.00
-1000	-28.00
-980	-30.00
-960	-30.00
-940	-24.00
-920	-20.00
-900	-12.00
-880	-4.00
-860	-4.00
-840	4.00
-820	10.00
-800	14.00
-780	14.00
-760	20.00
-740	22.00
-720	26.00
-700	28.00
-680	28.00
-660	32.00
-640	28.00
-620	30.00
-600	32.00
-580	34.00
-560	32.00
-540	26.00
-520	20.00

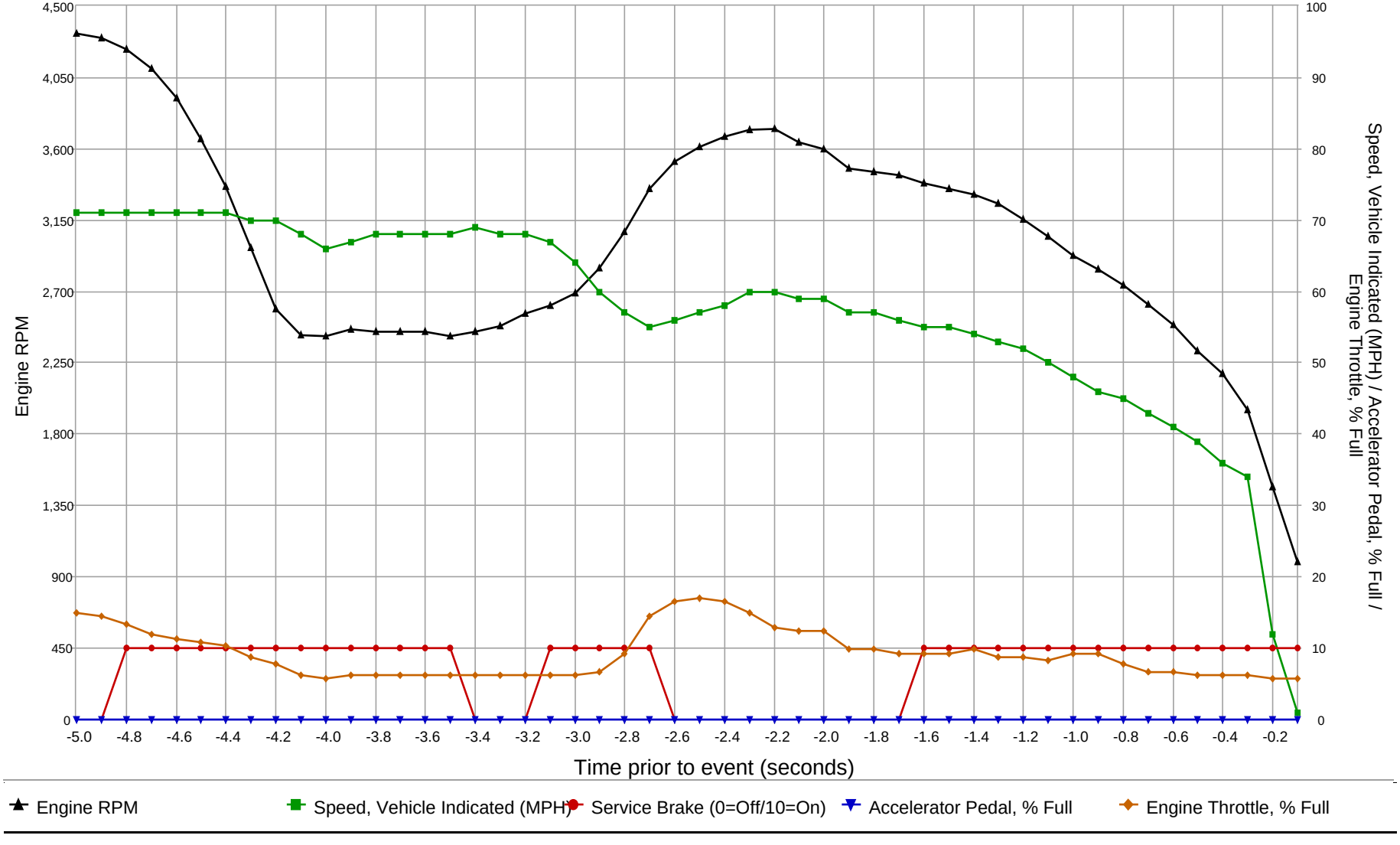
Time (msec)	Angular Rate (deg/sec)
-500	14.00
-480	0.00
-460	10.00
-440	2.00
-420	-2.00
-400	-34.00
-380	-62.00
-360	0.00
-340	0.00
-320	-136.00
-300	-142.00
-280	-202.00
-260	-180.00
-240	-180.00
-220	-182.00
-200	-150.00
-180	-156.00
-160	-172.00
-140	-180.00
-120	-180.00
-100	-176.00
-80	-180.00
-60	-200.00
-40	-206.00
-20	-204.00
0	-190.00
20	-198.00
40	-202.00
60	-196.00
80	-200.00
100	-198.00
120	-190.00
140	-184.00
160	-184.00
180	-184.00
200	-188.00
220	-178.00
240	-188.00
260	-188.00
280	-188.00
300	-186.00
320	-188.00
340	-188.00
360	-196.00
380	-194.00
400	-196.00
420	-196.00
440	-196.00
460	-194.00
480	-196.00

Angular Rate Data (1st Prior Event)

Time (msec)	Angular Rate (deg/sec)
500	-200.00
520	-208.00
540	-210.00
560	-210.00
580	-196.00
600	0.00
620	0.00
640	0.00
660	0.00
680	0.00
700	0.00
720	0.00
740	0.00
760	0.00
780	0.00
800	0.00
820	0.00
840	0.00
860	0.00
880	0.00
900	0.00
920	0.00
940	0.00
960	0.00
980	0.00
1000	0.00
1020	0.00
1040	0.00
1060	0.00
1080	0.00
1100	0.00
1120	0.00
1140	0.00
1160	0.00
1180	0.00
1200	0.00
1220	0.00
1240	0.00
1260	0.00
1280	0.00
1300	0.00
1320	0.00
1340	0.00
1360	0.00
1380	0.00
1400	0.00
1420	0.00
1440	0.00
1460	0.00
1480	0.00

Time (msec)	Angular Rate (deg/sec)
1500	0.00
1520	0.00
1540	0.00
1560	0.00
1580	0.00
1600	0.00
1620	0.00
1640	0.00
1660	0.00
1680	0.00
1700	0.00
1720	0.00
1740	0.00
1760	0.00
1780	0.00
1800	0.00
1820	0.00
1840	0.00
1860	0.00
1880	0.00
1900	0.00
1920	0.00
1940	0.00
1960	0.00
1980	0.00
2000	0.00
2020	0.00
2040	0.00
2060	0.00
2080	0.00
2100	0.00
2120	0.00
2140	0.00
2160	0.00
2180	0.00
2200	0.00
2220	0.00
2240	0.00
2260	0.00
2280	0.00
2300	0.00
2320	0.00
2340	0.00
2360	0.00
2380	0.00
2400	0.00
2420	0.00

Pre-Crash Data (1st Prior Event)



SNA values will not be plotted on the graph

Pre-Crash Data (1st Prior Event - table 1 of 4)

(the most recent sampled values are recorded prior to the event)

Time Stamp (sec)	Pre-Crash Recorder Status	Speed, Vehicle Indicated (MPH [km/h])	Accelerator Pedal, % Full	Engine Throttle, % Full	Service Brake	Engine RPM	ABS Activity	Stability Control	Steering Input (deg)
-5.0	Interrupted	71 [114]	0	15	Off	4,327	No	On	-3
-4.9	Interrupted	71 [114]	0	14	Off	4,297	No	On	-2
-4.8	Interrupted	71 [114]	0	13	On	4,230	No	On	-2
-4.7	Interrupted	71 [114]	0	12	On	4,108	No	On	-1
-4.6	Interrupted	71 [114]	0	11	On	3,917	No	On	-1
-4.5	Interrupted	71 [114]	0	11	On	3,660	No	On	-1
-4.4	Interrupted	71 [113]	0	10	On	3,364	No	On	-1
-4.3	Interrupted	70 [113]	0	9	On	2,973	No	On	0
-4.2	Interrupted	70 [113]	0	8	On	2,590	No	On	0
-4.1	Interrupted	68 [110]	0	6	On	2,424	No	On	1
-4.0	Interrupted	66 [107]	0	6	On	2,415	Yes	On	1
-3.9	Interrupted	67 [107]	0	6	On	2,464	Yes	On	1
-3.8	Interrupted	68 [109]	0	6	On	2,449	Yes	On	-2
-3.7	Interrupted	68 [110]	0	6	On	2,448	Yes	On	-8
-3.6	Interrupted	68 [110]	0	6	On	2,444	Yes	On	-15
-3.5	Interrupted	68 [110]	0	6	On	2,415	Yes	On	-17
-3.4	Interrupted	69 [110]	0	6	Off	2,444	No	On	-15
-3.3	Interrupted	68 [109]	0	6	Off	2,486	No	On	-12
-3.2	Interrupted	68 [109]	0	6	Off	2,558	No	On	-10
-3.1	Interrupted	67 [108]	0	6	On	2,608	No	On	-8
-3.0	Interrupted	64 [104]	0	6	On	2,692	Yes	On	-7
-2.9	Interrupted	60 [96]	0	7	On	2,844	Yes	On	-5
-2.8	Interrupted	57 [92]	0	9	On	3,073	Yes	On	-2
-2.7	Interrupted	55 [89]	0	14	On	3,350	No	Engaged	1
-2.6	Interrupted	56 [90]	0	16	Off	3,523	No	Engaged	6
-2.5	Interrupted	57 [92]	0	17	Off	3,611	No	Engaged	16
-2.4	Interrupted	58 [94]	0	16	Off	3,675	No	Engaged	38
-2.3	Interrupted	60 [96]	0	15	Off	3,722	No	Engaged	64
-2.2	Interrupted	60 [97]	0	13	Off	3,729	No	Engaged	88
-2.1	Interrupted	59 [95]	0	12	Off	3,639	No	Engaged	121
-2.0	Interrupted	59 [94]	0	12	Off	3,595	No	Engaged	157
-1.9	Interrupted	57 [92]	0	10	Off	3,479	No	Engaged	165
-1.8	Interrupted	57 [92]	0	10	Off	3,459	No	Engaged	168
-1.7	Interrupted	56 [90]	0	9	Off	3,435	No	Engaged	175
-1.6	Interrupted	55 [89]	0	9	On	3,385	No	Engaged	186
-1.5	Interrupted	55 [88]	0	9	On	3,347	No	Engaged	198
-1.4	Interrupted	54 [87]	0	10	On	3,313	No	Engaged	209
-1.3	Interrupted	53 [85]	0	9	On	3,253	No	Engaged	239
-1.2	Interrupted	52 [83]	0	9	On	3,153	No	Engaged	283
-1.1	Interrupted	50 [80]	0	8	On	3,051	No	Engaged	296
-1.0	Interrupted	48 [77]	0	9	On	2,925	No	Engaged	294
-0.9	Interrupted	46 [75]	0	9	On	2,837	No	Engaged	288
-0.8	Interrupted	45 [72]	0	8	On	2,738	No	Engaged	282
-0.7	Interrupted	43 [69]	0	7	On	2,621	No	Engaged	272
-0.6	Interrupted	41 [66]	0	7	On	2,491	No	Engaged	257
-0.5	Interrupted	39 [62]	0	6	On	2,326	No	Engaged	247
-0.4	Interrupted	36 [58]	0	6	On	2,183	No	Engaged	250
-0.3	Interrupted	34 [54]	0	6	On	1,955	No	Engaged	236
-0.2	Interrupted	12 [19]	0	6	On	1,467	Yes	Off	-53
-0.1	Interrupted	1 [2]	0	6	On	997	Yes	Off	-587

Pre-Crash Data (1st Prior Event - table 2 of 4)

(the most recent sampled values are recorded prior to the event)

Time Stamp (sec)	Raw Manifold Pressure (kPa)	PCM MIL	Yaw Rate (deg/sec)	Wheel Speed LF (RPM)	Wheel Speed RF (RPM)	Wheel Speed LR (RPM)	Wheel Speed RR (RPM)	ETC Lamp
-5.0	19.20	Off	0	738	739	737	738	Off
-4.9	17.60	Off	0	737	740	737	738	Off
-4.8	16.00	Off	0	736	738	737	739	Off
-4.7	15.20	Off	0	738	738	737	738	Off
-4.6	13.60	Off	0	739	739	738	738	Off
-4.5	13.60	Off	0	735	738	738	738	Off
-4.4	13.60	Off	0	723	727	735	736	Off
-4.3	12.80	Off	0	724	708	734	734	Off
-4.2	13.60	Off	0	719	674	732	729	Off
-4.1	13.60	Off	0	731	613	715	691	Off
-4.0	13.60	Off	1	727	605	730	658	Off
-3.9	13.60	Off	2	717	651	726	669	Off
-3.8	13.60	Off	1	693	712	725	689	Off
-3.7	13.60	Off	1	628	717	719	703	Off
-3.6	13.60	Off	0	588	711	719	702	Off
-3.5	13.60	Off	0	636	716	717	709	Off
-3.4	13.60	Off	-1	699	718	716	714	Off
-3.3	13.60	Off	-2	720	716	703	708	Off
-3.2	13.60	Off	-3	718	716	704	710	Off
-3.1	12.80	Off	-3	715	714	694	701	Off
-3.0	12.80	Off	-4	713	708	655	656	Off
-2.9	12.80	Off	-5	710	682	609	610	Off
-2.8	16.00	Off	-7	704	681	587	584	Off
-2.7	20.80	Off	-8	712	645	571	573	Off
-2.6	24.00	Off	-10	704	701	591	581	Off
-2.5	24.80	Off	-14	697	694	605	598	Off
-2.4	24.00	Off	-18	698	690	622	612	Off
-2.3	22.40	Off	-21	696	686	638	620	Off
-2.2	19.20	Off	-24	694	678	631	624	Off
-2.1	16.80	Off	-28	688	670	590	642	Off
-2.0	15.20	Off	-30	658	665	579	631	Off
-1.9	13.60	Off	-32	127	658	560	637	Off
-1.8	13.60	Off	-32	11	652	581	599	Off
-1.7	0.00	Off	-327	0	0	0	0	Off
-1.6	0.00	Off	-327	0	0	0	0	Off
-1.5	0.00	Off	-327	0	0	0	0	Off
-1.4	0.00	Off	-327	0	0	0	0	Off
-1.3	0.00	Off	-327	0	0	0	0	Off
-1.2	0.00	Off	-327	0	0	0	0	Off
-1.1	0.00	Off	-327	0	0	0	0	Off
-1.0	0.00	Off	-327	0	0	0	0	Off
-0.9	0.00	Off	-327	0	0	0	0	Off
-0.8	0.00	Off	-327	0	0	0	0	Off
-0.7	0.00	Off	-327	0	0	0	0	Off
-0.6	0.00	Off	-327	0	0	0	0	Off
-0.5	0.00	Off	-327	0	0	0	0	Off
-0.4	0.00	Off	-327	0	0	0	0	Off
-0.3	0.00	Off	-327	0	0	0	0	Off
-0.2	0.00	Off	-327	0	0	0	0	Off
-0.1	0.00	Off	-327	0	0	0	0	Off

Pre-Crash Data (1st Prior Event - table 3 of 4)

(the most recent sampled values are recorded prior to the event)

Time Stamp (sec)	ETC Flashing	Engine Torque Applied	PRNDL Status (if equip.)	Reverse Gear (Manual Only)	Tire Pressure Monitor Indicator Lamp	Tire Pressure Status, LF	Tire Pressure Status, RF	Tire Pressure Status, LR
-5.0	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.9	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.8	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.7	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.6	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.5	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.4	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.3	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.2	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.1	No	Yes	Drive	No	Off	Normal	Normal	Normal
-4.0	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.9	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.8	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.7	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.6	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.5	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.4	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.3	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.2	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.1	No	Yes	Drive	No	Off	Normal	Normal	Normal
-3.0	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.9	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.8	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.7	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.6	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.5	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.4	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.3	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.2	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.1	No	Yes	Drive	No	Off	Normal	Normal	Normal
-2.0	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.9	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.8	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.7	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.6	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.5	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.4	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.3	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.2	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.1	No	Yes	Drive	No	Off	Normal	Normal	Normal
-1.0	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.9	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.8	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.7	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.6	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.5	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.4	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.3	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.2	No	Yes	Drive	No	Off	Normal	Normal	Normal
-0.1	No	Yes	Drive	No	Off	Normal	Normal	Normal

Pre-Crash Data (1st Prior Event - table 4 of 4)

(the most recent sampled values are recorded prior to the event)

Time Stamp (sec)	Tire Pressure Status, RR	Tire Pressure, LF (psi)	Tire Pressure, RF (psi)	Tire Pressure, LR (psi)	Tire Pressure, RR (psi)	Cruise Control Engaged (if equip.)	Cruise Control Status (if equip.)
-5.0	Normal	39	41	40	41	Not Engaged	On
-4.9	Normal	39	41	40	41	Not Engaged	On
-4.8	Normal	39	41	40	41	Not Engaged	On
-4.7	Normal	39	41	40	41	Not Engaged	On
-4.6	Normal	39	41	40	41	Not Engaged	On
-4.5	Normal	39	41	40	41	Not Engaged	On
-4.4	Normal	39	41	40	41	Not Engaged	On
-4.3	Normal	39	41	40	41	Not Engaged	On
-4.2	Normal	39	41	40	41	Not Engaged	On
-4.1	Normal	39	41	40	41	Not Engaged	On
-4.0	Normal	39	41	40	41	Not Engaged	On
-3.9	Normal	39	41	40	41	Not Engaged	On
-3.8	Normal	39	41	40	41	Not Engaged	Off
-3.7	Normal	39	41	40	41	Not Engaged	Off
-3.6	Normal	39	41	40	41	Not Engaged	Off
-3.5	Normal	39	41	40	41	Not Engaged	Off
-3.4	Normal	39	41	40	41	Not Engaged	Off
-3.3	Normal	39	41	40	41	Not Engaged	Off
-3.2	Normal	39	41	40	41	Not Engaged	Off
-3.1	Normal	39	41	40	41	Not Engaged	Off
-3.0	Normal	39	41	40	41	Not Engaged	Off
-2.9	Normal	39	41	40	41	Not Engaged	Off
-2.8	Normal	39	41	40	41	Not Engaged	Off
-2.7	Normal	39	41	40	41	Not Engaged	Off
-2.6	Normal	39	41	40	41	Not Engaged	Off
-2.5	Normal	39	41	40	41	Not Engaged	Off
-2.4	Normal	39	41	40	41	Not Engaged	Off
-2.3	Normal	39	41	40	41	Not Engaged	Off
-2.2	Normal	39	41	40	41	Not Engaged	Off
-2.1	Normal	39	41	40	41	Not Engaged	Off
-2.0	Normal	39	41	40	41	Not Engaged	Off
-1.9	Normal	39	41	40	41	Not Engaged	Off
-1.8	Normal	39	41	40	41	Not Engaged	Off
-1.7	Normal	0	0	0	0	Not Engaged	Off
-1.6	Normal	0	0	0	0	Not Engaged	Off
-1.5	Normal	0	0	0	0	Not Engaged	Off
-1.4	Normal	0	0	0	0	Not Engaged	Off
-1.3	Normal	0	0	0	0	Not Engaged	Off
-1.2	Normal	0	0	0	0	Not Engaged	Off
-1.1	Normal	0	0	0	0	Not Engaged	Off
-1.0	Normal	0	0	0	0	Not Engaged	Off
-0.9	Normal	0	0	0	0	Not Engaged	Off
-0.8	Normal	0	0	0	0	Not Engaged	Off
-0.7	Normal	0	0	0	0	Not Engaged	Off
-0.6	Normal	0	0	0	0	Not Engaged	Off
-0.5	Normal	0	0	0	0	Not Engaged	Off
-0.4	Normal	0	0	0	0	Not Engaged	Off
-0.3	Normal	0	0	0	0	Not Engaged	Off
-0.2	Normal	0	0	0	0	Not Engaged	Off
-0.1	Normal	0	0	0	0	Not Engaged	Off

System Configuration at Event (2nd Prior Event)

Configured for Driver Frontal Airbag	Yes
Configured for Passenger Airbag	Yes
Configured for Driver Retractor Pretensioner	Yes
Configured for Passenger Retractor Pretensioner	Yes
Configured for Left Side Curtain Airbag	Yes
Configured for Right Side Curtain Airbag	Yes
Configured for Front Left Seat Airbags	Yes
Configured for Front Right Seat Airbag	Yes
Configured for Safety Belt Status, Driver	Yes
Configured for Safety Belt Status, Outboard Front Passenger	Yes
Configured for Seat Track Position Switch, Foremost, Status, Driver	No
Configured for Seat Track Position Switch, Foremost, Status, Outboard Front Passenger	No
Configured for Rollover Sensing	Yes

System Status at Event (2nd Prior Event)

Event Number	1
Multi-Event, Number of Events (1,2)	1
Total number of events	3
Time from Event 1 to 2 (Time since last event)(sec)	>5
Complete File Recorded (Yes, No)	No
Maximum Delta-V Longitudinal (MPH [km/h])	-16.8 [-27]
Time, Maximum Delta-V, Longitudinal (msec)	170
Maximum Delta-V Lateral (MPH [km/h])	0.0 [0]
Time, Maximum Delta-V, Lateral (msec)	0
Ignition Cycle, Crash	8107
Safety Belt Status, Driver	Buckled
Safety Belt Status, Outboard Front Passenger	Buckled
Airbag Warning Lamp, On/Off	Off
Operation System Time (sec)	4546863
Airbag Warning Lamp On Time Before Event (min)	0
Supply Voltage at Event, ACM (V)	14.8
Operation via Energy Reserve	No
VIN at Event (last 8 digits)	DS******
Odometer at Event (km [miles])	66863 [41546.5]

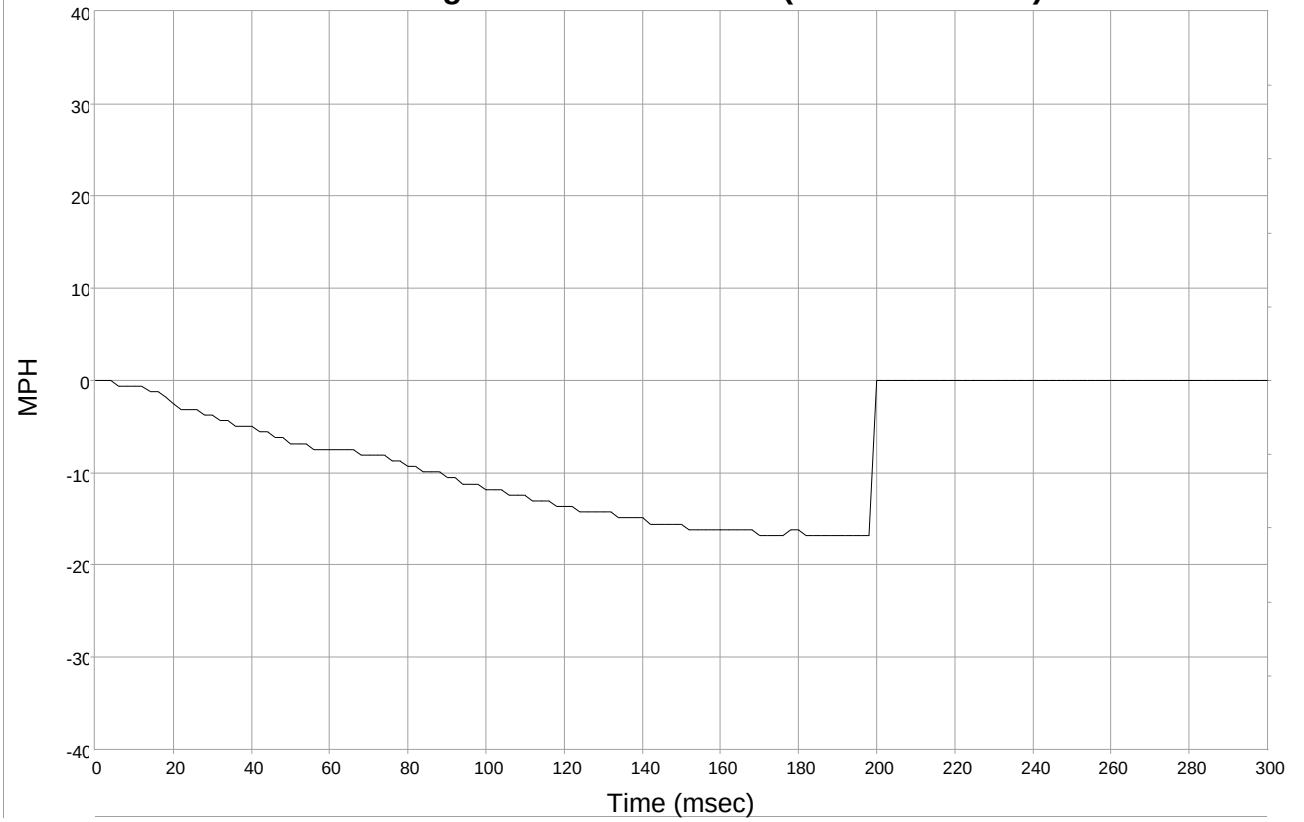
Deployment Command Data (2nd Prior Event)

Driver Frontal Airbag Commanded	No
Driver Front Airbag, Time to 1st stage (msec)	0
Driver Front Airbag, Time to 2nd Stage from T0 (msec)	0
Passenger Frontal Airbag Commanded	No
Passenger Front Airbag, Time to 1st stage (msec)	0
Passenger Front Airbag, Time to 2nd Stage from T0 (msec)	0
Commanded Driver Retractor Pretensioner Deployment	No
Commanded Passenger Retractor Pretensioner Deployment	No
Commanded Left Side Curtain Airbag Deployment	No
Commanded Left Seat Airbag Deployment	No
Commanded Right Side Curtain Airbag Deployment	No
Commanded Front Right Side Seat Airbag Deployment	No

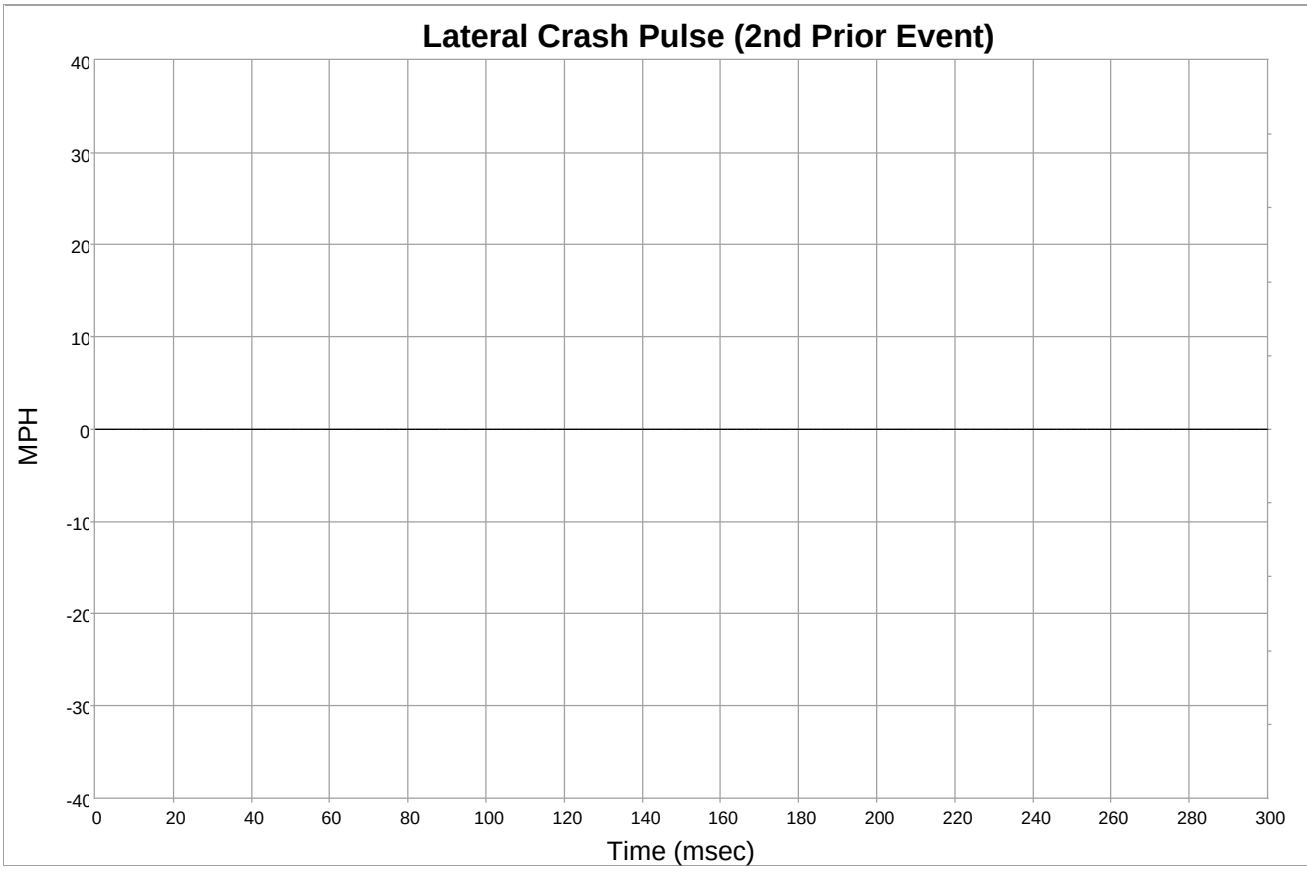
DTCs Present at Start of Event (2nd Prior Event)

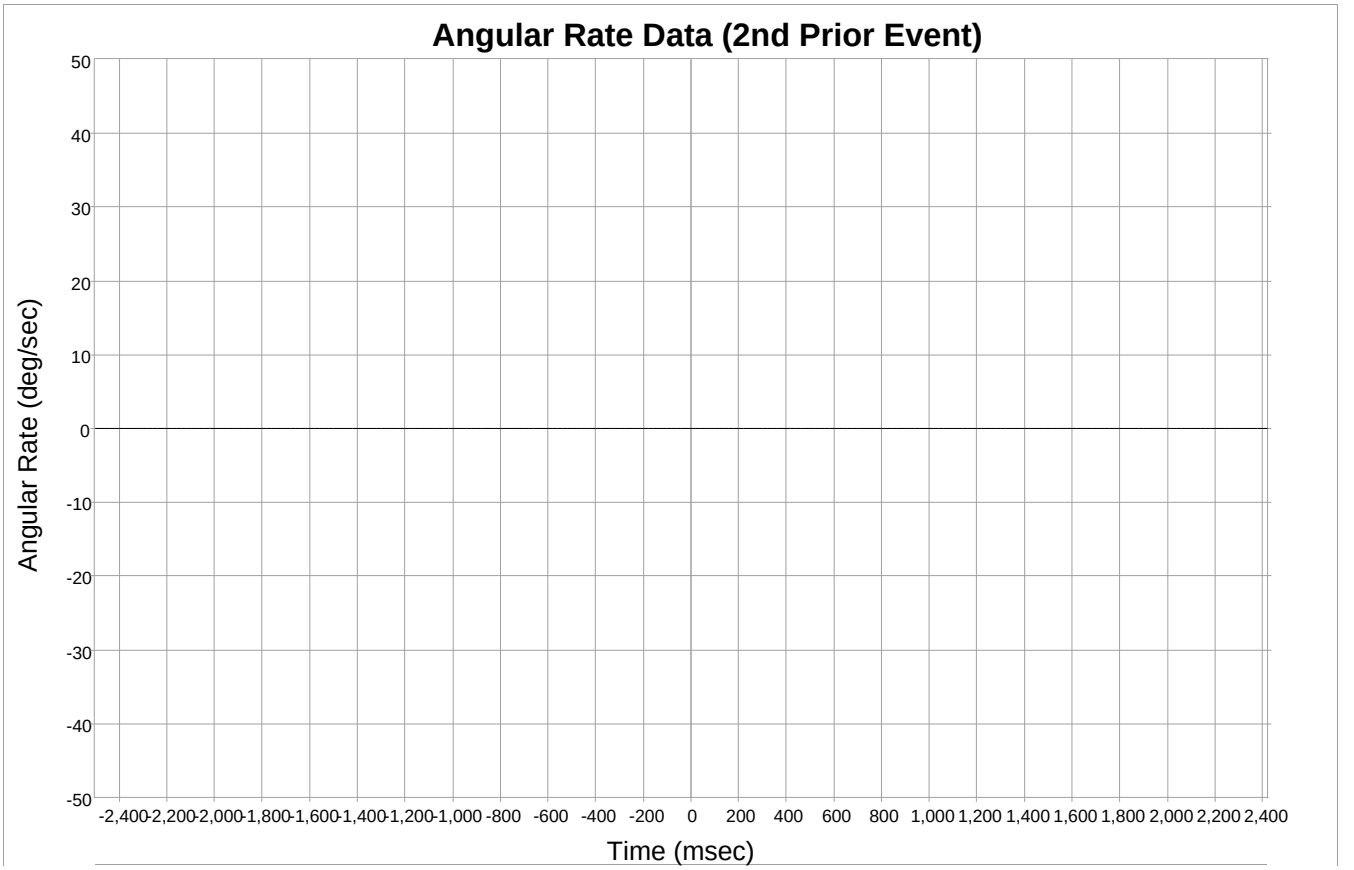
No DTCs Present

Longitudinal Crash Pulse (2nd Prior Event)



Lateral Crash Pulse (2nd Prior Event)




Angular Rate Data (2nd Prior Event)
Angular Rate (deg/sec)
50
40
30
20
10
0
-10
-20
-30
-40
-50
-2,400 -2,200 -2,000 -1,800 -1,600 -1,400 -1,200 -1,000 -800 -600 -400 -200 0 200 400 600 800 1,000 1,200 1,400 1,600 1,800 2,000 2,200 2,400
Time (msec)

Longitudinal Crash Pulse (2nd Prior Event)

Time (msec)	Delta-V, Longitudinal (MPH [km/h])
0	0.0 [0]
2	0.0 [0]
4	0.0 [0]
6	-0.6 [-1]
8	-0.6 [-1]
10	-0.6 [-1]
12	-0.6 [-1]
14	-1.2 [-2]
16	-1.2 [-2]
18	-1.9 [-3]
20	-2.5 [-4]
22	-3.1 [-5]
24	-3.1 [-5]
26	-3.1 [-5]
28	-3.7 [-6]
30	-3.7 [-6]
32	-4.3 [-7]
34	-4.3 [-7]
36	-5.0 [-8]
38	-5.0 [-8]
40	-5.0 [-8]
42	-5.6 [-9]
44	-5.6 [-9]
46	-6.2 [-10]
48	-6.2 [-10]
50	-6.8 [-11]
52	-6.8 [-11]
54	-6.8 [-11]
56	-7.5 [-12]
58	-7.5 [-12]
60	-7.5 [-12]
62	-7.5 [-12]
64	-7.5 [-12]
66	-7.5 [-12]
68	-8.1 [-13]
70	-8.1 [-13]
72	-8.1 [-13]
74	-8.1 [-13]
76	-8.7 [-14]
78	-8.7 [-14]
80	-9.3 [-15]
82	-9.3 [-15]
84	-9.9 [-16]
86	-9.9 [-16]
88	-9.9 [-16]
90	-10.6 [-17]
92	-10.6 [-17]
94	-11.2 [-18]
96	-11.2 [-18]
98	-11.2 [-18]
100	-11.8 [-19]
102	-11.8 [-19]
104	-11.8 [-19]
106	-12.4 [-20]
108	-12.4 [-20]
110	-12.4 [-20]
112	-13.0 [-21]
114	-13.0 [-21]
116	-13.0 [-21]
118	-13.7 [-22]
120	-13.7 [-22]
122	-13.7 [-22]
124	-14.3 [-23]
126	-14.3 [-23]
128	-14.3 [-23]
130	-14.3 [-23]
132	-14.3 [-23]
134	-14.9 [-24]
136	-14.9 [-24]
138	-14.9 [-24]
140	-14.9 [-24]
142	-15.5 [-25]
144	-15.5 [-25]
146	-15.5 [-25]
148	-15.5 [-25]
150	-15.5 [-25]
152	-16.2 [-26]
154	-16.2 [-26]
156	-16.2 [-26]
158	-16.2 [-26]
160	-16.2 [-26]
162	-16.2 [-26]
164	-16.2 [-26]
166	-16.2 [-26]
168	-16.2 [-26]
170	-16.8 [-27]
172	-16.8 [-27]
174	-16.8 [-27]
176	-16.8 [-27]
178	-16.2 [-26]
180	-16.2 [-26]
182	-16.8 [-27]
184	-16.8 [-27]
186	-16.8 [-27]
188	-16.8 [-27]
190	-16.8 [-27]
192	-16.8 [-27]
194	-16.8 [-27]
196	-16.8 [-27]
198	-16.8 [-27]
200	0.0 [0]
202	0.0 [0]
204	0.0 [0]
206	0.0 [0]
208	0.0 [0]
210	0.0 [0]
212	0.0 [0]
214	0.0 [0]
216	0.0 [0]
218	0.0 [0]
220	0.0 [0]
222	0.0 [0]
224	0.0 [0]
226	0.0 [0]
228	0.0 [0]
230	0.0 [0]
232	0.0 [0]
234	0.0 [0]
236	0.0 [0]
238	0.0 [0]
240	0.0 [0]
242	0.0 [0]
244	0.0 [0]
246	0.0 [0]
248	0.0 [0]
250	0.0 [0]
252	0.0 [0]
254	0.0 [0]
256	0.0 [0]
258	0.0 [0]
260	0.0 [0]
262	0.0 [0]
264	0.0 [0]
266	0.0 [0]
268	0.0 [0]
270	0.0 [0]
272	0.0 [0]
274	0.0 [0]
276	0.0 [0]
278	0.0 [0]
280	0.0 [0]
282	0.0 [0]
284	0.0 [0]
286	0.0 [0]
288	0.0 [0]
290	0.0 [0]
292	0.0 [0]
294	0.0 [0]
296	0.0 [0]
298	0.0 [0]
300	0.0 [0]

Lateral Crash Pulse (2nd Prior Event)

Time (msec)	Delta-V, Lateral (MPH [km/h])
0	0.0 [0]
2	0.0 [0]
4	0.0 [0]
6	0.0 [0]
8	0.0 [0]
10	0.0 [0]
12	0.0 [0]
14	0.0 [0]
16	0.0 [0]
18	0.0 [0]
20	0.0 [0]
22	0.0 [0]
24	0.0 [0]
26	0.0 [0]
28	0.0 [0]
30	0.0 [0]
32	0.0 [0]
34	0.0 [0]
36	0.0 [0]
38	0.0 [0]
40	0.0 [0]
42	0.0 [0]
44	0.0 [0]
46	0.0 [0]
48	0.0 [0]
50	0.0 [0]
52	0.0 [0]
54	0.0 [0]
56	0.0 [0]
58	0.0 [0]
60	0.0 [0]
62	0.0 [0]
64	0.0 [0]
66	0.0 [0]
68	0.0 [0]
70	0.0 [0]
72	0.0 [0]
74	0.0 [0]
76	0.0 [0]
78	0.0 [0]
80	0.0 [0]
82	0.0 [0]
84	0.0 [0]
86	0.0 [0]
88	0.0 [0]
90	0.0 [0]
92	0.0 [0]
94	0.0 [0]
96	0.0 [0]
98	0.0 [0]

Time (msec)	Delta-V, Lateral (MPH [km/h])
100	0.0 [0]
102	0.0 [0]
104	0.0 [0]
106	0.0 [0]
108	0.0 [0]
110	0.0 [0]
112	0.0 [0]
114	0.0 [0]
116	0.0 [0]
118	0.0 [0]
120	0.0 [0]
122	0.0 [0]
124	0.0 [0]
126	0.0 [0]
128	0.0 [0]
130	0.0 [0]
132	0.0 [0]
134	0.0 [0]
136	0.0 [0]
138	0.0 [0]
140	0.0 [0]
142	0.0 [0]
144	0.0 [0]
146	0.0 [0]
148	0.0 [0]
150	0.0 [0]
152	0.0 [0]
154	0.0 [0]
156	0.0 [0]
158	0.0 [0]
160	0.0 [0]
162	0.0 [0]
164	0.0 [0]
166	0.0 [0]
168	0.0 [0]
170	0.0 [0]
172	0.0 [0]
174	0.0 [0]
176	0.0 [0]
178	0.0 [0]
180	0.0 [0]
182	0.0 [0]
184	0.0 [0]
186	0.0 [0]
188	0.0 [0]
190	0.0 [0]
192	0.0 [0]
194	0.0 [0]
196	0.0 [0]
198	0.0 [0]

Time (msec)	Delta-V, Lateral (MPH [km/h])
200	0.0 [0]
202	0.0 [0]
204	0.0 [0]
206	0.0 [0]
208	0.0 [0]
210	0.0 [0]
212	0.0 [0]
214	0.0 [0]
216	0.0 [0]
218	0.0 [0]
220	0.0 [0]
222	0.0 [0]
224	0.0 [0]
226	0.0 [0]
228	0.0 [0]
230	0.0 [0]
232	0.0 [0]
234	0.0 [0]
236	0.0 [0]
238	0.0 [0]
240	0.0 [0]
242	0.0 [0]
244	0.0 [0]
246	0.0 [0]
248	0.0 [0]
250	0.0 [0]
252	0.0 [0]
254	0.0 [0]
256	0.0 [0]
258	0.0 [0]
260	0.0 [0]
262	0.0 [0]
264	0.0 [0]
266	0.0 [0]
268	0.0 [0]
270	0.0 [0]
272	0.0 [0]
274	0.0 [0]
276	0.0 [0]
278	0.0 [0]
280	0.0 [0]
282	0.0 [0]
284	0.0 [0]
286	0.0 [0]
288	0.0 [0]
290	0.0 [0]
292	0.0 [0]
294	0.0 [0]
296	0.0 [0]
298	0.0 [0]
300	0.0 [0]

Angular Rate Data (2nd Prior Event)

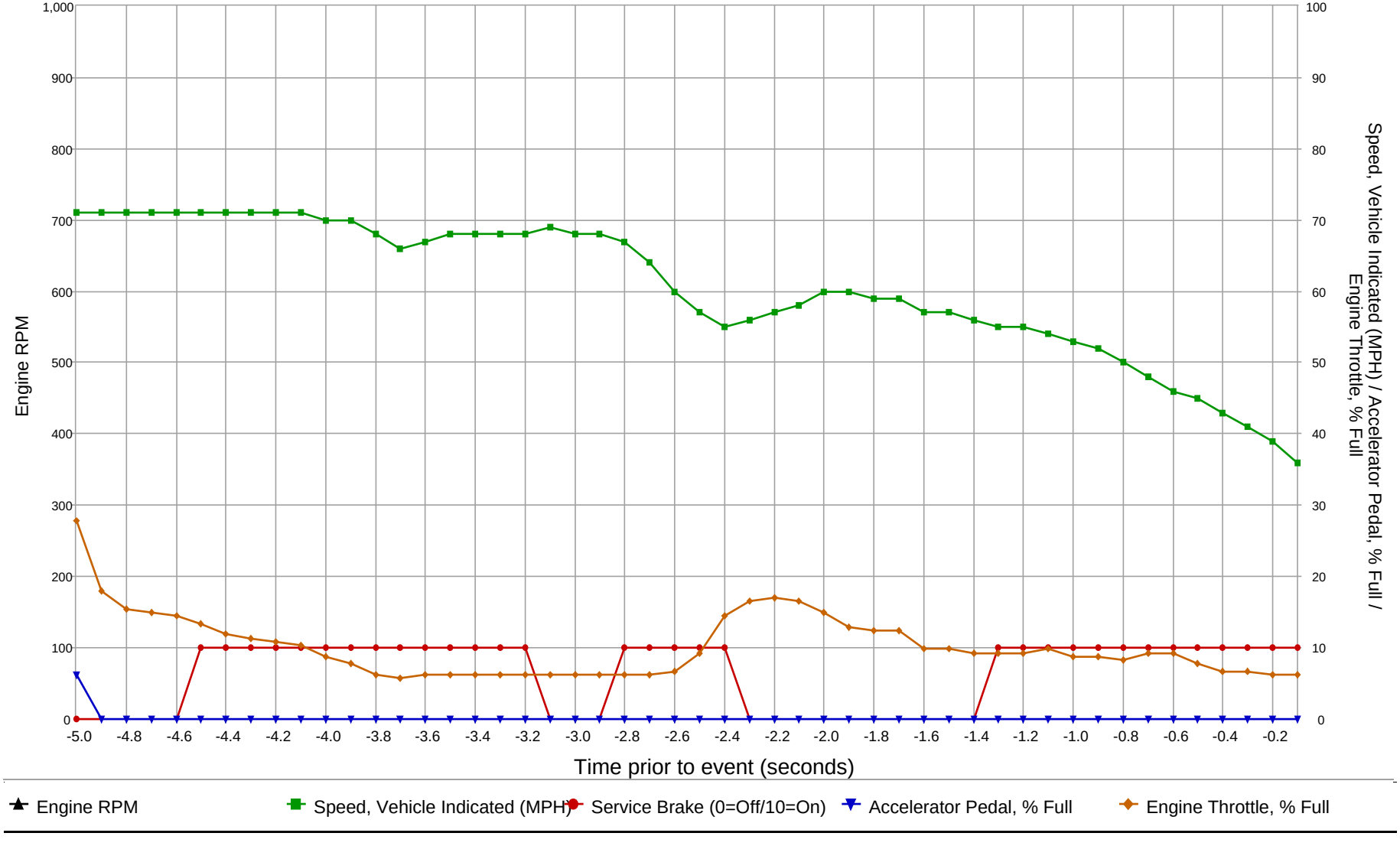
Time (msec)	Angular Rate (deg/sec)	Time (msec)	Angular Rate (deg/sec)	Time (msec)	Angular Rate (deg/sec)
-2500	0.00	-1500	0.00	-500	0.00
-2480	0.00	-1480	0.00	-480	0.00
-2460	0.00	-1460	0.00	-460	0.00
-2440	0.00	-1440	0.00	-440	0.00
-2420	0.00	-1420	0.00	-420	0.00
-2400	0.00	-1400	0.00	-400	0.00
-2380	0.00	-1380	0.00	-380	0.00
-2360	0.00	-1360	0.00	-360	0.00
-2340	0.00	-1340	0.00	-340	0.00
-2320	0.00	-1320	0.00	-320	0.00
-2300	0.00	-1300	0.00	-300	0.00
-2280	0.00	-1280	0.00	-280	0.00
-2260	0.00	-1260	0.00	-260	0.00
-2240	0.00	-1240	0.00	-240	0.00
-2220	0.00	-1220	0.00	-220	0.00
-2200	0.00	-1200	0.00	-200	0.00
-2180	0.00	-1180	0.00	-180	0.00
-2160	0.00	-1160	0.00	-160	0.00
-2140	0.00	-1140	0.00	-140	0.00
-2120	0.00	-1120	0.00	-120	0.00
-2100	0.00	-1100	0.00	-100	0.00
-2080	0.00	-1080	0.00	-80	0.00
-2060	0.00	-1060	0.00	-60	0.00
-2040	0.00	-1040	0.00	-40	0.00
-2020	0.00	-1020	0.00	-20	0.00
-2000	0.00	-1000	0.00	0	0.00
-1980	0.00	-980	0.00	20	0.00
-1960	0.00	-960	0.00	40	0.00
-1940	0.00	-940	0.00	60	0.00
-1920	0.00	-920	0.00	80	0.00
-1900	0.00	-900	0.00	100	0.00
-1880	0.00	-880	0.00	120	0.00
-1860	0.00	-860	0.00	140	0.00
-1840	0.00	-840	0.00	160	0.00
-1820	0.00	-820	0.00	180	0.00
-1800	0.00	-800	0.00	200	0.00
-1780	0.00	-780	0.00	220	0.00
-1760	0.00	-760	0.00	240	0.00
-1740	0.00	-740	0.00	260	0.00
-1720	0.00	-720	0.00	280	0.00
-1700	0.00	-700	0.00	300	0.00
-1680	0.00	-680	0.00	320	0.00
-1660	0.00	-660	0.00	340	0.00
-1640	0.00	-640	0.00	360	0.00
-1620	0.00	-620	0.00	380	0.00
-1600	0.00	-600	0.00	400	0.00
-1580	0.00	-580	0.00	420	0.00
-1560	0.00	-560	0.00	440	0.00
-1540	0.00	-540	0.00	460	0.00
-1520	0.00	-520	0.00	480	0.00

Angular Rate Data (2nd Prior Event)

Time (msec)	Angular Rate (deg/sec)
500	0.00
520	0.00
540	0.00
560	0.00
580	0.00
600	0.00
620	0.00
640	0.00
660	0.00
680	0.00
700	0.00
720	0.00
740	0.00
760	0.00
780	0.00
800	0.00
820	0.00
840	0.00
860	0.00
880	0.00
900	0.00
920	0.00
940	0.00
960	0.00
980	0.00
1000	0.00
1020	0.00
1040	0.00
1060	0.00
1080	0.00
1100	0.00
1120	0.00
1140	0.00
1160	0.00
1180	0.00
1200	0.00
1220	0.00
1240	0.00
1260	0.00
1280	0.00
1300	0.00
1320	0.00
1340	0.00
1360	0.00
1380	0.00
1400	0.00
1420	0.00
1440	0.00
1460	0.00
1480	0.00

Time (msec)	Angular Rate (deg/sec)
1500	0.00
1520	0.00
1540	0.00
1560	0.00
1580	0.00
1600	0.00
1620	0.00
1640	0.00
1660	0.00
1680	0.00
1700	0.00
1720	0.00
1740	0.00
1760	0.00
1780	0.00
1800	0.00
1820	0.00
1840	0.00
1860	0.00
1880	0.00
1900	0.00
1920	0.00
1940	0.00
1960	0.00
1980	0.00
2000	0.00
2020	0.00
2040	0.00
2060	0.00
2080	0.00
2100	0.00
2120	0.00
2140	0.00
2160	0.00
2180	0.00
2200	0.00
2220	0.00
2240	0.00
2260	0.00
2280	0.00
2300	0.00
2320	0.00
2340	0.00
2360	0.00
2380	0.00
2400	0.00
2420	0.00

Pre-Crash Data (2nd Prior Event)



SNA values will not be plotted on the graph

Pre-Crash Data (2nd Prior Event - table 1 of 4)

(the most recent sampled values are recorded prior to the event)

Time Stamp (sec)	Pre-Crash Recorder Status	Speed, Vehicle Indicated (MPH [km/h])	Accelerator Pedal, % Full	Engine Throttle, % Full	Service Brake	Engine RPM	ABS Activity	Stability Control	Steering Input (deg)
-5.0	Interrupted	71 [114]	6	28	Off	0	No	Off	-2048
-4.9	Interrupted	71 [114]	0	18	Off	0	No	Off	-2048
-4.8	Interrupted	71 [114]	0	15	Off	0	No	Off	-2048
-4.7	Interrupted	71 [114]	0	15	Off	0	No	Off	-2048
-4.6	Interrupted	71 [114]	0	14	Off	0	No	Off	-2048
-4.5	Interrupted	71 [114]	0	13	On	0	No	Off	-2048
-4.4	Interrupted	71 [114]	0	12	On	0	No	Off	-2048
-4.3	Interrupted	71 [114]	0	11	On	0	No	Off	-2048
-4.2	Interrupted	71 [114]	0	11	On	0	No	Off	-2048
-4.1	Interrupted	71 [113]	0	10	On	0	No	Off	-2048
-4.0	Interrupted	70 [113]	0	9	On	0	No	Off	-2048
-3.9	Interrupted	70 [113]	0	8	On	0	No	Off	-2048
-3.8	Interrupted	68 [110]	0	6	On	0	No	Off	-2048
-3.7	Interrupted	66 [107]	0	6	On	0	No	Off	-2048
-3.6	Interrupted	67 [107]	0	6	On	0	No	Off	-2048
-3.5	Interrupted	68 [109]	0	6	On	0	No	Off	-2048
-3.4	Interrupted	68 [110]	0	6	On	0	No	Off	-2048
-3.3	Interrupted	68 [110]	0	6	On	0	No	Off	-2048
-3.2	Interrupted	68 [110]	0	6	On	0	No	Off	-2048
-3.1	Interrupted	69 [110]	0	6	Off	0	No	Off	-2048
-3.0	Interrupted	68 [109]	0	6	Off	0	No	Off	-2048
-2.9	Interrupted	68 [109]	0	6	Off	0	No	Off	-2048
-2.8	Interrupted	67 [108]	0	6	On	0	No	Off	-2048
-2.7	Interrupted	64 [104]	0	6	On	0	No	Off	-2048
-2.6	Interrupted	60 [96]	0	7	On	0	No	Off	-2048
-2.5	Interrupted	57 [92]	0	9	On	0	No	Off	-2048
-2.4	Interrupted	55 [89]	0	14	On	0	No	Off	-2048
-2.3	Interrupted	56 [90]	0	16	Off	0	No	Off	-2048
-2.2	Interrupted	57 [92]	0	17	Off	0	No	Off	-2048
-2.1	Interrupted	58 [94]	0	16	Off	0	No	Off	-2048
-2.0	Interrupted	60 [96]	0	15	Off	0	No	Off	-2048
-1.9	Interrupted	60 [97]	0	13	Off	0	No	Off	-2048
-1.8	Interrupted	59 [95]	0	12	Off	0	No	Off	-2048
-1.7	Interrupted	59 [94]	0	12	Off	0	No	Off	-2048
-1.6	Interrupted	57 [92]	0	10	Off	0	No	Off	-2048
-1.5	Interrupted	57 [92]	0	10	Off	0	No	Off	-2048
-1.4	Interrupted	56 [90]	0	9	Off	0	No	Off	-2048
-1.3	Interrupted	55 [89]	0	9	On	0	No	Off	-2048
-1.2	Interrupted	55 [88]	0	9	On	0	No	Off	-2048
-1.1	Interrupted	54 [87]	0	10	On	0	No	Off	-2048
-1.0	Interrupted	53 [85]	0	9	On	0	No	Off	-2048
-0.9	Interrupted	52 [83]	0	9	On	0	No	Off	-2048
-0.8	Interrupted	50 [80]	0	8	On	0	No	Off	-2048
-0.7	Interrupted	48 [77]	0	9	On	0	No	Off	-2048
-0.6	Interrupted	46 [75]	0	9	On	0	No	Off	-2048
-0.5	Interrupted	45 [72]	0	8	On	0	No	Off	-2048
-0.4	Interrupted	43 [69]	0	7	On	0	No	Off	-2048
-0.3	Interrupted	41 [66]	0	7	On	0	No	Off	-2048
-0.2	Interrupted	39 [62]	0	6	On	0	No	Off	-2048
-0.1	Interrupted	36 [58]	0	6	On	0	No	Off	-2048

Pre-Crash Data (2nd Prior Event - table 2 of 4)

(the most recent sampled values are recorded prior to the event)

Time Stamp (sec)	Raw Manifold Pressure (kPa)	PCM MIL	Yaw Rate (deg/sec)	Wheel Speed LF (RPM)	Wheel Speed RF (RPM)	Wheel Speed LR (RPM)	Wheel Speed RR (RPM)	ETC Lamp
-5.0	0.00	Off	-327	0	0	0	0	Off
-4.9	0.00	Off	-327	0	0	0	0	Off
-4.8	0.00	Off	-327	0	0	0	0	Off
-4.7	0.00	Off	-327	0	0	0	0	Off
-4.6	0.00	Off	-327	0	0	0	0	Off
-4.5	0.00	Off	-327	0	0	0	0	Off
-4.4	0.00	Off	-327	0	0	0	0	Off
-4.3	0.00	Off	-327	0	0	0	0	Off
-4.2	0.00	Off	-327	0	0	0	0	Off
-4.1	0.00	Off	-327	0	0	0	0	Off
-4.0	0.00	Off	-327	0	0	0	0	Off
-3.9	0.00	Off	-327	0	0	0	0	Off
-3.8	0.00	Off	-327	0	0	0	0	Off
-3.7	0.00	Off	-327	0	0	0	0	Off
-3.6	0.00	Off	-327	0	0	0	0	Off
-3.5	0.00	Off	-327	0	0	0	0	Off
-3.4	0.00	Off	-327	0	0	0	0	Off
-3.3	0.00	Off	-327	0	0	0	0	Off
-3.2	0.00	Off	-327	0	0	0	0	Off
-3.1	0.00	Off	-327	0	0	0	0	Off
-3.0	0.00	Off	-327	0	0	0	0	Off
-2.9	0.00	Off	-327	0	0	0	0	Off
-2.8	0.00	Off	-327	0	0	0	0	Off
-2.7	0.00	Off	-327	0	0	0	0	Off
-2.6	0.00	Off	-327	0	0	0	0	Off
-2.5	0.00	Off	-327	0	0	0	0	Off
-2.4	0.00	Off	-327	0	0	0	0	Off
-2.3	0.00	Off	-327	0	0	0	0	Off
-2.2	0.00	Off	-327	0	0	0	0	Off
-2.1	0.00	Off	-327	0	0	0	0	Off
-2.0	0.00	Off	-327	0	0	0	0	Off
-1.9	0.00	Off	-327	0	0	0	0	Off
-1.8	0.00	Off	-327	0	0	0	0	Off
-1.7	0.00	Off	-327	0	0	0	0	Off
-1.6	0.00	Off	-327	0	0	0	0	Off
-1.5	0.00	Off	-327	0	0	0	0	Off
-1.4	0.00	Off	-327	0	0	0	0	Off
-1.3	0.00	Off	-327	0	0	0	0	Off
-1.2	0.00	Off	-327	0	0	0	0	Off
-1.1	0.00	Off	-327	0	0	0	0	Off
-1.0	0.00	Off	-327	0	0	0	0	Off
-0.9	0.00	Off	-327	0	0	0	0	Off
-0.8	0.00	Off	-327	0	0	0	0	Off
-0.7	0.00	Off	-327	0	0	0	0	Off
-0.6	0.00	Off	-327	0	0	0	0	Off
-0.5	0.00	Off	-327	0	0	0	0	Off
-0.4	0.00	Off	-327	0	0	0	0	Off
-0.3	0.00	Off	-327	0	0	0	0	Off
-0.2	0.00	Off	-327	0	0	0	0	Off
-0.1	0.00	Off	-327	0	0	0	0	Off

Pre-Crash Data (2nd Prior Event - table 3 of 4)

(the most recent sampled values are recorded prior to the event)

Time Stamp (sec)	ETC Flashing	Engine Torque Applied	PRNDL Status (if equip.)	Reverse Gear (Manual Only)	Tire Pressure Monitor Indicator Lamp	Tire Pressure Status, LF	Tire Pressure Status, RF	Tire Pressure Status, LR
-5.0	No	No	Park	No	Off	Normal	Normal	Normal
-4.9	No	No	Park	No	Off	Normal	Normal	Normal
-4.8	No	No	Park	No	Off	Normal	Normal	Normal
-4.7	No	No	Park	No	Off	Normal	Normal	Normal
-4.6	No	No	Park	No	Off	Normal	Normal	Normal
-4.5	No	No	Park	No	Off	Normal	Normal	Normal
-4.4	No	No	Park	No	Off	Normal	Normal	Normal
-4.3	No	No	Park	No	Off	Normal	Normal	Normal
-4.2	No	No	Park	No	Off	Normal	Normal	Normal
-4.1	No	No	Park	No	Off	Normal	Normal	Normal
-4.0	No	No	Park	No	Off	Normal	Normal	Normal
-3.9	No	No	Park	No	Off	Normal	Normal	Normal
-3.8	No	No	Park	No	Off	Normal	Normal	Normal
-3.7	No	No	Park	No	Off	Normal	Normal	Normal
-3.6	No	No	Park	No	Off	Normal	Normal	Normal
-3.5	No	No	Park	No	Off	Normal	Normal	Normal
-3.4	No	No	Park	No	Off	Normal	Normal	Normal
-3.3	No	No	Park	No	Off	Normal	Normal	Normal
-3.2	No	No	Park	No	Off	Normal	Normal	Normal
-3.1	No	No	Park	No	Off	Normal	Normal	Normal
-3.0	No	No	Park	No	Off	Normal	Normal	Normal
-2.9	No	No	Park	No	Off	Normal	Normal	Normal
-2.8	No	No	Park	No	Off	Normal	Normal	Normal
-2.7	No	No	Park	No	Off	Normal	Normal	Normal
-2.6	No	No	Park	No	Off	Normal	Normal	Normal
-2.5	No	No	Park	No	Off	Normal	Normal	Normal
-2.4	No	No	Park	No	Off	Normal	Normal	Normal
-2.3	No	No	Park	No	Off	Normal	Normal	Normal
-2.2	No	No	Park	No	Off	Normal	Normal	Normal
-2.1	No	No	Park	No	Off	Normal	Normal	Normal
-2.0	No	No	Park	No	Off	Normal	Normal	Normal
-1.9	No	No	Park	No	Off	Normal	Normal	Normal
-1.8	No	No	Park	No	Off	Normal	Normal	Normal
-1.7	No	No	Park	No	Off	Normal	Normal	Normal
-1.6	No	No	Park	No	Off	Normal	Normal	Normal
-1.5	No	No	Park	No	Off	Normal	Normal	Normal
-1.4	No	No	Park	No	Off	Normal	Normal	Normal
-1.3	No	No	Park	No	Off	Normal	Normal	Normal
-1.2	No	No	Park	No	Off	Normal	Normal	Normal
-1.1	No	No	Park	No	Off	Normal	Normal	Normal
-1.0	No	No	Park	No	Off	Normal	Normal	Normal
-0.9	No	No	Park	No	Off	Normal	Normal	Normal
-0.8	No	No	Park	No	Off	Normal	Normal	Normal
-0.7	No	No	Park	No	Off	Normal	Normal	Normal
-0.6	No	No	Park	No	Off	Normal	Normal	Normal
-0.5	No	No	Park	No	Off	Normal	Normal	Normal
-0.4	No	No	Park	No	Off	Normal	Normal	Normal
-0.3	No	No	Park	No	Off	Normal	Normal	Normal
-0.2	No	No	Park	No	Off	Normal	Normal	Normal
-0.1	No	No	Park	No	Off	Normal	Normal	Normal

Pre-Crash Data (2nd Prior Event - table 4 of 4)

(the most recent sampled values are recorded prior to the event)

Time Stamp (sec)	Tire Pressure Status, RR	Tire Pressure, LF (psi)	Tire Pressure, RF (psi)	Tire Pressure, LR (psi)	Tire Pressure, RR (psi)	Cruise Control Engaged (if equip.)	Cruise Control Status (if equip.)
-5.0	Normal	0	0	0	0	Not Engaged	Off
-4.9	Normal	0	0	0	0	Not Engaged	Off
-4.8	Normal	0	0	0	0	Not Engaged	Off
-4.7	Normal	0	0	0	0	Not Engaged	Off
-4.6	Normal	0	0	0	0	Not Engaged	Off
-4.5	Normal	0	0	0	0	Not Engaged	Off
-4.4	Normal	0	0	0	0	Not Engaged	Off
-4.3	Normal	0	0	0	0	Not Engaged	Off
-4.2	Normal	0	0	0	0	Not Engaged	Off
-4.1	Normal	0	0	0	0	Not Engaged	Off
-4.0	Normal	0	0	0	0	Not Engaged	Off
-3.9	Normal	0	0	0	0	Not Engaged	Off
-3.8	Normal	0	0	0	0	Not Engaged	Off
-3.7	Normal	0	0	0	0	Not Engaged	Off
-3.6	Normal	0	0	0	0	Not Engaged	Off
-3.5	Normal	0	0	0	0	Not Engaged	Off
-3.4	Normal	0	0	0	0	Not Engaged	Off
-3.3	Normal	0	0	0	0	Not Engaged	Off
-3.2	Normal	0	0	0	0	Not Engaged	Off
-3.1	Normal	0	0	0	0	Not Engaged	Off
-3.0	Normal	0	0	0	0	Not Engaged	Off
-2.9	Normal	0	0	0	0	Not Engaged	Off
-2.8	Normal	0	0	0	0	Not Engaged	Off
-2.7	Normal	0	0	0	0	Not Engaged	Off
-2.6	Normal	0	0	0	0	Not Engaged	Off
-2.5	Normal	0	0	0	0	Not Engaged	Off
-2.4	Normal	0	0	0	0	Not Engaged	Off
-2.3	Normal	0	0	0	0	Not Engaged	Off
-2.2	Normal	0	0	0	0	Not Engaged	Off
-2.1	Normal	0	0	0	0	Not Engaged	Off
-2.0	Normal	0	0	0	0	Not Engaged	Off
-1.9	Normal	0	0	0	0	Not Engaged	Off
-1.8	Normal	0	0	0	0	Not Engaged	Off
-1.7	Normal	0	0	0	0	Not Engaged	Off
-1.6	Normal	0	0	0	0	Not Engaged	Off
-1.5	Normal	0	0	0	0	Not Engaged	Off
-1.4	Normal	0	0	0	0	Not Engaged	Off
-1.3	Normal	0	0	0	0	Not Engaged	Off
-1.2	Normal	0	0	0	0	Not Engaged	Off
-1.1	Normal	0	0	0	0	Not Engaged	Off
-1.0	Normal	0	0	0	0	Not Engaged	Off
-0.9	Normal	0	0	0	0	Not Engaged	Off
-0.8	Normal	0	0	0	0	Not Engaged	Off
-0.7	Normal	0	0	0	0	Not Engaged	Off
-0.6	Normal	0	0	0	0	Not Engaged	Off
-0.5	Normal	0	0	0	0	Not Engaged	Off
-0.4	Normal	0	0	0	0	Not Engaged	Off
-0.3	Normal	0	0	0	0	Not Engaged	Off
-0.2	Normal	0	0	0	0	Not Engaged	Off
-0.1	Normal	0	0	0	0	Not Engaged	Off

Hexadecimal Data

Data that the vehicle manufacturer has specified for data retrieval is shown in the hexadecimal data section of the CDR report. The hexadecimal data section of the CDR report may contain data that is not translated by the CDR program. The control module contains additional data that is not retrievable by the CDR system.

```
62 F1 00 00 42 01 03

62 F1 32 36 38 30 38 35 38 38 31 41 48

62 F1 50 0C 05 00

62 F1 51 0D 1C 00 0E 18 00

62 02 20 04 75 41 04 0D 1D 0A 33 D3 0F 80 10 00 00 00 00 00 00 00 00 00 00 07 31 43 36 52
52 37 56 54 39 44 53 36 36 32 39 33 31 7E 0F 00 00 00 00

62 F1 8C 54 35 32 4D 44 31 31 34 33 30 30 39 33 38

62 F1 54 00 03

62 F1 90 31 43 36 52 52 37 56 54 39 44 53 2A 2A 2A 2A 2A 2A

62 02 B1 01 CC 03 03 33 FF 0F 0F 19 00 45 2A 2A 2A 2A 2A 2A 1F AB 0A 33 D2 1D 02 07 F8 04 F0
01 00 00 00 00 00 33 11 0F 00 00 00 00 00 00 00 00 00 80 00 00 00 00 10 0E 18 00 91 50 CC 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
01 00 00 00 44 53 2A 2A 2A 2A 2A 2A 00 0D FF FF FF 00 00 00 03 94 F6 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 E4 00 FC 83 00 06 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00

62 02 B2 02 66 02 03 33 FF 0F 0F 19 00 45 61 2F 00 00 00 B0 1F AB 0A 33 D2 1D 02 07 F8 04 F0
01 00 00 00 00 00 33 11 0F 00 00 00 00 00 03 00 00 00 80 00 00 00 00 10 0E 18 00 91 50 CC 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
01 00 00 00 44 53 2A 2A 2A 2A 2A 2A 01 7C FF FF FF 00 00 00 03 94 F6 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00 00 FC 83 00 06 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00

62 02 B3 03 66 01 03 33 FF 0F 0F 19 00 45 61 2F 00 00 00 B0 1F AB 0A 33 D2 1D 02 07 F8 04 F0
01 00 00 00 00 00 33 11 0F 00 00 00 00 00 00 00 00 00 40 00 00 00 00 00 0E 18 00 91 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 44 53 2A 2A 2A 2A 2A 2A FF FE FF FF FF 00 00 00 03 94 F6 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 06 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00

62 02 C1 03 7F 00 02 1F 00 01 03 00
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62 02 10 FF FF FF FF FF FF FF FF 03 43 01 90 01 90 3C 90 00 00 00 00 00 00

62 02 50 1F AE 00 45 6B 42 03 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

71 01 03 01 01 00 CC 00 03 E5 00 03 30 00 13 00 5E 00 12 FF FF 02 00 00 01 00 29 D6 15 0A 16
0B 00 C0 01 00 00 07 00 FF 00 00 00 00 00 0B 6A 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 01 02 00 04 04 40 00 00 27 29 28 29 FF 5C FF FF FF FF FF 6E 00 00 00 01 82 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 01 CC 00 05 BB 00 03 4C 00 57 01 25 00 40 FF FF 02 00 00 01 00 24 DB 15 0A 14
0B 00 C0 01 00 00 07 00 FF 00 00 00 00 00 0F 97 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 09 8E 00 04 04 40 00 00 27 29 28 29 FF 50 FF FF FF FF FF 6B 00 00 00 01 40 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 02 CC 00 07 A3 00 02 DE 02 3E 01 72 00 F9 70 DF 02 00 00 01 00 25 DA 15 0A 13
0C 00 C0 01 00 00 07 00 FF 00 00 00 00 00 11 D8 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 1B 01 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 36 3B 7E 69 00 00 00 01 4E 0B B4 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 03 CC 00 08 87 00 02 E4 02 E7 01 87 02 9C 79 D9 02 00 00 01 00 26 D9 15 0A 12
0C 00 C0 01 00 00 07 00 FF 00 00 00 00 00 11 F3 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 1C F7 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 75 58 7E 6D 00 00 00 01 4A 0F 38 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 04 CC 00 09 16 00 03 14 03 15 01 BC 02 B8 78 89 02 00 00 01 00 26 D9 15 0A 11
0C 00 C0 01 00 00 07 00 FF 00 00 00 00 00 11 EE 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 1F 05 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 73 57 7E 6E 00 00 00 01 3A 10 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 05 CC 00 09 BB 00 03 5B 03 2C 01 76 02 A0 77 61 02 00 00 01 00 26 D9 15 0A 11
0D 00 C0 01 00 00 07 00 FF 00 00 00 00 00 12 01 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 20 DC 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 6F 42 7E 6E 00 00 00 01 3A 0E 70 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 06 CC 00 0A 3D 00 03 9D 03 47 01 A2 02 E5 75 89 02 00 00 01 00 27 D8 15 0A 11
0D 00 C0 01 00 00 07 00 FF 00 00 00 00 00 12 1F 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 22 8F 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 6D 39 7E 71 00 00 00 01 48 0F 38 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 07 CC 00 0A B2 00 03 CE 03 6D 02 40 03 99 73 E9 02 00 00 01 00 27 D8 15 0A 11
0F 00 C0 01 00 00 07 00 FF 00 00 00 00 00 12 34 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 23 F5 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 6E 26 7E 75 00 00 00 01 5C 0F 9C 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 08 CC 00 0B 15 00 03 ED 03 93 02 9E 03 DB 72 98 02 00 00 01 00 28 D7 15 0B 12
12 00 C0 01 00 00 07 00 FF 00 00 00 00 00 12 40 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 25 5E 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 6F 21 7E 73 00 00 00 01 81 0F 9C 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 09 CC 00 0B 6D 00 03 F9 03 C9 03 4F 04 0B 73 61 02 00 00 01 00 2D D2 15 0A 11
12 00 C0 01 00 00 07 00 FF 00 00 00 00 00 12 4B 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 26 A7 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 71 37 7E 70 00 00 00 01 75 0F 38 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 0A CC 00 0B EB 00 04 14 04 02 02 34 04 5F 72 91 02 00 00 01 00 2A D5 15 0A 10
10 00 C0 01 00 00 07 00 FF 00 00 00 00 00 12 4F 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 28 13 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 71 3E 7E 6E 00 00 00 01 5B 10 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 0B CC 00 0C 51 00 04 2A 04 22 00 CC 04 71 71 71 02 00 00 01 00 2A D5 15 0A 10
11 00 C0 01 00 00 07 00 FF 00 00 00 00 00 12 36 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 29 80 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 6F 41 7E 6F 00 00 00 01 67 12 58 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF
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71 01 03 01 01 0C CC 00 0C B5 00 04 40 04 3D 03 70 03 FC 70 59 02 00 00 01 00 2B D4 15 0A 10
11 00 C0 01 00 00 07 00 FF 00 00 00 00 00 11 DE 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2A 55 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 73 3C 7E 71 00 00 00 01 73 13 20 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 0D CC 00 0C F1 00 04 58 04 60 04 78 04 09 70 79 02 00 00 01 00 2B D4 15 0A 11
13 00 C0 01 00 00 07 00 FF 00 00 00 00 00 11 A2 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2B 54 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 77 22 7E 70 00 00 00 01 8F 11 90 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 0E CC 00 0D 13 00 04 68 04 82 04 FC 04 4D 72 19 02 00 00 01 00 2B D4 15 0A 10
12 00 C0 01 00 00 07 00 FF 00 00 00 00 00 11 8C 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2C 20 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 77 1C 7E 70 00 00 00 01 74 11 90 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 0F CC 00 0D 39 00 04 78 04 8B 05 0D 04 F7 74 D9 02 00 00 01 00 2C D3 15 0A 10
12 00 C0 01 00 00 07 00 FF 00 00 00 00 00 11 73 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2C A1 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 75 2B 7E 70 00 00 00 01 78 10 C8 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 10 CC 00 0D 6B 00 04 86 04 98 03 0C 05 08 74 D1 02 00 00 00 00 2C D3 15 0A 10
12 00 C0 01 00 00 07 00 FF 00 00 00 00 00 11 5D 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2D 13 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 73 47 7E 71 00 00 00 01 7E 10 C8 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 11 CC 00 0D 83 00 04 AD 04 89 00 15 05 18 73 29 00 00 00 00 00 2C D3 15 0A 11
13 00 C0 01 00 00 07 00 FF 00 00 00 00 00 11 4F 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2E 06 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 73 5A 7E 72 00 00 00 01 8B 10 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 12 CC 00 0D 97 00 04 F9 04 5F 00 FD 05 24 73 39 00 00 00 00 00 2C D2 15 0A 11
13 00 C0 01 00 00 07 00 FF 00 00 00 00 00 11 4A 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2D E8 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 6C 58 7E 73 00 00 00 01 9E 10 C8 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 13 CC 00 0E 0B 00 04 ED 04 86 05 24 05 31 74 09 00 00 00 00 00 2D D1 15 0A 13
18 00 C0 01 00 00 07 00 FF 00 00 00 00 00 11 39 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2F 37 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 62 54 7E 74 00 00 00 01 D9 11 90 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 14 CC 00 0E 37 00 05 03 04 9B 05 60 05 3C 75 01 00 00 00 00 00 31 CE 15 0A 15
18 00 C0 01 00 00 07 00 FF 00 00 00 00 00 10 F1 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2F 7A 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 66 57 7E 74 00 00 00 02 26 12 BC 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 15 CC 00 0E 91 00 04 DF 04 ED 05 6B 05 4B 76 71 00 00 00 00 00 32 CD 15 0A 18
19 00 C0 01 00 00 07 00 FF 00 00 00 00 00 10 B0 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 30 80 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 67 59 7E 74 00 00 00 02 82 11 F4 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 16 CC 00 0E 8A 00 04 D7 04 FB 05 70 05 5B 77 99 00 00 00 00 00 36 C9 15 0A 1C
1D 00 C0 01 00 00 07 00 FF 00 00 00 00 00 10 80 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 30 38 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 68 5F 7E 74 00 00 00 03 01 11 90 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 17 CC 00 0E 5B 00 04 C8 04 DC 05 74 05 64 78 A1 00 00 00 00 00 39 C6 15 0A 1E
20 00 C0 01 00 00 07 00 FF 00 00 00 00 00 10 4C 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2F 11 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 6C 5F 7E 74 00 00 00 03 5C 12 58 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 18 CC 00 0E 1B 00 04 AB 04 B9 05 71 05 6C 7A 59 00 00 00 00 00 3B C4 15 0A 1F
21 00 C0 01 00 00 07 00 FF 00 00 00 00 00 10 20 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2D FC 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 71 63 7E 75 00 00 00 03 83 10 C8 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF
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71 01 03 01 01 19 CC 00 0D C3 00 04 89 04 9E 05 7F 05 79 7B D9 00 00 00 00 00 3B C4 15 0A 1E
20 00 C0 01 00 00 07 00 FF 00 00 00 00 00 10 0C 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2D 13 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 6F 6C 7E 76 00 00 00 03 78 10 64 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 1A CC 00 0D 16 00 04 7A 04 75 05 90 05 09 7C C9 02 00 00 01 00 37 C8 15 0A 1A
1C 00 C0 00 00 00 07 00 FF 00 00 00 00 00 10 02 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2C 66 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 6C 73 7E 75 00 00 00 02 BB 10 64 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 1B CC 00 0C 01 00 04 90 04 96 05 80 05 52 7D 21 02 00 00 01 00 31 CE 15 0A 14
12 00 C0 00 00 00 07 00 FF 00 00 00 00 00 0F FC 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2D D5 00 00 04 40 00 00 27 29 28 29 FF 32 80 74 6A 72 7E 71 00 00 00 01 E9 10 64 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 1C CC 00 0B 1C 00 04 C3 04 C2 05 8B 05 53 7D E1 02 00 00 01 00 29 D6 15 0A 10
0D 00 C0 00 00 00 07 00 FF 00 00 00 00 00 0F F6 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 2F F3 00 00 04 40 00 00 27 29 28 29 FF 32 80 74 71 77 7E 6E 00 00 00 01 4C 10 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 1D CC 00 0A 84 00 05 1F 05 1D 05 92 05 87 7E 61 02 00 00 01 00 26 D9 15 0A 10
0C 00 C0 00 00 00 07 00 FF 00 00 00 00 00 0F F3 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 33 CA 00 00 04 40 00 00 27 29 28 29 FF 32 80 74 75 79 7E 6D 00 00 00 01 35 10 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 1E CC 00 0A 30 00 05 7A 05 6C 05 96 05 94 7E 99 02 00 00 01 00 25 DA 15 0A 10
0C 00 C0 00 00 00 07 00 FF 00 00 00 00 00 0F F0 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 36 25 00 00 04 40 00 00 27 29 28 29 FF 22 80 74 75 7A 7E 6D 00 00 00 01 35 10 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 1F CC 00 09 FE 00 05 8C 05 7F 05 9B 05 97 7E A1 00 00 00 00 00 25 DA 15 0A 11
0C 00 C0 00 00 00 07 00 FF 00 00 00 00 00 0F ED 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 36 7D 00 00 04 40 00 00 27 29 28 29 FF 22 80 74 75 7C 7E 6D 00 00 00 01 3A 10 64 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 20 CC 00 09 B6 00 00 FF 00 F8 00 F6 00 F6 FF FF 00 00 00 00 00 25 DA 15 0A 70
0C 00 C0 00 00 00 07 00 FF 00 00 00 00 00 0F E9 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 36 AE 00 00 04 40 00 00 27 29 28 29 FF 22 FF FF FF FF FF 7F 00 00 00 00 00 10 64 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 21 CC 00 09 8C 00 01 00 00 FC 00 FB 00 FC FF FF 00 00 00 00 00 25 DA 15 0A 70
0C 00 C0 01 00 00 07 00 FF 00 00 00 00 00 0F E3 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 37 25 00 00 04 40 00 00 27 29 28 29 FF 22 FF FF FF FF FF 7F 00 00 00 00 00 10 64 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 22 CC 00 00 00 00 01 03 00 FD 01 04 00 FC FF FF 02 00 00 01 00 25 DA 15 0A 70
0C 00 80 01 00 00 07 00 FF 00 00 00 00 00 0F DC 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 36 D9 00 04 04 40 00 00 27 29 28 29 FF 46 FF FF FF FF FF 7F 00 00 00 00 00 0F 38 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 23 CC 00 00 00 00 01 08 01 02 00 FF 00 FE FF FF 02 00 00 01 00 25 DA 15 0B 70
0C 00 80 01 00 00 07 00 FF 00 00 00 00 00 0F EB 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 36 CB 00 04 04 40 00 00 27 29 28 29 FF 46 FF FF FF FF FF 7F 00 00 00 00 00 10 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 24 CC 00 00 00 00 01 0B 01 06 01 00 01 0C FF FF 02 00 00 01 00 25 DA 15 0A 70
0C 00 80 01 00 00 07 00 FF 00 00 00 00 00 0F E1 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 36 D3 00 04 04 40 00 00 27 29 28 29 FF 42 FF FF FF FF FF 7F 00 00 00 00 00 10 C8 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 25 CC 00 00 00 00 01 0A 01 0D 01 06 01 00 FF FF 02 00 00 01 00 25 DA 15 0A 70
0C 00 80 01 00 00 07 00 FF 00 00 00 00 00 0F D3 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 36 68 00 04 04 40 00 00 27 29 28 29 FF 42 FF FF FF FF FF 7F 00 00 00 00 00 11 2C 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF
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71 01 03 01 01 26 CC 00 00 00 00 01 09 01 15 01 0C 01 10 FF FF 02 00 00 01 00 25 DA 15 0A 70
0C 00 80 01 00 00 07 00 FF 00 00 00 00 00 0F A4 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 35 86 00 04 04 40 00 00 27 29 28 29 FF 42 FF FF FF FF FF 7F 00 00 00 00 00 12 58 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 27 CC 00 00 00 00 01 0B 01 17 01 0F 01 0E FF FF 02 00 00 01 00 25 DA 15 0A 70
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FF 35 5C 00 04 04 40 00 00 27 29 28 29 FF 42 FF FF FF FF FF 7F 00 00 00 00 00 11 90 00 00 00
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71 01 03 01 01 28 CC 00 00 00 00 01 0E 01 1A 01 14 01 0D FF FF 02 00 00 01 00 25 DA 15 0B 70
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FF 37 1C 00 04 04 40 00 00 27 29 28 29 FF 42 FF FF FF FF FF 7F 00 00 00 00 00 12 BC 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 29 CC 00 00 00 00 01 12 01 19 01 14 01 0D FF FF 02 00 00 01 00 27 D8 15 0B 70
0F 00 80 01 00 00 07 00 FF 00 00 00 00 00 0E F7 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF
FF 38 66 00 04 04 40 00 00 27 29 28 29 FF 42 FF FF FF FF FF 7F 00 00 00 00 00 13 20 00 00 00
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FF 38 E6 00 04 04 40 00 00 27 29 28 29 FF 42 FF FF FF FF FF 7F 00 00 00 00 00 10 64 00 00 00
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71 01 03 01 01 2D CC 00 00 00 00 01 0F 01 24 01 27 01 15 FF FF 02 00 00 01 00 2F D0 15 0A 70
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FF 2D 13 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 6F 6C 7E 76 00 00 00 03 78 10 64 00 00 00
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FF 2C 66 00 00 04 40 00 00 27 29 28 29 FF 23 80 74 6C 73 7E 75 00 00 00 02 BB 10 64 00 00 00
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FF 20 DC 00 00 00 00 00 00 00 00 00 00 00 00 03 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
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71 01 03 01 03 03 66 00 00 00 00 00 00 00 00 00 00 00 00 00 02 00 00 01 00 27 D8 15 0A 00
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FF 22 8F 00 00 00 00 00 00 00 00 00 00 00 03 00 00 00 00 00 00 00 00 00 00 00 00 00 00
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0F 00 00 00 00 00 00 00 00 00 00 00 00 00 00 0F 00 00 00 00 60 00 00 00 00 00 00 FF FF
FF 23 F5 00 00 00 00 00 00 00 00 00 00 00 03 00 00 00 00 00 00 00 00 00 00 00 00 00 00
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71 01 03 01 03 05 66 00 00 00 00 00 00 00 00 00 00 00 00 00 02 00 00 01 00 28 D7 15 0B 00
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FF 25 5E 00 00 00 00 00 00 00 00 00 00 00 03 00 00 00 00 00 00 00 00 00 00 00 00 00 00
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FF 26 A7 00 00 00 00 00 00 00 00 00 00 00 03 00 00 00 00 00 00 00 00 00 00 00 00 00 00
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10 00 00 00 00 00 00 00 00 00 00 00 00 00 00 0F 00 00 00 00 60 00 00 00 00 00 00 FF FF
FF 28 13 00 00 00 00 00 00 00 00 00 00 00 03 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00

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FF 29 80 00 00 00 00 00 00 00 00 00 00 00 03 00 00 00 00 00 00 00 00 00 00 00 00 00 00
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71 01 03 01 03 09 66 00 00 00 00 00 00 00 00 00 00 00 00 00 02 00 00 01 00 2B D4 15 0A 00
11 00 00 00 00 00 00 00 00 00 00 00 00 00 00 0F 00 00 00 00 60 00 00 00 00 00 00 FF FF
FF 2A 55 00 00 00 00 00 00 00 00 00 00 00 03 00 00 00 00 00 00 00 00 00 00 00 00 00 00
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71 01 03 01 03 0C 66 00 00 00 00 00 00 00 00 00 00 00 00 00 02 00 00 01 00 2C D3 15 0A 00
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FF 2D E8 00 00 00 00 00 00 00 00 00 00 00 03 00 00 00 00 00 00 00 00 00 00 00 00 00 00
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FF 2F 7A 00 00 00 00 00 00 00 00 00 00 00 00 03 00 00 00 00 00 00 00 00 00 00 00 00 00 00
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00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

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00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

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71 01 03 01 03 17 66 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 02 00 00 01 00 37 C8 15 0A 00
1C 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 0F 00 00 00 00 60 00 00 00 00 00 00 FF FF
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EC EB EB EB EA EA EA E9 E9 E9 E9 E9 E8 E8 E8 E8 E7 E7 E7 E7 E7 E6 E6 E6 E6 E6 E6 E6 E6 E6 E5
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24 27 28 28 26 26 23 1C 15 0E

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59 06 80 7E 13 89 01 00 10 52 10 52 01 00 02 00 2C 00 45 61 37 FF FF FF FF

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U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

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