



# Collision Sciences **CLAIMS REPORT**

EXPOSURE, RISK & DECISION SUPPORT

**Vehicle:** 2017 RAM 1500

**VIN:** 1C6RR7MT2HS\*\*\*\*\*

**Report ID:** #2518

**Generated:** 2018-10-01 19:00:42



## REPORT SUMMARY

This section provides an overview of the predictive analytics used for the estimation of claim severity, exposure, and fraud risk for the most recent crash or event sequence.



### Repair / Loss Exposure

The vehicle is predicted to be repairable.



### Occupant Injury Risk

1st Party: Medium Risk, Transient Neck Injury  
3rd Party (if any): Medium Risk, Transient Neck Injury



### Max Recorded Speed / Impact Speed

Within the 5.0 seconds of recorded pre-impact data for the most recent crash, the maximum recorded speed on this vehicle was 98 mph. The vehicle speed was 68 mph at the moment of impact.



### Flags / Loss Indicators

Medium Risk (2 Alerts): Steered-To Sideswipe, Possible Intentional Damage



### Recommended Action / Notes

Expedite Settlement / Treatment. Compare pre-crash data to reported circumstances. Evidence of Dangerous Operation / Criminal Negligence.



## CRASH DATA RECORDS

This section lists crash data records stored on the vehicle's event data recorder. The date of crash data collection was 2018-06-08.

Recency / Sequence	Crash Severity	Type	Sudden Speed Change	Impact Angle	Engine Starts Since Event
Most Recent (1st Impact)	Moderate, Low-speed Impact	Left Side Impact. Rollover Pulse.	6 mph	276 degrees (9 o'Clock)	8
Most Recent (2nd Impact)	Moderate, Low-speed Impact	Frontal (Right)	-9 mph	30 degrees (1 o'Clock)	8

### How To Interpret This Information

The crash severity (acceleration / g-force) measured by the airbag module accelerometer reached a maximum value of 9 mph within 250 milliseconds, which is considered "moderate" in terms of severity. Damage occurred on the left side of the vehicle. The vehicle's ignition was turned on 8 times between the incident and crash data download; this number can be used as an indication of event recency.



## PRE-CRASH DATA / Most Recent (1st Impact)

This section lists pre-crash data records stored on the vehicle's event data recorder.

Time Before Impact (sec)	Vehicle Speed (mph)	Engine Speed (RPM)	Accelerator Pedal (%)	Brake Switch Status	Steering Angle (deg)
-5.0	88	4875	100.0	Off	12.0 (Left)
-4.5	89	4978	100.0	Off	-15.0 (Right)
-4.0	91	5095	77.0	Off	-15.0 (Right)
-3.5	98	5432	100.0	Off	0.0 (Straight)
-3.0	96	5251	0.0	Off	44.0 (Left)
-2.5	88	4869	8.0	Off	16.0 (Left)
-2.0	84	4586	0.0	Off	-70.0 (Right)
-1.5	77	4217	0.0	On	-130.0 (Right)
-1.0	71	3944	0.0	On	-160.0 (Right)
-0.5	65	3654	0.0	On	-190.0 (Right)
-0.1	68	3754	0.0	On	-172.0 (Right)



## PRE-CRASH DATA / Most Recent (2nd Impact)

This section lists pre-crash data records stored on the vehicle's event data recorder.

Time Before Impact (sec)	Vehicle Speed (mph)	Engine Speed (RPM)	Accelerator Pedal (%)	Brake Switch Status	Steering Angle (deg)
-5.0	61	3366	0.0	On	-221.0 (Right)
-4.5	57	3081	0.0	On	-98.0 (Right)
-4.0	54	2929	0.0	Off	11.0 (Left)
-3.5	49	2690	0.0	Off	39.0 (Left)
-3.0	42	2274	0.0	Off	50.0 (Left)
-2.5	33	1821	0.0	Off	-32.0 (Right)
-2.0	26	1405	0.0	Off	-50.0 (Right)
-1.5	36	878	0.0	Off	-86.0 (Right)
-1.0	33	637	0.0	Off	-192.0 (Right)
-0.5	22	313	0.0	On	-208.0 (Right)
-0.1	12	0	0.0	On	-233.0 (Right)



## SEAT BELT & AIRBAG STATUS (Most Recent Crash)

This section lists the restraint system status at the time of the event recording, including airbag deployment status and the seatbelt buckle insertion status for supported seating positions.

- ✓ Known number of occupants: 1. Front passenger seat occupancy status was "Unknown".
- ✓ Seatbelt Circuit status for the driver was "Buckled". Front Passenger: "Unbuckled".
- ✓ Frontal Airbag status for the driver was "Not Deployed". Front Passenger: "Not Deployed".
- ✓ Side Seat Airbag status for the driver was "Deployed". Front Passenger: "Not Deployed".



## FLAGS / LOSS INDICATORS

This section lists flags for further investigation based on known anti-fraud indicators and/or inconsistencies with reported circumstances.

Indicator	Description	Flag / Risk Alert
Drive Down	Frontal collision where the driver accelerates up to impact, with no pre-impact brake application.	No
No Avoidance Maneuver	No driver input for either brake or steering maneuver within the 2.0 seconds prior to impact.	No
No Pre-Impact Speed Reduction	Brake is only applied lightly with no meaningful reduction in speed.	No
Steered-To Sideswipe	Driver steers either left or right, causing an impact on the steered-to side.	Yes
Swoop & Squat	Driver steers to make a lane change and quickly applies brakes.	No
Panic Stop	Rear-end collision where driver brakes just prior to impact.	No
Past Posting	Accident recording may not be recent. Event data recorded 10 or more engine starts prior to data retrieval.	No
Possible Intentional Damage	Event data recorded on successive engine starts (sequential ignition cycles), or multiple events recorded on the same ignition cycle, where pre-crash data does not overlap.	Yes
Pre-Damaged Vehicle	Evidence of prior accident damage, where event data was recorded 25 or more engine starts prior to the count at crash data retrieval. Possible issues include: Unrelated Damage to Incident, staged Hit & Run, Phantom Accident, or Paper Accident.	No

## Reported Circumstances

The flags in this section are generated through cross-referencing provided information (if any).

Indicator	Description	Flag / Risk Alert
Reported Number of Occupants	Compares the reported number of occupants to the available seat sensor data.	N/A
Reported Vehicle Speed Variance	Compares the reported travel speed and/or impact speed with the pre-crash data and flags a variance of 6 mph.	N/A
Reported Pre-impact Maneuver Variance	Compares the reported pre-impact motion with pre-crash data and impact angle for consistency.	N/A
Reported Appraisal Variance	Compares a provided appraisal estimate with the AI estimate and flags an appraisal variance of +15%.	N/A
Reported Airbag Deployment Variance	Determines whether airbags were manually removed to exaggerate damage by comparing recorded airbag deployment status.	N/A
VIN Mismatch	Compares the VIN diagnostically retrieved from the vehicle to the the VIN sticker or provided VIN. Requires claim reference number.	N/A
Image Integrity	Utilizes algorithms to identify digitally edited or altered parts in provided photographs.	N/A
Pre-Accident Vehicle	VIN identified in online classifieds within the last 6	N/A



## 1ST PARTY / INJURY SEVERITY & DURATION

This section predicts occupant injury risk for WAD (Whiplash Associated Disorder) and MAIS2+ (Maximum Abbreviated Injury Scale - moderate/serious) injury for frontal/side/rear collisions using a regression model of crash severity versus reported injuries from real-world crash studies using event data recorders.

Occupant Detail	Risk of Initial WAD Symptoms	Risk of Long-term WAD Symptoms	Risk of Serious Injury
Occupants in Frontal Impact	24% (Possible)	9% (Unlikely)	1% (Improbable)

### How To Interpret This Information

With a high risk of whiplash or other injury, the claim can be expedited. Early treatment is often effective in providing the best probable outcome for patient recovery.

The injury prediction is based on the actual incidence rate or proportion of injury in tracked studies using data from real-world outcomes. The most important factor in predicting the risk of injury or death in a vehicle crash is the crash severity, which is expressed as the velocity change, or Delta-V, experienced by the vehicle during the crash. The Crash Investigation Sampling System (CISS) is the largest database in the world with over 100,000 cases linking injury outcomes with Delta-Vs, which are obtained from field reconstructions. The effects of occupant age, gender, and belt use on injury and fatality risk have been found substantial.



## RELATIVE INJURY RISK / 3RD PARTY EXPOSURE

This section provides a lead indicator for relative 3rd party injury risk based on accident reconstruction principles including conservation of momentum and relative vehicle mass ( $\Delta V_2$  (Change in velocity) =  $\Delta V_1 * M_1 / M_2$ ). The calculation does not require the vehicles reach a common post-impact velocity.

Assumed 3rd Party Vehicle	3rd Party Vehicle Delta-V / Severity	3rd Party Injury Risk	3rd Party Vehicle Speed
Avg Compact Car (1815 kg)	8.92 mph	Medium Risk, Transient Neck Injury	N/A
Avg Midsize Car (2260 kg)	7.16 mph	Medium Risk, Transient Neck Injury	N/A
Avg Van/SUV/Light Truck (2720 kg)	5.95 mph	Medium Risk, Transient Neck Injury	N/A
Avg Full Size Truck/SUV (3630 kg)	4.46 mph	Low Risk, Whiplash Unlikely	N/A



## RECALLS / SAFETY / DIAGNOSTIC SCAN DATA

This section lists any outstanding recalls, known safety ratings & issues, retrieved DTCs (Diagnostic Trouble Codes), and respective Freeze Frame impact data, if any.

### Safety Recalls

Vehicle safety recall information is received from Transport Canada and includes all known recalls associated with this particular vehicle model.

**Recal Date:** 2017-03-23

**Recall Number:** 2017167

**Affected System:** Powertrain

**Description:** Certain vehicles may have a loose differential pin retaining screw. This could damage or lock up the rear axle differential, resulting in a loss of motive power which would increase the risk of a crash causing injury and/or damage to property.

**Correction:** Dealers will inspect and replace the differential pin retaining screw as necessary. If the inspection reveals that the retaining screw is loose or damaged, the rear axle assemble will be replaced.

**Recal Date:** 2017-12-21

**Recall Number:** 2017659

**Affected System:** Powertrain

**Description:** On certain vehicles equipped with a steering column gear shifter, the brake transmission shift interlock (BTSI) may become inoperative. This could allow the steering column gear shifter lever to be shifted out of the PARK (P) position without depressing the service brake pedal or having the key in the ignition, which could result in unintended vehicle movement, increasing the risk of a crash causing injury and/or damage to property.

**Correction:** Dealers will inspect and replace the BTSI as necessary. The Body Control Module (BCM) will also be updated.

**Recal Date:** 2018-02-08

**Recall Number:** 2018081

**Affected System:** Powertrain

**Description:** On certain vehicles equipped with a steering column gear shifter, the brake transmission shift interlock (BTSI) may become inoperative. This could allow the steering column gear shifter lever to be shifted out of the PARK (P) position without depressing the service brake pedal or having the key in the ignition, which could result in unintended vehicle movement, increasing the risk of a crash causing injury and/or damage to property.

**Correction:** Dealers will inspect and replace the BTSI as necessary. The Body Control Module (BCM) will also be updated.

**Recal Date:** 2018-05-17

**Recall Number:** 2018269

**Affected System:** Engine

**Description:** On certain vehicles, an electronic fault may create a situation where the cruise control cannot be deactivated. If this occurs and the driver does not apply the brakes or shift the transmission to neutral, the vehicle could maintain speed or accelerate without warning, increasing the risk of a crash causing injury and/or damage to property.

**Correction:** Dealers will inspect the Powertrain Control Module (PCM) software and perform an update as necessary.

**Note:** In the interim, owners are advised not to use the cruise control until the vehicle is repaired.

**Recal Date:** 2018-07-31

**Recall Number:** 2018398





**Affected System:** Structure

**Description:** Certain trucks equipped with a power locking tailgate may experience unintended opening of the tailgate. If this occurs while driving, unrestrained cargo could fall out of the box and create a road hazard, increasing the risk of a crash causing injury and/or damage to property.

**Correction:** Dealers will modify the locking mechanism.





IIHS Crashworthiness / Safety Ratings

Insurance Institute for Highway Safety (IIHS) in the US publishes vehicle safety ratings based on actual crash tests. In each category, the possible ratings are: Good, Acceptable, Marginal, and Poor. Further vehicle research on safety ratings and features, reviews, tips and more can be found here: [www.iihs.org/iihs/ratings](http://www.iihs.org/iihs/ratings).

Frontal Small Overlap	 Marginal	Side	 Good
Frontal Moderate Overlap	 Good	Rollover	 Marginal

Diagnostic Trouble Codes (DTCs)

Diagnostic Trouble Codes (DTCs) are set by a control module when it detects faults in its system through self-diagnostics. The following section lists DTCs retrieved from various control modules of the vehicle.

 Engine Control Module (ECM)	 No Issues Found
 Transmission Control Module (TCM)	 No Issues Found

Freeze Frame Data

Freeze Frame Data refers to a snapshot taken by a control module when it detects a fault in its system. The snapshot consists of measured values from various sensors and can be useful in determining the root cause of the fault. Note that not all vehicles support the items listed below and thus some values may be inaccurate.

No freeze frame data for DTCs (Diagnostic Trouble Codes) were retrieved from the ECM (Engine Control Module) or TCM (Transmission Control Module).



MARKET VALUE

This section provides an estimated market value for 2017 Ram 1500 Sport. Estimate based on 178 similar vehicles sold between 2018-04-12 and 2018-08-23 within the range of USD \$37,120.68 - USD \$42,840.68.

Assumed Milage	Market Value	Time Period	Estimate Certainty
16,187 miles	USD \$39,980.68	6 Months	99%



EXPOSURE / AUTO PHYSICAL DAMAGES

This section provides predictive loss and repair estimate/cost information. AI inputs: Trusted Repair Estimates, Max Delta-V, Impact Angle, Vehicle Model/Specs (weight, stiffness), Airbag Deployment status, DTCs, Damage Area/Level/Photographs (if any).

Repair Estimate (AI Prediction)	Salvage Value (80% of Market Value)	Prediction: Total Loss / Repairable	Estimate Certainty
USD \$28,588.60	USD \$31,984.54	Likely Repairable	94%

## How To Interpret This Information

The vehicle is predicted to be repairable. The algorithmic repair estimate is less than the estimated salvage (as damaged) value of the vehicle. The algorithmic repair estimate for this prediction considered "total repair estimates" from similar vehicles, with similar recorded impact configuration and severity, also requiring airbag replacement. Photographs of the damaged vehicle were not used to generate the prediction.

The repair estimate does not replace a physical damage appraisal. Collision Sciences is working with strategic partners to develop an advanced repair cost prediction algorithm using a combination of photo-based estimating, diagnostically detected impact configuration and severity, and diagnostic issues requiring repair. The repair estimate may currently be used to predict a total loss or repairable condition, identify potentially exaggerated repair estimates and provides a contextual frame of reference for claim severity.



## VEHICLE SPECIFICATIONS

This section lists basic vehicle details encoded by the VIN.

<b>VIN</b>	1C6RR7MT2HS664236	<b>Year</b>	2017
<b>Make</b>	Ram	<b>Model</b>	1500
<b>Trim</b>	Sport	<b>Engine</b>	5.7L V8 OHV 16V
<b>Made In</b>	United States	<b>Style</b>	Crew Cab Pickup (4-Door)
<b>Steering Type</b>	R&P	<b>Anti-Brake System</b>	4-Wheel ABS
<b>Fuel Type</b>	Regular Unleaded	<b>Fuel Capacity</b>	26 gallon
<b>Overall Length</b>	N/A	<b>Overall Width</b>	N/A
<b>Overall Height</b>	N/A	<b>Standard Seating</b>	5
<b>Curb Weight</b>	N/A	<b>Gross Weight</b>	6800
<b>Highway Mileage</b>	23 miles/gallon	<b>City Mileage</b>	16 miles/gallon
<b>Invoice Price</b>	USD \$40,353	<b>MSRP</b>	USD \$43,895

## Event Data Disclaimer

It is important to note is that if a vehicle was spinning or rolling surrounding the collision, then the report's speed measurements would not accurately reflect the actual speed of the vehicle during/after it lost control; the speed measurement is typically based on the wheel speed sensor. Signs of this type of anomaly would be rapid changes in speed between the brief timing intervals. The reported speed may be an average of the four wheels; thus could also be skewed by spinning wheels. In combination with scene evidence, an expert could assess vehicle speed by analyzing the data via accident reconstruction and engineering analysis.

Users of the Collision Sciences service and reviewers of the reports and exported data shall ensure that data and information supplied is applicable to the vehicle, vehicle's system(s) and the vehicle ECU. Collision Sciences Inc. and all its directors, officers, employees and members shall not be liable for damages arising out of or related to incorrect, incomplete or misinterpreted software and/or data. Collision Sciences Inc. expressly excludes all liability for incidental, consequential, special or punitive damages arising from or related to the online services, evidence logistics, EDR data, EDR software or use thereof.

## Injury Risk / Biomechanical Assessment Disclaimer

The estimated injury risks are calculated based on the recorded crash pulse, relative energy changes, known vehicle characteristics in standardized and real-world crashes, published databases, and recognized studies. The provided information can be used as a guide in settlement decisions but cannot be used to definitively prove the existence or non-presence of an injury. In cases with a very low risk of whiplash or other injury, claims can be identified for further investigation. Conversely, for cases with a high risk of whiplash or other injury, the claim can be expedited, since early treatment is often effective in reducing the long term prognosis.

Delta-V (Change in Velocity) has traditionally been used to correlate crash severity with risk of occupant injury (Augenstein et al., 2003; Bahouth et al., 2004; Sunnevång et al., 2009; Kononen et al., 2011). Injury tolerance and risk for various injury types based on real-world crashes with recorded crash data have been established (Gabauer and Gabler, 2006; Gabauer and Gabler, 2008; Kullgren and Krafft, 2008; Ydenius, 2010). Large-scale retrospective studies have also examined the relationship between minor severity crashes and the risk of occupant whiplash complaints, including studies in the U.S. (Tencer et al., 2001), Germany (Eis et al., 2005; Hell et al., 2002) and Sweden (Krafft et al., 2005). Injury risk studies consider the following risk factors: Crash configuration (front, side, rear, rollover), Delta-V = Change in velocity, Vehicle mass (size, weight), Vehicle stiffness, Vehicle geometry and engagement, Restraint system and its adjustment, Occupant seated position, Occupant profile (age, gender, previous injury), Number of WAD symptoms, and Psychological Distress. Structural damage and known whiplash thresholds overlap, indicating structural damage and repair cost are a poor predictor of minor injury threshold. Damage can also vary widely by vehicle model and impact configuration.

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	1C6RR7MT2HS*****
User	
Case Number	
EDR Data Imaging Date	06-08-2018
Crash Date	
Filename	1C6RR7MT2HS_ACM_2017RAM1500.CDRX
Saved on	Friday, June 8 2018 at 16:14:10
Imaged with CDR version	Crash Data Retrieval Tool 17.7
Imaged with Software Licensed to (Company Name)	Collision Sciences
Reported with CDR version	Crash Data Retrieval Tool 17.9
Reported with Software Licensed to (Company Name)	Collision Sciences
EDR Device Type	Airbag Control Module
Event(s) recovered	Most Recent Event 1st 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.
- For Fiat vehicles, the "Read VIN from Vehicle" feature in the CDR Tool will not work. The VIN will have to be manually entered.
- 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.
- 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 will be stored with activation of the Active Head Restraints.

**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, 3<sup>rd</sup> 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. 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 5<sup>th</sup> percentile female adult crash dummy, including an empty seat; "Not Child" indicates anything weighing the same as or more than a 5<sup>th</sup> 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.
- System Voltage at Event, ACM - Voltage at the ACM as measured by the ACM.
- System Voltage at Event, Bussed - 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.
- 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.

#### 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
  - +/- 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
- 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.
- (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.
- Cruise Control:
  - 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.
- 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 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 for 5 seconds to disable the ESC System. "Enabled" indicates that the ESC button has not been pressed for 5 seconds and thus the ESC System is enabled.
- 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 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 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 - This indicates the current transmission gear.
- Master Cylinder Pressure - This indicates the brake pressure applied to the brakes by the driver.
- PCM MIL - This indicates the PCM fault indicator lamp status. It will only be "On" when there is a fault in the PCM. 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 depressed.
- Speed, Vehicle Indicated - This indicates the average of the drive wheels. The accuracy of the recorded Speed, Vehicle Indicated will be affected if the vehicle had the tire size or the final drive axle ratio changed from the factory build specifications. 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 (in revolutions per minute) 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:

- Jeep Renegade and Alfa Romeo Giulia are only CDR supported in the NAFTA market.

03002\_Chrysler\_ r036

## System Status at Retrieval

Original VIN	1C6RR7MT2HS*****
Ignition Cycle, Download	1584
ACM Part Number	68303218AA
ECU Serial Number	T52MD005701327
ACM Supplier	Bosch
ECU Supply Voltage at Time of Retrieval	12.2

## 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

**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

## System Status at Event (Most Recent Event)

Event Number	2
Multi-Event, Number of Events (1,2)	1
Total number of events	2
Time from Event 1 to 2 (Time since last event)(sec)	>5
Complete File Recorded (Yes, No)	Yes
Maximum Delta-V Longitudinal (MPH [km/h])	-8.7 [-14]
Time, Maximum Delta-V, Longitudinal (msec)	122
Maximum Delta-V Lateral (MPH [km/h])	-5.0 [-8]
Time, Maximum Delta-V, Lateral (msec)	94
Ignition Cycle, Crash	1576
Safety Belt Status, Driver	Buckled
Safety Belt Status, Outboard Front Passenger	Not Buckled
Airbag Warning Lamp, On/Off	On
Operation System Time (sec)	1608307
Airbag Warning Lamp On Time Before Event (min)	0
Supply Voltage at Event, ACM (V)	13.1
Operation via Energy Reserve	No
VIN at Event (last 8 digits)	HS*****
Odometer at Event (km [miles])	20844 [12951.9]

## Deployment Command Data (Most Recent Event)

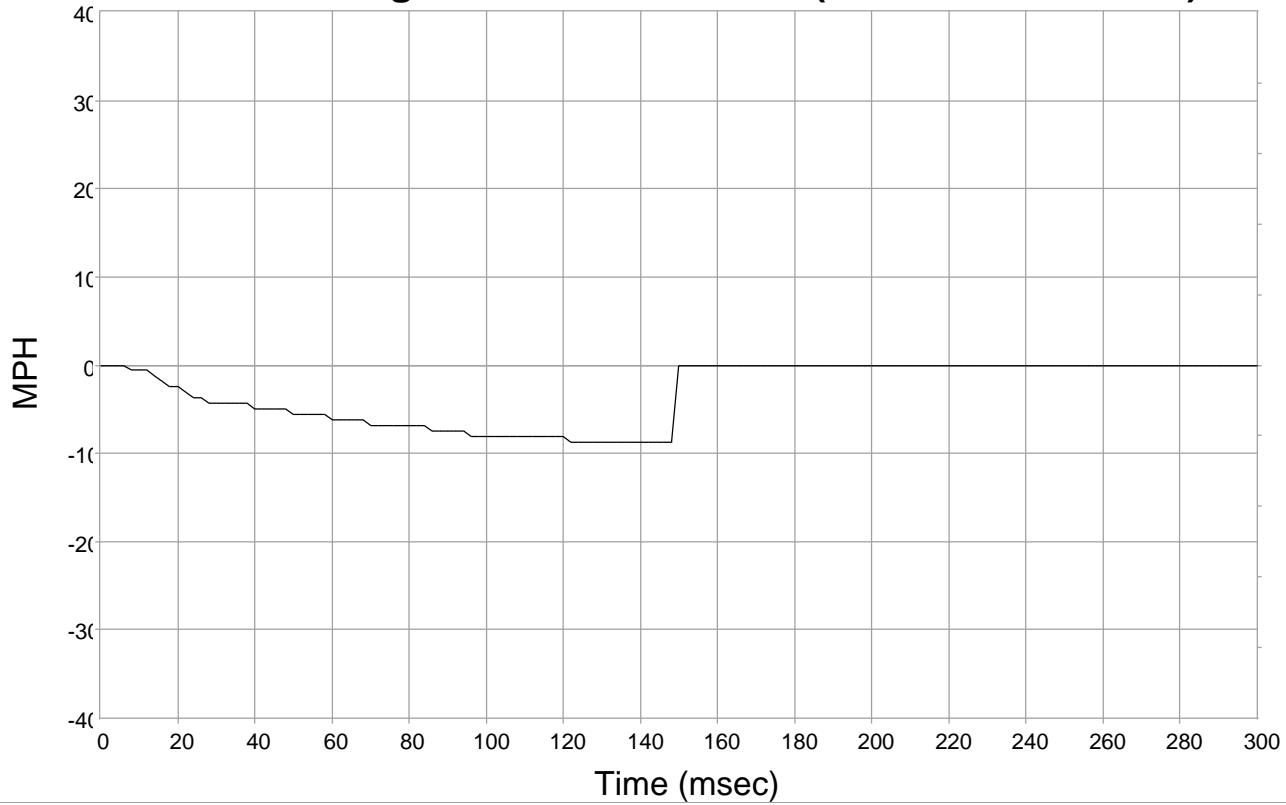
Driver Frontal Airbag Commanded	No
Driver Front Airbag, Time to 1st stage (msec)	0
Driver Front Airbag, Time to 2nd Stage from T0 (msec)	0
Passenger Frontal Airbag Commanded	No
Passenger Front Airbag, Time to 1st stage (msec)	0
Passenger Front Airbag, Time to 2nd Stage from T0 (msec)	0
Commanded Driver 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)**

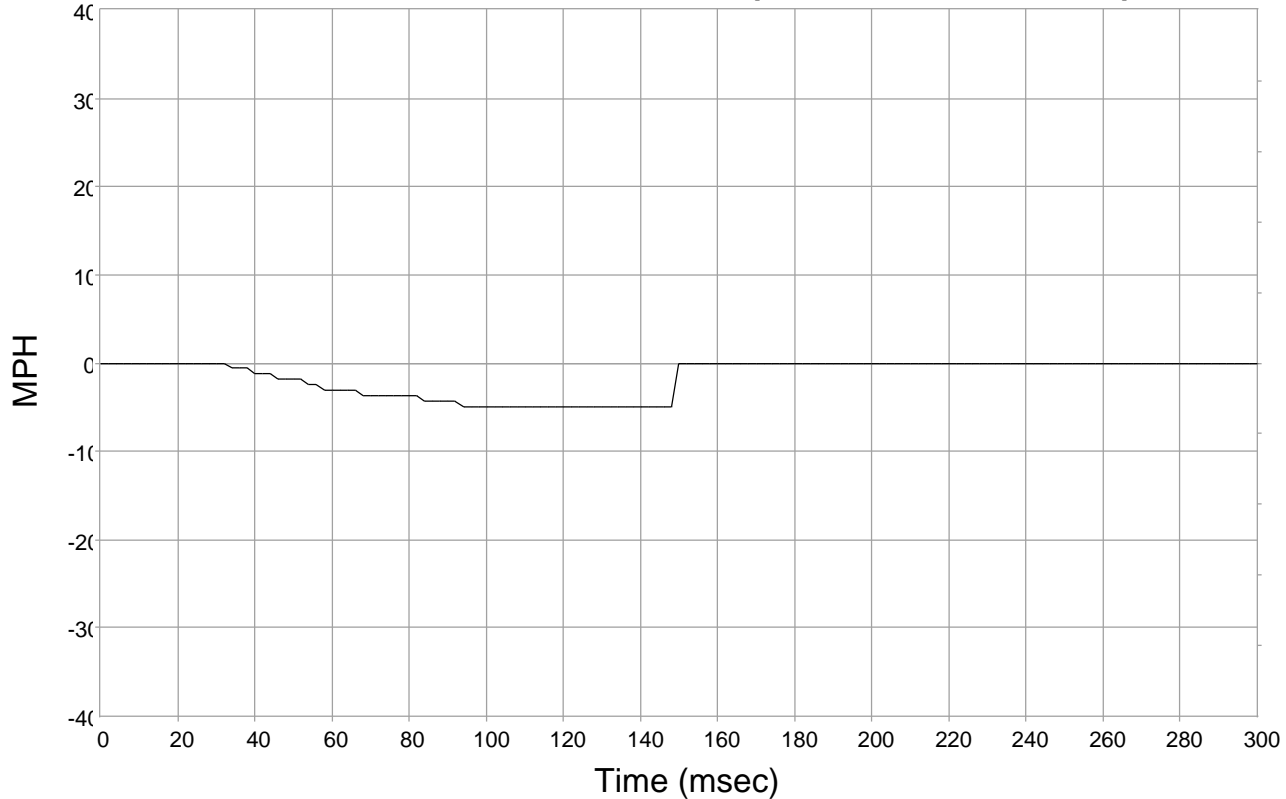
DTC Number	DTC Status
C10CC-00	Active
B0020-11	Active
B0021-13	Active
B007F-13	Active
B007E-13	Active



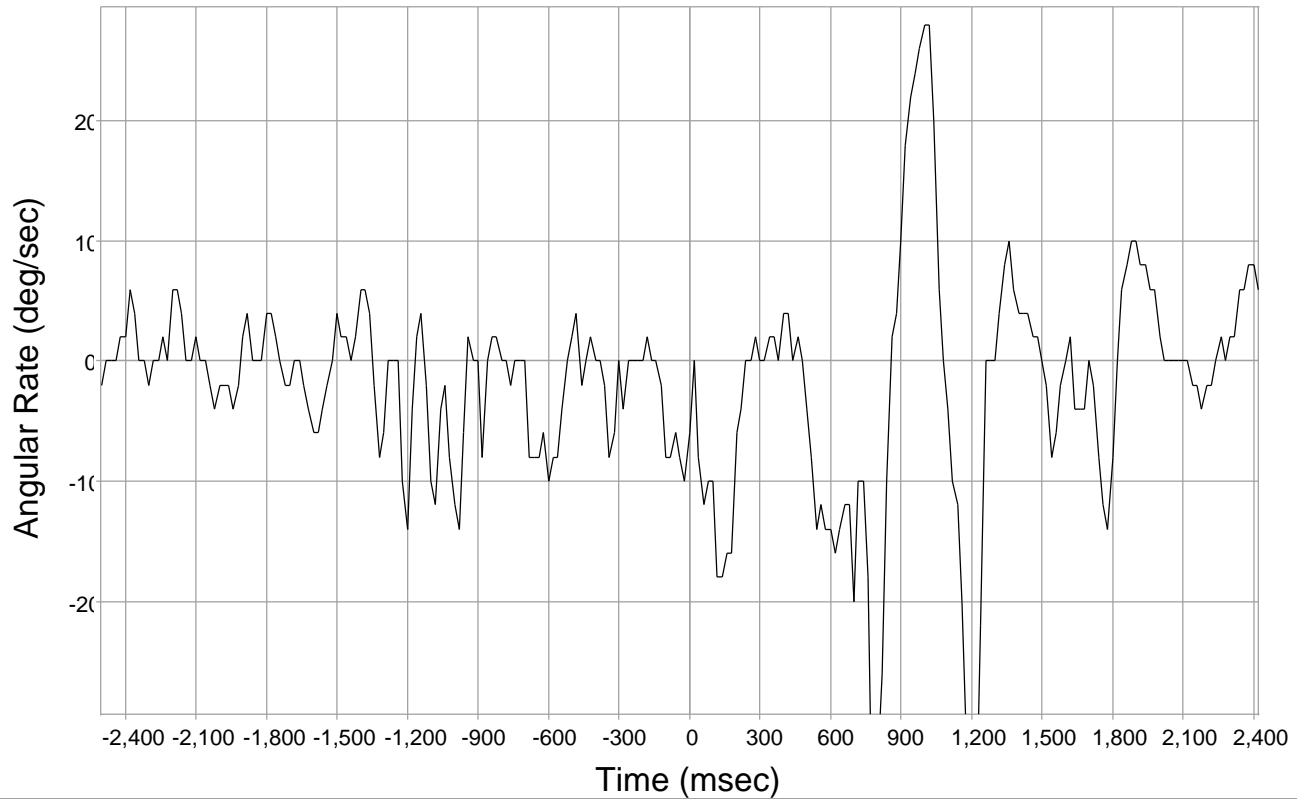
### Longitudinal Crash Pulse (Most Recent Event)



### Lateral Crash Pulse (Most Recent Event)



### Angular Rate Data (Most Recent Event)



## 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	-0.6 [-1]
10	-0.6 [-1]
12	-0.6 [-1]
14	-1.2 [-2]
16	-1.9 [-3]
18	-2.5 [-4]
20	-2.5 [-4]
22	-3.1 [-5]
24	-3.7 [-6]
26	-3.7 [-6]
28	-4.3 [-7]
30	-4.3 [-7]
32	-4.3 [-7]
34	-4.3 [-7]
36	-4.3 [-7]
38	-4.3 [-7]
40	-5.0 [-8]
42	-5.0 [-8]
44	-5.0 [-8]
46	-5.0 [-8]
48	-5.0 [-8]
50	-5.6 [-9]
52	-5.6 [-9]
54	-5.6 [-9]
56	-5.6 [-9]
58	-5.6 [-9]
60	-6.2 [-10]
62	-6.2 [-10]
64	-6.2 [-10]
66	-6.2 [-10]
68	-6.2 [-10]
70	-6.8 [-11]
72	-6.8 [-11]
74	-6.8 [-11]
76	-6.8 [-11]
78	-6.8 [-11]
80	-6.8 [-11]
82	-6.8 [-11]
84	-6.8 [-11]
86	-7.5 [-12]
88	-7.5 [-12]
90	-7.5 [-12]
92	-7.5 [-12]
94	-7.5 [-12]
96	-8.1 [-13]
98	-8.1 [-13]

Time (msec)	Delta-V, Longitudinal (MPH [km/h])
100	-8.1 [-13]
102	-8.1 [-13]
104	-8.1 [-13]
106	-8.1 [-13]
108	-8.1 [-13]
110	-8.1 [-13]
112	-8.1 [-13]
114	-8.1 [-13]
116	-8.1 [-13]
118	-8.1 [-13]
120	-8.1 [-13]
122	-8.7 [-14]
124	-8.7 [-14]
126	-8.7 [-14]
128	-8.7 [-14]
130	-8.7 [-14]
132	-8.7 [-14]
134	-8.7 [-14]
136	-8.7 [-14]
138	-8.7 [-14]
140	-8.7 [-14]
142	-8.7 [-14]
144	-8.7 [-14]
146	-8.7 [-14]
148	-8.7 [-14]
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	-0.6 [-1]
36	-0.6 [-1]
38	-0.6 [-1]
40	-1.2 [-2]
42	-1.2 [-2]
44	-1.2 [-2]
46	-1.9 [-3]
48	-1.9 [-3]
50	-1.9 [-3]
52	-1.9 [-3]
54	-2.5 [-4]
56	-2.5 [-4]
58	-3.1 [-5]
60	-3.1 [-5]
62	-3.1 [-5]
64	-3.1 [-5]
66	-3.1 [-5]
68	-3.7 [-6]
70	-3.7 [-6]
72	-3.7 [-6]
74	-3.7 [-6]
76	-3.7 [-6]
78	-3.7 [-6]
80	-3.7 [-6]
82	-3.7 [-6]
84	-4.3 [-7]
86	-4.3 [-7]
88	-4.3 [-7]
90	-4.3 [-7]
92	-4.3 [-7]
94	-5.0 [-8]
96	-5.0 [-8]
98	-5.0 [-8]

Time (msec)	Delta-V, Lateral (MPH [km/h])
100	-5.0 [-8]
102	-5.0 [-8]
104	-5.0 [-8]
106	-5.0 [-8]
108	-5.0 [-8]
110	-5.0 [-8]
112	-5.0 [-8]
114	-5.0 [-8]
116	-5.0 [-8]
118	-5.0 [-8]
120	-5.0 [-8]
122	-5.0 [-8]
124	-5.0 [-8]
126	-5.0 [-8]
128	-5.0 [-8]
130	-5.0 [-8]
132	-5.0 [-8]
134	-5.0 [-8]
136	-5.0 [-8]
138	-5.0 [-8]
140	-5.0 [-8]
142	-5.0 [-8]
144	-5.0 [-8]
146	-5.0 [-8]
148	-5.0 [-8]
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 (Most Recent Event)

Time (msec)	Angular Rate (deg/sec)
-2500	-2.00
-2480	0.00
-2460	0.00
-2440	0.00
-2420	2.00
-2400	2.00
-2380	6.00
-2360	4.00
-2340	0.00
-2320	0.00
-2300	-2.00
-2280	0.00
-2260	0.00
-2240	2.00
-2220	0.00
-2200	6.00
-2180	6.00
-2160	4.00
-2140	0.00
-2120	0.00
-2100	2.00
-2080	0.00
-2060	0.00
-2040	-2.00
-2020	-4.00
-2000	-2.00
-1980	-2.00
-1960	-2.00
-1940	-4.00
-1920	-2.00
-1900	2.00
-1880	4.00
-1860	0.00
-1840	0.00
-1820	0.00
-1800	4.00
-1780	4.00
-1760	2.00
-1740	0.00
-1720	-2.00
-1700	-2.00
-1680	0.00
-1660	0.00
-1640	-2.00
-1620	-4.00
-1600	-6.00
-1580	-6.00
-1560	-4.00
-1540	-2.00
-1520	0.00

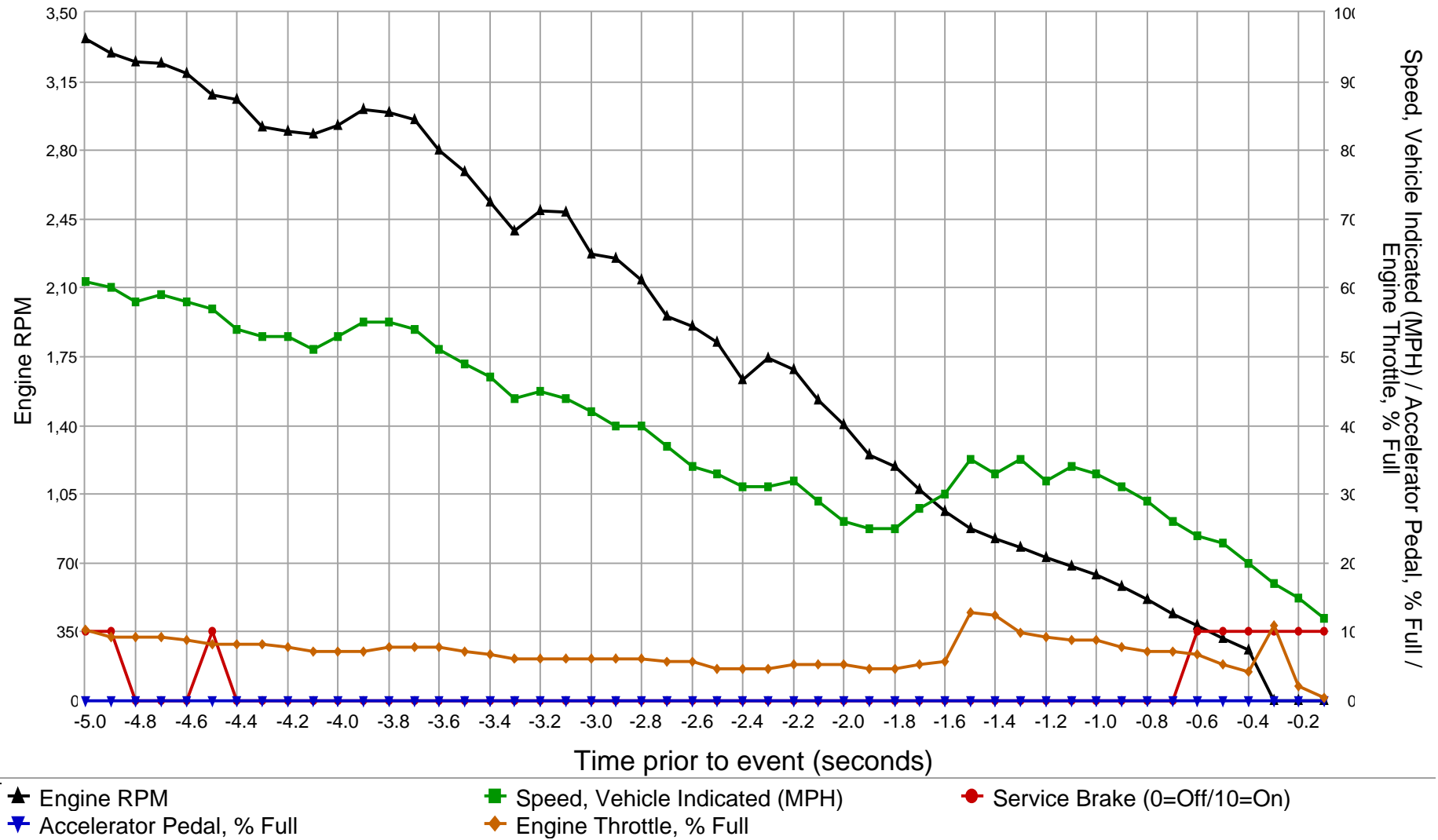
Time (msec)	Angular Rate (deg/sec)
-1500	4.00
-1480	2.00
-1460	2.00
-1440	0.00
-1420	2.00
-1400	6.00
-1380	6.00
-1360	4.00
-1340	-2.00
-1320	-8.00
-1300	-6.00
-1280	0.00
-1260	0.00
-1240	0.00
-1220	-10.00
-1200	-14.00
-1180	-4.00
-1160	2.00
-1140	4.00
-1120	-2.00
-1100	-10.00
-1080	-12.00
-1060	-4.00
-1040	-2.00
-1020	-8.00
-1000	-12.00
-980	-14.00
-960	-6.00
-940	2.00
-920	0.00
-900	0.00
-880	-8.00
-860	0.00
-840	2.00
-820	2.00
-800	0.00
-780	0.00
-760	-2.00
-740	0.00
-720	0.00
-700	0.00
-680	-8.00
-660	-8.00
-640	-8.00
-620	-6.00
-600	-10.00
-580	-8.00
-560	-8.00
-540	-4.00
-520	0.00

Time (msec)	Angular Rate (deg/sec)
-500	2.00
-480	4.00
-460	-2.00
-440	0.00
-420	2.00
-400	0.00
-380	0.00
-360	-2.00
-340	-8.00
-320	-6.00
-300	0.00
-280	-4.00
-260	0.00
-240	0.00
-220	0.00
-200	0.00
-180	2.00
-160	0.00
-140	0.00
-120	-2.00
-100	-8.00
-80	-8.00
-60	-6.00
-40	-8.00
-20	-10.00
0	-6.00
20	0.00
40	-8.00
60	-12.00
80	-10.00
100	-10.00
120	-18.00
140	-18.00
160	-16.00
180	-16.00
200	-6.00
220	-4.00
240	0.00
260	0.00
280	2.00
300	0.00
320	0.00
340	2.00
360	2.00
380	0.00
400	4.00
420	4.00
440	0.00
460	2.00
480	0.00

**Angular Rate Data (Most Recent Event)**

Time (msec)	Angular Rate (deg/sec)	Time (msec)	Angular Rate (deg/sec)
500	-4.00	1500	0.00
520	-8.00	1520	-2.00
540	-14.00	1540	-8.00
560	-12.00	1560	-6.00
580	-14.00	1580	-2.00
600	-14.00	1600	0.00
620	-16.00	1620	2.00
640	-14.00	1640	-4.00
660	-12.00	1660	-4.00
680	-12.00	1680	-4.00
700	-20.00	1700	0.00
720	-10.00	1720	-2.00
740	-10.00	1740	-8.00
760	-18.00	1760	-12.00
780	-36.00	1780	-14.00
800	-38.00	1800	-8.00
820	-26.00	1820	0.00
840	-10.00	1840	6.00
860	2.00	1860	8.00
880	4.00	1880	10.00
900	10.00	1900	10.00
920	18.00	1920	8.00
940	22.00	1940	8.00
960	24.00	1960	6.00
980	26.00	1980	6.00
1000	28.00	2000	2.00
1020	28.00	2020	0.00
1040	20.00	2040	0.00
1060	6.00	2060	0.00
1080	0.00	2080	0.00
1100	-4.00	2100	0.00
1120	-10.00	2120	0.00
1140	-12.00	2140	-2.00
1160	-20.00	2160	-2.00
1180	-30.00	2180	-4.00
1200	-34.00	2200	-2.00
1220	-50.00	2220	-2.00
1240	-22.00	2240	0.00
1260	0.00	2260	2.00
1280	0.00	2280	0.00
1300	0.00	2300	2.00
1320	4.00	2320	2.00
1340	8.00	2340	6.00
1360	10.00	2360	6.00
1380	6.00	2380	8.00
1400	4.00	2400	8.00
1420	4.00	2420	6.00
1440	4.00		
1460	2.00		
1480	2.00		

### Pre-Crash Data (Most Recent Event)



SNA values will not be plotted on the graph

## Pre-Crash Data (Most Recent Event - table 1 of 3)

(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	61 [98]	0	10	On	3,366	Yes	Off	-221
-4.9	Complete	60 [97]	0	9	On	3,291	Yes	Off	-194
-4.8	Complete	58 [94]	0	9	Off	3,253	No	Off	-186
-4.7	Complete	59 [95]	0	9	Off	3,246	No	Off	-160
-4.6	Complete	58 [94]	0	9	Off	3,191	No	Off	-134
-4.5	Complete	57 [91]	0	8	On	3,081	Yes	Off	-99
-4.4	Complete	54 [87]	0	8	Off	3,059	No	Off	-71
-4.3	Complete	53 [86]	0	8	Off	2,916	No	Off	-65
-4.2	Complete	53 [85]	0	8	Off	2,894	No	Off	-45
-4.1	Complete	51 [82]	0	7	Off	2,885	No	Off	-6
-4.0	Complete	53 [86]	0	7	Off	2,929	No	Off	11
-3.9	Complete	55 [88]	0	7	Off	3,011	No	Off	20
-3.8	Complete	55 [88]	0	8	Off	2,993	No	Off	27
-3.7	Complete	54 [86]	0	8	Off	2,959	No	Off	28
-3.6	Complete	51 [82]	0	8	Off	2,803	No	Off	30
-3.5	Complete	49 [78]	0	7	Off	2,690	No	Off	39
-3.4	Complete	47 [76]	0	7	Off	2,537	No	Off	48
-3.3	Complete	44 [71]	0	6	Off	2,390	No	Off	49
-3.2	Complete	45 [72]	0	6	Off	2,490	No	Off	50
-3.1	Complete	44 [71]	0	6	Off	2,483	No	Off	50
-3.0	Complete	42 [68]	0	6	Off	2,274	No	Off	50
-2.9	Complete	40 [65]	0	6	Off	2,250	No	Off	46
-2.8	Complete	40 [64]	0	6	Off	2,140	No	Off	29
-2.7	Complete	37 [59]	0	6	Off	1,955	No	Off	-5
-2.6	Complete	34 [55]	0	6	Off	1,904	No	Off	-28
-2.5	Complete	33 [53]	0	5	Off	1,821	No	Off	-32
-2.4	Complete	31 [49]	0	5	Off	1,635	No	Off	-35
-2.3	Complete	31 [49]	0	5	Off	1,741	No	Off	-48
-2.2	Complete	32 [51]	0	5	Off	1,686	No	Off	-56
-2.1	Complete	29 [46]	0	5	Off	1,533	No	Off	-54
-2.0	Complete	26 [42]	0	5	Off	1,405	No	Off	-51
-1.9	Complete	25 [39]	0	5	Off	1,250	No	Off	-51
-1.8	Complete	25 [40]	0	5	Off	1,193	No	Off	-51
-1.7	Complete	28 [45]	0	5	Off	1,077	No	Off	-53
-1.6	Complete	30 [48]	0	6	Off	960	No	Off	-63
-1.5	Complete	35 [57]	0	13	Off	878	No	Off	-86
-1.4	Complete	33 [54]	0	12	Off	820	No	Off	-109
-1.3	Complete	35 [57]	0	10	Off	777	No	Off	-133
-1.2	Complete	32 [52]	0	9	Off	726	No	Off	-158
-1.1	Complete	34 [55]	0	9	Off	684	No	Off	-179
-1.0	Complete	33 [53]	0	9	Off	637	No	Off	-193
-0.9	Complete	31 [51]	0	8	Off	579	No	Off	-205
-0.8	Complete	29 [47]	0	7	Off	512	No	Off	-222
-0.7	Complete	26 [42]	0	7	Off	441	No	Off	-225
-0.6	Complete	24 [38]	0	7	On	383	Yes	Off	-212
-0.5	Complete	23 [36]	0	5	On	313	Yes	Off	-209
-0.4	Complete	20 [33]	0	4	On	258	Yes	Off	-210
-0.3	Complete	17 [28]	0	11	On	0	Yes	Off	-213
-0.2	Complete	15 [24]	0	2	On	0	Yes	Off	-226
-0.1	Complete	12 [19]	0	1	On	0	Yes	Off	-233



## Pre-Crash Data (Most Recent Event - table 2 of 3)

(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	15.20	Off	SNA	39	433	659	603	Off
-4.9	15.20	Off	SNA	11	581	643	609	Off
-4.8	15.20	Off	SNA	0	610	617	599	Off
-4.7	15.20	Off	SNA	0	636	585	675	Off
-4.6	14.40	Off	SNA	0	632	545	644	Off
-4.5	15.20	Off	SNA	0	610	520	636	Off
-4.4	15.20	Off	SNA	0	622	530	601	Off
-4.3	15.20	Off	SNA	0	620	512	602	Off
-4.2	15.20	Off	SNA	0	619	462	604	Off
-4.1	16.00	Off	SNA	0	613	529	560	Off
-4.0	15.20	Off	SNA	0	602	545	584	Off
-3.9	14.40	Off	SNA	0	596	547	571	Off
-3.8	15.20	Off	SNA	0	589	557	572	Off
-3.7	14.40	Off	SNA	0	587	564	571	Off
-3.6	15.20	Off	SNA	0	581	485	581	Off
-3.5	16.00	Off	SNA	0	575	419	566	Off
-3.4	16.00	Off	SNA	0	570	429	534	Off
-3.3	16.00	Off	SNA	0	565	417	570	Off
-3.2	16.00	Off	SNA	0	559	351	547	Off
-3.1	16.00	Off	SNA	0	556	244	547	Off
-3.0	16.80	Off	SNA	0	551	284	544	Off
-2.9	17.60	Off	SNA	0	550	218	543	Off
-2.8	17.60	Off	SNA	0	545	235	538	Off
-2.7	17.60	Off	SNA	0	540	256	530	Off
-2.6	17.60	Off	SNA	0	533	185	551	Off
-2.5	18.40	Off	SNA	0	528	110	520	Off
-2.4	18.40	Off	SNA	0	526	175	522	Off
-2.3	18.40	Off	SNA	0	525	89	523	Off
-2.2	19.20	Off	SNA	0	514	104	503	Off
-2.1	19.20	Off	SNA	0	512	102	497	Off
-2.0	20.00	Off	SNA	0	508	26	499	Off
-1.9	20.80	Off	SNA	0	500	12	493	Off
-1.8	20.80	Off	SNA	0	498	74	488	Off
-1.7	22.40	Off	SNA	0	494	127	480	Off
-1.6	24.00	Off	SNA	0	490	247	449	Off
-1.5	34.40	Off	SNA	0	483	224	461	Off
-1.4	43.20	Off	SNA	0	479	257	449	Off
-1.3	48.80	Off	SNA	0	474	285	443	Off
-1.2	51.20	Off	SNA	0	472	259	444	Off
-1.1	53.60	Off	SNA	0	463	247	428	Off
-1.0	55.20	Off	SNA	0	454	265	408	Off
-0.9	56.80	Off	SNA	0	444	271	382	Off
-0.8	58.40	Off	SNA	0	430	186	377	Off
-0.7	59.20	Off	SNA	0	413	176	353	Off
-0.6	60.80	Off	SNA	0	386	167	322	Off
-0.5	62.40	Off	SNA	0	351	139	309	Off
-0.4	63.20	Off	SNA	0	324	141	260	Off
-0.3	73.60	Off	SNA	0	282	112	236	Off
-0.2	76.00	Off	SNA	0	250	85	207	Off
-0.1	77.60	Off	SNA	0	216	65	175	Off

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

(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)	Cruise Control Engaged (if equip.)	Cruise Control Status (if equip.)
-5.0	No	Yes	Drive	No	Not Engaged	On
-4.9	No	Yes	Drive	No	Not Engaged	On
-4.8	No	Yes	Drive	No	Not Engaged	On
-4.7	No	Yes	Drive	No	Not Engaged	On
-4.6	No	Yes	Drive	No	Not Engaged	On
-4.5	No	Yes	Drive	No	Not Engaged	On
-4.4	No	Yes	Drive	No	Not Engaged	On
-4.3	No	Yes	Drive	No	Not Engaged	On
-4.2	No	Yes	Drive	No	Not Engaged	On
-4.1	No	Yes	Drive	No	Not Engaged	On
-4.0	No	Yes	Drive	No	Not Engaged	On
-3.9	No	Yes	Drive	No	Not Engaged	On
-3.8	No	Yes	Drive	No	Not Engaged	On
-3.7	No	Yes	Drive	No	Not Engaged	On
-3.6	No	Yes	Drive	No	Not Engaged	On
-3.5	No	Yes	Drive	No	Not Engaged	On
-3.4	No	Yes	Drive	No	Not Engaged	On
-3.3	No	Yes	Drive	No	Not Engaged	On
-3.2	No	Yes	Drive	No	Not Engaged	On
-3.1	No	Yes	Drive	No	Not Engaged	On
-3.0	No	Yes	Drive	No	Not Engaged	On
-2.9	No	Yes	Drive	No	Not Engaged	On
-2.8	No	Yes	Drive	No	Not Engaged	On
-2.7	No	Yes	Drive	No	Not Engaged	On
-2.6	No	Yes	Drive	No	Not Engaged	On
-2.5	No	Yes	Drive	No	Not Engaged	On
-2.4	No	Yes	Drive	No	Not Engaged	On
-2.3	No	Yes	Drive	No	Not Engaged	On
-2.2	No	Yes	Drive	No	Not Engaged	On
-2.1	No	Yes	Drive	No	Not Engaged	On
-2.0	No	Yes	Drive	No	Not Engaged	On
-1.9	No	Yes	Drive	No	Not Engaged	On
-1.8	No	Yes	Drive	No	Not Engaged	On
-1.7	No	Yes	Drive	No	Not Engaged	On
-1.6	No	Yes	Drive	No	Not Engaged	On
-1.5	No	Yes	Drive	No	Not Engaged	On
-1.4	No	Yes	Drive	No	Not Engaged	On
-1.3	No	Yes	Drive	No	Not Engaged	On
-1.2	No	Yes	Drive	No	Not Engaged	On
-1.1	No	Yes	Drive	No	Not Engaged	On
-1.0	No	Yes	Drive	No	Not Engaged	On
-0.9	No	Yes	Drive	No	Not Engaged	On
-0.8	No	Yes	Drive	No	Not Engaged	On
-0.7	No	Yes	Drive	No	Not Engaged	On
-0.6	No	Yes	Drive	No	Not Engaged	On
-0.5	No	Yes	Drive	No	Not Engaged	On
-0.4	No	Yes	Drive	No	Not Engaged	On
-0.3	No	Yes	Drive	No	Not Engaged	On
-0.2	No	No	Drive	No	Not Engaged	On
-0.1	No	No	Drive	No	Not Engaged	On

**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

### System Status at Event (1st Prior Event)

Event Number	1
Multi-Event, Number of Events (1,2)	1
Total number of events	2
Time from Event 1 to 2 (Time since last event)(sec)	>5
Complete File Recorded (Yes, No)	Yes
Maximum Delta-V Longitudinal (MPH [km/h])	-0.6 [-1]
Time, Maximum Delta-V, Longitudinal (msec)	96
Maximum Delta-V Lateral (MPH [km/h])	6.2 [10]
Time, Maximum Delta-V, Lateral (msec)	82
Ignition Cycle, Crash	1576
Safety Belt Status, Driver	Buckled
Safety Belt Status, Outboard Front Passenger	Not Buckled
Airbag Warning Lamp, On/Off	Off
Operation System Time (sec)	1608301
Airbag Warning Lamp On Time Before Event (min)	0
Supply Voltage at Event, ACM (V)	14.6
Operation via Energy Reserve	No
VIN at Event (last 8 digits)	HS*****
Odometer at Event (km [miles])	20844 [12951.8]

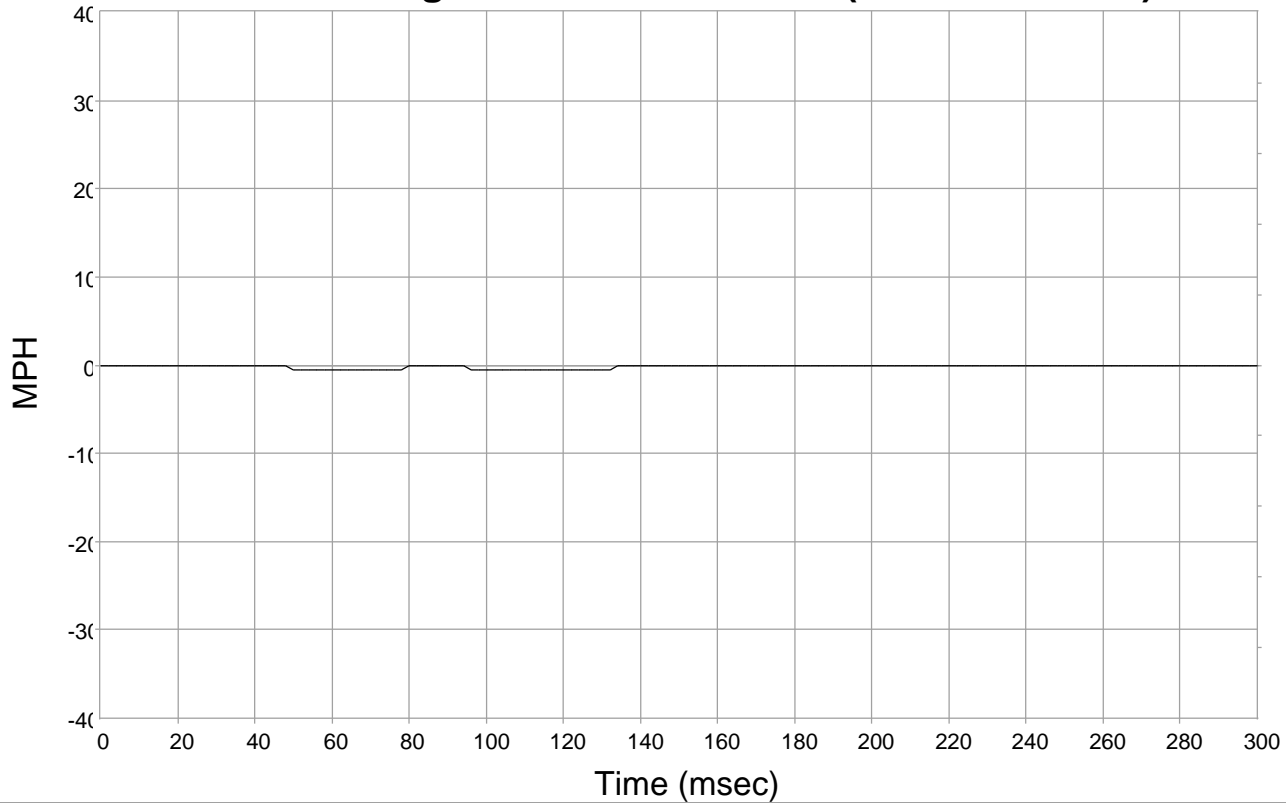
### Deployment Command Data (1st Prior Event)

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	Yes
Commanded Left Seat Airbag Deployment	Yes
Commanded Right Side Curtain Airbag Deployment	No
Commanded Front Right Side Seat Airbag Deployment	No

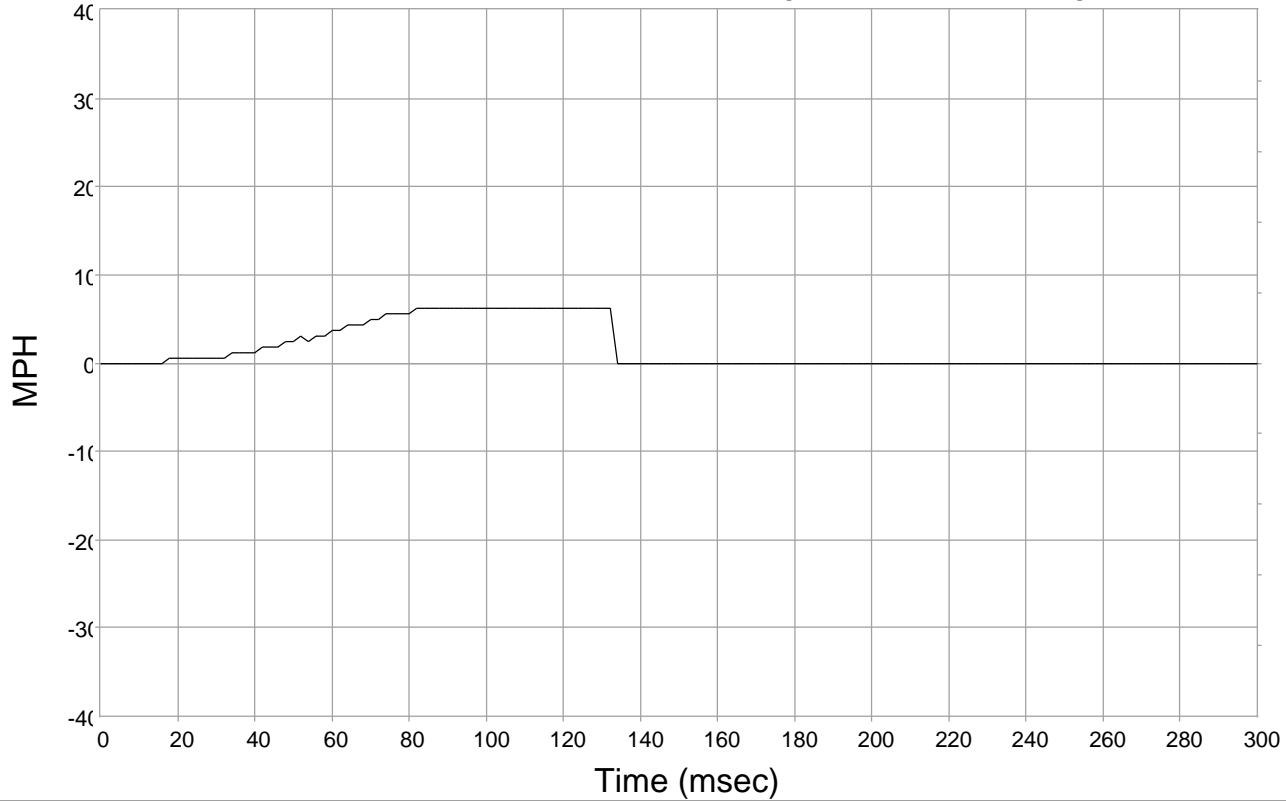
## DTCs Present at Start of Event (1st Prior Event)

No DTCs Present

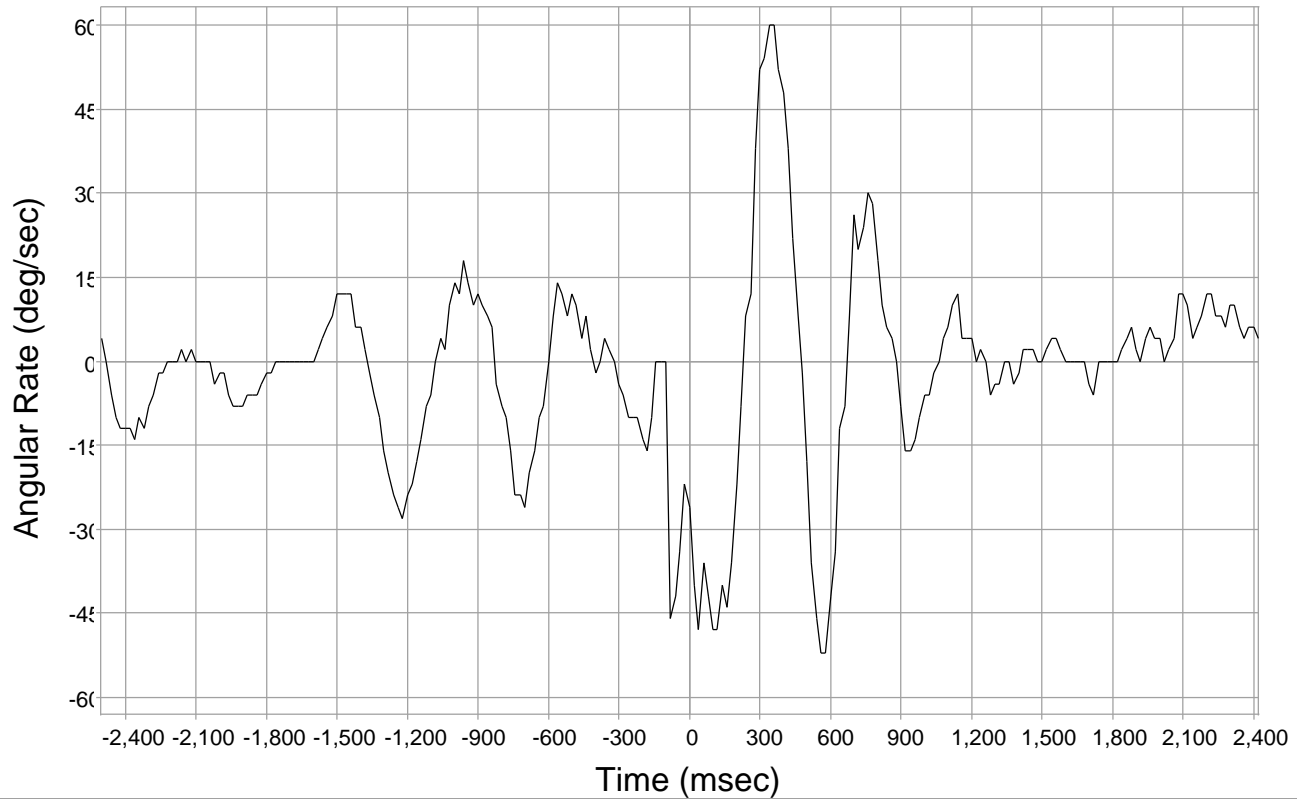
### Longitudinal Crash Pulse (1st Prior Event)



### Lateral Crash Pulse (1st Prior Event)



### Angular Rate Data (1st Prior Event)



## 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	-0.6 [-1]
52	-0.6 [-1]
54	-0.6 [-1]
56	-0.6 [-1]
58	-0.6 [-1]
60	-0.6 [-1]
62	-0.6 [-1]
64	-0.6 [-1]
66	-0.6 [-1]
68	-0.6 [-1]
70	-0.6 [-1]
72	-0.6 [-1]
74	-0.6 [-1]
76	-0.6 [-1]
78	-0.6 [-1]
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	-0.6 [-1]
98	-0.6 [-1]

Time (msec)	Delta-V, Longitudinal (MPH [km/h])
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	-0.6 [-1]
128	-0.6 [-1]
130	-0.6 [-1]
132	-0.6 [-1]
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 (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	0.6 [1]
20	0.6 [1]
22	0.6 [1]
24	0.6 [1]
26	0.6 [1]
28	0.6 [1]
30	0.6 [1]
32	0.6 [1]
34	1.2 [2]
36	1.2 [2]
38	1.2 [2]
40	1.2 [2]
42	1.9 [3]
44	1.9 [3]
46	1.9 [3]
48	2.5 [4]
50	2.5 [4]
52	3.1 [5]
54	2.5 [4]
56	3.1 [5]
58	3.1 [5]
60	3.7 [6]
62	3.7 [6]
64	4.3 [7]
66	4.3 [7]
68	4.3 [7]
70	5.0 [8]
72	5.0 [8]
74	5.6 [9]
76	5.6 [9]
78	5.6 [9]
80	5.6 [9]
82	6.2 [10]
84	6.2 [10]
86	6.2 [10]
88	6.2 [10]
90	6.2 [10]
92	6.2 [10]
94	6.2 [10]
96	6.2 [10]
98	6.2 [10]

Time (msec)	Delta-V, Lateral (MPH [km/h])
100	6.2 [10]
102	6.2 [10]
104	6.2 [10]
106	6.2 [10]
108	6.2 [10]
110	6.2 [10]
112	6.2 [10]
114	6.2 [10]
116	6.2 [10]
118	6.2 [10]
120	6.2 [10]
122	6.2 [10]
124	6.2 [10]
126	6.2 [10]
128	6.2 [10]
130	6.2 [10]
132	6.2 [10]
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 (1st Prior Event)

Time (msec)	Angular Rate (deg/sec)
-2500	4.00
-2480	0.00
-2460	-6.00
-2440	-10.00
-2420	-12.00
-2400	-12.00
-2380	-12.00
-2360	-14.00
-2340	-10.00
-2320	-12.00
-2300	-8.00
-2280	-6.00
-2260	-2.00
-2240	-2.00
-2220	0.00
-2200	0.00
-2180	0.00
-2160	2.00
-2140	0.00
-2120	2.00
-2100	0.00
-2080	0.00
-2060	0.00
-2040	0.00
-2020	-4.00
-2000	-2.00
-1980	-2.00
-1960	-6.00
-1940	-8.00
-1920	-8.00
-1900	-8.00
-1880	-6.00
-1860	-6.00
-1840	-6.00
-1820	-4.00
-1800	-2.00
-1780	-2.00
-1760	0.00
-1740	0.00
-1720	0.00
-1700	0.00
-1680	0.00
-1660	0.00
-1640	0.00
-1620	0.00
-1600	0.00
-1580	2.00
-1560	4.00
-1540	6.00
-1520	8.00

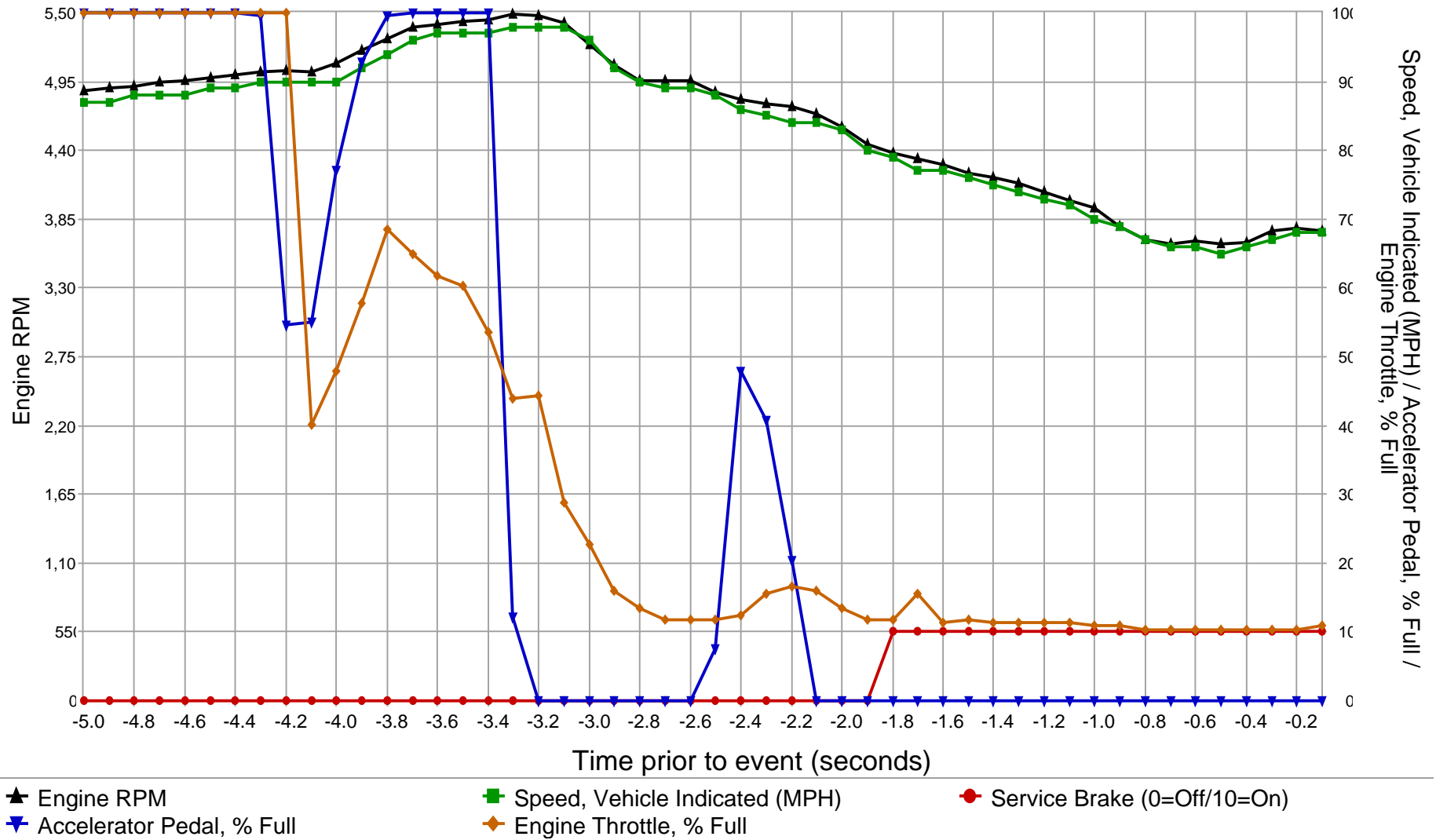
Time (msec)	Angular Rate (deg/sec)
-1500	12.00
-1480	12.00
-1460	12.00
-1440	12.00
-1420	6.00
-1400	6.00
-1380	2.00
-1360	-2.00
-1340	-6.00
-1320	-10.00
-1300	-16.00
-1280	-20.00
-1260	-24.00
-1240	-26.00
-1220	-28.00
-1200	-24.00
-1180	-22.00
-1160	-18.00
-1140	-14.00
-1120	-8.00
-1100	-6.00
-1080	0.00
-1060	4.00
-1040	2.00
-1020	10.00
-1000	14.00
-980	12.00
-960	18.00
-940	14.00
-920	10.00
-900	12.00
-880	10.00
-860	8.00
-840	6.00
-820	-4.00
-800	-8.00
-780	-10.00
-760	-16.00
-740	-24.00
-720	-24.00
-700	-26.00
-680	-20.00
-660	-16.00
-640	-10.00
-620	-8.00
-600	0.00
-580	8.00
-560	14.00
-540	12.00
-520	8.00

Time (msec)	Angular Rate (deg/sec)
-500	12.00
-480	10.00
-460	4.00
-440	8.00
-420	2.00
-400	-2.00
-380	0.00
-360	4.00
-340	2.00
-320	0.00
-300	-4.00
-280	-6.00
-260	-10.00
-240	-10.00
-220	-10.00
-200	-14.00
-180	-16.00
-160	-10.00
-140	0.00
-120	0.00
-100	0.00
-80	-46.00
-60	-42.00
-40	-34.00
-20	-22.00
0	-26.00
20	-40.00
40	-48.00
60	-36.00
80	-42.00
100	-48.00
120	-48.00
140	-40.00
160	-44.00
180	-36.00
200	-22.00
220	-8.00
240	8.00
260	12.00
280	38.00
300	52.00
320	54.00
340	60.00
360	60.00
380	52.00
400	48.00
420	38.00
440	22.00
460	8.00
480	-2.00

### Angular Rate Data (1st Prior Event)

Time (msec)	Angular Rate (deg/sec)	Time (msec)	Angular Rate (deg/sec)
500	-18.00	1500	0.00
520	-36.00	1520	2.00
540	-46.00	1540	4.00
560	-52.00	1560	4.00
580	-52.00	1580	2.00
600	-42.00	1600	0.00
620	-34.00	1620	0.00
640	-12.00	1640	0.00
660	-8.00	1660	0.00
680	8.00	1680	0.00
700	26.00	1700	-4.00
720	20.00	1720	-6.00
740	24.00	1740	0.00
760	30.00	1760	0.00
780	28.00	1780	0.00
800	18.00	1800	0.00
820	10.00	1820	0.00
840	6.00	1840	2.00
860	4.00	1860	4.00
880	0.00	1880	6.00
900	-8.00	1900	2.00
920	-16.00	1920	0.00
940	-16.00	1940	4.00
960	-14.00	1960	6.00
980	-10.00	1980	4.00
1000	-6.00	2000	4.00
1020	-6.00	2020	0.00
1040	-2.00	2040	2.00
1060	0.00	2060	4.00
1080	4.00	2080	12.00
1100	6.00	2100	12.00
1120	10.00	2120	10.00
1140	12.00	2140	4.00
1160	4.00	2160	6.00
1180	4.00	2180	8.00
1200	4.00	2200	12.00
1220	0.00	2220	12.00
1240	2.00	2240	8.00
1260	0.00	2260	8.00
1280	-6.00	2280	6.00
1300	-4.00	2300	10.00
1320	-4.00	2320	10.00
1340	0.00	2340	6.00
1360	0.00	2360	4.00
1380	-4.00	2380	6.00
1400	-2.00	2400	6.00
1420	2.00	2420	4.00
1440	2.00		
1460	2.00		
1480	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 3)

(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	87 [140]	100	100	Off	4,875	No	On	12
-4.9	Complete	87 [140]	100	100	Off	4,900	No	On	10
-4.8	Complete	88 [141]	100	100	Off	4,914	No	On	2
-4.7	Complete	88 [142]	100	100	Off	4,946	No	On	-6
-4.6	Complete	88 [142]	100	100	Off	4,955	No	On	-11
-4.5	Complete	89 [143]	100	100	Off	4,978	No	On	-15
-4.4	Complete	89 [143]	100	100	Off	4,999	No	On	-19
-4.3	Complete	90 [144]	99	100	Off	5,024	No	On	-21
-4.2	Complete	90 [145]	55	100	Off	5,039	No	On	-20
-4.1	Complete	90 [145]	55	40	Off	5,032	No	On	-18
-4.0	Complete	90 [146]	77	48	Off	5,095	No	On	-15
-3.9	Complete	92 [148]	93	58	Off	5,203	No	On	-11
-3.8	Complete	94 [151]	99	69	Off	5,293	No	On	-7
-3.7	Complete	96 [154]	100	65	Off	5,386	No	On	-3
-3.6	Complete	97 [155]	100	62	Off	5,404	No	On	-1
-3.5	Complete	97 [156]	100	60	Off	5,432	No	Engaged	0
-3.4	Complete	97 [157]	100	54	Off	5,445	No	Engaged	9
-3.3	Complete	98 [157]	12	44	Off	5,487	No	Engaged	26
-3.2	Complete	98 [158]	0	44	Off	5,474	No	Engaged	34
-3.1	Complete	98 [158]	0	29	Off	5,424	No	Engaged	41
-3.0	Complete	96 [154]	0	23	Off	5,251	No	Engaged	45
-2.9	Complete	92 [148]	0	16	Off	5,086	No	Engaged	58
-2.8	Complete	90 [145]	0	13	Off	4,959	No	Engaged	72
-2.7	Complete	89 [143]	0	12	Off	4,954	No	Engaged	63
-2.6	Complete	89 [143]	0	12	Off	4,957	No	Engaged	39
-2.5	Complete	88 [141]	8	12	Off	4,869	No	Engaged	16
-2.4	Complete	86 [139]	48	12	Off	4,808	No	Engaged	-6
-2.3	Complete	85 [137]	41	15	Off	4,773	No	Engaged	-26
-2.2	Complete	84 [136]	20	16	Off	4,748	No	Engaged	-30
-2.1	Complete	84 [135]	0	16	Off	4,688	No	Engaged	-54
-2.0	Complete	83 [134]	0	13	Off	4,586	No	Engaged	-70
-1.9	Complete	80 [129]	0	12	Off	4,445	No	Engaged	-84
-1.8	Complete	79 [128]	0	12	On	4,377	No	Engaged	-107
-1.7	Complete	77 [125]	0	15	On	4,334	No	Engaged	-111
-1.6	Complete	77 [123]	0	11	On	4,285	No	Engaged	-114
-1.5	Complete	76 [123]	0	12	On	4,217	No	Engaged	-131
-1.4	Complete	75 [121]	0	11	On	4,177	No	Engaged	-134
-1.3	Complete	74 [119]	0	11	On	4,134	No	Engaged	-143
-1.2	Complete	73 [118]	0	11	On	4,067	No	Engaged	-140
-1.1	Complete	72 [116]	0	11	On	3,999	No	Engaged	-141
-1.0	Complete	70 [113]	0	11	On	3,944	No	Engaged	-161
-0.9	Complete	69 [110]	0	11	On	3,786	No	Engaged	-176
-0.8	Complete	67 [108]	0	10	On	3,687	No	Engaged	-180
-0.7	Complete	66 [106]	0	10	On	3,650	No	Engaged	-182
-0.6	Complete	66 [106]	0	10	On	3,676	No	Engaged	-190
-0.5	Complete	65 [104]	0	10	On	3,654	No	Engaged	-190
-0.4	Complete	66 [107]	0	10	On	3,661	No	Engaged	-186
-0.3	Complete	67 [108]	0	10	On	3,751	No	Engaged	-183
-0.2	Complete	68 [109]	0	10	On	3,782	No	Engaged	-175
-0.1	Complete	68 [109]	0	11	On	3,754	Yes	Engaged	-172

## Pre-Crash Data (1st Prior Event - table 2 of 3)

(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	95.20	Off	2	897	899	904	910	Off
-4.9	95.20	Off	3	901	905	914	906	Off
-4.8	95.20	Off	3	905	908	912	919	Off
-4.7	93.60	Off	0	910	912	927	915	Off
-4.6	96.80	Off	-2	915	913	919	928	Off
-4.5	95.20	Off	-4	920	915	930	924	Off
-4.4	94.40	Off	-5	924	917	927	938	Off
-4.3	96.80	Off	-5	929	921	936	937	Off
-4.2	92.00	Off	-6	932	926	936	942	Off
-4.1	74.40	Off	-5	935	929	938	941	Off
-4.0	79.20	Off	-4	937	931	946	947	Off
-3.9	88.80	Off	-4	939	934	950	987	Off
-3.8	89.60	Off	-5	943	938	971	1,007	Off
-3.7	88.80	Off	-5	945	939	986	1,015	Off
-3.6	91.20	Off	-7	948	942	1,006	1,010	Off
-3.5	87.20	Off	-8	951	943	1,017	1,015	Off
-3.4	79.20	Off	-10	949	943	1,010	1,015	Off
-3.3	73.60	Off	-10	947	944	1,014	1,027	Off
-3.2	65.60	Off	-10	944	945	1,030	1,030	Off
-3.1	45.60	Off	-9	944	943	1,010	1,024	Off
-3.0	31.20	Off	-8	941	942	960	1,014	Off
-2.9	24.00	Off	-2	937	941	939	973	Off
-2.8	18.40	Off	10	934	942	925	932	Off
-2.7	16.00	Off	28	923	949	920	941	Off
-2.6	15.20	Off	35	916	943	903	937	Off
-2.5	15.20	Off	31	909	932	900	925	Off
-2.4	16.00	Off	27	903	901	883	909	Off
-2.3	19.20	Off	27	897	866	885	895	Off
-2.2	22.40	Off	28	887	818	879	873	Off
-2.1	22.40	Off	27	877	726	899	857	Off
-2.0	19.20	Off	25	868	587	890	819	Off
-1.9	16.00	Off	21	856	328	883	788	Off
-1.8	16.00	Off	18	793	393	836	791	Off
-1.7	18.40	Off	13	811	322	816	796	Off
-1.6	16.00	Off	5	809	590	810	797	Off
-1.5	16.00	Off	2	670	822	795	790	Off
-1.4	15.20	Off	6	600	788	785	775	Off
-1.3	15.20	Off	9	664	670	775	768	Off
-1.2	15.20	Off	9	786	267	765	761	Off
-1.1	15.20	Off	6	775	398	752	740	Off
-1.0	15.20	Off	0	777	515	742	719	Off
-0.9	15.20	Off	-2	764	801	723	690	Off
-0.8	15.20	Off	1	600	502	683	706	Off
-0.7	15.20	Off	-4	646	348	659	708	Off
-0.6	15.20	Off	-7	748	690	682	695	Off
-0.5	14.40	Off	-6	713	659	688	657	Off
-0.4	15.20	Off	-10	439	759	695	690	Off
-0.3	14.40	Off	-14	461	742	719	681	Off
-0.2	14.40	Off	-21	507	699	700	713	Off
-0.1	14.40	Off	-30	83	529	696	704	Off

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

(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)	Cruise Control Engaged (if equip.)	Cruise Control Status (if equip.)
-5.0	No	Yes	Drive	No	Not Engaged	On
-4.9	No	Yes	Drive	No	Not Engaged	On
-4.8	No	Yes	Drive	No	Not Engaged	On
-4.7	No	Yes	Drive	No	Not Engaged	On
-4.6	No	Yes	Drive	No	Not Engaged	On
-4.5	No	Yes	Drive	No	Not Engaged	On
-4.4	No	Yes	Drive	No	Not Engaged	On
-4.3	No	Yes	Drive	No	Not Engaged	On
-4.2	No	Yes	Drive	No	Not Engaged	On
-4.1	No	Yes	Drive	No	Not Engaged	On
-4.0	No	Yes	Drive	No	Not Engaged	On
-3.9	No	Yes	Drive	No	Not Engaged	On
-3.8	No	Yes	Drive	No	Not Engaged	On
-3.7	No	Yes	Drive	No	Not Engaged	On
-3.6	No	Yes	Drive	No	Not Engaged	On
-3.5	No	Yes	Drive	No	Not Engaged	On
-3.4	No	Yes	Drive	No	Not Engaged	On
-3.3	No	Yes	Drive	No	Not Engaged	On
-3.2	No	Yes	Drive	No	Not Engaged	On
-3.1	No	Yes	Drive	No	Not Engaged	On
-3.0	No	Yes	Drive	No	Not Engaged	On
-2.9	No	Yes	Drive	No	Not Engaged	On
-2.8	No	Yes	Drive	No	Not Engaged	On
-2.7	No	Yes	Drive	No	Not Engaged	On
-2.6	No	Yes	Drive	No	Not Engaged	On
-2.5	No	Yes	Drive	No	Not Engaged	On
-2.4	No	Yes	Drive	No	Not Engaged	On
-2.3	No	Yes	Drive	No	Not Engaged	On
-2.2	No	Yes	Drive	No	Not Engaged	On
-2.1	No	Yes	Drive	No	Not Engaged	On
-2.0	No	Yes	Drive	No	Not Engaged	On
-1.9	No	Yes	Drive	No	Not Engaged	On
-1.8	No	Yes	Drive	No	Not Engaged	On
-1.7	No	Yes	Drive	No	Not Engaged	On
-1.6	No	Yes	Drive	No	Not Engaged	On
-1.5	No	Yes	Drive	No	Not Engaged	On
-1.4	No	Yes	Drive	No	Not Engaged	On
-1.3	No	Yes	Drive	No	Not Engaged	On
-1.2	No	Yes	Drive	No	Not Engaged	On
-1.1	No	Yes	Drive	No	Not Engaged	On
-1.0	No	Yes	Drive	No	Not Engaged	On
-0.9	No	Yes	Drive	No	Not Engaged	On
-0.8	No	Yes	Drive	No	Not Engaged	On
-0.7	No	Yes	Drive	No	Not Engaged	On
-0.6	No	Yes	Drive	No	Not Engaged	On
-0.5	No	Yes	Drive	No	Not Engaged	On
-0.4	No	Yes	Drive	No	Not Engaged	On
-0.3	No	Yes	Drive	No	Not Engaged	On
-0.2	No	Yes	Drive	No	Not Engaged	On
-0.1	No	Yes	Drive	No	Not Engaged	On

## 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 33 30 33 32 31 38 41 41

62 F1 50 0C 05 00

62 F1 51 0F 2D 00 0F 2E 00

62 02 20 04 7A 41 04 11 1D 03 2E 39 12 7F 10 00 00 00 00 00 00 00 00 00 00 00 07 31 43 36 52 52  
37 4D 54 32 48 53 36 36 34 32 33 36 7E 0F 00 00 00 00

62 F1 8C 54 35 32 4D 44 30 30 35 37 30 31 33 32 37

62 F1 54 00 03

62 F1 90 31 43 36 52 52 37 4D 54 32 48 53 2A 2A 2A 2A 2A 2A

62 02 B1 01 CC 02 02 13 FF 0F 8F 19 00 18 8A 73 00 00 00 B0 06 28 03 2E 39 1D 04 07 F8 04 F0 00  
00 00 00 00 00 33 11 0F 00  
11 80 21 13 80 7F 13 80 7E 13 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  
00  
00  
53 2A 2A 2A 2A 2A 2A FF FE FF FF FF 00 00 00 03 83 F3 00 00 00 00 00 00 00 00 00 00 00 00  
00  
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00  
00 00 00

62 02 B2 02 CC 01 02 13 FF 0F 0F 19 00 18 8A 6D 00 00 00 B0 06 28 03 2E 37 1D 04 07 F8 04 F0 00  
00 00 00 00 00 33 11 0F 00 00 00 00 00 00 43 04 00 00 80 00 00 00 00 10 0F 2E 00 95 00 00 00 00  
00  
00  
00 48  
53 2A 2A 2A 2A 2A 2A FF FE FF FF FF 00 00 00 03 92 F3 00 00 00 00 00 00 00 00 00 00 00 00  
00  
00  
00  
00 00 00 00 00 00 10 00 00 00 00 00 00 FF 19 0A 29 00 06 00 00 00 00 00 00 00 00 00 00  
00  
00 00 00

62 02 B3 FF  
FF  
FF  
FF  
FF 2A 2A 2A 2A 2A 2A FF  
FF  
FF  
FF  
FF  
FF  
FF FF FF

62 02 C1 02 7F 00 01 7F 00 00 00 00

62 02 10 FF FF FF FF FF FF FF FF 03 3D 01 9F 01 A1 3F C0 00 00 00 00 00 00



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62 02 50 06 30 00 18 91 66 02 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 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 00 00 00 01 5E 00 82 00 00 01 B0 FF FF 02 00 00 01 00 1B E4 15 0A 61 01
00 02 00 00 00 07 00 FF 00 00 00 00 00 0E 2E 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 09
B1 00 00 04 FB FF 03 FF FF FF FF FF 5C FF 75 FF FF FF 7D 00 00 00 00 00 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 01 CC 00 00 00 00 01 9D 00 A9 00 00 01 F4 FF FF 02 00 00 01 00 1B E4 15 00 5F 04
00 02 00 00 00 07 00 FF 00 00 00 00 00 0E 3C 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 0B
EB 00 00 04 FB FF 03 FF FF FF FF FF 5C FF 75 FF FF FF 7D 00 00 00 00 00 0E D4 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 00 00 00 01 D8 00 E0 00 00 02 34 FF FF 02 00 00 01 00 1F DF 15 0A 5C 15
00 82 00 00 00 07 00 FF 00 00 00 00 00 0E 56 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 0E
0F 00 00 04 FB FF 03 FF FF FF FF FF 5C FF 75 FF FF FF 7D 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 03 CC 00 01 02 00 02 07 01 1A 00 00 02 88 FF FF 02 00 00 01 00 20 DE 15 0A 4F 08
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 5D 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 10
41 00 00 04 FB FF 03 FF FF FF FF FF 5C FF 75 FF FF FF 7E 00 00 00 07 14 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 04 CC 00 01 39 00 02 6A 01 15 00 00 02 BE FF FF 02 00 00 01 00 23 DC 15 0A 4E 0A
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 5F 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 12
2A 00 00 04 FB FF 03 FF FF FF FF FF 5C FF 75 FF FF FF 7F 00 00 00 07 03 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 01 7F 00 02 84 01 4E 00 00 03 03 FF FF 02 00 00 01 00 24 DA 15 0A 4C 0D
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 58 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 12
FC 00 00 04 FB FF 03 FF FF FF FF FF 5C FF 75 FF FF FF 7F 00 00 00 06 DD 10 C8 00 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 01 B9 00 02 C2 01 60 00 00 03 3A FF FF 00 00 00 00 00 26 D9 15 0A 4A 0E
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 3F 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 14
DC 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 7F 00 00 00 06 B4 11 2C 00 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 02 00 00 02 F2 01 73 00 00 03 5B FF FF 00 00 00 00 00 27 D7 15 0A 49 0E
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 45 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 17
54 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 7F 00 00 00 06 8F 0F 38 00 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 02 43 00 02 FB 02 1E 00 00 03 78 FF FF 00 00 00 00 00 28 D6 15 0A 47 0F
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 67 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 19
57 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 7F 00 00 00 06 6B 0F 38 00 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 02 7D 00 03 30 02 12 00 00 03 8C FF FF 00 00 00 00 00 29 D5 15 0B 45 11
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 7F 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 1A
55 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 7F 00 00 00 06 42 0F 38 00 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 02 AC 00 03 57 01 EE 00 00 03 9E FF FF 00 00 00 00 00 2A D4 15 0A 43 11
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 9B 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 1B
97 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 7F 00 00 00 06 0C 0E D4 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 02 D6 00 03 78 02 05 00 00 03 AF FF FF 00 00 00 00 00 2B D4 15 0A 40 12
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E C5 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 1A
02 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 7F 00 00 00 05 DB 0E 0C 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 0C CC 00 03 09 00 03 76 02 39 00 00 03 B3 FF FF 00 00 00 00 00 2C D2 15 0A 3D 13
00 C2 00 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 1C
85 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 7F 00 00 00 05 91 0E 70 00 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 0D CC 00 03 34 00 03 81 02 01 00 00 03 BD FF FF 00 00 00 00 00 2F D0 15 0A 36 18
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E5 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 7F 00 00 00 04 FE 0E 0C 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 03 6E 00 03 9A 01 C0 00 00 03 C6 FF FF 00 00 00 00 00 33 CB 15 0A 2B 19
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F 54 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 1C
75 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 77 00 00 00 03 BC 0E 0C 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 03 C0 00 03 82 01 ED 00 00 03 D4 FF FF 00 00 00 00 00 28 D7 15 0A 1E 0B
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F 82 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 17
DD 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 70 00 00 00 02 35 0E 70 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 04 35 00 03 C0 00 FE 00 00 03 DB FF FF 00 00 00 00 00 24 DB 15 0A 1C 0A
00 C2 00 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 16
A2 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6F 00 00 00 01 F6 0F 9C 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 04 A9 00 03 CF 00 93 00 00 03 E3 FF FF 00 00 00 00 00 23 DC 15 0A 1A 09
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F 9B 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 13
E5 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6E 00 00 00 01 C8 10 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 04 E2 00 03 DA 00 18 00 00 03 E8 FF FF 00 00 00 00 00 22 DD 15 00 1A 09
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F 9B 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 13
BA 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 AE 10 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 05 7D 00 03 E6 00 33 00 00 03 F7 FF FF 00 00 00 00 00 23 DC 15 0A 19 0A
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F 9B 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 14
DA 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 A8 10 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 05 FD 00 03 E1 00 CC 00 00 03 FF FF FF 00 00 00 00 00 23 DC 15 0A 18 0A
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F 94 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 17
26 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 A0 10 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 06 96 00 03 ED 00 D0 00 00 04 04 FF FF 00 00 00 00 00 23 DB 15 0A 18 0A
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F 90 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 19
8F 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 96 10 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 06 CD 00 04 16 00 B2 00 00 04 19 FF FF 00 00 00 00 00 23 DC 15 0A 17 09
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F A1 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 18
AE 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 98 0F 9C 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 06 63 00 04 14 01 5D 00 00 04 1B FF FF 00 00 00 00 00 22 DC 15 0A 17 09
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F BA 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 18
B4 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 7C 0E D4 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 07 1D 00 04 0F 00 DC 00 00 04 20 FF FF 00 00 00 00 00 23 DC 15 0A 17 09
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F C1 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 1A
98 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6C 00 00 00 01 8F 10 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 19 CC 00 07 70 00 04 4D 01 71 00 00 04 2A FF FF 00 00 00 00 00 24 DB 15 0A 16 0B
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F C8 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 1B
9C 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 9C 0F 9C 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 07 A3 00 04 24 02 00 00 00 04 37 FF FF 00 00 00 00 00 25 DA 15 0A 16 0B

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00 C2 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 1D
78 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 98 0E 0C 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 08 5C 00 04 33 01 D6 00 00 04 42 FF FF 00 00 00 00 00 25 DA 15 0A 16 0C
00 C2 00 00 00 07 00 FF 00 00 00 00 00 10 39 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 20
2F 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 8F 0C 7C 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 08 CA 00 04 3D 01 B4 00 00 04 4B FF FF 00 00 00 00 00 25 DA 15 0A 16 0C
00 C2 00 00 00 07 00 FF 00 00 00 00 00 10 5B 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 20
94 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 82 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 1D CC 00 08 E2 00 04 3F 02 38 00 00 04 4D FF FF 00 00 00 00 00 25 DA 15 0A 15 0C
00 C2 00 00 00 07 00 FF 00 00 00 00 00 10 64 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 21
E5 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 78 10 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 09 B3 00 04 45 01 E8 00 00 04 57 FF FF 00 00 00 00 00 25 DA 15 0A 14 0C
00 C2 00 00 00 07 00 FF 00 00 00 00 00 10 64 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 23
6A 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 70 10 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 BA 00 04 46 02 BE 00 00 04 5E FF FF 00 00 00 00 00 25 DA 15 0A 14 0C
00 C2 00 00 00 07 00 FF 00 00 00 00 00 10 63 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 24
0B 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 6D 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 56 00 04 73 03 42 00 00 04 6A FF FF 00 00 00 00 00 25 D9 15 0A 14 0C
00 C2 00 00 00 07 00 FF 00 00 00 00 00 10 61 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 23
41 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 65 10 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 E9 00 04 2B 03 5A 00 00 04 73 FF FF 00 00 00 00 00 26 D9 15 0A 14 0D
00 C2 00 00 00 07 00 FF 00 00 00 00 00 10 5F 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 26
27 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 69 10 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 0A 82 00 04 6C 03 46 00 00 04 7D FF FF 00 00 00 00 00 27 D8 15 0A 14 0E
00 C2 00 00 00 07 00 FF 00 00 00 00 00 10 4E 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 27
2B 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 7B 11 2C 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 0A F3 00 04 8A 03 CA 00 00 04 8A FF FF 00 00 00 00 00 28 D6 15 00 13 0F
00 C2 00 00 00 07 00 FF 00 00 00 00 00 10 3B 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 28
C1 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 7A 10 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 0B 8F 00 04 75 04 67 00 00 04 96 FF FF 00 00 00 00 00 28 D6 15 0A 12 0F
00 C2 00 00 00 07 00 FF 00 00 00 00 00 10 38 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 2B
0F 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 85 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 25 CC 00 0B B1 00 04 77 04 5A 00 00 04 99 FF FF 00 00 00 00 00 28 D6 15 0A 13 0F
00 C2 00 00 00 07 00 FF 00 00 00 00 00 10 35 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 2B
F3 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 82 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 26 CC 00 0B C3 00 04 76 04 45 00 00 04 A8 FF FF 00 00 00 00 00 28 D6 15 0A 12 0E
00 C2 00 00 00 07 00 FF 00 00 00 00 00 10 27 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 2C
13 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 85 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 27 CC 00 0B 71 00 04 90 04 42 00 00 04 B3 FF FF 00 00 00 00 00 28 D7 15 0B 13 0E
00 C2 00 00 00 07 00 FF 00 00 00 00 00 10 16 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF FF 2A
D0 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 84 10 64 00 00 00 00 00 00

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00 00 00 00 00 00 00 00 00 00 00 FF FF

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10 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 87 13 20 00 00 00 00 00
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4A 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 83 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 2A CC 00 0B 64 00 04 B3 03 FF 00 00 04 D8 FF FF 00 00 00 00 00 29 D6 15 0B 13 10
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F 7F 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 2A
EB 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6E 00 00 00 01 88 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 2B CC 00 0B F3 00 04 B2 04 24 00 00 04 DC FF FF 00 00 00 00 00 29 D6 15 0A 13 10
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F 72 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 2B
79 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6D 00 00 00 01 97 11 2C 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 01 2C CC 00 0C 09 00 04 F7 04 10 00 00 04 C4 FF FF 02 00 00 01 00 2A D5 15 0A 13 10
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F 3B 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 2D
9D 00 00 04 FB FF 03 FF FF FF FF FF 5C FF 75 FF FF FF 6E 00 00 00 01 97 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 2D CC 00 0C 77 00 05 07 04 41 00 00 04 EF FF FF 00 00 00 00 00 2A D4 15 0A 12 11
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E F5 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 2E
C0 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6E 00 00 00 01 A2 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 2E CC 00 0C AE 00 05 46 04 91 00 00 04 F7 FF FF 00 00 00 00 00 2B D4 15 0A 13 12
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E C1 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 2F
B7 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 6F 00 00 00 01 A4 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 2F CC 00 0C B5 00 04 AD 04 D1 00 00 04 C3 FF FF 00 00 00 00 00 2B D4 15 0A 13 12
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 8D 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 2E
CA 00 00 04 FB FF 03 FF FF FF FF FF 48 FF 75 FF FF FF 70 00 00 00 01 A7 11 90 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 FF FF

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48 00 00 04 FB FF 03 FF FF FF FF FF 5C FF 75 FF FF FF 70 00 00 00 01 B2 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 31 CC 00 0D 26 00 04 B6 05 26 00 4D 03 61 FF FF 02 00 00 01 00 2C D2 15 0A 13 14
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20 00 00 04 FB FF 03 FF FF FF FF FF 5C FF 75 FF FF FF 73 00 00 00 01 BD 11 F4 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 02 00 CC 00 0E AA 00 05 7F 05 6F 00 A6 04 21 74 0D 02 00 00 01 00 2E D1 15 00 12 15
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E A8 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 36
8B 00 00 04 FB FF 03 FF FF FF FF FF 3F 7E 75 46 82 80 73 00 00 00 01 BB 0E D4 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 02 01 CC 00 0E C6 00 05 91 05 77 03 F5 05 76 77 B1 02 00 00 01 00 2D D1 15 0A 12 14
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E A2 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 36
66 00 00 04 FB FF 03 FF FF FF FF FF 2F 7E 75 64 9D 80 73 00 00 00 01 B3 11 2C 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 02 02 CC 00 0E A7 00 05 51 05 9D 03 9A 05 CB 7A 29 02 00 00 01 00 2D D2 15 0A 12 14
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 92 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 36
07 00 00 04 FB FF 03 FF FF FF FF FF 2F 7E 75 66 A3 80 73 00 00 00 01 B8 10 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 02 03 CC 00 0E 4D 00 05 63 05 6E 03 6E 05 ED 7C 11 02 00 00 01 00 2D D1 15 0A 13 14
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 8C 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 35
61 00 00 04 FB FF 03 FF FF FF FF FF 2F 7E 75 63 A6 80 73 00 00 00 01 BC 10 C8 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 02 04 CC 00 0E 46 00 05 22 05 5F 05 92 05 26 7D 79 02 00 00 01 00 2D D1 15 0A 12 14
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 84 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 34
06 00 00 04 FB FF 03 FF FF FF FF FF 2F 7E 75 67 A7 80 73 00 00 00 01 B6 10 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 02 05 CC 00 0E 5C 00 05 6E 05 53 05 D7 05 64 7D 01 02 00 00 01 00 2D D2 15 0A 13 14
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 84 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 35
0B 00 00 04 FB FF 03 FF FF FF FF FF 2F 7E 75 66 A7 80 72 00 00 00 01 BD 10 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 02 06 CC 00 0E 42 00 05 88 05 26 05 0B 02 B8 7E 49 02 00 00 01 00 2D D1 15 0B 13 14
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 95 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 34
FC 00 00 04 FB FF 03 FF FF FF FF FF 2F 7E 75 68 AA 80 74 00 00 00 01 C0 0F 38 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 FF FF

71 01 03 01 02 07 CC 00 0E 67 00 05 84 05 56 04 B0 03 EB 80 6F 02 00 00 01 00 2D D1 15 0A 13 14
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E 98 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 35
D3 00 00 04 FB FF 03 FF FF FF FF FF 2F 7E 75 67 C5 80 73 00 00 00 01 C6 0F 9C 00 00 00 00 00 00
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37 00 00 04 FB FF 03 FF FF FF FF FF 23 7E 75 64 BA 80 73 00 00 00 01 C5 10 00 00 00 00 00 00 00
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71 01 03 01 02 09 CC 00 0F 68 00 05 9D 05 CB 06 12 04 05 80 00 02 00 00 01 00 2E D0 15 0A 13 15
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E BF 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 38
AF 00 00 04 FB FF 03 FF FF FF FF FF 23 7E 75 69 B8 80 71 00 00 00 01 CB 0E 0C 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 FF FF

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EE 00 00 04 FB FF 03 FF FF FF FF FF 23 7E 75 6C B2 80 73 00 00 00 01 C8 0F 38 00 00 00 00 00 00
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71 01 03 01 02 0B CC 00 0F E3 00 05 F1 05 F9 06 24 02 16 83 87 02 00 00 01 00 2F D0 15 0A 13 16
00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E E8 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 3A
FC 00 00 04 FB FF 03 FF FF FF FF FF 23 7E 75 6C AE 80 72 00 00 00 01 CD 10 64 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 FF FF

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00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E E2 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 3B
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00 C2 00 00 00 07 00 FF 00 00 00 00 00 0E F4 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 3C
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5E 00 00 04 FB FF 03 FF FF FF FF FF 23 7E 75 69 CA 80 71 00 00 00 01 E5 0E D4 00 00 00 00 00 00
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00 C2 00 00 00 07 00 FF 00 00 00 00 00 0F 1D 00 0F 1F FF 00 FF 60 03 FF FF 78 FF FF FF FF 3D
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9A 00 00 04 FB FF 03 FF FF FF FF FF 23 7E 75 62 CC 80 6F 00 00 00 03 17 0E 0C 00 00 00 00 00 00
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D1 00 00 04 FB FF 03 FF FF FF FF FF 23 7E 75 67 CF 80 70 00 00 00 02 FC 0F 38 00 00 00 00 00 00
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01 01

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