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/Frame Number	[redacted]
User	[redacted]
Case Number	[redacted]
EDR Data Imaging Date	[redacted]
Crash Date	[redacted]
Filename	[redacted]
Saved on	[redacted]
Imaged with CDR version	Crash Data Retrieval Tool 21.5
Imaged with Software Licensed to (Company Name)	Connecticut Transportation Institute
Reported with CDR version	Crash Data Retrieval Tool 23.0
Reported with Software Licensed to (Company Name)	Connecticut Transportation Institute
EDR Device Type	Airbag Control Module
Event(s) recovered	Front/Rear (2), Side (2), Rollover (2)

Comments

No comments entered.

Data Limitations

CDR Record Information:

- Due to limitations of the data recorded by the airbag ECU, such as the resolution, data range, sampling interval, time period of the recording, and the items recorded, the information provided by this data may not be sufficient to capture the entire crash.
- Pre-Crash data is recorded in discrete intervals. Due to different refresh rates within the vehicle's electronics, the data recorded may not be synchronous to each other.
- Airbag ECU data should be used in conjunction with other physical evidence obtained from the vehicle and the surrounding circumstances.
- If the airbags did not deploy or the pretensioners did not operate during an event that meets a specified recording threshold, it is called a Non-Deployment Event. Data from a Non-Deployment Event can be overwritten by a succeeding event that meets the specified recording threshold. If the airbag(s) deploy or the pretensioners are operated, it is called a Deployment Event. Deployment Event data cannot be overwritten or deleted by the airbag ECU following that event.
- If power supply to the airbag ECU is lost during an event, all or part of the data may not be recorded.
- "Diagnostic Trouble Codes" are information about faults when a recording trigger is established. Various diagnostic trouble codes could be set and recorded due to component or system damage during an accident.
- The airbag ECU records only diagnostic information related to the airbag system. It does not record diagnostic information related to other vehicle systems.
- The TaSCAN, Global Tech Stream, or Intelligent Tester II devices (or any other Toyota genuine diagnostic tool) can be used to obtain detailed information on the diagnostic trouble codes from the airbag system, as well as diagnostic information from other systems. However, in some cases, the diagnostic trouble codes of the airbag system recorded by the airbag ECU when the event occurred may not match the diagnostic trouble codes read out when the diagnostic tool is used.

General Information:

- The data recording specifications of Toyota¶ airbag ECUs are divided into the following categories. The specifications for 12EDR or later are designed to be compatible with NHTSA¶ 49CFR Part 563 rule.
  - 00EDR / 02EDR / 04EDR / 06EDR / 10EDR / 12EDR / 13EDR / 15EDR / 17EDR / 19EDR / 21EDR / 22EDR
- The airbag ECU records data for all or some of the following accident types: frontal crash, rear crash , side crash, and rollover events. Depending on the installed airbag ECU, data for side crash and/or rollover events may not be recorded.
- This airbag ECU records post-crash data, and depending on the airbag ECU, may record pre-crash data.
  - If a single event occurs independently, the data for that event is recorded on a one-to-one basis.
  - If multiple events occur successively (within a period of approximately 500ms), the establishment of the recording trigger for the first event is defined as the "pre-crash recording trigger". Pre-crash data for the first event and post-crash data for each successive event is then recorded.
- The airbag ECU has two recording pages (memory maps) to store pre-crash data. Additionally, to store post-crash data, the airbag ECU has two recording pages for each accident type: two pages for frontal and rear crash, two pages for a side crash, and two pages for rollover event.
- The data recorded by the airbag ECU includes correlating information between each previously occurring event (i.e., information that clarifies the collision event sequence. This correlation information consists of the following items.

- Time from Previous Pre-Crash TRG
- Linked Pre-Crash Page
- Time from Pre-Crash TRG
- TRG Count
- Previous Crash Type

- The point in time at which the recording trigger is established is regarded as time zero for the recorded data.
- The recording trigger judgment threshold value differs depending on the collision type (i.e., frontal crash, rear crash, side crash, or rollover event).
- Time series data for side crash may have 24 or 25 sampling points.
- Some of the data recorded by the airbag ECU is transmitted to the airbag ECU from various vehicle control modules by the vehicle's Controller Area Network (CAN).
- In some cases, the airbag ECU part number printed on the ECU label may not match the airbag ECU part number that the CDR tool reports. The part number retrieved by the CDR tool should be considered as the official ECU part number.

Data Element Sign Convention:
The following table provides an explanation of the sign notation for data elements that may be included in this CDR report.

Data Element Name	Positive Sign Notation Indicates
Max. Longitudinal Delta-V	Forward
Longitudinal Delta-V	Forward
Max. Lateral Delta-V , B-Pillar Sensor	Outside to Inside
Max. Lateral Delta-V , C-Pillar Sensor	Outside to Inside
Max. Lateral Delta-V , Slide Door Sensor	Outside to Inside
Lateral Delta-V , B-Pillar Sensor	Outside to Inside
Lateral Delta-V , C-Pillar Sensor	Outside to Inside
Lateral Delta-V , Slide Door Sensor	Outside to Inside
Lateral Delta-V , Airbag ECU Sensor	Left to Right
Roll Angle Peak	Clockwise Rotation
Roll Angle	Clockwise Rotation
Lateral Acceleration , Airbag ECU Sensor *	Right to Left

* For sensing a rollover

Data Definitions:

- The "ON" setting for the "Freeze Signal" indicates a state in which the non-volatile memory can not be overwritten or deleted by the airbag ECU. After "Freeze Signal" has been turned ON, subsequent events will not be recorded.
- "Recording Status" indicates a state in which all recorded event data has been written into the non-volatile memory, or a state in which this process was interrupted and not fully written into the non-volatile memory. If "Recording Status" is "Incomplete", recorded event data may not be valid.
- "Time to Deployment Command" indicates the time between recording trigger establishment and the determination of airbag deployment. This value may differ from the actual time it takes for the airbag to fully deploy.
- Even if an airbag/pretensioner did not deploy due to the "front passenger airbag disable switch and/or "RSCA Disable Switch" in the ON position or other disabling criteria are met, the "Time to deployment command" data element for that airbag/pretensioner may still be recorded.
- "Engine RPM" indicates the number of engine revolutions, not the number of motor revolutions. The recorded value has an upper limit of 5,200 rpm. Resolution is 400 rpm and the value is rounded down and recorded. For example, if the actual engine speed is 799 rpm, the recorded value will be 400 rpm.
- The upper limit for the recorded "Vehicle Speed" value is 122 km/h (75.8mph). Resolution is 2km/h (1.2mph) and the value is rounded down and recorded. The accuracy of the "Vehicle Speed" value can be affected by various factors. These include, but not limited, to the following.
  - Significant changes in the tire¶s rolling radius
  - Wheel lock and wheel slip
- "Accelerator Rate" value is recorded as a voltage. The voltage increases as the driver depresses the accelerator.
- The "Drive" setting for the "Shift Position" value indicates the shift position state is other than "R,"(Reverse), "N" (Neutral), or "P" (Park). If sequential shift had been used, "Invalid" may be displayed.
- Depending on the type of occupant sensor installed in the vehicle, one of the following three recording formats for "Occupancy Status, Passenger" will be utilized.
  - Occupied / Not Occupied
  - Adult / Child / Not Occupied
  - AM50 / AF05 / Child / Not Occupied
- Resolution of the "Air Bag Warning Lamp ON Time Since DTC was Set" is 15 minutes, and the value is rounded down and recorded.
- "Longitudinal Delta-V" indicates the change in forward speed after establishment of the recording trigger. This does not refer to vehicle speed, and it does not include the change in speed during the period from the start of the actual collision to establishment of the recording trigger.
- Depending on the specifications, "Roll Angle peak" can be recorded as absolute value.
- "Roll Angle peak" may not always match the peak value within the "Roll Angle" sampling points due to differences in data calculation method.
- For "Lateral Delta-V", the sensor location (B-pillar, front door, C-pillar, and slide door) shows the outline of a typical sensor position. Sensory location can be confirmed using the repair manual.
- "Time from Previous Pre-Crash TRG" indicates the time between the establishment of an event's pre-crash recording trigger to the

establishment of a more recent event's pre-crash recording trigger. The upper limit for the recorded value is 16,381 milliseconds. In the event of establishment of the first pre-crash recording trigger after the ignition is switched ON, the upper limit value(max value) is recorded.

- "TRG Count" indicates a calculated value of the number of times recording triggers have been established for all crash types. The sequence in which each event occurred can be verified from the "TRG Count". The smaller the "TRG Count" value, the older the data. The upper limit for the recorded value is 65,533 times. When more than one event reaches the upper limit, the actual "TRG Count" may be greater than what is displayed for that event.
- "Linked Pre-Crash Page" is used to link 'paged" pre-crash data with 'paged" post-crash data. When old pre-crash data is overwritten by new pre-crash data, the "Linked Pre-Crash Page" value may record a page number that is not actually linked.
- Resolution of the "Time from Pre-Crash to TRG" is 100 [ms], and the value is rounded down and recorded.

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System Status at Time of Retrieval

ECU Part Number	89170-0R020
ECU Generation	04EDR
Recording Status, All Pages	Complete
Freeze Signal	ON
Freeze Signal Factor	Front Airbag Deployment Front Pretensioner Deployment
Diagnostic Trouble Codes Exist	No
Time from Previous Pre Crash TRG (msec)	16381 or greater
Latest Pre-Crash Page	1
Contains Unlinked Pre-Crash Data	No

Event Record Summary at Retrieval

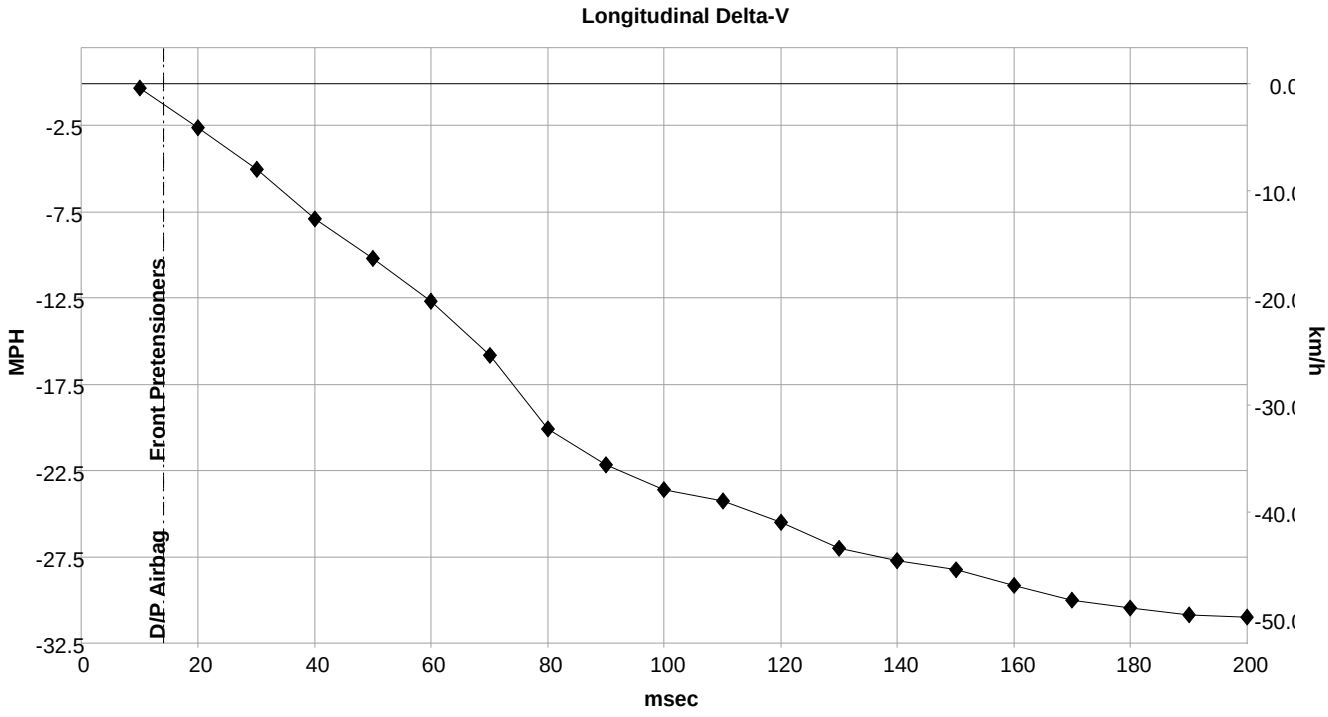
Events Recorded	TRG Count	Crash Type	Time (msec)	Pre-Crash and/or DTC Data Recording Status	Event & Crash Pulse Data Recording Status
Most Recent Event	20	Front/Rear Crash	0	Complete (Page 1)	Complete (Front/Rear Page 1)
1st Prior Event	19	Side Crash	-1	Complete (Page 1)	Complete (Side Page 0)
2nd Prior Event	18	Front/Rear Crash	-16381 or greater	Complete (Page 0)	Complete (Front/Rear Page 0)
3rd Prior Event	15	Rollover	N/A	N/A	Complete (Rollover Page 0)
4th Prior Event	14	Rollover	N/A	N/A	Complete (Rollover Page 1)
5th Prior Event	12	Side Crash	N/A	N/A	Complete (Side Page 1)

System Status at Event (Most Recent Event, TRG 20)

Recording Status, Front/Rear Crash Info.	Complete
Crash Type	Front/Rear Crash
TRG Count (times)	20
Previous Crash Type	Side
Time from Pre-Crash TRG (msec)	1
Linked Pre-Crash Page	1
Time to Deployment Command, Front Airbag, Driver (msec)	14
Time to Deployment Command, Front Airbag, Passenger (msec)	14
Event Severity Status, Driver	Level 3
Event Severity Status, Passenger	N/A
Time to Deployment Command, Pretensioner (msec)	14

Longitudinal Crash Pulse (Most Recent Event, TRG 20 - table 1 of 2)

Recording Status, Time Series Data	Complete
Max Longitudinal Delta-V (MPH [km/h])	-30.9 [-49.8]



Longitudinal Crash Pulse (Most Recent Event, TRG 20 - table 2 of 2)

Time (msec)	Longitudinal Delta-V (MPH [km/h])
10	-0.3 [-0.4]
20	-2.6 [-4.1]
30	-5.0 [-8.0]
40	-7.9 [-12.7]
50	-10.2 [-16.4]
60	-12.7 [-20.4]
70	-15.8 [-25.4]
80	-20.1 [-32.3]
90	-22.1 [-35.6]
100	-23.6 [-37.9]
110	-24.3 [-39.0]
120	-25.5 [-41.0]
130	-27.0 [-43.4]
140	-27.7 [-44.5]
150	-28.2 [-45.4]
160	-29.1 [-46.9]
170	-30.0 [-48.3]
180	-30.4 [-49.0]
190	-30.9 [-49.6]
200	-30.9 [-49.8]

DTCs Present at Time of Event (Most Recent Event, TRG 20)

Recording Status, Diagnostic	Complete
Ignition Cycle Since DTC was Set (times)	0
Airbag Warning Lamp ON Time Since DTC was Set (min)	0
Diagnostic Trouble Codes	None

Pre-Crash Data, 1 Sample (Most Recent Event, TRG 20)

Recording Status, Pre-Crash/Occupant	Complete
Time from Pre-Crash to TRG (msec)	900
Buckle Switch, Driver	Buckled
Buckle Switch, Passenger	Unbuckled
Occupancy Status, Passenger	Not Occupied
Seat Position, Driver	Rearward
Shift Position	Drive

Pre-Crash Data, -5 to 0 seconds (Most Recent Event, TRG 20)

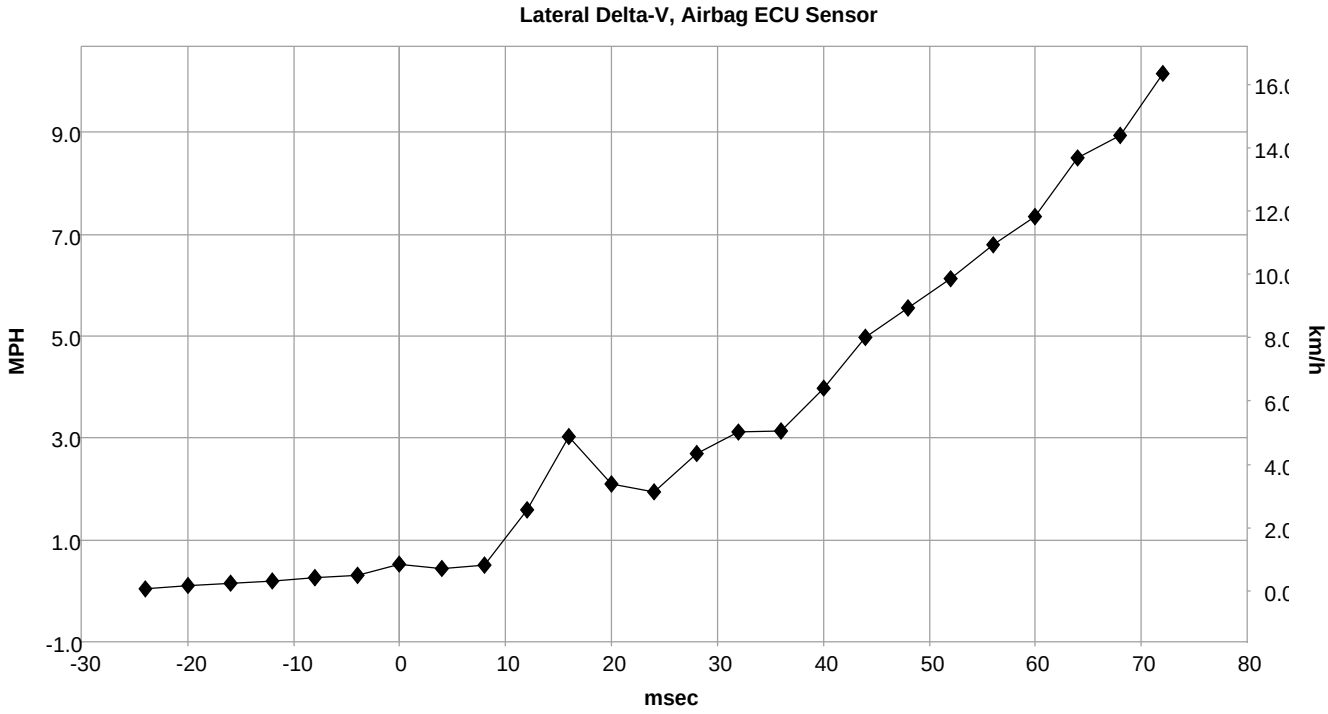
Time (sec)	-4.9	-3.9	-2.9	-1.9	-0.9	0 (TRG)
Vehicle Speed (MPH [km/h])	34.8 [56]	34.8 [56]	36 [58]	34.8 [56]	34.8 [56]	34.8 [56]
Brake Switch	OFF	OFF	OFF	OFF	OFF	ON
Accelerator Rate (V)	1.09	1.09	0.94	0.98	0.98	0.78
Engine RPM (RPM)	1,200	1,200	1,200	1,200	1,200	1,200

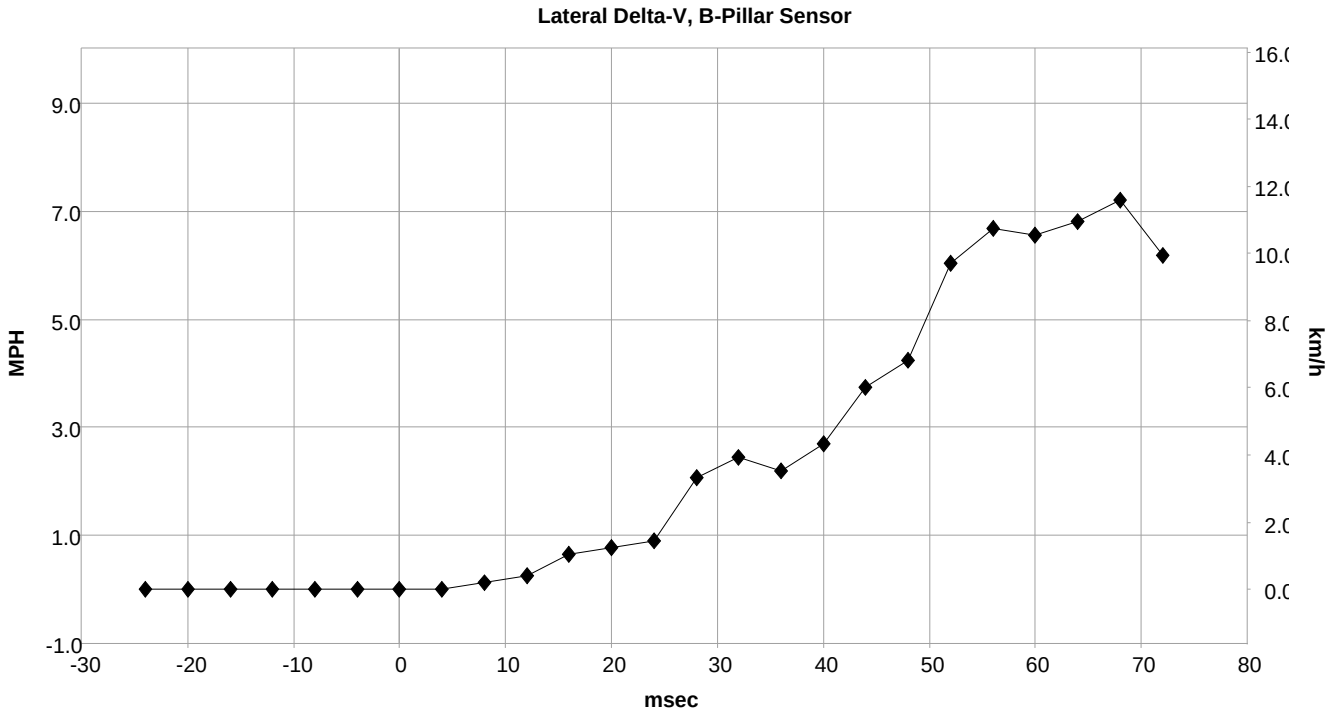
System Status at Event (1st Prior Event, TRG 19)

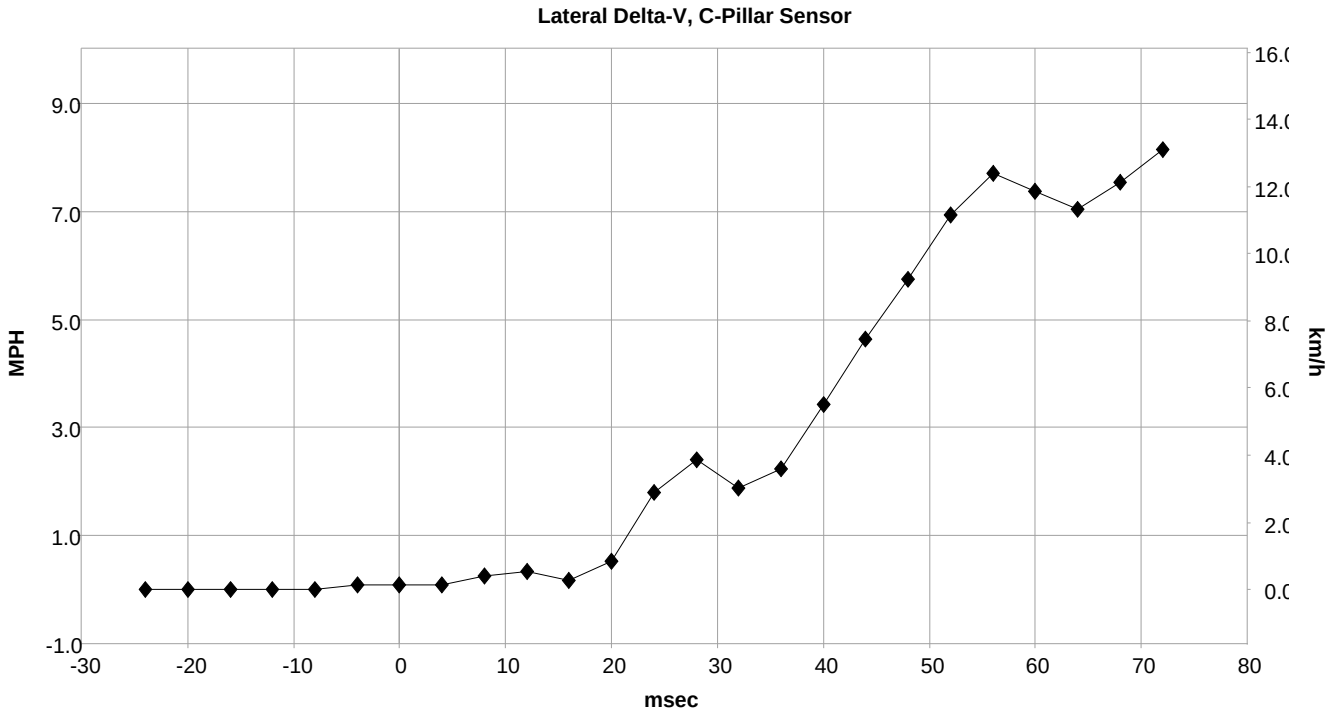
Recording Status, Side Crash Info.	Complete
Crash Type	Side Crash
TRG Count (times)	19
Recorded Side	Driver's Side
Previous Crash Type	No Event
Time from Pre-Crash TRG (msec)	0
Linked Pre-Crash Page	1
Time to Deployment Command, B-Pillar Sensor (msec)	Not Commanded
Time to Deployment Command, C-Pillar Sensor (msec)	Not Commanded

Lateral Crash Pulse (1st Prior Event, TRG 19 - table 1 of 2)

Recording Status, Time Series Data	Complete
Time from TRG to Next Sample (msec)	0
Max Lateral Delta-V, B-Pillar Sensor (MPH [km/h])	7.2 [11.6]
Max Lateral Delta-V, C-Pillar Sensor (MPH [km/h])	8.1 [13.1]






Lateral Delta-V, C-Pillar Sensor
MPH
km/h
msec
9.0
7.0
5.0
3.0
1.0
-1.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
-30
-20
-10
0
10
20
30
40
50
60
70
80

Lateral Crash Pulse (1st Prior Event, TRG 19 - table 2 of 2)

Time (msec)	Lateral Delta-V, Airbag ECU Sensor (MPH [km/h])	Lateral Delta-V, B-Pillar Sensor (MPH [km/h])	Lateral Delta-V, C-Pillar Sensor (MPH [km/h])
-24	0.1 [0.1]	0.0 [0.0]	0.0 [0.0]
-20	0.1 [0.2]	0.0 [0.0]	0.0 [0.0]
-16	0.2 [0.2]	0.0 [0.0]	0.0 [0.0]
-12	0.2 [0.3]	0.0 [0.0]	0.0 [0.0]
-8	0.3 [0.4]	0.0 [0.0]	0.0 [0.0]
-4	0.3 [0.5]	0.0 [0.0]	0.1 [0.1]
0	0.5 [0.9]	0.0 [0.0]	0.1 [0.1]
4	0.4 [0.7]	0.0 [0.0]	0.1 [0.1]
8	0.5 [0.8]	0.1 [0.2]	0.3 [0.4]
12	1.6 [2.6]	0.3 [0.4]	0.3 [0.6]
16	3.0 [4.9]	0.6 [1.0]	0.2 [0.3]
20	2.1 [3.4]	0.8 [1.2]	0.5 [0.8]
24	1.9 [3.1]	0.9 [1.4]	1.8 [2.9]
28	2.7 [4.4]	2.1 [3.3]	2.4 [3.9]
32	3.1 [5.0]	2.4 [3.9]	1.9 [3.0]
36	3.1 [5.0]	2.2 [3.5]	2.2 [3.6]
40	4.0 [6.4]	2.7 [4.3]	3.4 [5.5]
44	5.0 [8.0]	3.7 [6.0]	4.6 [7.4]
48	5.6 [8.9]	4.2 [6.8]	5.7 [9.2]
52	6.1 [9.9]	6.0 [9.7]	6.9 [11.2]
56	6.8 [10.9]	6.7 [10.8]	7.7 [12.4]
60	7.4 [11.8]	6.6 [10.6]	7.4 [11.9]
64	8.5 [13.7]	6.8 [11.0]	7.0 [11.3]
68	8.9 [14.4]	7.2 [11.6]	7.5 [12.1]
72	10.2 [16.4]	6.2 [9.9]	8.1 [13.1]

DTCs Present at Time of Event (1st Prior Event, TRG 19)

Recording Status, Diagnostic	Complete
Ignition Cycle Since DTC was Set (times)	0
Airbag Warning Lamp ON Time Since DTC was Set (min)	0
Diagnostic Trouble Codes	None

Pre-Crash Data, 1 Sample (1st Prior Event, TRG 19)

Recording Status, Pre-Crash/Occupant	Complete
Time from Pre-Crash to TRG (msec)	900
Buckle Switch, Driver	Buckled
Buckle Switch, Passenger	Unbuckled
Occupancy Status, Passenger	Not Occupied
Seat Position, Driver	Rearward
Shift Position	Drive

Pre-Crash Data, -5 to 0 seconds (1st Prior Event, TRG 19)

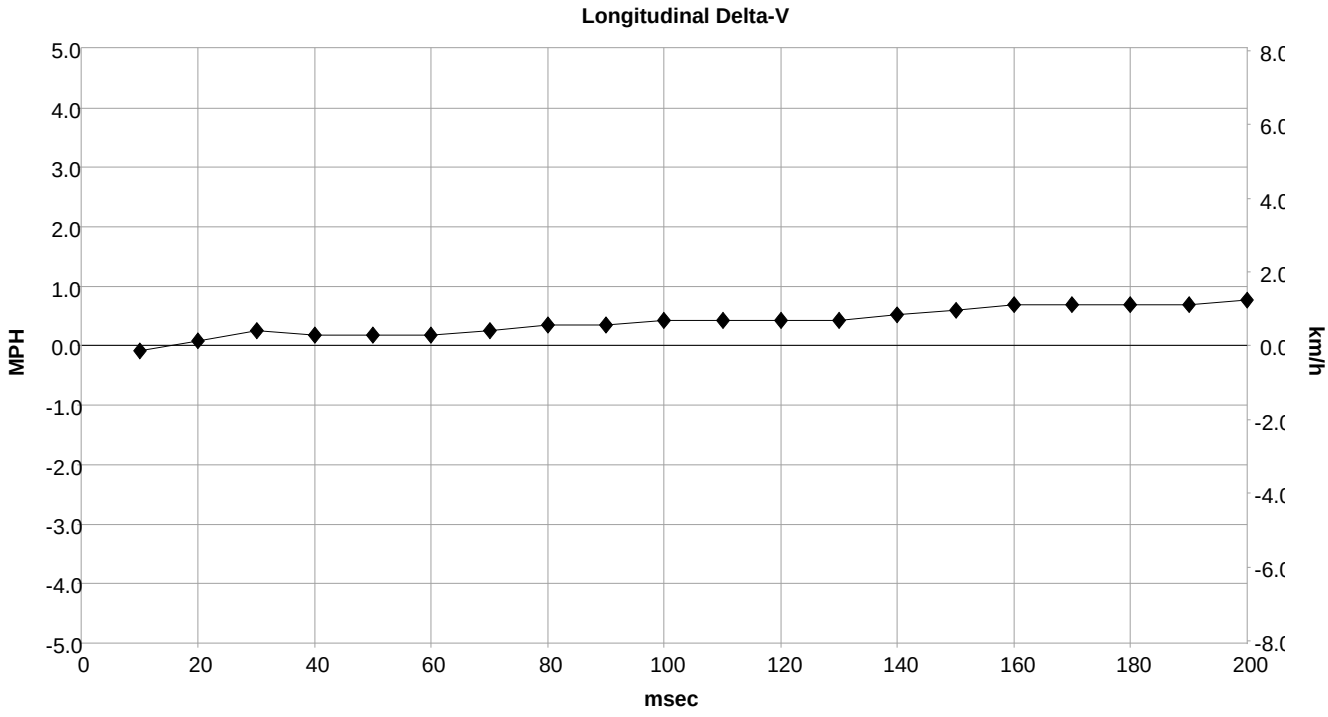
Time (sec)	-4.9	-3.9	-2.9	-1.9	-0.9	0 (TRG)
Vehicle Speed (MPH [km/h])	34.8 [56]	34.8 [56]	36 [58]	34.8 [56]	34.8 [56]	34.8 [56]
Brake Switch	OFF	OFF	OFF	OFF	OFF	ON
Accelerator Rate (V)	1.09	1.09	0.94	0.98	0.98	0.78
Engine RPM (RPM)	1,200	1,200	1,200	1,200	1,200	1,200

System Status at Event (2nd Prior Event, TRG 18)

Recording Status, Front/Rear Crash Info.	Complete
Crash Type	Front/Rear Crash
TRG Count (times)	18
Previous Crash Type	No Event
Time from Pre-Crash TRG (msec)	0
Linked Pre-Crash Page	0
Time to Deployment Command, Front Airbag, Driver (msec)	Not Commanded
Time to Deployment Command, Front Airbag, Passenger (msec)	Not Commanded
Event Severity Status, Driver	N/A
Event Severity Status, Passenger	N/A
Time to Deployment Command, Pretensioner (msec)	Not Commanded

Longitudinal Crash Pulse (2nd Prior Event, TRG 18 - table 1 of 2)

Recording Status, Time Series Data	Complete
Max Longitudinal Delta-V (MPH [km/h])	0.8 [1.2]



Longitudinal Crash Pulse (2nd Prior Event, TRG 18 - table 2 of 2)

Time (msec)	Longitudinal Delta-V (MPH [km/h])
10	-0.1 [-0.1]
20	0.1 [0.1]
30	0.3 [0.4]
40	0.2 [0.3]
50	0.2 [0.3]
60	0.2 [0.3]
70	0.3 [0.4]
80	0.3 [0.6]
90	0.3 [0.6]
100	0.4 [0.7]
110	0.4 [0.7]
120	0.4 [0.7]
130	0.4 [0.7]
140	0.5 [0.8]
150	0.6 [1.0]
160	0.7 [1.1]
170	0.7 [1.1]
180	0.7 [1.1]
190	0.7 [1.1]
200	0.8 [1.2]

DTCs Present at Time of Event (2nd Prior Event, TRG 18)

Recording Status, Diagnostic	Complete
Ignition Cycle Since DTC was Set (times)	0
Airbag Warning Lamp ON Time Since DTC was Set (min)	0
Diagnostic Trouble Codes	None

Pre-Crash Data, 1 Sample (2nd Prior Event, TRG 18)

Recording Status, Pre-Crash/Occupant	Complete
Time from Pre-Crash to TRG (msec)	900
Buckle Switch, Driver	Buckled
Buckle Switch, Passenger	Unbuckled
Occupancy Status, Passenger	Not Occupied
Seat Position, Driver	Rearward
Shift Position	Drive

Pre-Crash Data, -5 to 0 seconds (2nd Prior Event, TRG 18)

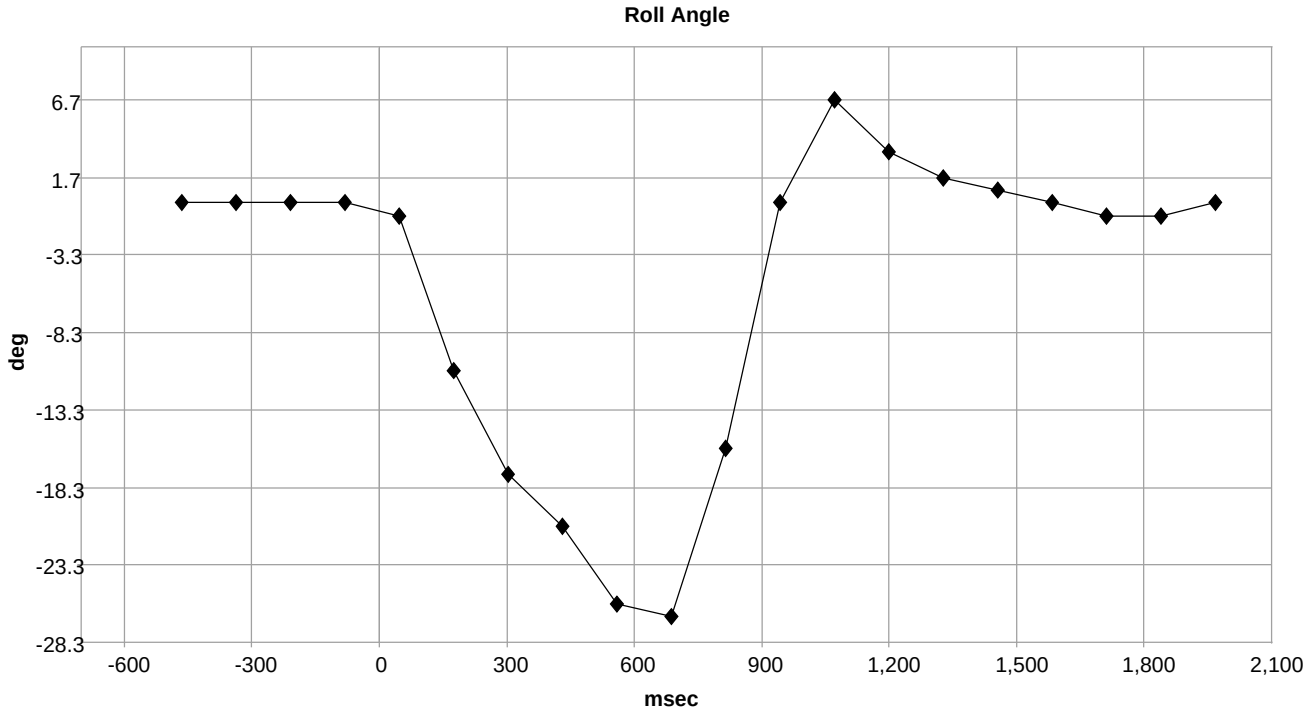
Time (sec)	-4.9	-3.9	-2.9	-1.9	-0.9	0 (TRG)
Vehicle Speed (MPH [km/h])	31.1 [50]	29.8 [48]	29.8 [48]	29.8 [48]	28.6 [46]	28.6 [46]
Brake Switch	OFF	OFF	OFF	OFF	OFF	OFF
Accelerator Rate (V)	0.86	0.86	0.78	0.78	0.78	0.78
Engine RPM (RPM)	1,200	800	800	800	800	800

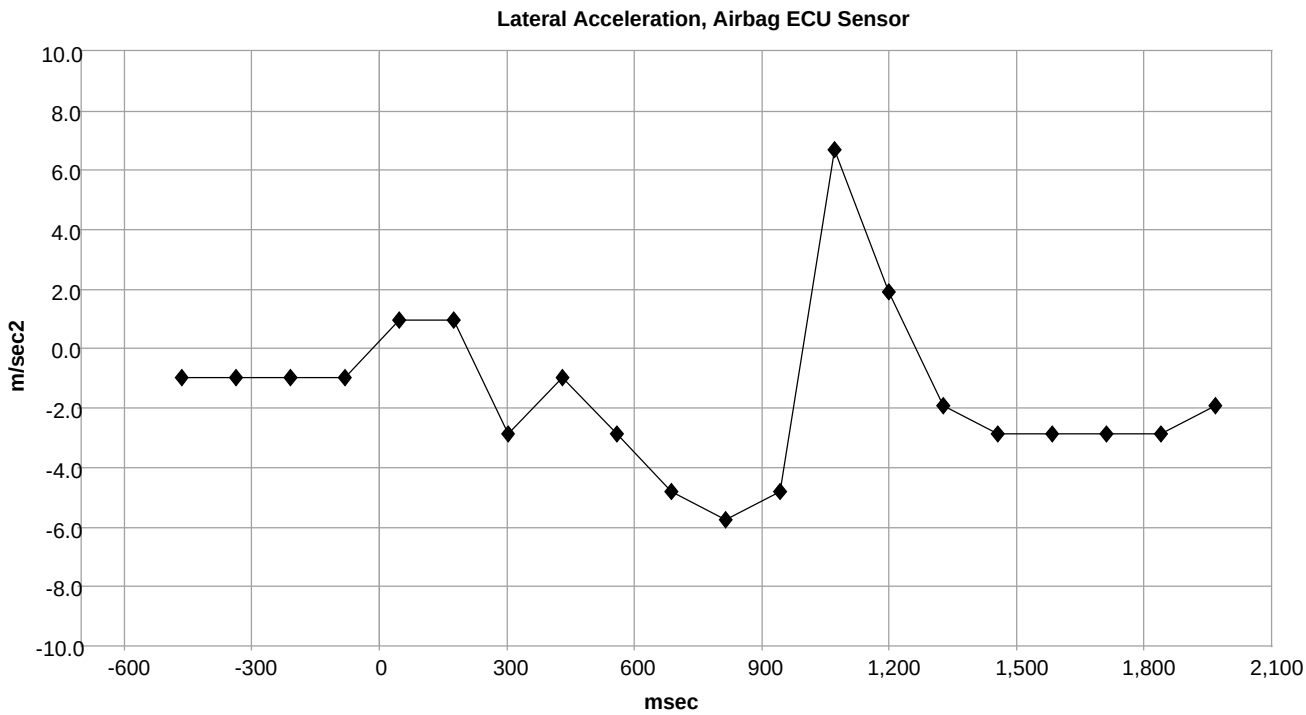
System Status at Event (3rd Prior Event, TRG 15)

Recording Status, Rollover Crash Info.	Complete
Crash Type	Rollover
TRG Count (times)	15
Previous Crash Type	No Event
Time from Pre-Crash TRG (msec)	0
Linked Pre-Crash Page	1
Time to Deployment Command, Rollover Airbag (msec)	Not Commanded

Rollover Crash Pulse (3rd Prior Event, TRG 15 - table 1 of 2)

Recording Status, Time Series Data	Complete
Time from TRG to Next Sample (msec)	47
Roll Angle Peak (degrees)	27.5





Rollover Crash Pulse (3rd Prior Event, TRG 15 - table 2 of 2)

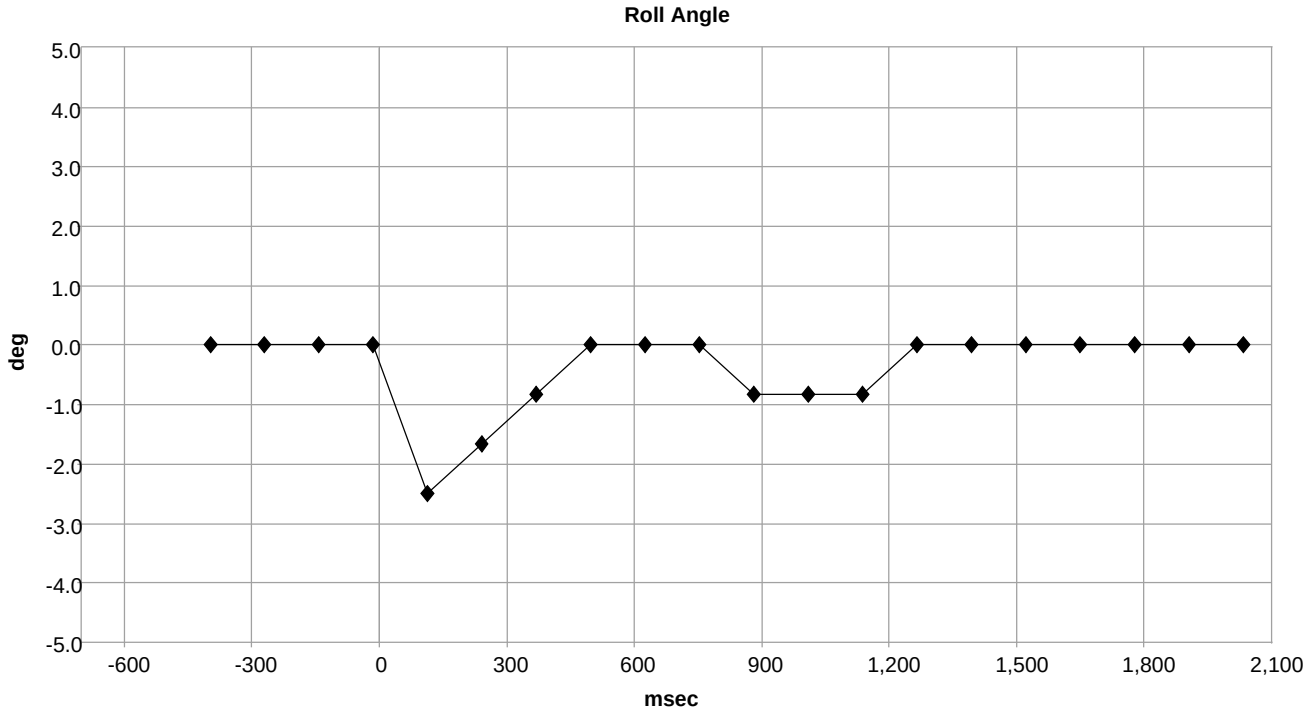
Time (msec)	Roll Angle (degrees)	Lateral Acceleration, Airbag ECU Sensor (m/sec^2)
-465	0.0	-1.0
-337	0.0	-1.0
-209	0.0	-1.0
-81	0.0	-1.0
47	-0.8	1.0
175	-10.8	1.0
303	-17.5	-2.9
431	-20.8	-1.0
559	-25.8	-2.9
687	-26.7	-4.8
815	-15.8	-5.7
943	0.0	-4.8
1071	6.7	6.7
1199	3.3	1.9
1327	1.7	-1.9
1455	0.8	-2.9
1583	0.0	-2.9
1711	-0.8	-2.9
1839	-0.8	-2.9
1967	0.0	-1.9

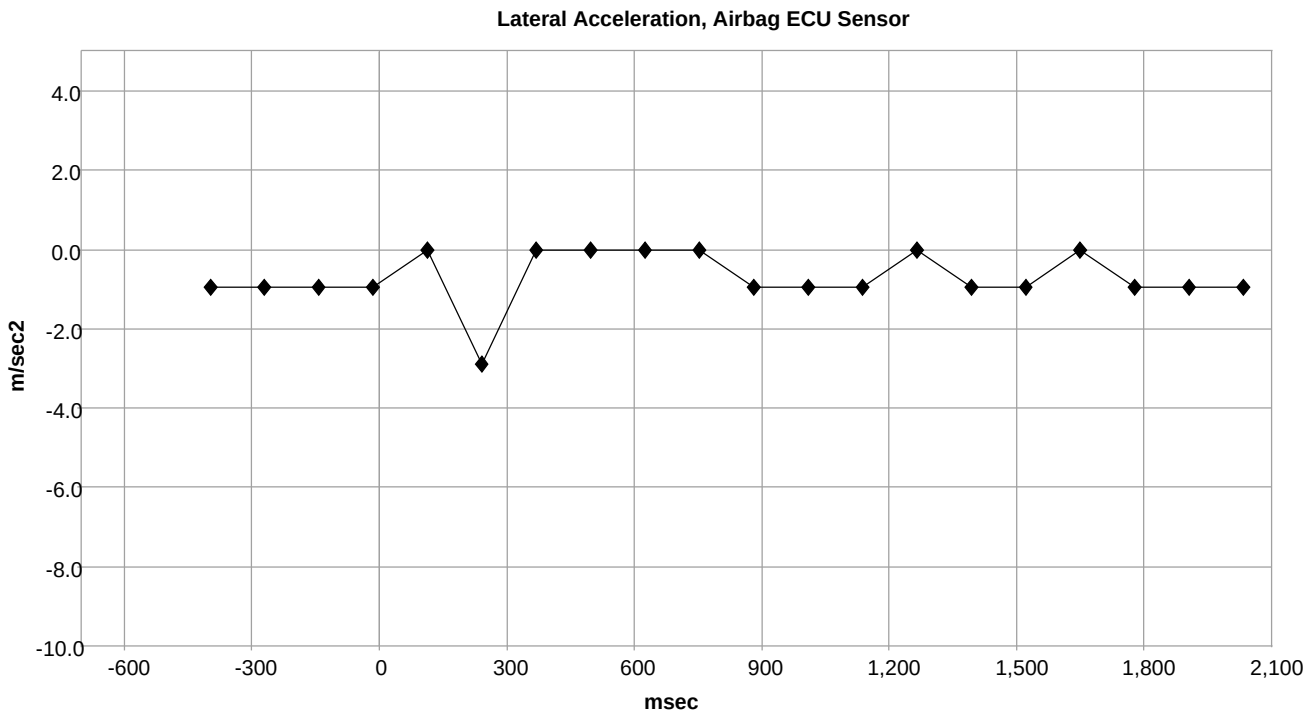
System Status at Event (4th Prior Event, TRG 14)

Recording Status, Rollover Crash Info.	Complete
Crash Type	Rollover
TRG Count (times)	14
Previous Crash Type	Frontal/Rear
Time from Pre-Crash TRG (msec)	54
Linked Pre-Crash Page	0
Time to Deployment Command, Rollover Airbag (msec)	Not Commanded

Rollover Crash Pulse (4th Prior Event, TRG 14 - table 1 of 2)

Recording Status, Time Series Data	Complete
Time from TRG to Next Sample (msec)	114
Roll Angle Peak (degrees)	3.1





Rollover Crash Pulse (4th Prior Event, TRG 14 - table 2 of 2)

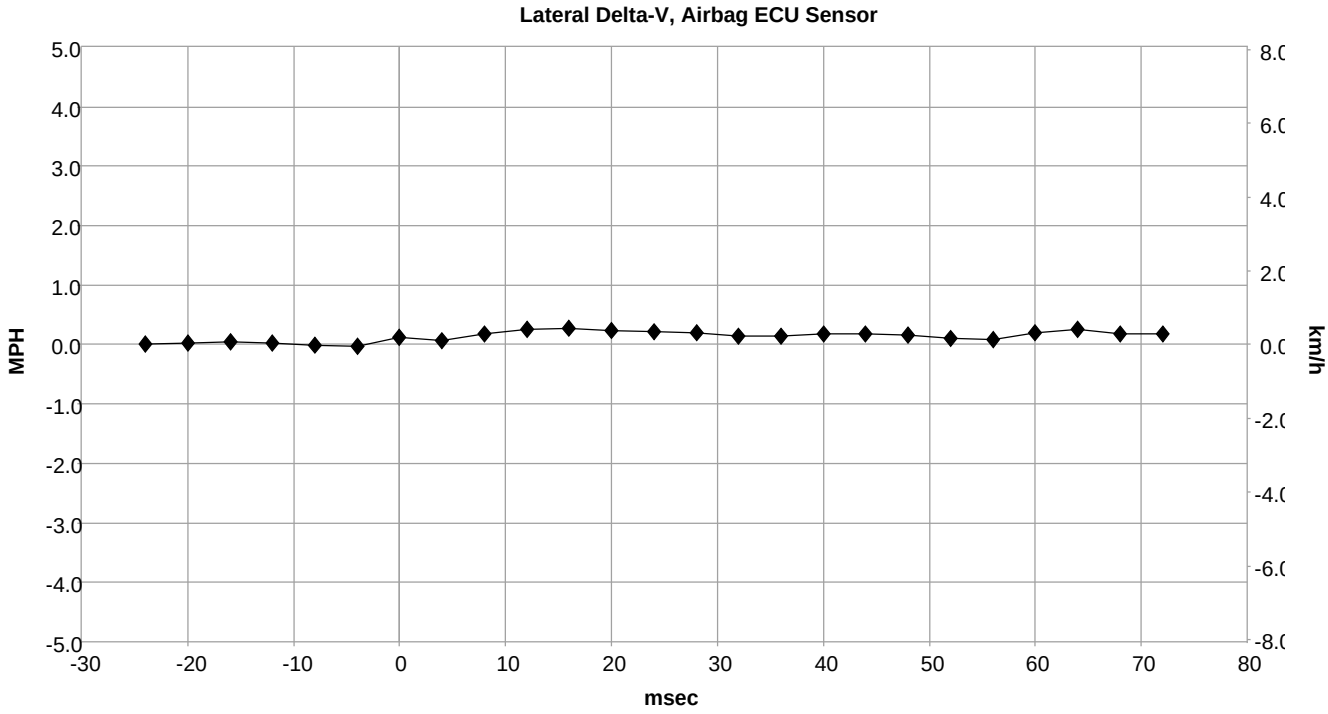
Time (msec)	Roll Angle (degrees)	Lateral Acceleration, Airbag ECU Sensor (m/sec^2)
-398	0.0	-1.0
-270	0.0	-1.0
-142	0.0	-1.0
-14	0.0	-1.0
114	-2.5	0.0
242	-1.7	-2.9
370	-0.8	0.0
498	0.0	0.0
626	0.0	0.0
754	0.0	0.0
882	-0.8	-1.0
1010	-0.8	-1.0
1138	-0.8	-1.0
1266	0.0	0.0
1394	0.0	-1.0
1522	0.0	-1.0
1650	0.0	0.0
1778	0.0	-1.0
1906	0.0	-1.0
2034	0.0	-1.0

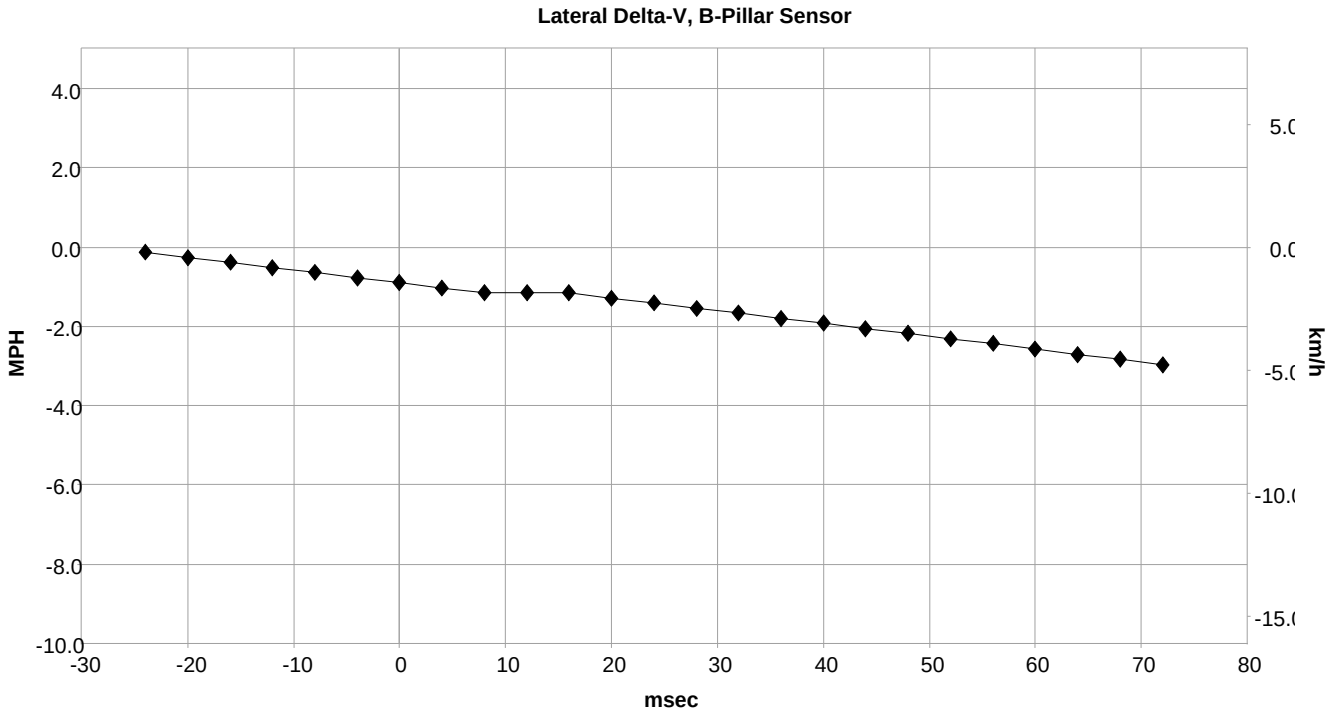
System Status at Event (5th Prior Event, TRG 12)

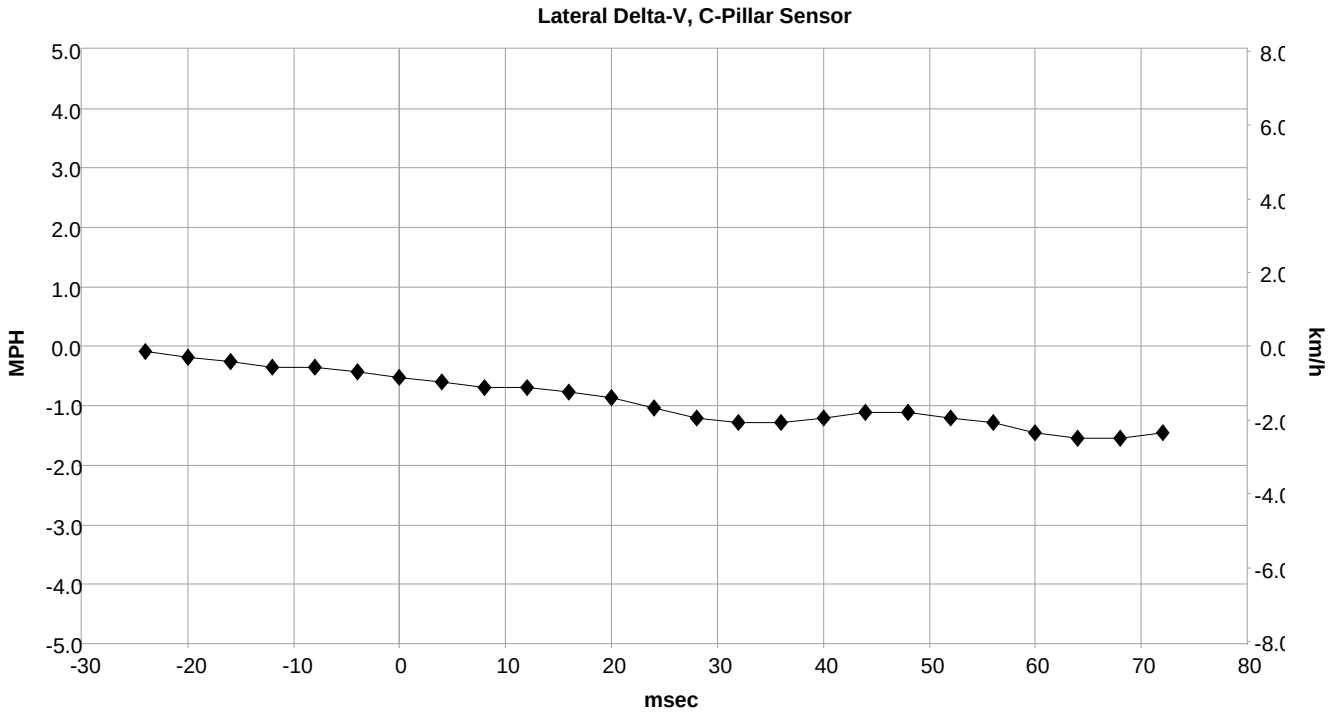
Recording Status, Side Crash Info.	Complete
Crash Type	Side Crash
TRG Count (times)	12
Recorded Side	Driver's Side
Previous Crash Type	No Event
Time from Pre-Crash TRG (msec)	0
Linked Pre-Crash Page	0
Time to Deployment Command, B-Pillar Sensor (msec)	Not Commanded
Time to Deployment Command, C-Pillar Sensor (msec)	Not Commanded

Lateral Crash Pulse (5th Prior Event, TRG 12 - table 1 of 2)

Recording Status, Time Series Data	Complete
Time from TRG to Next Sample (msec)	0
Max Lateral Delta-V, B-Pillar Sensor (MPH [km/h])	-3.0 [-4.8]
Max Lateral Delta-V, C-Pillar Sensor (MPH [km/h])	-1.5 [-2.5]






Lateral Delta-V, C-Pillar Sensor
MPH
km/h
msec
5.0
4.0
3.0
2.0
1.0
0.0
-1.0
-2.0
-3.0
-4.0
-5.0
8.0
6.0
4.0
2.0
0.0
-2.0
-4.0
-6.0
-8.0
-30
-20
-10
0
10
20
30
40
50
60
70
80

Lateral Crash Pulse (5th Prior Event, TRG 12 - table 2 of 2)

Time (msec)	Lateral Delta-V, Airbag ECU Sensor (MPH [km/h])	Lateral Delta-V, B-Pillar Sensor (MPH [km/h])	Lateral Delta-V, C-Pillar Sensor (MPH [km/h])
-24	0.0 [0.0]	-0.1 [-0.2]	-0.1 [-0.1]
-20	0.0 [0.1]	-0.3 [-0.4]	-0.2 [-0.3]
-16	0.1 [0.1]	-0.4 [-0.6]	-0.3 [-0.4]
-12	0.0 [0.1]	-0.5 [-0.8]	-0.3 [-0.6]
-8	0.0 [0.0]	-0.6 [-1.0]	-0.3 [-0.6]
-4	0.0 [-0.1]	-0.8 [-1.2]	-0.4 [-0.7]
0	0.1 [0.2]	-0.9 [-1.4]	-0.5 [-0.8]
4	0.1 [0.1]	-1.0 [-1.7]	-0.6 [-1.0]
8	0.2 [0.3]	-1.2 [-1.9]	-0.7 [-1.1]
12	0.3 [0.4]	-1.2 [-1.9]	-0.7 [-1.1]
16	0.3 [0.4]	-1.2 [-1.9]	-0.8 [-1.2]
20	0.2 [0.4]	-1.3 [-2.1]	-0.9 [-1.4]
24	0.2 [0.4]	-1.4 [-2.3]	-1.0 [-1.7]
28	0.2 [0.3]	-1.5 [-2.5]	-1.2 [-1.9]
32	0.1 [0.2]	-1.7 [-2.7]	-1.3 [-2.1]
36	0.1 [0.2]	-1.8 [-2.9]	-1.3 [-2.1]
40	0.2 [0.3]	-1.9 [-3.1]	-1.2 [-1.9]
44	0.2 [0.3]	-2.1 [-3.3]	-1.1 [-1.8]
48	0.2 [0.2]	-2.2 [-3.5]	-1.1 [-1.8]
52	0.1 [0.2]	-2.3 [-3.7]	-1.2 [-1.9]
56	0.1 [0.1]	-2.4 [-3.9]	-1.3 [-2.1]
60	0.2 [0.3]	-2.6 [-4.1]	-1.5 [-2.3]
64	0.3 [0.4]	-2.7 [-4.3]	-1.5 [-2.5]
68	0.2 [0.3]	-2.8 [-4.6]	-1.5 [-2.5]
72	0.2 [0.3]	-3.0 [-4.8]	-1.5 [-2.3]

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.

PIDs

PID	Data
00	BE E0 00 01
01	00
03	30 52 30 32 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30
04	FF FF FF FF
05	02
06	02
07	30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30
09	
0A	01
0B	00
20	80 00 00 01
21	00 51
40	00 00 00 01
60	00 00 00 01
80	00 00 00 01
A0	00 00 00 01
C0	00 00 00 01
E0	C0 10 00 00
E1	12 12
E2	00 5B 1F 11 00
EC	FF

EEPROM

Address	Data (-- = data not imaged from ECU) (** = no response from ECU)
0	-- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
10	-- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
20	-- -- -- -- -- -- -- -- -- -- -- -- -- -- 00 00
30	00 00 4F 01 7F FD 00 00 A5 03 00 02 FF FF FF FF
40	FF FF FF FF FF FF FF FF FF FF FF FF FF FF -- --
50	-- -- 10 01 01 5C 14 22 5C 14 22 60 14 23 60 14
60	60 16 64 16 09 00 00 00 00 00 00 00 00 00 00 00
70	00 00 00 00 00 00 00 00 00 00 00 10 01 01 71 14 33
80	70 19 33 70 19 33 74 18 70 1C 70 1C 09 00 00 00
90	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
A0	00 00 -- -- 01 FE FE 01 00 00 FF FF 00 FF 00 00
B0	00 FF FF FF 00 00 00 FF 00 06 00 00 00 12 E0 00
C0	FE FE 00 00 03 1B 1C 22 1B 1D 24 32 18 11 08 0E
D0	12 08 06 0B 0A 05 05 01 05 7E 00 00 00 14 14 01
E0	0E 0E 30 00 -- -- 00 00 00 00 00 00 00 00 01 01
F0	03 01 01 09 03 FE 04 08 04 0E 05 FF 02 03 F8 00
100	00 00 00 00 01 00 00 02 01 FE 04 0F 07 FA 04 0E
110	0E 0D 0E 09 FC FC 06 07 FD FD FD FD FD FD F3 06
120	FC C0 AC 36 0A D3 E8 FF CF C5 DF DE DA DF BD E6
130	B9 00 00 00 00 13 E4 00 FE FE 00 00 FF FF FF FF
140	FF FF FF FF FF 00 00 FF FF FF FF FF FF FF FF FF
150	FF FF FF FF FF FF FF FF FF 00 FF FF FF FF 00 FF
160	FF FE FE FF 00 01 01 00 FF FF FE FF 00 01 FF FF
170	FF 01 03 01 F7 03 FA FB FF 02 01 01 04 00 FE 00
180	01 03 01 F9 FD 04 00 00 00 00 00 0C E0 00 FE FE
190	00 00 00 00 00 00 FF F3 EB E7 E1 E0 ED 00 08 04
1A0	02 01 00 FF FF 00 FF FF FF FF 01 01 FD FF FD FB
1B0	FA FB 07 02 FE FD FD FD FD FE 21 03 2F 00 FF FE
1C0	E4 00 00 0F 00 00 00 00 00 00 FD FE FF 00 00 00
1D0	FF FF FF 00 00 00 00 00 00 00 FF FF FF FF 00 FD
1E0	00 00 00 00 FF FF FF 00 FF FF 00 FF FF FF 03 AD
1F0	72 00 FF FE 00 36 00 0E 00 00

Disclaimer of Liability

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