Cranbury, New Jersey Multiple Vehicle Accident

HWY14MH012

Attachment 6 to Vehicle Data Recorders, Specialist's Factual Report

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

CDR File Information

User Entered VIN	5GAKVCED5BJ[redacted]
User	Ben Hsu
Case Number	HWY14MH012
EDR Data Imaging Date	06/13/2014
Crash Date	06/07/2014
Filename	5GAKVCED5BJ[redacted]_ACM.CDRX
Saved on	Friday, June 13 2014 at 10:06:34
Collected with CDR version	Crash Data Retrieval Tool 12.3
Reported with CDR version	Crash Data Retrieval Tool 12.3
EDR Device Type	Airbag Control Module
Event(s) recovered	Deployment, Deployment

Comments

No comments entered.

Data Limitations

Recorded Crash Events:

There are two types of recorded crash events for Front, Side, and Rear (FSR) Events. The first is the Non-Deployment Event. A Non-Deployment Event records data but does not deploy the air bag(s). The minimum SDM Recorded Vehicle Velocity Change, that is needed to record a Non-Deployment Event, is five MPH [8 km/h]. A Non-Deployment Event contains Pre-Crash and Crash data. The oldest Non-Deployment event can be overwritten by a Deployment Event, if all three records are full and the Non-Deployment Event is not locked. Non-Deployment Events can be overwritten after approximately 250 ignition cycles. Also, a Non-Deployment event can be recorded if one of the following occurs without the Deployment of any of the frontal air bags, side air bags, or roll bars:

-Pretensioner(s) only Deployment
-Head Rest Deployment
-Battery Cut-Off Deployment

The second type of SDM recorded crash event for FSR Events is the Deployment Event. It also contains Pre-Crash and Crash data. Deployment Events cannot be overwritten or cleared by the SDM.

There are also two types of recorded crash events for Rollover Events. The first is the Non-Deployment (Non-rollover) Event. A Non-Deployment Event records data but does not deploy the air bag(s). A Non-Deployment Event contains Pre-Crash and Crash data. Non-Deployment Rollover event follow the same rules as FSR Non-Deployment events.

The SDM can store up to three Events.

Data:

For FSR Events, SDM Recorded Vehicle Velocity Change reflects the change in velocity that the sensing system experienced during the recorded portion of the event. SDM Recorded Vehicle Velocity Change is the change in velocity during the recording time and is not the speed the vehicle was traveling before the event, and is also not the Barrier Equivalent Velocity. For Deployment Events, the SDM will record 220 milliseconds of data after the Deployment criteria is met and up to 70 milliseconds before the Deployment criteria is met. For Non-Deployment Events, the SDM will record the first 300 milliseconds of data after algorithm enable.

For Rollover Events, the SDM may record Lateral Acceleration, Vertical Acceleration, and Roll Rate data, if the SDM is rollover capable. This data reflects what the sensing system experienced during the recorded portion of the event. For Non-Deployment (Non-rollover) Events, the SDM will record 750 milliseconds of data before a calibrated angle threshold is reached. For Deployment Events, the SDM will record up to 490 milliseconds of data before the Deployment criteria is met and 250 milliseconds after the Deployment criteria is met.

-Deployment loops may be displayed as being deployed in a Non-Deployment event record, if a Deployment event is qualified during the Non-Deployment event. That is, if two or more events are occurring at the same time and one is a Non-Deployment event and one of the others is a Deployment event, and the Deployment event is qualified while the Non-Deployment is still active, the deployed loops may be recorded in the Non-Deployment event record.

-Deployment loops can only be deployed once per module power cycle.

-Time between events is recorded in 10 msec intervals and is displayed in seconds for a maximum time of 655.33 seconds. The counter measures the time from the start of one event to the start of the next event if both events occur within the same ignition cycle.

-The CDR tool displays time from Algorithm Enable (AE) to time of Deployment command in a Deployment event and AE to time of maximum SDM recorded vehicle velocity change in a Non-Deployment event. Time from AE begins when the first air bag system enable threshold is met and ends when Deployment command criteria is met or at maximum SDM recorded vehicle velocity change. Any air bag systems may be a source of an enable.

-Time From Algorithm Enable to Maximum SDM Recorded Vehicle Velocit y Change is captured when the largest, absolute value of either the Longitudinal or Lateral Recorded Vehicle Velocity Chang e occurs. The Maximum may occur between the recorded 10 millisecond sample points.
-Event Recording Complete will indicate if data from the recorded e vent has been fully written to the SDM memory or if it has been interrupted and not fully written.
-SDM Recorded Vehicle Speed accuracy can be affected by various fac tors, including but not limited to the following:
-Significant changes in the tire's rolling radius
-Final drive axle ratio changes
-Wheel lockup and wheel slip
-Brake Switch Circuit Status indicates the open/closed state of the brake switch circuit.
-Pre-Crash data is recorded asynchronously. The 0.5 second Pre-crash data value (most recent recorded data point) is the data point last sampled before AE. That is to say, the last data point may have been captured just before AE but no more than 0.5 second before AE. All subsequent Pre-crash data values are referenced from this data point.
-Pre-Crash Electronic Data Validity Check Status indicates "Data Invali d" if:
-The SDM receives a message with an "invalid" flag from the module sending the pre-crash data
-Pre-Crash Electronic Data Validity Check Status indicates "Data Not Av ailable" if:
-No data is received from the module sending the pre-crash data
-Belt Switch Circuit Status indicates the status of the seat belt s witch circuit.
-The ignition cycle counter will increment when the power mode cycl es from OFF/Accessory to RUN. Applying and removing of battery power to the module will not increment the ignition cycle counter.
-Ignition Cycles Since DTCs Were Last Cleared can record a maximum value of 253 cycles and can only be reset by a scan tool.
-Deployment Event Counter tracks the number of Deployment events th at have occurred during the SDM's lifetime.
-Event Counter tracks the number of qualified events (either Deploy ments, Non-Deployments, or Rollover events) that have occurred during the SDM's lifetime.
-The Algorithm Enable to Deployment Command Criteria Met times for the following will be indicated for whichever occurs first:
-Driver Thorax or Driver Curtain
-Passenger Thorax or Passenger Curtain
-Driver Pretensioner Loop #1 or Driver Pretensioner Loop #2
-Passenger Pretensioner Loop #1 or Passenger Pretensioner Loop #2
-For Deployment Events, DTC B0052 (Deployment commanded) shall be recorded with the remainder of the data for this event even though it occurred after Event Enable.
-Once a firing loop has been commanded to be deployed, it will not be commanded to be deployed again during the same ignition cycle. Firing loop deployment times for subsequent deployment typ e events, during the same ignition cycle, will not be recorded. Also, forced timer loops, will not be shown as being commanded to deploy. Loops without their own independent deployment calibration are called "forced timer loops." Examples of a forced timer loops are Pretensioner Deployment Loo p #2 and Knee Deployment Loop.
-Number of Ignition Cycles SIR Warning Lamp was ON/OFF Continuously may be reported higher than Ignition Cycles At Event because the Ignition Cycles SIR Warning Lamp was ON/OFF counter is not cleared during the vehicle build process.
-Ignition Cycles At Event may be reported higher than Ignition Cycl es At Investigation by one ignition cycle. This is due to the way Ignition Cycles At Investigation is written during a vehicle power loss situation.
-The reported range of the longitudinal and lateral acceleration va lues is approximately ± 50 g.
-All data should be examined in conjunction with other available ph ysical evidence from the vehicle and scene

Data Source:
All SDM recorded data is measured, calculated, and stored internal ly, except for the following:
-Vehicle Status Data (Pre-Crash) is transmitted to the SDM, by Body Control Module, via the vehicle's communication network.
-The Belt Switch Circuit is wired directly to the SDM.

Data Element Sign Convention:
The following table provides an explanation of the sign notation f or data elements that may be included in this CDR report. Directional references to sign notation are all from the perspective of the driver when seated in the vehicle faci ng the direction of forward vehicle travel.

Data Element	Positive Sign Notation
Longitudinal Velocity Change	Forward
Lateral Acceleration	Left to Right
Lateral Velocity Change	Left to Right
Vertical Acceleration	Downward
Roll Rate	Clockwise Rotation

Hexadecimal Data:
Data that the vehicle manufacturer has specified for data retrieva l is shown in the hexadecimal data section of the CDR report. The hexadecimal data section of the CDR report may contain data that i s not translated by the CDR program. The control module contains additional data that is not retrievable by the CDR tool.

01040_SDM11-autoliv_r016

Event Data (General)

Ignition Cycles At Investigation	5275
ESS # 1 Traceability Data	AU0000E000000000
ESS # 2 Traceability Data	DA0000E000000000
ESS # 3 Traceability Data	AH0000E000000000
ESS # 4 Traceability Data	AJ0000E000000000
ESS # 5 Traceability Data	AT0000E000000000
ESS # 6 Traceability Data	DB0000E000000000
ESS # 7 Traceability Data	000000E000000000
ESS # 8 Traceability Data	000000E000000000
Dynamic Deployment Event Counter	2
Dynamic Event Counter	2
Dynamic OnStar Notification Event Counter	2
Vehicle Identification Number	?????????????????
System Type	Autoliv
Manufacturing Traceability Data	AS5093E050259854
Software Module Identifier 1	013F4AA6
Software Module Identifier 2	013F4AA8
End Model Part Number	013F4AA5

Event Data (Event Record 1)

Event Recording Complete	Yes
Event Record Type	Deployment
Crash Record Locked	Yes
OnStar Deployment Status Data Sent	Yes
OnStar SDM Recorded Vehicle Velocity Change Data Sent	Yes
Deployment Event Counter	1
Event Counter	1
OnStar Notification Event Counter	1
Algorithm Active: Rear	Yes
Algorithm Active: Rollover	Yes
Algorithm Active: Side	Yes
Algorithm Active: Frontal	No
Ignition Cycles At Event	5273
Time Between Events (sec)	Data Not Available
Concurrent Event Flag Set	No
Event Severity Status: Rollover	No
Event Severity Status: Rear	Yes
Event Severity Status: Right Side	No
Event Severity Status: Left Side	No
Event Severity Status: Frontal Stage 2	No
Event Severity Status: Frontal Stage 1	No
Event Severity Status: Frontal Pretensioner	No
Driver 1st Stage Deployment Loop Commanded	No
Passenger 1st Stage Deployment Loop Commanded	No
Driver 2nd Stage Deployment Loop Commanded	No
Passenger 2nd Stage Deployment Loop Commanded	No
Driver Pretensioner Deployment Loop #1 Commanded	Yes
Passenger Pretensioner Deployment Loop #1 Commanded	Yes
Driver Pretensioner Deployment Loop #2 Commanded	Yes
Passenger Pretensioner Deployment Loop #2 Commanded	Yes
Driver Thorax Loop Commanded	No
Passenger Thorax Loop Commanded	No
Driver Row 1 Roof Rail/Head Curtain Loop Commanded	No
Passenger Row 1 Roof Rail/Head Curtain Loop Commanded	No
Driver Belt Switch Circuit Status	Buckled
Passenger Belt Switch Circuit Status	Buckled
Passenger Seat Occupancy Status	Occupied
Passenger Classification Status	Small Adult
Passenger Air Bag ON Indicator Status	On
Passenger Air Bag OFF Indicator Status	Off
Low Tire Pressure Warning Lamp	Off
SIR Warning Lamp Status	Off
SIR Warning Lamp ON/OFF Time Continuously (seconds)	655330
Number of Ignition Cycles SIR Warning Lamp was ON/OFF Continuously	289
Ignition Cycles Since DTCs Were Last Cleared at Event Enable	253
Time From Algorithm Enable to Maximum SDM Recorded Vehicle Velocity Change (msec)	190
Longitudinal SDM Recorded Vehicle Velocity Change at time of Maximum SDM Recorded Vehicle Velocity Change MPH [km/h]	18 [29]
Lateral SDM Recorded Vehicle Velocity Change at time of Maximum SDM Recorded Vehicle Velocity Change MPH [km/h]	-1 [-2]
Driver 1st Stage Time From Algorithm Enable to Deployment Command Criteria Met (msec)	Data Not Available
Driver 2nd Stage Time From Algorithm Enable to Deployment Command Criteria Met (msec)	Data Not Available
Passenger 1st Stage Time From Algorithm Enable to Deployment Command Criteria Met (msec)	Data Not Available
Passenger 2nd Stage Time From Algorithm Enable to Deployment Command Criteria Met (msec)	Data Not Available
Driver Thorax/Curtain Time From Algorithm Enable to Deployment Command Criteria Met (msec)	Data Not Available
Passenger Thorax/Curtain Time From Algorithm Enable to Deployment Command Criteria Met (msec)	Data Not Available
Driver Pretensioner Time From Algorithm Enable to Deployment Loop #1 or Loop #2 Command Criteria Met (msec)	72

Passenger Pretensioner Time From Algorithm Enable to Deployment Loop #1 or Loop #2 Command Criteria Met (msec)	72

DTCs Present at Time of Event (Event Record 1)

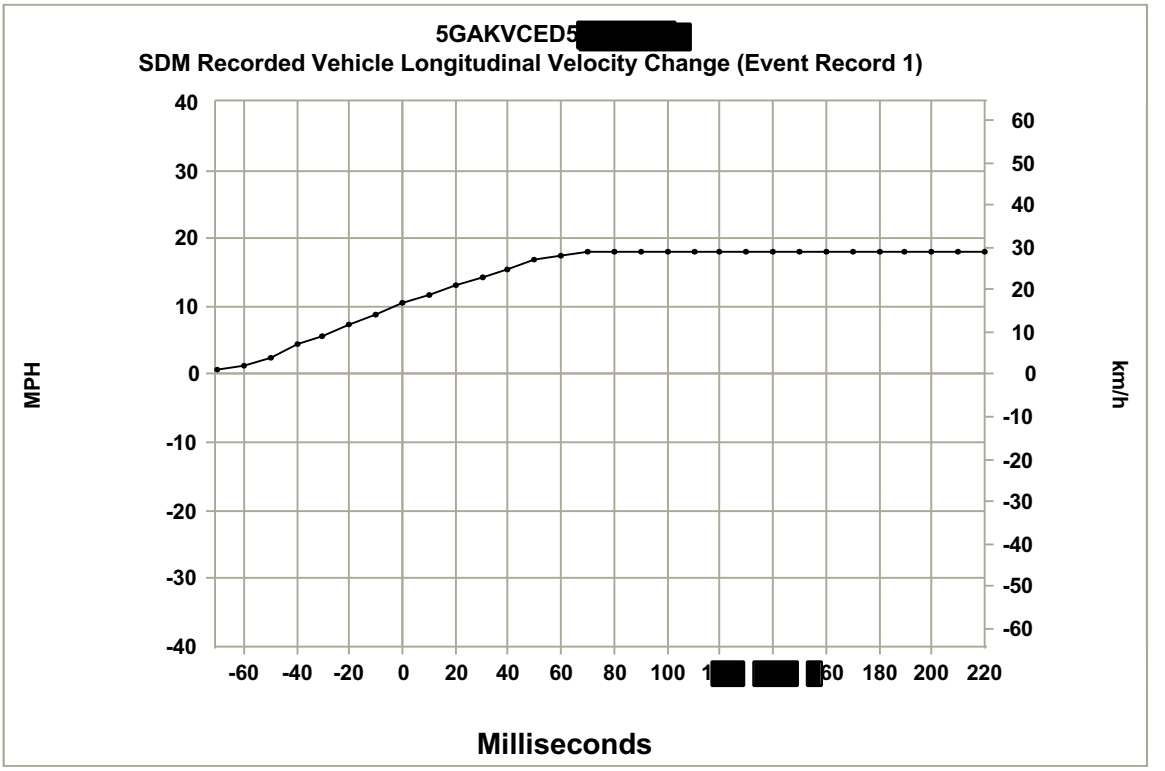
B0052-00

Pre-Crash Data -1 to -.5 sec (Event Record 1)

Times (sec)	Cruise Control Active	Cruise Control Resume Switch Active	Cruise Control Set Switch Active	Engine Torque (lb-ft [N-m])	Reduced Engine Power Mode Indicator
-1.0	No	No	No	8 [10]	Off
-0.5	No	No	No	8 [10]	Off

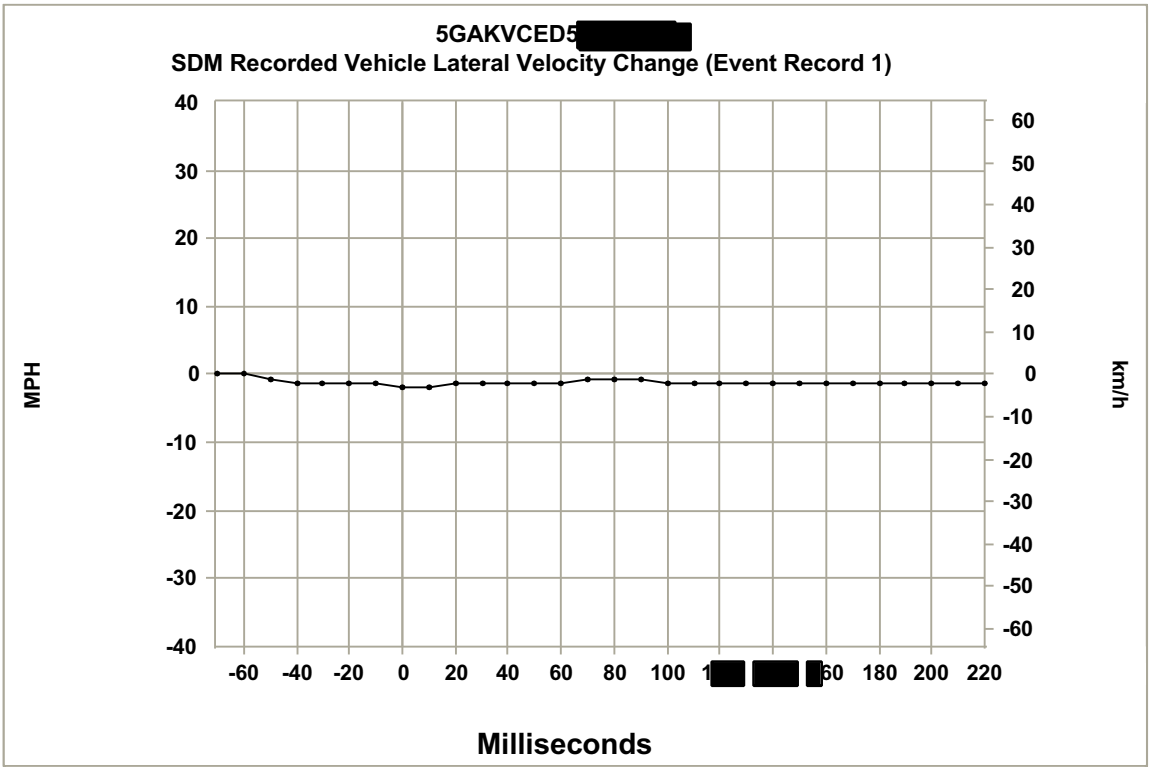
Pre-Crash Data -2.5 to -.5 sec (Event Record 1)

Times (sec)	Accelerator Pedal Position (percent)	Brake Switch Circuit State	Engine Speed	Throttle Position (%)	Vehicle Speed (MPH [km/h])
-2.5	0	Off	704	12	4 [6]
-2.0	0	Off	704	12	4 [6]
-1.5	0	On	704	11	4 [6]
-1.0	0	On	640	10	4 [6]
-0.5	0	On	576	6	4 [6]



Time (msec)	Delta-V, longitudinal (MPH)	Delta-V, longitudinal (km/h)
-70	0.6	1.0
-60	1.2	2.0
-50	2.5	4.0
-40	4.3	7.0
-30	5.6	9.0
-20	7.5	12.0
-10	8.7	14.0
0	10.6	17.0
10	11.8	19.0
20	13.0	21.0
30	14.3	23.0
40	15.5	25.0
50	16.8	27.0
60	17.4	28.0
70	18.0	29.0
80	18.0	29.0
90	18.0	29.0
100	18.0	29.0
110	18.0	29.0
120	18.0	29.0
130	18.0	29.0

Time (msec)	Delta-V, longitudinal (MPH)	Delta-V, longitudinal (km/h)
140	18.0	29.0
150	18.0	29.0
160	18.0	29.0
170	18.0	29.0
180	18.0	29.0
190	18.0	29.0
200	18.0	29.0
210	18.0	29.0
220	18.0	29.0



Time (msec)	Delta-V, lateral (MPH)	Delta-V, lateral (km/h)
-70	0.0	0.0
-60	0.0	0.0
-50	-0.6	-1.0
-40	-1.2	-2.0
-30	-1.2	-2.0
-20	-1.2	-2.0
-10	-1.2	-2.0
0	-1.9	-3.0
10	-1.9	-3.0
20	-1.2	-2.0
30	-1.2	-2.0
40	-1.2	-2.0
50	-1.2	-2.0
60	-1.2	-2.0
70	-0.6	-1.0
80	-0.6	-1.0
90	-0.6	-1.0
100	-1.2	-2.0
110	-1.2	-2.0
120	-1.2	-2.0
130	-1.2	-2.0

Time (msec)	Delta-V, lateral (MPH)	Delta-V, lateral (km/h)
140	-1.2	-2.0
150	-1.2	-2.0
160	-1.2	-2.0
170	-1.2	-2.0
180	-1.2	-2.0
190	-1.2	-2.0
200	-1.2	-2.0
210	-1.2	-2.0
220	-1.2	-2.0

SDM Recorded Vehicle Lateral Acceleration (Event Record 1)

Contains No Recorded Data

SDM Recorded Vehicle Vertical Acceleration (Event Record 1)

Contains No Recorded Data

SDM Recorded Vehicle Roll Rate (Event Record 1)

Contains No Recorded Data

Event Data (Event Record 2)

Event Recording Complete	Yes
Event Record Type	Deployment
Crash Record Locked	Yes
OnStar Deployment Status Data Sent	Yes
OnStar SDM Recorded Vehicle Velocity Change Data Sent	Yes
Deployment Event Counter	2
Event Counter	2
OnStar Notification Event Counter	2
Algorithm Active: Rear	No
Algorithm Active: Rollover	Yes
Algorithm Active: Side	No
Algorithm Active: Frontal	Yes
Ignition Cycles At Event	5273
Time Between Events (sec)	0.81
Concurrent Event Flag Set	No
Event Severity Status: Rollover	No
Event Severity Status: Rear	Yes
Event Severity Status: Right Side	No
Event Severity Status: Left Side	No
Event Severity Status: Frontal Stage 2	No
Event Severity Status: Frontal Stage 1	Yes
Event Severity Status: Frontal Pretensioner	Yes
Driver 1st Stage Deployment Loop Commanded	Yes
Passenger 1st Stage Deployment Loop Commanded	Yes
Driver 2nd Stage Deployment Loop Commanded	Yes
Passenger 2nd Stage Deployment Loop Commanded	Yes
Driver Pretensioner Deployment Loop #1 Commanded	Yes
Passenger Pretensioner Deployment Loop #1 Commanded	Yes
Driver Pretensioner Deployment Loop #2 Commanded	Yes
Passenger Pretensioner Deployment Loop #2 Commanded	Yes
Driver Thorax Loop Commanded	No
Passenger Thorax Loop Commanded	No
Driver Row 1 Roof Rail/Head Curtain Loop Commanded	No
Passenger Row 1 Roof Rail/Head Curtain Loop Commanded	No
Driver Belt Switch Circuit Status	Buckled
Passenger Belt Switch Circuit Status	Buckled
Passenger Seat Occupancy Status	Occupied
Passenger Classification Status	Small Adult
Passenger Air Bag ON Indicator Status	On
Passenger Air Bag OFF Indicator Status	Off
Low Tire Pressure Warning Lamp	Off
SIR Warning Lamp Status	Off
SIR Warning Lamp ON/OFF Time Continuously (seconds)	655330
Number of Ignition Cycles SIR Warning Lamp was ON/OFF Continuously	289
Ignition Cycles Since DTCs Were Last Cleared at Event Enable	253
Time From Algorithm Enable to Maximum SDM Recorded Vehicle Velocity Change (msec)	210
Longitudinal SDM Recorded Vehicle Velocity Change at time of Maximum SDM Recorded Vehicle Velocity Change MPH [km/h]	-14 [-23]
Lateral SDM Recorded Vehicle Velocity Change at time of Maximum SDM Recorded Vehicle Velocity Change MPH [km/h]	0 [0]
Driver 1st Stage Time From Algorithm Enable to Deployment Command Criteria Met (msec)	75
Driver 2nd Stage Time From Algorithm Enable to Deployment Command Criteria Met (msec)	174
Passenger 1st Stage Time From Algorithm Enable to Deployment Command Criteria Met (msec)	75
Passenger 2nd Stage Time From Algorithm Enable to Deployment Command Criteria Met (msec)	174
Driver Thorax/Curtain Time From Algorithm Enable to Deployment Command Criteria Met (msec)	Data Not Available
Passenger Thorax/Curtain Time From Algorithm Enable to Deployment Command Criteria Met (msec)	Data Not Available
Driver Pretensioner Time From Algorithm Enable to Deployment Loop #1 or Loop #2 Command Criteria Met (msec)	Data Not Available

Passenger Pretensioner Time From Algorithm Enable to Deployment Loop #1 or Loop #2 Command Criteria Met (msec)	Data Not Available

DTCs Present at Time of Event (Event Record 2)

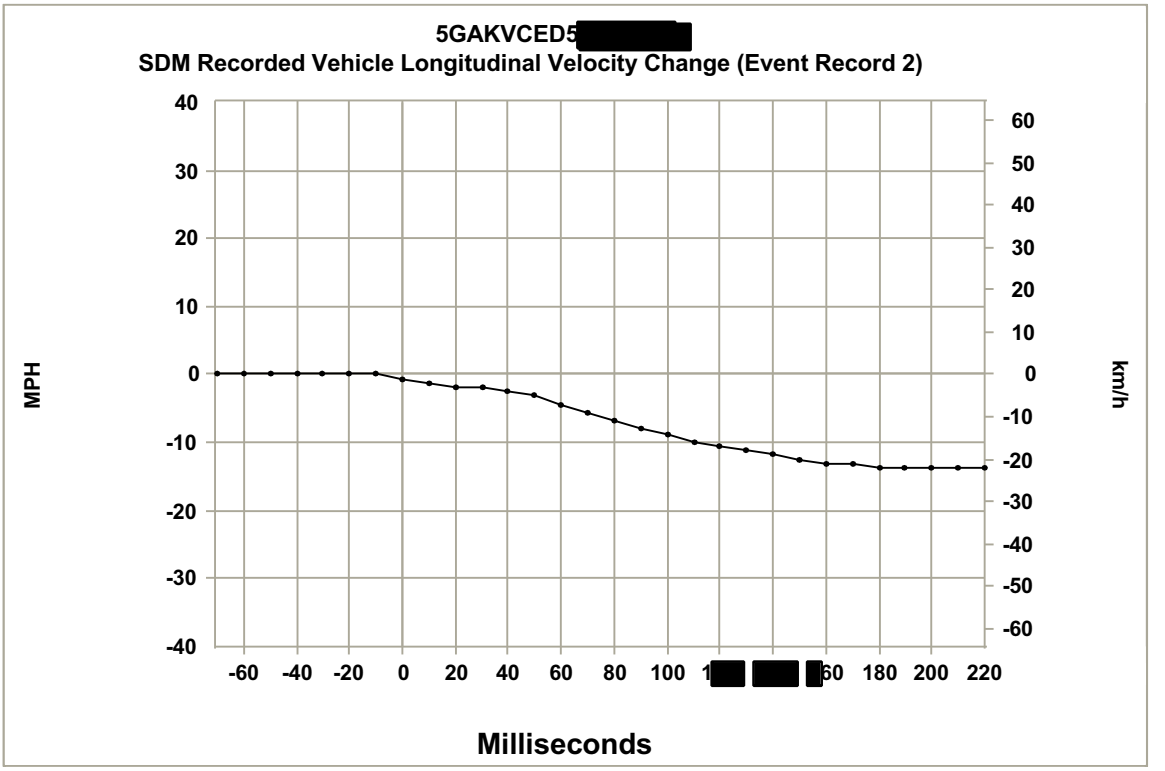
B0052-00

Pre-Crash Data -1 to -.5 sec (Event Record 2)

Times (sec)	Cruise Control Active	Cruise Control Resume Switch Active	Cruise Control Set Switch Active	Engine Torque (lb-ft [N-m])	Reduced Engine Power Mode Indicator
-1.0	No	No	No	8 [10]	Off
-0.5	No	No	No	9 [12]	Off

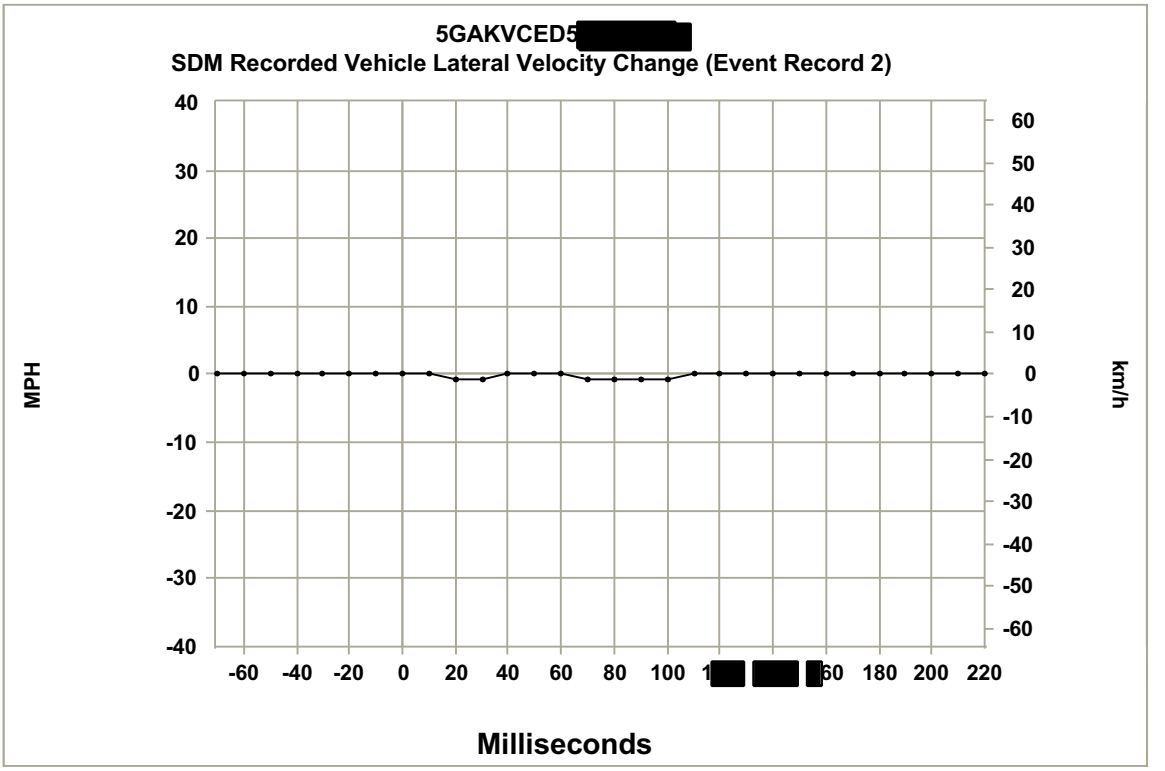
Pre-Crash Data -2.5 to -.5 sec (Event Record 2)

Times (sec)	Accelerator Pedal Position (percent)	Brake Switch Circuit State	Engine Speed	Throttle Position (%)	Vehicle Speed (MPH [km/h])
-2.5	0	Off	704	12	4 [6]
-2.0	0	On	704	11	4 [6]
-1.5	0	On	640	10	4 [6]
-1.0	0	On	576	6	4 [6]
-0.5	0	Off	704	3	11 [18]



Time (msec)	Delta-V, longitudinal (MPH)	Delta-V, longitudinal (km/h)
-70	0.0	0.0
-60	0.0	0.0
-50	0.0	0.0
-40	0.0	0.0
-30	0.0	0.0
-20	0.0	0.0
-10	0.0	0.0
0	-0.6	-1.0
10	-1.2	-2.0
20	-1.9	-3.0
30	-1.9	-3.0
40	-2.5	-4.0
50	-3.1	-5.0
60	-4.3	-7.0
70	-5.6	-9.0
80	-6.8	-11.0
90	-8.1	-13.0
100	-8.7	-14.0
110	-9.9	-16.0
120	-10.6	-17.0
130	-11.2	-18.0

Time (msec)	Delta-V, longitudinal (MPH)	Delta-V, longitudinal (km/h)
140	-11.8	-19.0
150	-12.4	-20.0
160	-13.0	-21.0
170	-13.0	-21.0
180	-13.7	-22.0
190	-13.7	-22.0
200	-13.7	-22.0
210	-13.7	-22.0
220	-13.7	-22.0



Time (msec)	Delta-V, lateral (MPH)	Delta-V, lateral (km/h)
-70	0.0	0.0
-60	0.0	0.0
-50	0.0	0.0
-40	0.0	0.0
-30	0.0	0.0
-20	0.0	0.0
-10	0.0	0.0
0	0.0	0.0
10	0.0	0.0
20	-0.6	-1.0
30	-0.6	-1.0
40	0.0	0.0
50	0.0	0.0
60	0.0	0.0
70	-0.6	-1.0
80	-0.6	-1.0
90	-0.6	-1.0
100	-0.6	-1.0
110	0.0	0.0
120	0.0	0.0
130	0.0	0.0

Time (msec)	Delta-V, lateral (MPH)	Delta-V, lateral (km/h)
140	0.0	0.0
150	0.0	0.0
160	0.0	0.0
170	0.0	0.0
180	0.0	0.0
190	0.0	0.0
200	0.0	0.0
210	0.0	0.0
220	0.0	0.0

SDM Recorded Vehicle Lateral Acceleration (Event Record 2)

Contains No Recorded Data

SDM Recorded Vehicle Vertical Acceleration (Event Record 2)

Contains No Recorded Data

SDM Recorded Vehicle Roll Rate (Event Record 2)

Contains No Recorded Data

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.

```
DPID $11
FF F0 00 FC C0 7C 00

DPID $15
01 02 03 04 07 08 05

DPID $16
06 09 0A 0D 0E 00 00

DPID $17
00 00 00 00 00 00 00

DPID $32
00 FD 14 9B 00 00 00

DPID $35
78 00 00 00 00 00 00

DID $01
41 55 30 30 30 30 45 30 30 30 30 30 30 30 30

DID $03
44 41 30 30 30 30 45 30 30 30 30 30 30 30 30

DID $05
41 48 30 30 30 30 45 30 30 30 30 30 30 30 30

DID $07
41 4A 30 30 30 30 45 30 30 30 30 30 30 30 30

DID $09
41 54 30 30 30 30 45 30 30 30 30 30 30 30 30

DID $0B
44 42 30 30 30 30 45 30 30 30 30 30 30 30 30

DID $0D
30 30 30 30 30 30 45 30 30 30 30 30 30 30 30

DID $0F
30 30 30 30 30 30 45 30 30 30 30 30 30 30 30

DID $30
02 00 02 02

DID $90
FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

DID $9A
04 01

DID $B4
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DID $C1
01 3F 4A A6

DID $C2
01 3F 4A A8
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DID $CB
01 3F 4A A5

DID $31

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 0020   5C FC FC F0 20 60 C0 40 00 00
 0030   00 00 00 54 00 00 00 09 0A 0B
 0040   0B 0B 06 B5 06 B5 06 0A 0B 0C
 0050   0C 06 06 06 06 06 00 FF FD 01
 0060   21 FD 00 00 00 00 00 00 00 00
 0070   00 00 00 00 00 00 00 00 00 00
 0080   00 00 00 00 00 00 80 52 00 13
 0090   9C 7D FF FF FF FF FF FF 18 18
 0100   80 7F 81 7F 83 7E 86 7D 88 7D
 0110   8B 7D 8D 7D 90 7C 92 7C 94 7D
 0120   96 7D 98 7D 9A 7D 9B 7D 9C 7E
 0130   9C 7E 9C 7E 9C 7D 9C 7D 9C 7D
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 0170   7D 7F 7D 7D 7F 7D 7D 7F 7D 7D
 0180   7F 7D 7D 7F 7D 7D 7F 7D 7D 7F
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 0220   7D 7D 7F 7D 7D 7F 7D 7D 7F 7D
 0230   7D 7F 7D 7D 7F 7D 7D 7F 7D 7D
 0240   7F 7D 7D 7F 7D 7D 7F 7D 7D 7F
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 0270   7F 7D 7D 7F 7D 7D 7F 7D 7D 7F
 0280   7D 7D 7F 7D 7D 7F 7D 7D 7F 7D
 0290   7D 7F 7D 7D 7F 7D 7D 7F 7D 7D
 0300   7F 7D 7D 7F 7D 7D 7F 7D 7D 7F
 0310   7D 7D 7F 7D 7D 7F 7D 7D 7F 7D
 0320   7D 7F 7D 7D 7F 7D 7D 7F 7D 7D
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 0360   7F 7D 7D 7F 7D 7D 7F 7D 7D 7F
 0370   7D 7D 7F 7D 7D 7F 7D 7D 7F 7D
 0380   7D 7F 7D 7D 7F 00 00 00 00 00
 0390   00 00 00 00 00 00 00 00 00 00
 0400   00 00 00 00 00 00 00 00 00 00
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 0430   00 00 00 00 00 00 00 00 00 00
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 0460   00 00 00 00 00 00 00 00 00 00
 0470   00 00 00 00 00 00 00 00 00 00
 0480   00 00 00 00 00 00 00 00 10 00 00
 0490   89 00 00 00 00 00 00 15 CC 19
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DID $32

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 0040   0B 0B 06 B9 06 B5 03 06 0A 0B
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 0060   21 FD 00 00 00 00 00 00 00 00
 0070   00 00 00 00 00 00 00 00 00 00
 0080   00 00 00 00 00 00 80 52 00 15
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 0120   7C 7E 7B 7F 7A 7F 78 7F 76 7E
 0130   74 7E 72 7E 71 7E 6F 7F 6E 7F
 0140   6D 7F 6C 7F 6B 7F 6A 7F 6A 7F
 0150   69 7F 69 7F 69 7F 69 7F 69 7F
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 0360   7F 7D 7D 7F 7D 7D 7F 7D 7D 7F
 0370   7D 7D 7F 7D 7D 7F 7D 7D 7F 7D
 0380   7D 7F 7D 7D 7F 00 11 00 00 00
 0390   11 00 11 70 11 01 12 00 00 00
 0400   8A 00 00 00 21 00 00 00 11 00
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 0450   00 00 00 00 00 00 00 00 00 00
 0460   00 00 00 00 00 00 00 00 00 00
 0470   00 00 00 00 00 00 00 00 00 00
 0480   00 00 00 00 00 00 00 10 00 00
 0490   89 00 00 00 00 00 00 15 CC 19

DID $33

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 0020   FF FF FF FF FF FF FF FF FF FF
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 0210   FF FF FF FF FF FF FF FF FF FF
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0240   FF FF FF FF FF FF FF FF FF FF
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0260   FF FF FF FF FF FF FF FF FF FF
0270   FF FF FF FF FF FF FF FF FF FF
0280   FF FF FF FF FF FF FF FF FF FF
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0470   FF FF FF FF FF FF FF FF FF FF
0480   FF FF FF FF FF FF FF FF FF FF
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