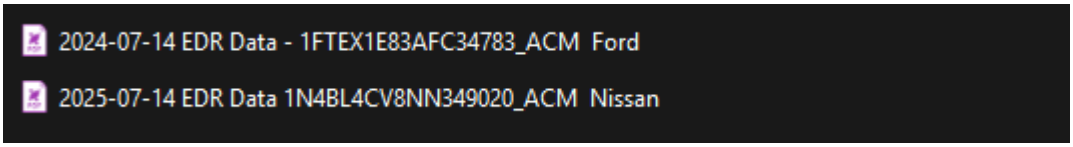
Ohio Attorney General's Office
Bureau of Criminal Investigation
Investigative Report

2025-2000
Officer Involved Critical Incident - Tiedeman Road at I-480 West, Brooklyn, OH 44144, Cuyahoga County

Investigative Activity:	Vehicle Data Analysis
Involves:	Ronald Liszka (O), Patrick Kerr (S)
Activity Date:	07/23/2025
Activity Location:	4055 Highlander Parkway, Richfield, OH
Authoring Agent:	SA Jesse Bynum #179

Narrative:

On July 17, 2025, Ohio Bureau of Criminal Investigation (BCI) Special Agent Allison Fletcher (SA Fletcher received vehicle data relating to a 2022 Nissan Altima (driven by Ronald Liszka) and a Ford F-150 (driven by Patrick Kerr). Cleveland Police Department Officer Hryn conducted the imaging of both vehicles on June 27, 2025, with a crash data recovery tool that reads information stored in modules related to a crash. SA Jesse Bynum (SA Bynum) was assigned to review the data from the two files that are attached to this report. The files were two PDF format files as shown below:



A search warrant was obtained by Brooklyn Police Department (BPD) Detective Brett Dalton (Dalton) for the extraction and search of the Sensing Data Module (SDM) and Event Data Recorder (EDR) for Patrick Kerr's Ford F-150 and Ronald Liszka's Nissan Altima. The search warrants and returns are attached to this report.

Nissan Altima

On June 24, 2025, a crash involving a 2022 Nissan Altima (VIN: 1N4BL4CV8NN349020) occurred and was investigated by the Cleveland Police Department. Event data from the vehicle's Airbag Control Module (ACM) was imaged on June 27, 2025, using Bosch Crash Data Retrieval Tool version 25.0.833. The recorded data confirms a deployment-level event involving significant impact forces, and the system successfully captured a complete dataset from a single crash event.

At the time of the collision, the driver's safety belt was buckled, while the right front passenger was unbelted. The vehicle's airbag warning lamp was off, indicating the supplemental restraint system was functioning properly prior to impact. The front

passenger airbag suppression was active. This typically occurs when the system determines no occupant is present or when conditions warrant suppression, such as child classification.

Deployment of multiple restraint systems was confirmed. The driver's frontal airbag deployed in two stages, activating the first stage at 17 milliseconds and the second stage at 20 milliseconds after impact detection. Dual-stage airbags are designed to deploy at different force levels depending on crash severity. Side impact protection systems also activated rapidly: the driver's seat-mounted side airbag and the curtain airbag deployed within 1 millisecond—nearly instantaneous. The pretensioners on both the driver and passenger seatbelts, which are designed to retract slack and restrain occupants early in a crash, also deployed at 1 millisecond.

Crash severity is represented by Delta-V, or the change in vehicle velocity during a collision. The vehicle recorded a maximum longitudinal Delta-V of -13.7 mph (-22 km/h), representing a reduction in forward speed, likely due to secondary impact forces. More critically, the maximum lateral Delta-V reached 39.8 mph (64 km/h), indicating a strong side impact, likely from a perpendicular striking vehicle or object.

The acceleration data shows peak longitudinal acceleration of 62.0g and lateral acceleration clipping at 62.5g. The term 'clipping' (noted as 'clp') indicates the acceleration exceeded the measurable range of the sensor, signifying extreme forces beyond the system's limits. Such high values confirm the crash involved severe energy transfer into the vehicle structure.

Vehicle roll angle remained zero prior to the crash, suggesting no rollover occurred. Roll angle is measured in degrees and tracks the vehicle's rotation along its longitudinal axis. A value of 0° confirms the vehicle remained upright throughout the recorded event.

The system also captured pre-crash data spanning the five seconds leading up to impact. The vehicle accelerated from approximately 6.2 mph to 15.5 mph and then maintained a steady speed. The accelerator pedal input decreased gradually and reached 0% approximately two seconds before the crash. No braking was recorded during this time—service brake status remained 'OFF.' Steering input increased to 135 degrees left, which may indicate a last-moment evasive maneuver. Steering input is measured in degrees, with positive values indicating left turns; values exceeding 100 degrees suggest significant wheel rotation.

The ACM reported multiple Diagnostic Trouble Codes (DTCs) at the time of retrieval. These include:
- B1421 / B1422: Indicate frontal and side collision detection.

- B0001 / B0002 / B0010 / B0011: Refer to open circuits in driver and passenger airbag modules.
- B0091–B0097 / B0093 / B0094: Denote disconnection or failure in B-, C-, and crash zone satellite sensors.
- B1430–B1433: Signal open circuits in pretensioner firing circuits.

These codes confirm the deployment of safety systems and indicate that several critical impact sensors were damaged or disconnected, consistent with a high-severity crash. One past fault code (B00A0) related to occupant detection was also logged.

In summary, this vehicle experienced a high-energy, lateral-impact collision triggering comprehensive deployment of frontal and side restraint systems. The combination of elevated Delta-V, clipped acceleration values, and multiple airbag deployments is consistent with a crash capable of causing serious injury or fatality. The data further indicates that the vehicle was not braking and may have been engaged in evasive steering immediately prior to the crash. This report should be evaluated in conjunction with physical evidence, occupant injury reports, and scene documentation to support reconstruction and investigative findings.

Ford F-150

On June 24, 2025, a crash involving a 2010 Ford F-150 (VIN: 1FTEX1E83AFC34783) occurred and was investigated by the Cleveland Police Department. Event data was extracted from the vehicle's Airbag Control Module (ACM) using the Bosch Crash Data Retrieval Tool (version 25.0.833) to analyze crash dynamics. The retrieved data confirms a significant crash event with frontal airbag deployment and extensive safety system activity. One complete event was recorded by the module.

At the time of the crash, the driver's safety belt was fastened and the frontal airbag warning light was off, indicating proper functionality of the supplemental restraint system prior to the event. The driver's frontal airbag deployed at 26 milliseconds after crash detection, while the seatbelt pretensioner activated at 13 milliseconds. These timing values are consistent with a moderate to severe frontal impact, as the systems are designed to respond within milliseconds to reduce injury risk.

The crash generated a longitudinal Delta-V (change in velocity) of -21.4 mph (-34.4 km/h), indicating rapid deceleration during impact. Delta-V is a key metric used to assess the severity of a crash; values over 20 mph often correlate with significant damage and possible injury. The peak longitudinal acceleration reached -18.6g, confirming the force of the collision. No lateral or roll movement was recorded during the event.

Pre-crash vehicle dynamics reveal that the F-150 was traveling at 44.0 mph five seconds prior to the crash and had reduced to 23.0 mph one second before the collision. The accelerator pedal position decreased from 13.3% to 0%, and the brake switch was active from -4.0 seconds until the moment of impact. This pattern strongly suggests the driver recognized the hazard and attempted to stop the vehicle. Steering wheel angle data shows a progressive leftward turn from -1˚ to -55˚, suggesting evasive maneuvering or loss of directional stability.

The ACM reported several Diagnostic Trouble Codes (DTCs) consistent with the recorded deployment event. These include codes for the deployment of the driver's frontal airbag, pretensioners, and indication of a crash event. No sensor failures or previously stored faults were noted, supporting the integrity of the safety system at the time of the crash.

In conclusion, the 2010 Ford F-150 experienced a deployment-level frontal collision involving substantial forward deceleration and activation of critical safety restraint systems. The data indicates the driver attempted to avoid the collision through braking and steering adjustments. The vehicle's systems responded as designed, and all safety data appears complete and valid. This report should be evaluated in conjunction with physical crash evidence and other investigative materials to support accident reconstruction efforts.

References:

None

Attachments:

1. 2025-07-14 EDR Data 1N4BL4CV8NN349020_ACM Nissan
2. 2024-07-14 EDR Data - 1FTEX1E83AFC34783_ACM Ford
3. 2025-07-14 F-150 EDR SW
4. 2025-07-14 EDR F 150 SW RETURN
5. 2025-07-14 Nissan SW Return
6. 2025-07-14 Nissan EDR SW

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	1N4BL4CV8NN349020
User	Hryn
Case Number	2025214244
EDR Data Imaging Date	06/27/2025
Crash Date	06/24/2025
Filename	1N4BL4CV8NN349020_ACM.CDRX
Saved on	Friday, June 27 2025 at 09:37:26
Imaged with CDR version	Crash Data Retrieval Tool 25.0.833
Imaged with Software Licensed to (Company Name)	Cleveland Police Department
Reported with CDR version	Crash Data Retrieval Tool 25.0.833
Reported with Software Licensed to (Company Name)	Cleveland Police Department
EDR Device Type	Airbag Control Module
Event(s) recovered	Event Record 1

Comments

Per search warrant
D2M download

Data Limitations

General Information:
Data limitations are intended to assist in reading event data that has been imaged from the vehicle's Air bag Control Unit (ACU). Event data should be considered in conjunction with other available physical evidence from the vehicle and scene.

Airbag Control Unit (ACU)

- The Air bag Control Unit (ACU) can store two types of events: Non-Deployment Events and Deployment.
  - A Non-Deployment Event is a crash or other physical occurrence which causes the ACU algorithm to be activated, but in which deployment thresholds are not reached.
  - A Deployment Event is a crash or other physical occurrence which causes ACU deployment thresholds to be reached or exceeded. Depending on the vehicle model, one or more of the following may be activated during a Deployment Event: front air bags, seat-mounted side airbags, roof-mounted or door-mounted curtain air bags, pretensioners, or pop-up roll bars.

- The ACU can record up to two events. If additional events occur subsequently, the older of the two events already recorded (i.e. the one which occurred first) is overwritten.
  - A Non-Deployment Event can be overwritten by another Non-Deployment event, or by a Deployment Event.
  - A Deployment Event has higher priority than a Non-Deployment Event, and cannot be interrupted or overwritten by another event.
  - The data pertaining to a Deployment Event is locked after being recorded. However, a second event can still be recorded subsequently in the portion of the event memory which is not locked.

- Event data includes both pre-crash data and crash data.
  - If the power supply to the ACU is lost during an event, all or part of the event data may not be recorded.
  - In addition to the recording of event data, the ACU has the ability to perform diagnostics and record Diagnostic Trouble Codes (DTCs).

Data Element Sign Convention:
The following table provides an explanation of the sign convention for data elements in the CDR report.

Data Element Name	Positive Sign Notation Indicates
Longitudinal Acceleration	Forward
Delta-V, Longitudinal	Forward
Maximum Delta-V, Longitudinal	Forward
Lateral Acceleration	Left to Right
Delta-V, Lateral	Left to Right
Maximum Delta-V, Lateral	Left to Right
Vehicle Roll Angle	Left to Right Rotation
Steering Input	Left Turn

- "Life Time Counter (sec)" indicates the elapsed time, in seconds, from the vehicle's first ignition activation until the start of the first recorded event. The counter is incremented whenever the vehicle's ignition is on. The counter is reset to 0 if the ACU is replaced.
- "Complete File Recorded" indicates whether a complete EDR data set has been stored after the event. "Yes" indicates that a complete data set has been recorded. "No" indicates that only a portion of the data set has been recorded, for example due to the power to the ACU being lost during the event.

- "Multi-Event, Number of Events (1, 2)" indicates the number of events which are stored during a given ignition cycle. A Multi-Event occurs whenever the time between Event 2 trigger threshold and Event 1 trigger threshold is less than or equal to 5 seconds during the same ignition cycle, and "2" will be recorded in this case. Otherwise, "1" will be recorded.
- "Air Bag Warning Lamp (On, Off)" indicates whether the ACU was in trouble mode or in normal operation mode at the time of the event. "On" indicates that the air bag warning lamp was illuminated at the time of the event, and the ACU was in trouble mode. "Off" indicates that the air bag warning lamp was not illuminated at the time of the event, and the ACU was in normal operation mode.
- "Frontal Air Bag Suppression Switch Status" indicates whether front passenger air bag deployment was suppressed at the time of the event. "On" indicates that the front passenger air bag was suppressed at the time of the event (deployment inhibited). "Off" indicates that the front passenger air bag was not suppressed at the time of the event (deployment enabled). This data will not be available for all vehicles.
- "Delta-V, Longitudinal" indicates the cumulative change in velocity along the longitudinal direction.
- "Acceleration, Longitudinal" indicates the rate of change of velocity with time along the longitudinal direction.
- "Delta-V, Lateral" indicates the cumulative change in velocity along the lateral direction.
- "Acceleration, Lateral" indicates the rate of change of velocity with time along the lateral direction.
- "Engine Throttle, % full" indicates the position of the accelerator pedal as a percentage of the fully depressed position.
- "Service Brake (On, Off)" indicates whether the service brake is activated ("On") or not activated ("Off").
- "Steering Input (deg)" indicates the angular displacement of the steering wheel measured in degrees. -250 deg indicates a 250 degree turn to the right of the steering wheel, 0 deg indicates the straight-ahead steering wheel position, and 250 deg indicates a 250 degree turn to the left of the steering wheel.
- The notation "CLP" indicates that the measurement captured by a sensor exceeded the design range of the sensor.
- "Seat Track Position Switch, Foremost, Status, Driver (Yes/No)" indicates whether the driver's seat is positioned within a designated threshold value of the most forward adjustment position. "Yes" indicates that the driver's seat is positioned within a designated threshold value of the most forward adjustment position. For all other adjustment positions, "No" is displayed. This data will not be available if the seat track position switch is not installed in the vehicle.
- "Occupant Size Classification, Right Front Passenger, Child (Yes/No)" indicates whether or not the right front passenger is classified as a child (as defined in 49 CFR part 572, subpart N or smaller). This data will not be available for all vehicles.
- "e-pedal ON/OFF Status" indicates whether "e-pedal" is activated (ON), or not activated (OFF). This data will not be available for all vehicles.
- "ABS Warning lamp, on/off" indicates whether "Anti-lock Brake System" was in trouble mode or in normal operation mode at the time of the event. This data will not be available for all vehicles.
- "AEB/FCW switch status ON/OFF (from ADAS)" indicates whether the switch of "Automatic Emergency Braking or Forward Collision Warning controlled by ADAS unit" was ON, or OFF at the time of the event. This data will not be available for all vehicles.
- "AEB Warning lamp (from ADAS)" indicates whether "Automatic Emergency Braking controlled by ADAS unit" was in trouble mode or in normal operation mode at the time of the event. This data will not be available for all vehicles.
- "ABS regulation status" indicates whether "Anti-lock Brake System" was activated (ABS in regulation), or not activated (no ABS regulation). This data will not be available for all vehicles.
- "VDC switch status ON/OFF" indicates whether the switch of "Vehicle Dynamic Control" in ON, or OFF. This data will not be available for all vehicles.
- "VDC status/warning" indicates whether "Vehicle Dynamic Control" was in normal operation mode and not activated (No failure and no control), in trouble mode and not activated (Failure), or in normal mode and activated (In active control). This data will not be available for all vehicles.
- "Adaptive Cruise Control status" indicates whether "Intelligent Cruise Control status" was activated (ACC activated), waiting (ACC waiting), suspended (ACC suspended), or not activated (No display request). This data will not be available for all vehicles.
- "AEB operating capability" indicates whether "Automatic Emergency Braking" was in trouble mode (Impossible to execute request) or in normal operation mode (Braking fully operational). This data will not be available for all vehicles.
- "AEB Brake request (from ADAS)" indicates whether "Automatic Emergency Braking controlled by ADAS unit" was activated (Brake Torque AEB Maximum), or not activated (No Brake Request). This data will not be available for all vehicles.
- "VIN retrieval from other ECU " indicates VIN data retrieval from other ECU when CDR connect to vehicle by using OBD system if available.
- "VIN retrieval from ACU " indicates VIN data retrieval from ACU. It will not be available for all vehicles.
- "Engine RPM (Gearbox Input Shaft)" indicates RPM of motor used for vehicle drive on electric or hybrid vehicles. In case of ICE vehicles, this indicates input shaft revolution that is input to Gearbox. This data will not be available for all vehicles.
- "Engine RPM (Front Electrical Motor)" indicates RPM of motor used for vehicle drive on electric vehicles. This data will not be available for all vehicles.
- "Engine RPM (Rear Electrical Motor)" indicates RPM of motor used for 4WD vehicle drive on electric vehicles. This data will not be available for all vehicles.
- "Engine RPM" indicates RPM of engine used for vehicle drive on electric vehicles. This data will not be available for all vehicles.
- "Airbag Deployment Time" indicates deployment time of each airbag. This data will not be available for all vehicles.
- "Seat Track Position Switch, Foremost, Status, Passenger" indicates whether the passenger's seat is positioned within a designated threshold value of the most forward adjustment position. "Yes" indicates that the passenger's seat is positioned within a designated threshold value of the most forward adjustment position. For all other adjustment positions, "No" is displayed. This data will not be available if the seat track position switch is not installed in the vehicle.

Hexadecimal Data:
All data that has been specified for retrieval is shown in the Hexadecimal Data section of this report. However, the Hexadecimal Data section may contain data that is not translated by the CDR tool.

Data Sources:
- Crash data is measured internally in the ACU.
- Pre-crash data is not measured internally in the ACU, but is transmitted from other control units through the Controller Area Network (CAN).
- Pre-crash data and crash data are asynchronous.

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DTCs at Time of Retrieval

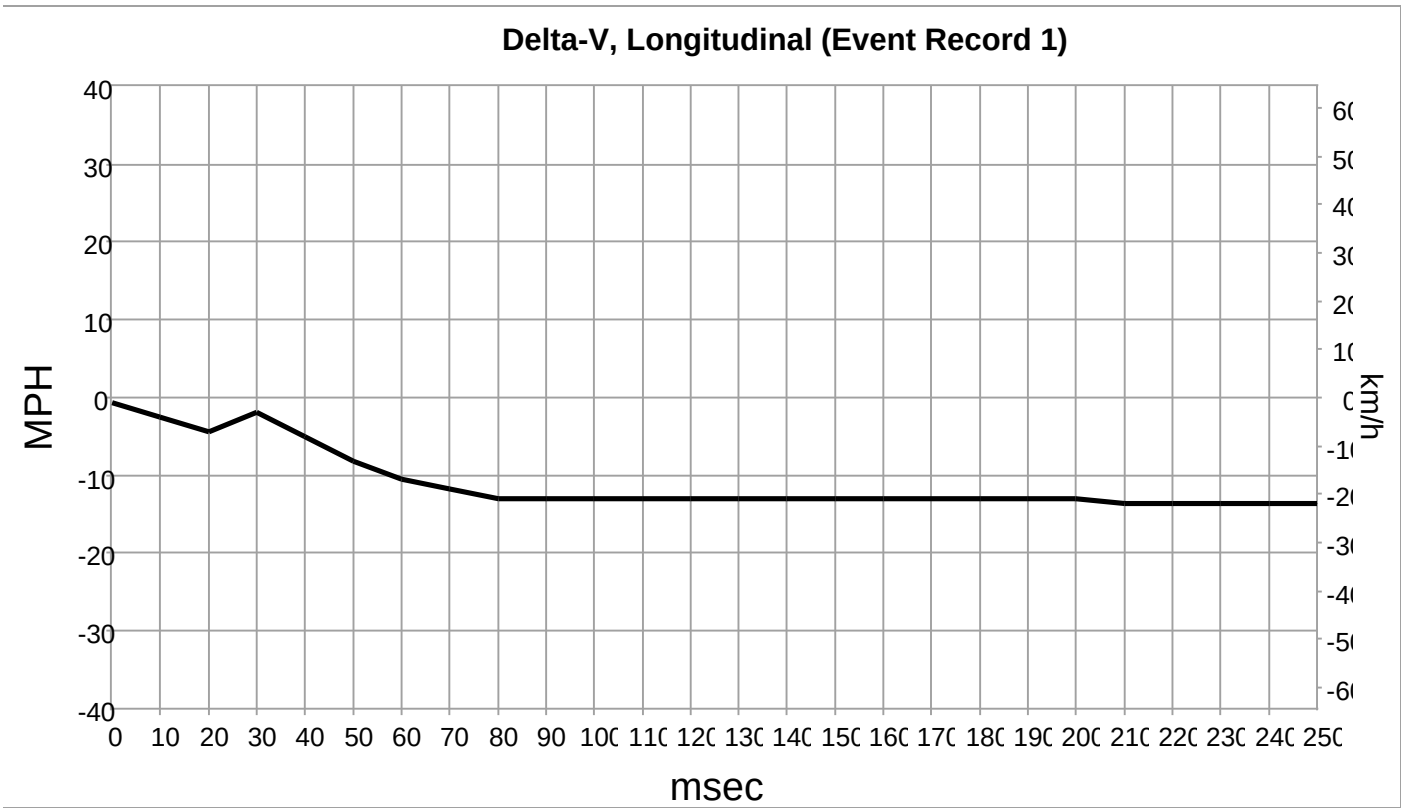
DTC	Status	Description
B1422	Current	SIDE COLLISION DETECTION
B1421	Current	FRONTAL COLLISION DETECTION
B0010	Current	ASSIST AIRBAG MODULE CIRCUIT [OPEN]
B0011	Current	ASSIST AIRBAG MODULE 2ND CIRCUIT [OPEN]
B0001	Current	DRIVER AIRBAG MODULE CIRCUIT [OPEN]
B0091	Current	B-PILLAR SATELLITE SENSOR LH [DISCONNECT]
B0096	Current	B-PILLAR SATELLITE SENSOR RH [DISCONNECT]
B0092	Current	C-PILLAR SATELLITE SENSOR LH [DISCONNECT]
B0097	Current	C-PILLAR SATELLITE SENSOR RH [DISCONNECT]
B0002	Current	DRIVER AIRBAG MODULE 2ND CIRCUIT [OPEN]
B1432	Current	FRONT PRE-TEN2 LH CIRCUIT [OPEN]
B1430	Current	FRONT PRE-TEN LH CIRCUIT [OPEN]
B1433	Current	FRONT PRE-TEN2 RH CIRCUIT [OPEN]
B0094	Current	CRASH ZONE SENSOR [DISCONNECT]
B0093	Current	DOOR SATELLITE SENSOR LH [DISCONNECT]
B1431	Current	FRONT PRE-TEN RH CIRCUIT [OPEN]
B00A0	Past	OCCUPANT DETECTION SENSOR UNIT [UNDEFINED]
B1422	Past	SIDE COLLISION DETECTION
B1421	Past	FRONTAL COLLISION DETECTION

System Status at Event (Event Record 1)

Ignition Cycle, Download	11826
Multi-Event, Number of Events (1,2)	Single event or 1st event of multi-event
Time from Event 1 to 2 (sec)	N/A
Complete File Recorded (Yes, No)	Yes (Complete)
Ignition Cycle, Crash	11825
Safety Belt Status, Driver	ON "Fastened"
Safety belt status, right front passenger (buckled, not buckled)	OFF "Unfastened"
Frontal air bag warning lamp, on/off	"Off"
Frontal air bag suppression switch status, right front passenger (on, off, or auto)	On (AS airbag inhibit)
Maximum delta-V, longitudinal (MPH [km/h])	-13.7 [-22]
Time, Maximum Delta-V, Longitudinal (msec)	292.5
Maximum delta-V, lateral (MPH [km/h])	39.8 [64]
Time maximum delta-V, lateral (msec)	62.5
Maximum acceleration, Longitudinal (g)	62.0
Time, Maximum acceleration, Longitudinal (msec)	35.0
Maximum acceleration, Lateral (g)	62.5 (clp)
Time, Maximum acceleration, Lateral (msec)	17.5
Life Time Counter (sec)	21323860
Occupant Size Classification, Right Front Passenger, Child (Yes/No)	No
Seat track position switch, foremost, status driver	N/A

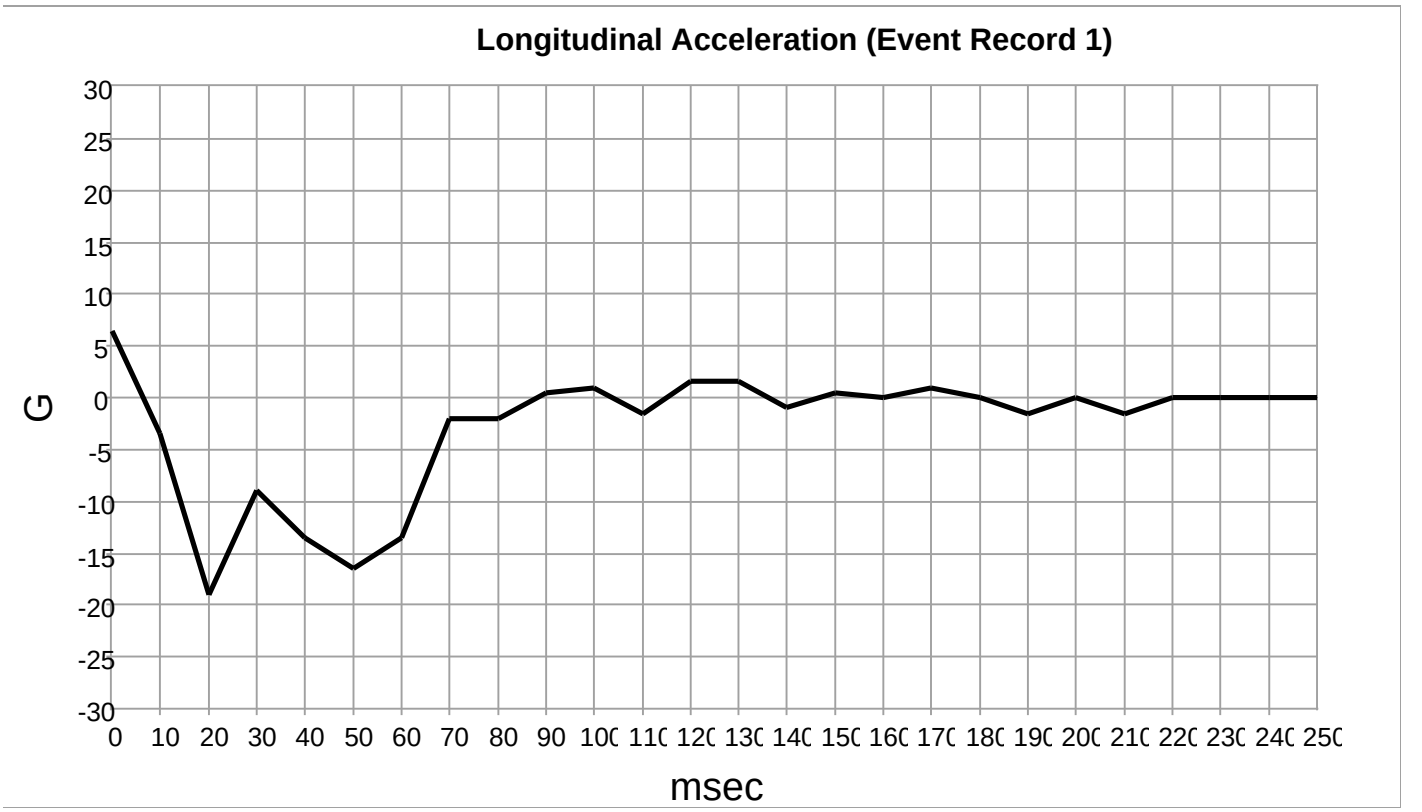
Deployment Command Data (Event Record 1)

Frontal Airbag Deployment, Time to First Stage Deployment, in the case of a multi-stage airbag, driver (msec)	17
Frontal Airbag Deployment, Time to First Stage Deployment, in the case of a multi-stage airbag, passenger (msec)	N/A
Frontal Airbag Deployment, Time to 2nd Stage, Driver (msec)	20
Frontal Airbag Deployment, Time to 2nd Stage, Right Front Passenger (msec)	N/A
Side Airbag Deployment, Time to Deploy, Driver (msec)	1
Side Airbag Deployment, Time to Deploy, Right Front Passenger (msec)	N/A
Side Curtain/Tube Airbag Deployment, Time to Deploy, Driver Side (msec)	1
Side Curtain/Tube Airbag Deployment, Time to Deploy, Right Passenger Side (msec)	N/A
Pretensioner Deployment, Time to Fire, Driver (msec)	1
Pretensioner Deployment, Time to Fire, Right Front Passenger (msec)	1
Frontal 2nd Airbag Deployment, Time to 1st Stage, Right Front Passenger (msec)	N/A


Delta-V, Longitudinal (Event Record 1)
MPH
km/h
msec
40
30
20
10
0
-10
-20
-30
-40
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250

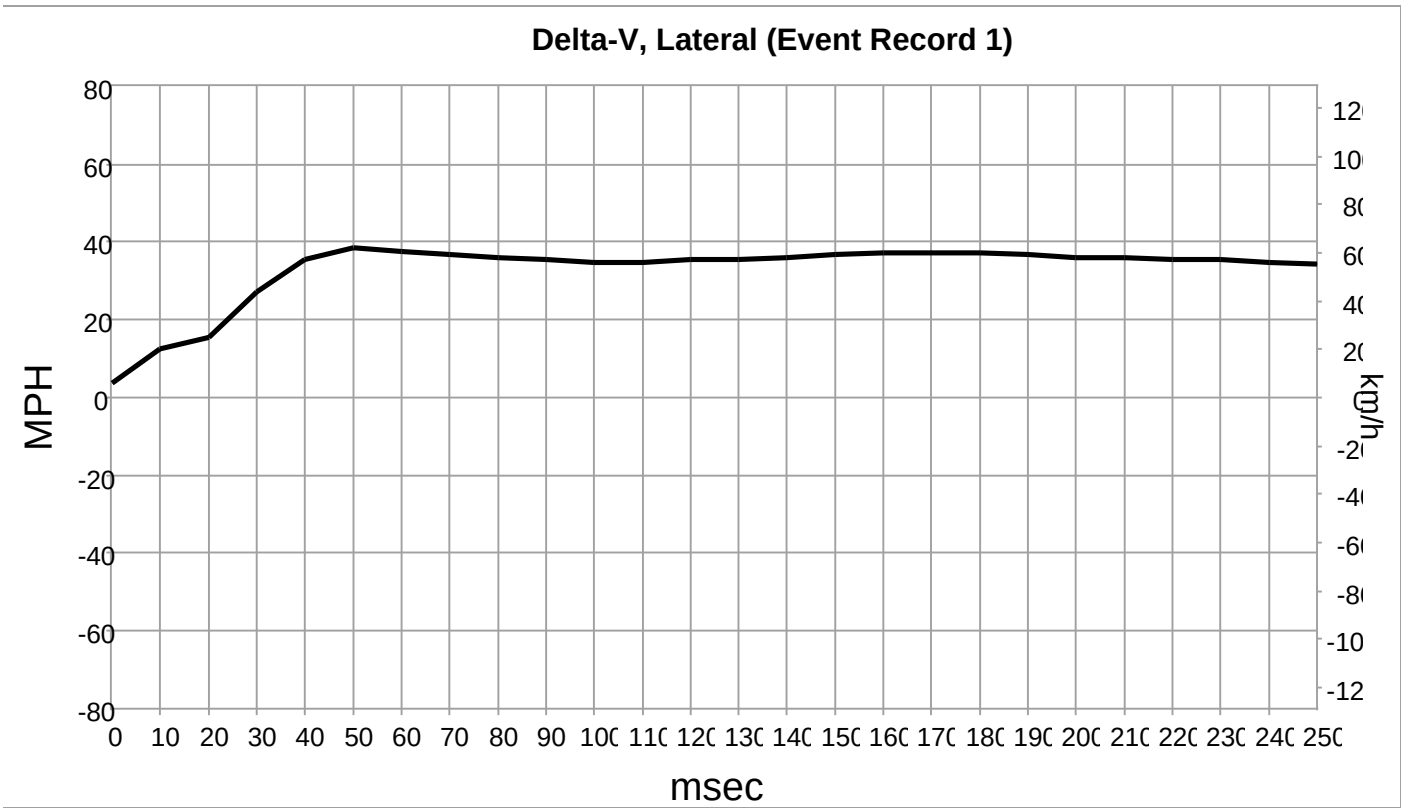
Delta-V, Longitudinal (Event Record 1)

Time (msec)	Delta-V, Longitudinal (MPH [km/h])
0	-0.6 [-1]
10	-2.5 [-4]
20	-4.3 [-7]
30	-1.9 [-3]
40	-5.0 [-8]
50	-8.1 [-13]
60	-10.6 [-17]
70	-11.8 [-19]
80	-13.0 [-21]
90	-13.0 [-21]
100	-13.0 [-21]
110	-13.0 [-21]
120	-13.0 [-21]
130	-13.0 [-21]
140	-13.0 [-21]
150	-13.0 [-21]
160	-13.0 [-21]
170	-13.0 [-21]
180	-13.0 [-21]
190	-13.0 [-21]
200	-13.0 [-21]
210	-13.7 [-22]
220	-13.7 [-22]
230	-13.7 [-22]
240	-13.7 [-22]
250	-13.7 [-22]


Longitudinal Acceleration (Event Record 1)
G
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250
msec

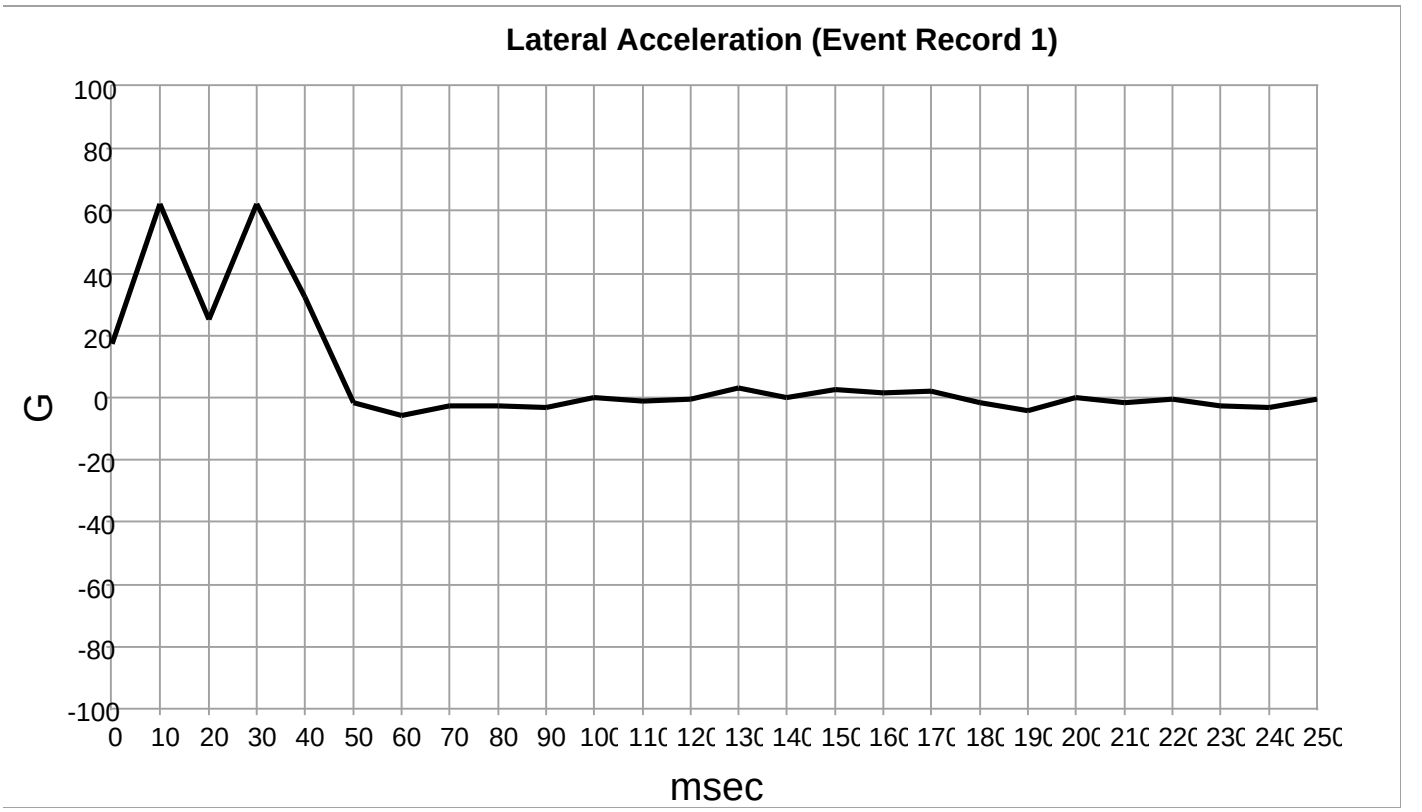
Longitudinal Acceleration (Event Record 1)

Time (msec)	Longitudinal Acceleration (g)
0	6.5
10	-3.5
20	-19.0
30	-9.0
40	-13.5
50	-16.5
60	-13.5
70	-2.0
80	-2.0
90	0.5
100	1.0
110	-1.5
120	1.5
130	1.5
140	-1.0
150	0.5
160	0.0
170	1.0
180	0.0
190	-1.5
200	0.0
210	-1.5
220	0.0
230	0.0
240	0.0
250	0.0


Delta-V, Lateral (Event Record 1)
MPH
80
60
40
20
0
-20
-40
-60
-80
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250
msec
kph
12
10
8
6
4
2
-2
-4
-6
-8
-10
-12

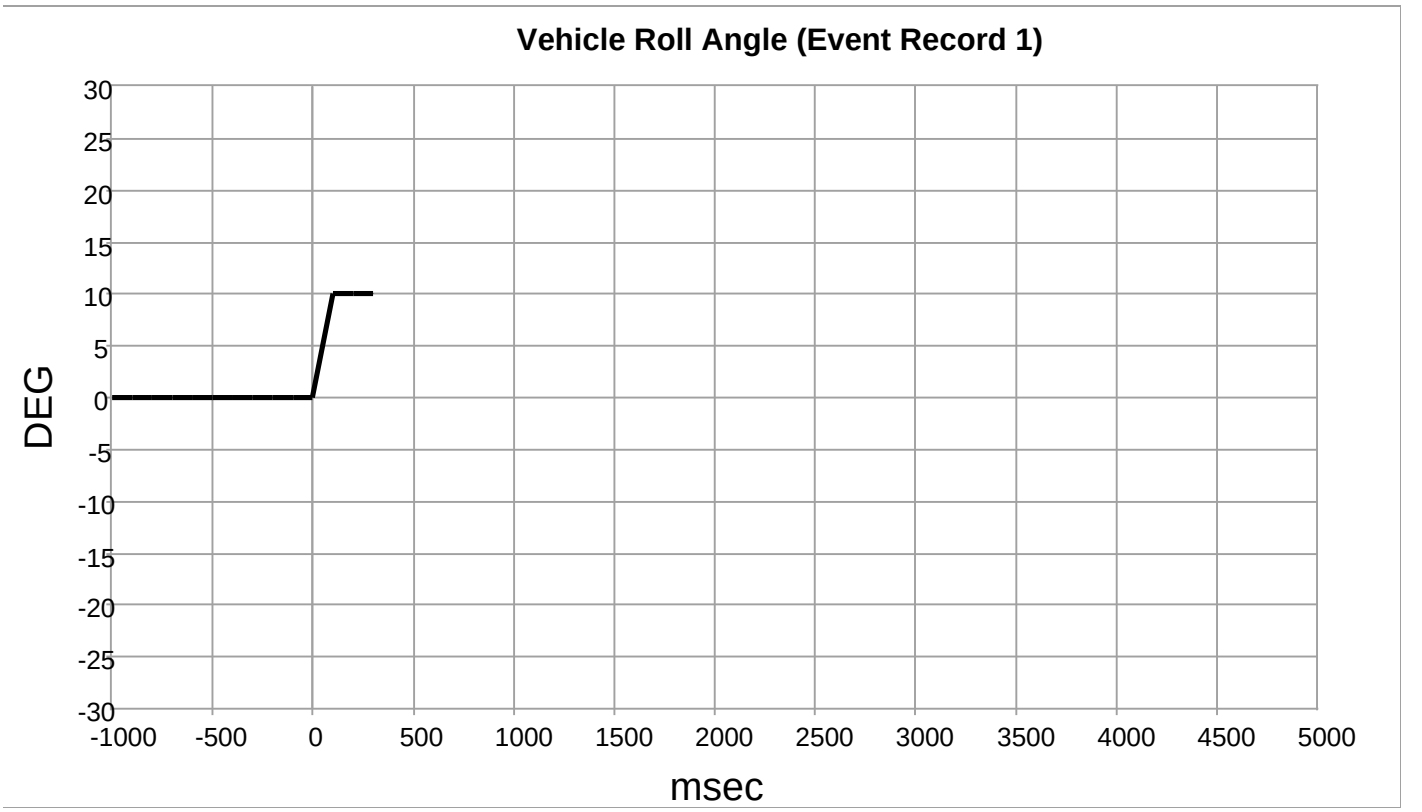
Delta-V, Lateral (Event Record 1)

Time (msec)	Delta-V, Lateral (MPH [km/h])
0	3.7 [6]
10	12.4 [20]
20	15.5 [25]
30	27.3 [44]
40	35.4 [57]
50	38.5 [62]
60	37.9 [61]
70	36.7 [59]
80	36.0 [58]
90	35.4 [57]
100	34.8 [56]
110	34.8 [56]
120	35.4 [57]
130	35.4 [57]
140	36.0 [58]
150	36.7 [59]
160	37.3 [60]
170	37.3 [60]
180	37.3 [60]
190	36.7 [59]
200	36.0 [58]
210	36.0 [58]
220	35.4 [57]
230	35.4 [57]
240	34.8 [56]
250	34.2 [55]


Lateral Acceleration (Event Record 1)
100
80
60
40
20
0
-20
-40
-60
-80
-100
G
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250
msec

Lateral Acceleration (Event Record 1)

Time (msec)	Lateral Acceleration (g)
0	17.5
10	62.50 (clp)
20	25.0
30	62.50 (clp)
40	32.5
50	-1.5
60	-6.0
70	-2.5
80	-2.5
90	-3.0
100	0.0
110	-1.0
120	-0.5
130	3.0
140	0.0
150	2.5
160	1.5
170	2.0
180	-1.5
190	-4.0
200	0.0
210	-1.5
220	-0.5
230	-2.5
240	-3.0
250	-0.5


Vehicle Roll Angle (Event Record 1)
DEG
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-1000
-500
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
msec

Vehicle Roll Angle (Event Record 1)

Time (sec)	Vehicle Roll Angle (deg)
-1.0	0
-0.9	0
-0.8	0
-0.7	0
-0.6	0
-0.5	0
-0.4	0
-0.3	0
-0.2	0
-0.1	0
0.0	0
0.1	10
0.2	10
0.3	10
0.4	N/A
0.5	N/A
0.6	N/A
0.7	N/A
0.8	N/A
0.9	N/A
1.0	N/A
1.1	N/A
1.2	N/A
1.3	N/A
1.4	N/A
1.5	N/A
1.6	N/A
1.7	N/A
1.8	N/A
1.9	N/A
2.0	N/A
2.1	N/A
2.2	N/A
2.3	N/A
2.4	N/A
2.5	N/A
2.6	N/A
2.7	N/A
2.8	N/A
2.9	N/A
3.0	N/A
3.1	N/A
3.2	N/A
3.3	N/A
3.4	N/A
3.5	N/A
3.6	N/A
3.7	N/A
3.8	N/A
3.9	N/A

Time (sec)	Vehicle Roll Angle (deg)
4.0	N/A
4.1	N/A
4.2	N/A
4.3	N/A
4.4	N/A
4.5	N/A
4.6	N/A
4.7	N/A
4.8	N/A
4.9	N/A
5.0	N/A

Pre-Crash Data -5 to 0 Sec (Event Record 1)

Time (sec)	Speed, Vehicle Indicated (MPH [km/h])	Accelerator Pedal, % Full (%)	Engine RPM (rpm)	Service Brake, On/Off	Steering Input (deg)
-5.0	6.2 [10]	24	1700	"OFF" (Brake not activated)	0.0
-4.5	8.7 [14]	24	1700	"OFF" (Brake not activated)	2.5
-4.0	11.2 [18]	23	1700	"OFF" (Brake not activated)	5.0
-3.5	13.0 [21]	17	1600	"OFF" (Brake not activated)	17.5
-3.0	14.3 [23]	13	1600	"OFF" (Brake not activated)	22.5
-2.5	15.5 [25]	0	1400	"OFF" (Brake not activated)	30.0
-2.0	15.5 [25]	0	1400	"OFF" (Brake not activated)	40.0
-1.5	15.5 [25]	0	1400	"OFF" (Brake not activated)	57.5
-1.0	15.5 [25]	0	1300	"OFF" (Brake not activated)	90.0
-0.5	14.9 [24]	0	1200	"OFF" (Brake not activated)	110.0
0.0	14.9 [24]	0	1200	"OFF" (Brake not activated)	135.0

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.

```
DID    Data

2001   62 20 01 FF 90 1C 94 22 00 94 21 00 80 10 13 80
       11 13 80 01 13 80 91 88 80 96 88 80 92 88 80 97
       88 80 02 13 94 32 13 94 30 13 94 33 13 80 94 88
       80 93 88 94 31 13 1C FF FF FF FF 00 05 00 EF 00
       00

2002   62 20 02 80 A0 8F 03 00 02 06 00 78 1F 00 00 00
       00 1C 00 A3 87 8D A7 00 00 4A 00 49 00 39 00 39
       00 42 00 3E 00 3B 00 38 00 3B 00 38 00 3A 00 44
       00 40 00 FF FF FF FF 38 00 3C 00 41 00 3E 00 3E
       00 3C 00 FF FF FF FF FF FF FF FF FF FF FF FF FF
       FF FF FF FF FF FF FF FF FF FF FF FF FF 00 00 94
       22 00 05 5F 01 3F 04 E2 21 01 01 00 82 1C 01 18
       72 02 9B 08 EC 4D 00 4B 00 3B 00 3A 00 44 00 3F
       00 3C 00 3A 00 3D 00 39 00 3B 00 47 00 42 00 FF
       FF FF FF 3A 00 3E 00 44 00 40 00 3F 00 3E 00 FF
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       01 3F 04 E2 21 01 01 00 82 1C 01 18 72 02 9B 08
       EC 4D 00 4B 00 3B 00 3A 00 44 00 3F 00 3C 00 3A
       00 3D 00 39 00 3B 00 47 00 42 00 FF FF FF FF 3A
       00 3E 00 44 00 40 00 3F 00 3E 00 FF FF FF FF FF
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2004  62 20 04 00 00 00 82 1C 00 00 FF E0 70 1A 00 00
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2006  62 20 06 0D 00 00 11 11 11 11 11 11 11 11 11 11
      11 11 01 01 01 01 11 14 FF FF FF FF FF FF 00 14
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     12 FF FF 01 01 04 17 17 FF FF FF FF 7F 7F 7F 7F
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201A 62 20 1A FF FC F9 FD F8 F3 EF ED EB EB EB EB EB
     EB EB EB EB EB EB EB EB EA EA EA EA EA EA 75 00
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     01 01 01 01 01 01 2E 31 2E 32 00 01 11 FF 01 FF
     00 01 00 14 FF 01 FF 01 FF 01 01 23 7D 32 7D 41
     FD F4 FB FB FA 00 FE FF 06 00 05 03 04 FD F8 00
     FD FF FB FA FF FF

201B 62 20 1B 0D F9 DA EE E5 DF E5 FC FC 01 02 FD 03
     03 FE 01 00 02 00 FD 00 FD 00 00 00 00 06 14 19
     2C 39 3E 3D 3B 3A 39 38 38 39 39 3A 3B 3C 3C 3C
     3B 3A 3A 39 39 38 37 40 19 00 11 00 11 00 11 00
     10 00 10 00 0E 00 0E 00 0E 00 0D 00 0C 00 0C

201C 62 20 1C 00 00 00 00 00 00 00 00 00 00 00 01 01
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     7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F
     7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F
     00 00 00 01 00 02 00 07 00 09 00 0C 00 10 00 17
     00 24 00 2C 00 36 7C 0E 7D 07 00 0C 00 0F 00 10
     00 10 00 10 00 0E 00 0E 00 0D 00 0C 00 0C 00 0B
     FF FF 01 FF FF FF FF FF FF FF FF FF FF FF FF FF
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201D 62 20 1D 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F 7F
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3001 62 30 01 BF FF FF F9 F8 00 FF FF FF FF 45 FF 1C
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2020  62 20 20 00 00 00 00 00 00 00 00 00 00 00 00 00
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2021  62 20 21 00 00 00 00

      59 02 09 94 22 00 09 94 21 00 09 80 10 13 09 80
      11 13 09 80 01 13 09 80 91 88 09 80 96 88 09 80
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      30 13 09 94 33 13 09 80 94 88 09 80 93 88 09 94
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      59 02 09 80 A0 8F 08 94 22 00 09 94 21 00 09

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Disclaimer of Liability

The users of the CDR product and reviewers of the CDR reports and exported data shall ensure that data and information supplied is applicable to the vehicle, vehicle's system(s) and the vehicle ECU. Robert Bosch LLC 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. Robert Bosch LLC expressly excludes all liability for incidental, consequential, special or punitive damages arising from or related to the CDR data, CDR software or use thereof.

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	1FTEX1E83AFC34783
User	Hryn
Case Number	2025214244
EDR Data Imaging Date	06/27/2025
Crash Date	06/24/2025
Filename	1FTEX1E83AFC34783_ACM.CDRX
Saved on	Friday, June 27 2025 at 09:52:45
Imaged with CDR version	Crash Data Retrieval Tool 25.0.833
Imaged with Software Licensed to (Company Name)	Cleveland Police Department
Reported with CDR version	Crash Data Retrieval Tool 25.0.833
Reported with Software Licensed to (Company Name)	Cleveland Police Department
EDR Device Type	Airbag Control Module
ACM Adapter Detected During Download	Yes
Event(s) recovered	locked frontal event unlocked event

Comments

Per Search Warrant
Direct to Module

The retrieval of this data has been authorized by the vehicle's owner, or other legal authority such as a court order or search warrant, as indicated by the CDR tool user on Friday, June 27 2025 at 09:52:45.

Data Limitations

Restraints Control Module Recorded Crash Events:
Deployment Events cannot be overwritten or cleared from the Restraints Control Module (RCM). Once the RCM has deployed any airbag device, the RCM must be replaced. The data from events which did not qualify as deployable events can be overwritten by subsequent events. The RCM can store up to two deployment events.

Airbag Module Data Limitations:

- Restraints Control Module Recorded Vehicle Forward Velocity Change reflects the change in forward velocity that the sensing system experienced from the point of algorithm wake up. It is not the speed the vehicle was traveling before the event. Note that the vehicle speed is recorded separately five seconds prior to algorithm wake up. This data should be examined in conjunction with other available physical evidence from the vehicle and scene when assessing occupant or vehicle forward velocity change.
- Event Recording Complete will indicate if data from the recorded event has been fully written to the RCM memory or if it has been interrupted and not fully written.
- If power to the Airbag Module is lost during a crash event, all or part of the crash record may not be recorded.
- For 2011 Ford Mustangs, the Steering Wheel Angle parameter indicates the change in steering wheel angle from the previously recorded sample value and does not represent the actual steering wheel position.

Airbag Module Data Sources:

- Event recorded data are collected either INTERNALLY or EXTERNALLY to the RCM.

  - INTERNAL DATA is measured, calculated, and stored internally, sensors external to the RCM include the following:
    > The Driver and Passenger Belt Switch Circuits are wired directly to the RCM.
    > The Driver's Seat Track Position Switch Circuit is wired directly to the RCM.
    > The Side Impact Sensors (if equipped) are located on the side of vehicle and are wired directly to the RCM.
    > The Occupant Classification Sensor is located in the front passenger seat and transmits data directly to the RCM on high-speed CAN bus.
    > Front Impact Sensors (right and left) are located at the front of vehicle and are wire directly to the RCM.

  - EXTERNAL DATA recorded by the RCM are data collected from the vehicle communication network from various sources such as Powertrain Control Module, Brake Module, etc.

02007_RCM-RC6_r002

System Status at Time of Retrieval

VIN as programmed into RCM at factory	1FTEX1E83AFC34783
Current VIN from PCM	1FTEX1E83AFC34783
Ignition cycle, download (first record)	27717
Ignition cycle, download (second record)	27717
Restraints Control Module Part Number	AL34-14B321-FA
Restraints Control Module Serial Number	7136896100000000
Restraints Control Module Software Part Number (Version)	BR33-14C028-AB
Left/Center Frontal Restraints Sensor Serial Number	0CA9EF50
Left Side Restraint Sensor 1 Serial Number	99B214C1
Left Side Restraint Sensor 2 Serial Number	12837005
Right Frontal Restraints Sensor Serial Number	0CA9E9FD
Right Side Restraint Sensor 1 Serial Number	487054C1
Right Side Restraints Sensor 2 Serial Number	0CAB6DBD

System Status at Event (First Record)

Recording Status	Locked Record
Complete file recorded (yes,no)	Yes
Multi-event, number of events (1,2)	1
Time from event 1 to 2 (msec)	N/A
Lifetime Operating Timer at event time zero (seconds)	24959560
Key-on Timer at event time zero (seconds)	2850
Vehicle voltage at time zero (Volts)	13.527
Energy Reserve Mode entered during event (Y/N)	Yes
Time Driver First Row Satellite Sensor Lost Relative to Time Zero (msec)	79.0
Time Passenger Second Row Satellite Sensor Lost Relative to Time Zero (msec)	79.0

Faults Present at Start of Event (First Record)

No Faults Recorded

Deployment Data (First Record)

Frontal airbag deployment, time to first stage deployment, driver (msec)	21.5
Frontal airbag deployment, time to 2nd stage, driver (msec)	31.5
Pretensioner (retractor) deployment, time to fire, driver (msec)	6.5
Maximum delta-V, longitudinal (MPH [km/h])	-30.76 [-49.51]
Time, maximum delta-V longitudinal (msec)	142
Maximum delta-V, lateral (MPH [km/h])	-6.29 [-10.13]
Time, maximum delta-V lateral (msec)	106
Left or center front, satellite Sensor discriminating deployment	Yes
Left or center, front satellite Sensor safing	Yes
Right, front satellite sensor discriminating deployment	Yes
Right, front satellite sensor safing	Yes
RCM, front sensor discriminating deployment	Yes
RCM, front sensor safing	Yes
Longitudinal Delta-V Time Zero Offset	1.0 ms
Lateral Delta-V Time Zero Offset	1.0 ms
Roll Angle Time Zero Offset	61.0 ms

Pre-Crash Data -1 sec (First Record)

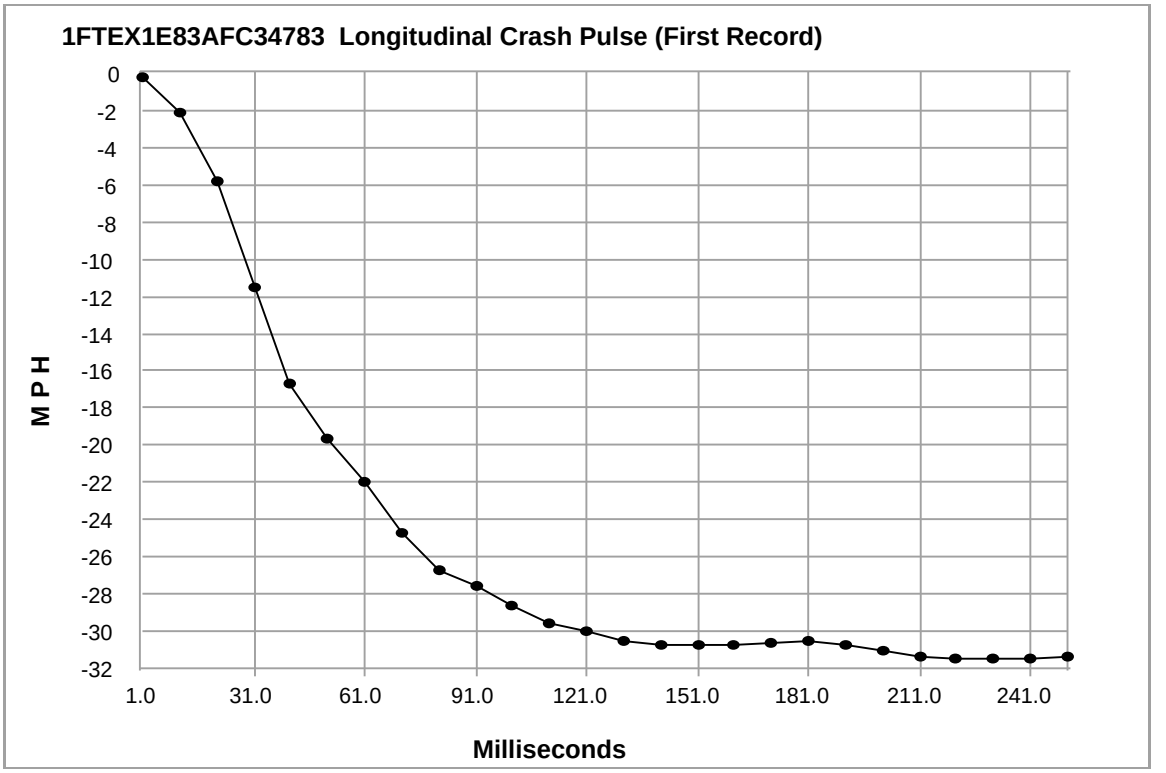
Ignition cycle, crash	27714
Frontal air bag warning lamp, on/off	Off
Occupant size classification, front passenger (Child size Yes/No [Hex value])	No [$01]
Safety belt status, driver	Driver Buckled
Seat track position switch, foremost, status, driver	Not Forward
Safety belt status, front passenger	Passenger Not Buckled
Brake Telltale	Off
ABS Telltale	Off
Stability Control Telltale	Off
Speed Control Telltale	Off
Powertrain Wrench Telltale	Off
Powertrain Malfunction Indicator Lamp (MIL)Telltale	Off

Pre-Crash Data -5 to 0 sec [2 samples/sec] (First Record)

Times (sec)	Speed vehicle indicated MPH [km/h]	Accelerator pedal, % full	Service brake, on/off	Engine RPM	ABS activity (engaged, non-engaged)	Stability control (engaged, non-engaged)	Traction Control via Brakes (engaged, non-engaged)	Traction Control via Engine (engaged, non-engaged)
- 5.0	79.5 [128.0]	82	Off	4900	non-engaged	non-engaged	non-engaged	non-engaged
- 4.5	80.2 [129.0]	44	Off	4900	non-engaged	non-engaged	non-engaged	non-engaged
- 4.0	79.5 [128.0]	0	Off	4600	non-engaged	non-engaged	non-engaged	non-engaged
- 3.5	78.9 [127.0]	0	On	3900	non-engaged	non-engaged	non-engaged	non-engaged
- 3.0	77.7 [125.0]	0	On	3300	non-engaged	non-engaged	non-engaged	non-engaged
- 2.5	76.4 [123.0]	0	On	3300	non-engaged	non-engaged	non-engaged	non-engaged
- 2.0	75.8 [122.0]	0	On	3200	non-engaged	non-engaged	non-engaged	non-engaged
- 1.5	74.6 [120.0]	0	Off	3100	non-engaged	non-engaged	non-engaged	non-engaged
- 1.0	73.9 [119.0]	44	Off	2900	non-engaged	non-engaged	non-engaged	non-engaged
- 0.5	74.6 [120.0]	99	Off	2700	non-engaged	non-engaged	non-engaged	non-engaged
0.0	70.8 [114.0]	0	On	2900	non-engaged	non-engaged	non-engaged	non-engaged

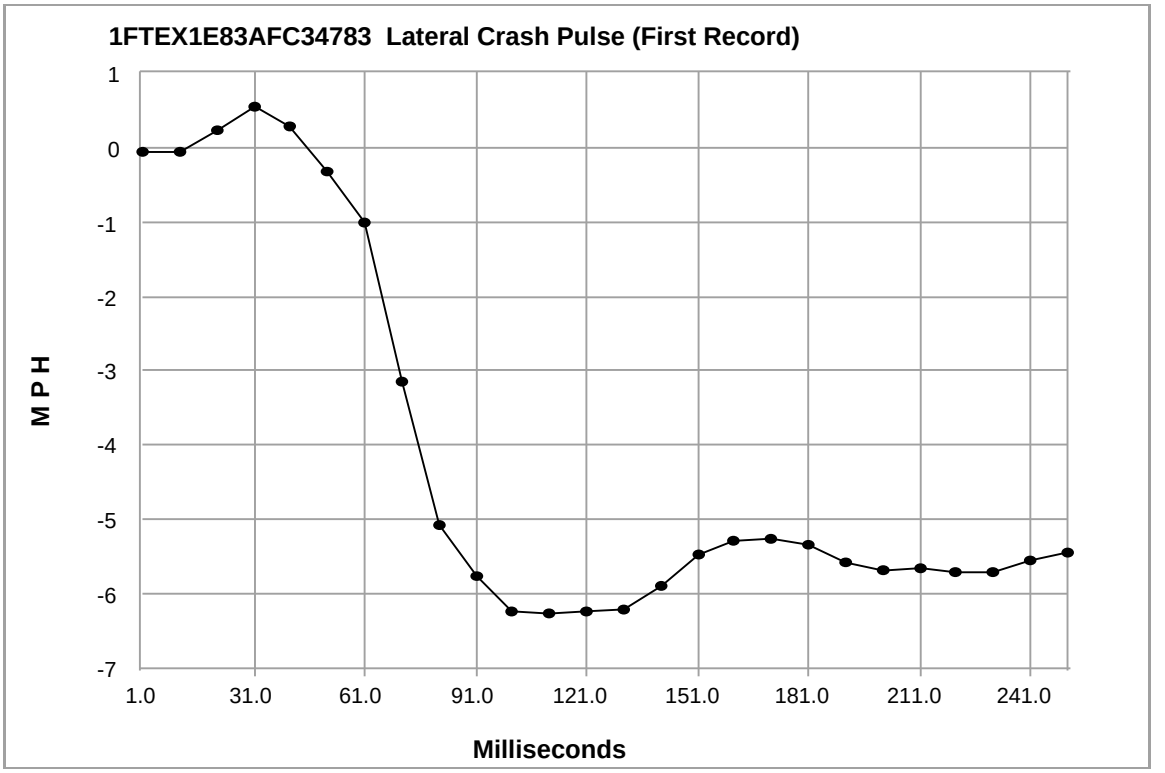
Pre-Crash Data -5 to 0 sec [10 samples/sec] (First Record)

Times (sec)	Steering Wheel Angle (degrees)	Stability Control Lateral Acceleration (g)	Stability Control Longitudinal Acceleration (g)	Stability Control Yaw Rate (deg/sec)	Stability Control Roll Rate (deg/sec)
- 5.0	7.7	0.047	0.035	1.0	-1.62
- 4.9	12.2	0.087	0.078	2.25	1.62
- 4.8	16.7	0.109	0.005	4.12	4.25
- 4.7	12.2	0.23	-0.034	4.5	1.5
- 4.6	7.7	0.169	-0.046	4.62	-1.12
- 4.5	3.2	0.145	-0.048	2.62	-0.75
- 4.4	3.2	0.097	-0.078	1.5	-0.37
- 4.3	-1.3	-0.009	-0.048	0.62	-3.25
- 4.2	-1.3	0.055	-0.136	0.37	-1.75
- 4.1	3.2	0.021	-0.133	0.37	1.37
- 4.0	3.2	0.04	-0.092	0.62	3.12
- 3.9	3.2	-0.039	-0.153	1.5	2.5
- 3.8	3.2	0.093	-0.153	1.25	-1.37
- 3.7	3.2	0.014	-0.187	1.0	0.5
- 3.6	3.2	0.014	-0.169	1.5	1.5
- 3.5	3.2	0.067	-0.131	1.75	1.5
- 3.4	3.2	0.031	-0.143	1.37	0.37
- 3.3	3.2	0.088	-0.114	1.75	0.0
- 3.2	3.2	0.046	-0.138	1.62	0.62
- 3.1	3.2	0.082	-0.107	1.75	0.62
- 3.0	3.2	0.056	-0.099	2.25	1.62
- 2.9	3.2	0.058	-0.141	2.0	1.5
- 2.8	3.2	0.086	-0.114	1.75	0.12
- 2.7	3.2	0.071	-0.15	1.75	-0.5
- 2.6	3.2	0.078	-0.138	1.75	0.25
- 2.5	3.2	0.068	-0.114	1.75	1.0
- 2.4	3.2	0.043	-0.141	1.5	1.5
- 2.3	3.2	0.073	-0.097	1.5	1.37
- 2.2	3.2	0.041	-0.112	1.75	1.0
- 2.1	3.2	0.058	-0.146	1.5	0.0
- 2.0	3.2	0.077	-0.107	1.25	-0.75
- 1.9	3.2	0.046	-0.126	1.37	0.5
- 1.8	3.2	0.036	-0.122	1.75	1.37
- 1.7	3.2	0.059	-0.089	2.0	1.5
- 1.6	-1.3	0.024	-0.089	1.12	1.25
- 1.5	-1.3	0.043	-0.068	0.62	-0.25
- 1.4	-1.3	0.032	-0.071	0.87	0.0
- 1.3	-1.3	0.005	-0.053	0.62	1.12
- 1.2	-1.3	-0.031	-0.022	0.62	1.62
- 1.1	3.2	0.047	0.007	1.75	-5.37
- 1.0	7.7	0.046	0.01	1.0	-2.25
- 0.9	7.7	-0.003	-0.027	2.12	5.62
- 0.8	12.2	0.075	-0.068	2.5	8.5
- 0.7	16.7	0.175	-0.204	3.25	6.5
- 0.6	25.7	0.151	-0.449	4.75	4.12
- 0.5	34.7	0.318	-0.483	6.87	2.5
- 0.4	43.7	0.44	-0.82	9.75	5.25
- 0.3	25.7	0.335	-0.987	11.62	1.5
- 0.2	-1.3	0.133	-0.509	7.25	-9.5
- 0.1	-1.3	0.103	-0.958	3.75	-11.75
0.0	7.7	0.08	-0.742	4.25	9.0



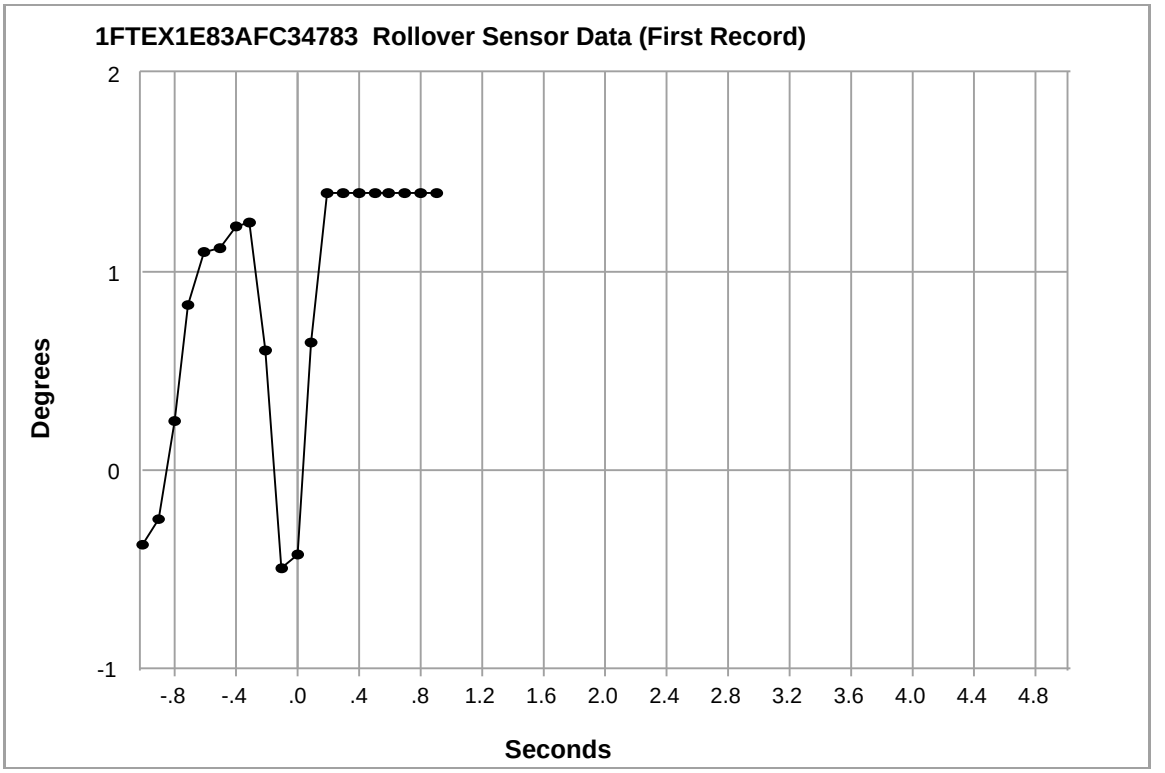
Longitudinal Crash Pulse (First Record)

Time (msec)	Delta-V, longitudinal (MPH)	Delta-V, longitudinal (km/h)
1.0	-0.17	-0.27
11.0	-2.08	-3.34
21.0	-5.81	-9.35
31.0	-11.49	-18.48
41.0	-16.72	-26.91
51.0	-19.68	-31.68
61.0	-21.93	-35.29
71.0	-24.70	-39.76
81.0	-26.70	-42.97
91.0	-27.54	-44.33
101.0	-28.57	-45.98
111.0	-29.56	-47.58
121.0	-30.04	-48.34
131.0	-30.55	-49.16
141.0	-30.76	-49.50
151.0	-30.77	-49.52
161.0	-30.71	-49.43
171.0	-30.58	-49.21
181.0	-30.55	-49.17
191.0	-30.70	-49.40
201.0	-31.05	-49.97
211.0	-31.37	-50.48
221.0	-31.51	-50.72
231.0	-31.49	-50.67
241.0	-31.45	-50.61
251.0	-31.34	-50.44



Lateral Crash Pulse (First Record)

Time (msec)	Delta-V, lateral (MPH)	Delta-V, lateral (km/h)
1.0	-0.07	-0.11
11.0	-0.05	-0.08
21.0	0.22	0.36
31.0	0.56	0.91
41.0	0.30	0.48
51.0	-0.33	-0.53
61.0	-1.02	-1.64
71.0	-3.15	-5.06
81.0	-5.07	-8.16
91.0	-5.77	-9.28
101.0	-6.22	-10.01
111.0	-6.27	-10.09
121.0	-6.24	-10.04
131.0	-6.22	-10.01
141.0	-5.89	-9.48
151.0	-5.47	-8.80
161.0	-5.30	-8.52
171.0	-5.26	-8.46
181.0	-5.34	-8.60
191.0	-5.58	-8.99
201.0	-5.68	-9.14
211.0	-5.65	-9.09
221.0	-5.70	-9.18
231.0	-5.71	-9.19
241.0	-5.54	-8.92
251.0	-5.45	-8.77



Rollover Sensor Data (First Record)

Time (sec)	Vehicle roll angle (degrees)
-1.0	-0.38
-0.9	-0.25
-0.8	0.25
-0.7	0.83
-0.6	1.1
-0.5	1.12
-0.4	1.23
-0.3	1.25
-0.2	0.61
-0.1	-0.5
0.0	-0.43
0.1	0.65
0.2	1.39
0.3	1.39
0.4	1.39
0.5	1.39
0.6	1.39
0.7	1.39
0.8	1.39
0.9	1.39
1.0	N/A

Time (sec)	Vehicle roll angle (degrees)
1.1	N/A
1.2	N/A
1.3	N/A
1.4	N/A
1.5	N/A
1.6	N/A
1.7	N/A
1.8	N/A
1.9	N/A
2.0	N/A
2.1	N/A
2.2	N/A
2.3	N/A
2.4	N/A
2.5	N/A
2.6	N/A
2.7	N/A
2.8	N/A
2.9	N/A
3.0	N/A
3.1	N/A

Time (sec)	Vehicle roll angle (degrees)
3.2	N/A
3.3	N/A
3.4	N/A
3.5	N/A
3.6	N/A
3.7	N/A
3.8	N/A
3.9	N/A
4.0	N/A
4.1	N/A
4.2	N/A
4.3	N/A
4.4	N/A
4.5	N/A
4.6	N/A
4.7	N/A
4.8	N/A
4.9	N/A
5.0	N/A

System Status at Event (Second Record)

Recording Status	Unlocked Record
Complete file recorded (yes,no)	Yes
Multi-event, number of events (1,2)	2
Time from event 1 to 2 (msec)	100
Lifetime Operating Timer at event time zero (seconds)	24959560
Key-on Timer at event time zero (seconds)	2850
Vehicle voltage at time zero (Volts)	3.564
Energy Reserve Mode entered during event (Y/N)	Yes
Time Driver First Row Satellite Sensor Lost Relative to Time Zero (msec)	Data lost prior to event
Time Passenger Second Row Satellite Sensor Lost Relative to Time Zero (msec)	Data lost prior to event

Faults Present at Start of Event (Second Record)

B1193-00

Deployment Data (Second Record)

Maximum delta-V, longitudinal (MPH [km/h])	1.21 [1.95]
Time, maximum delta-V longitudinal (msec)	99
Maximum delta-V, lateral (MPH [km/h])	0.28 [0.45]
Time, maximum delta-V lateral (msec)	22
Longitudinal Delta-V Time Zero Offset	0.0 ms
Lateral Delta-V Time Zero Offset	0.0 ms
Roll Angle Time Zero Offset	10.0 ms

Pre-Crash Data -1 sec (Second Record)

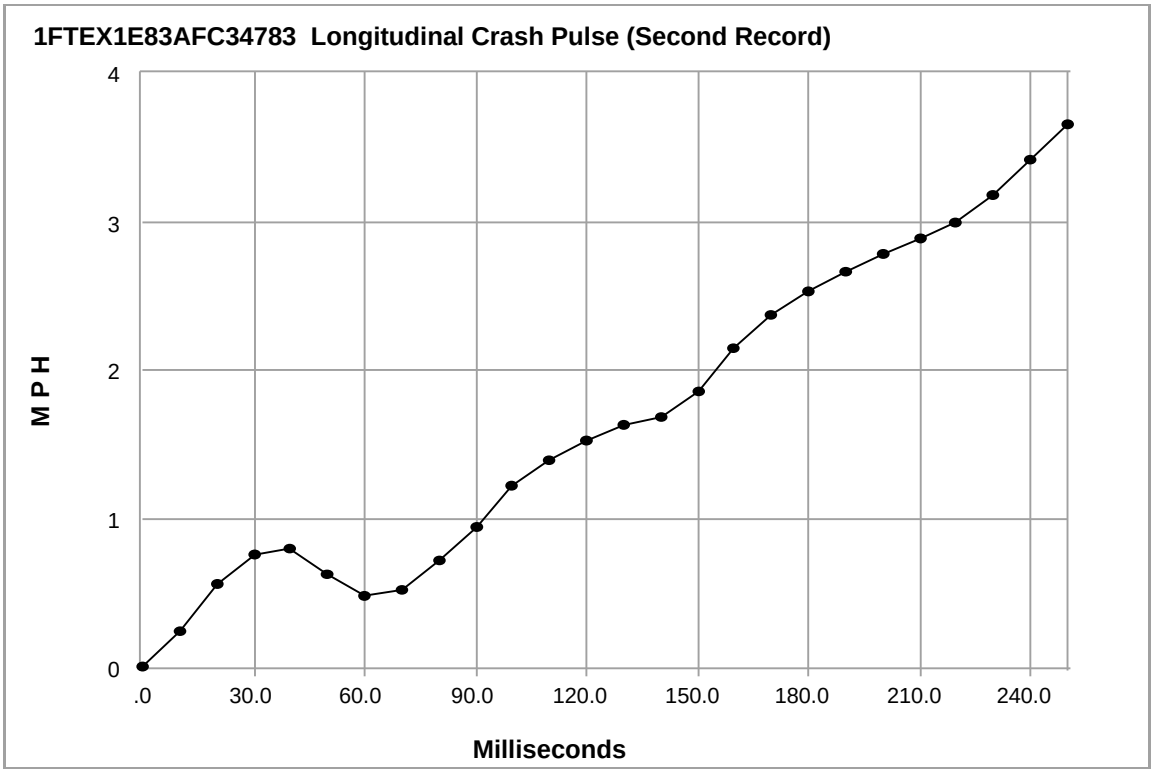
Ignition cycle, crash	27714
Frontal air bag warning lamp, on/off	On
Occupant size classification, front passenger (Child size Yes/No [Hex value])	No [$01]
Safety belt status, driver	Driver Buckled
Seat track position switch, foremost, status, driver	Not Forward
Safety belt status, front passenger	Passenger Not Buckled
Brake Telltale	Off
ABS Telltale	Off
Stability Control Telltale	Off
Speed Control Telltale	Off
Powertrain Wrench Telltale	Off
Powertrain Malfunction Indicator Lamp (MIL)Telltale	Off

Pre-Crash Data -5 to 0 sec [2 samples/sec] (Second Record)

Times (sec)	Speed vehicle indicated MPH [km/h]	Accelerator pedal, % full	Service brake, on/off	Engine RPM	ABS activity (engaged, non-engaged)	Stability control (engaged, non-engaged)	Traction Control via Brakes (engaged, non-engaged)	Traction Control via Engine (engaged, non-engaged)
- 5.0	79.5 [128.0]	82	Off	4900	non-engaged	non-engaged	non-engaged	non-engaged
- 4.5	80.2 [129.0]	44	Off	4900	non-engaged	non-engaged	non-engaged	non-engaged
- 4.0	79.5 [128.0]	0	Off	4600	non-engaged	non-engaged	non-engaged	non-engaged
- 3.5	78.9 [127.0]	0	On	3900	non-engaged	non-engaged	non-engaged	non-engaged
- 3.0	77.7 [125.0]	0	On	3300	non-engaged	non-engaged	non-engaged	non-engaged
- 2.5	76.4 [123.0]	0	On	3300	non-engaged	non-engaged	non-engaged	non-engaged
- 2.0	75.8 [122.0]	0	On	3200	non-engaged	non-engaged	non-engaged	non-engaged
- 1.5	74.6 [120.0]	0	Off	3100	non-engaged	non-engaged	non-engaged	non-engaged
- 1.0	73.9 [119.0]	44	Off	2900	non-engaged	non-engaged	non-engaged	non-engaged
- 0.5	74.6 [120.0]	99	Off	2700	non-engaged	non-engaged	non-engaged	non-engaged
0.0	70.8 [114.0]	0	On	2900	non-engaged	non-engaged	non-engaged	non-engaged

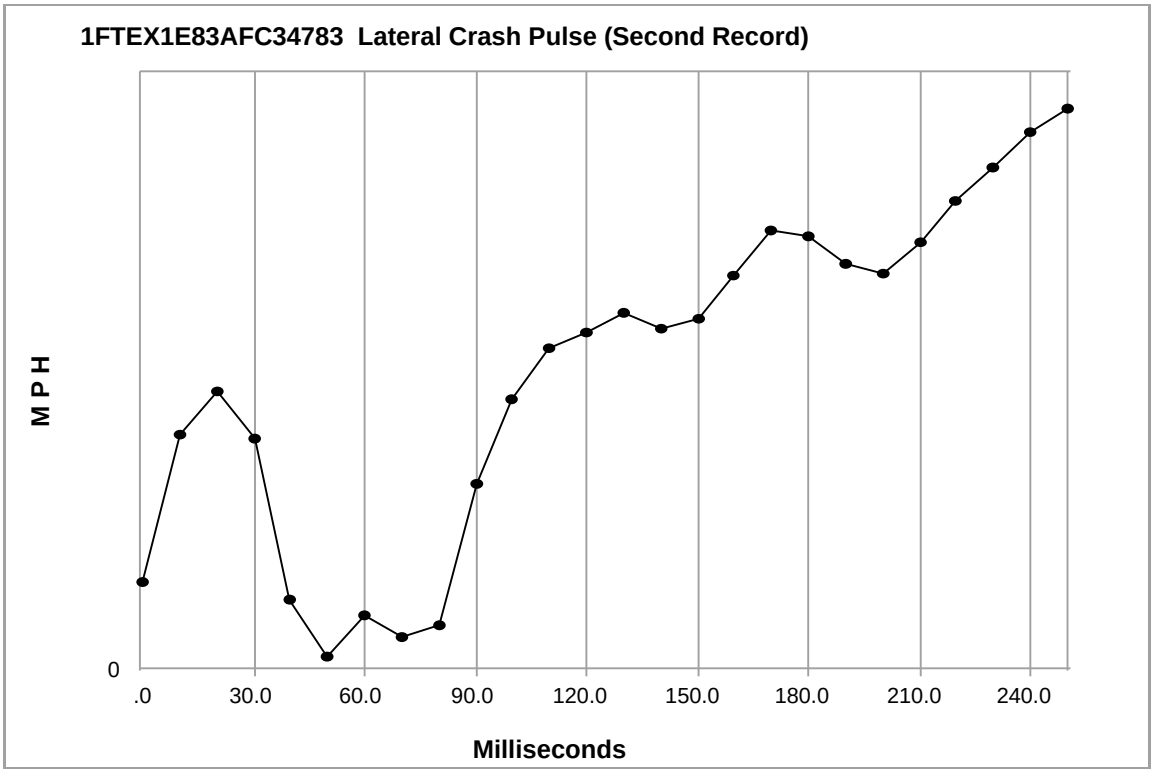
Pre-Crash Data -5 to 0 sec [10 samples/sec] (Second Record)

Times (sec)	Steering Wheel Angle (degrees)	Stability Control Lateral Acceleration (g)	Stability Control Longitudinal Acceleration (g)	Stability Control Yaw Rate (deg/sec)	Stability Control Roll Rate (deg/sec)
- 5.0	12.2	0.087	0.078	2.25	1.62
- 4.9	16.7	0.109	0.005	4.12	4.25
- 4.8	12.2	0.23	-0.034	4.5	1.5
- 4.7	7.7	0.169	-0.046	4.62	-1.12
- 4.6	3.2	0.145	-0.048	2.62	-0.75
- 4.5	3.2	0.097	-0.078	1.5	-0.37
- 4.4	-1.3	-0.009	-0.048	0.62	-3.25
- 4.3	-1.3	0.055	-0.136	0.37	-1.75
- 4.2	3.2	0.021	-0.133	0.37	1.37
- 4.1	3.2	0.04	-0.092	0.62	3.12
- 4.0	3.2	-0.039	-0.153	1.5	2.5
- 3.9	3.2	0.093	-0.153	1.25	-1.37
- 3.8	3.2	0.014	-0.187	1.0	0.5
- 3.7	3.2	0.014	-0.169	1.5	1.5
- 3.6	3.2	0.067	-0.131	1.75	1.5
- 3.5	3.2	0.031	-0.143	1.37	0.37
- 3.4	3.2	0.088	-0.114	1.75	0.0
- 3.3	3.2	0.046	-0.138	1.62	0.62
- 3.2	3.2	0.082	-0.107	1.75	0.62
- 3.1	3.2	0.056	-0.099	2.25	1.62
- 3.0	3.2	0.058	-0.141	2.0	1.5
- 2.9	3.2	0.086	-0.114	1.75	0.12
- 2.8	3.2	0.071	-0.15	1.75	-0.5
- 2.7	3.2	0.078	-0.138	1.75	0.25
- 2.6	3.2	0.068	-0.114	1.75	1.0
- 2.5	3.2	0.043	-0.141	1.5	1.5
- 2.4	3.2	0.073	-0.097	1.5	1.37
- 2.3	3.2	0.041	-0.112	1.75	1.0
- 2.2	3.2	0.058	-0.146	1.5	0.0
- 2.1	3.2	0.077	-0.107	1.25	-0.75
- 2.0	3.2	0.046	-0.126	1.37	0.5
- 1.9	3.2	0.036	-0.122	1.75	1.37
- 1.8	3.2	0.059	-0.089	2.0	1.5
- 1.7	-1.3	0.024	-0.089	1.12	1.25
- 1.6	-1.3	0.043	-0.068	0.62	-0.25
- 1.5	-1.3	0.032	-0.071	0.87	0.0
- 1.4	-1.3	0.005	-0.053	0.62	1.12
- 1.3	-1.3	-0.031	-0.022	0.62	1.62
- 1.2	3.2	0.047	0.007	1.75	-5.37
- 1.1	7.7	0.046	0.01	1.0	-2.25
- 1.0	7.7	-0.003	-0.027	2.12	5.62
- 0.9	12.2	0.075	-0.068	2.5	8.5
- 0.8	16.7	0.175	-0.204	3.25	6.5
- 0.7	25.7	0.151	-0.449	4.75	4.12
- 0.6	34.7	0.318	-0.483	6.87	2.5
- 0.5	43.7	0.44	-0.82	9.75	5.25
- 0.4	25.7	0.335	-0.987	11.62	1.5
- 0.3	-1.3	0.133	-0.509	7.25	-9.5
- 0.2	-1.3	0.103	-0.958	3.75	-11.75
- 0.1	7.7	0.08	-0.742	4.25	9.0
0.0	7.7	0.54	-2.0	17.62	27.37



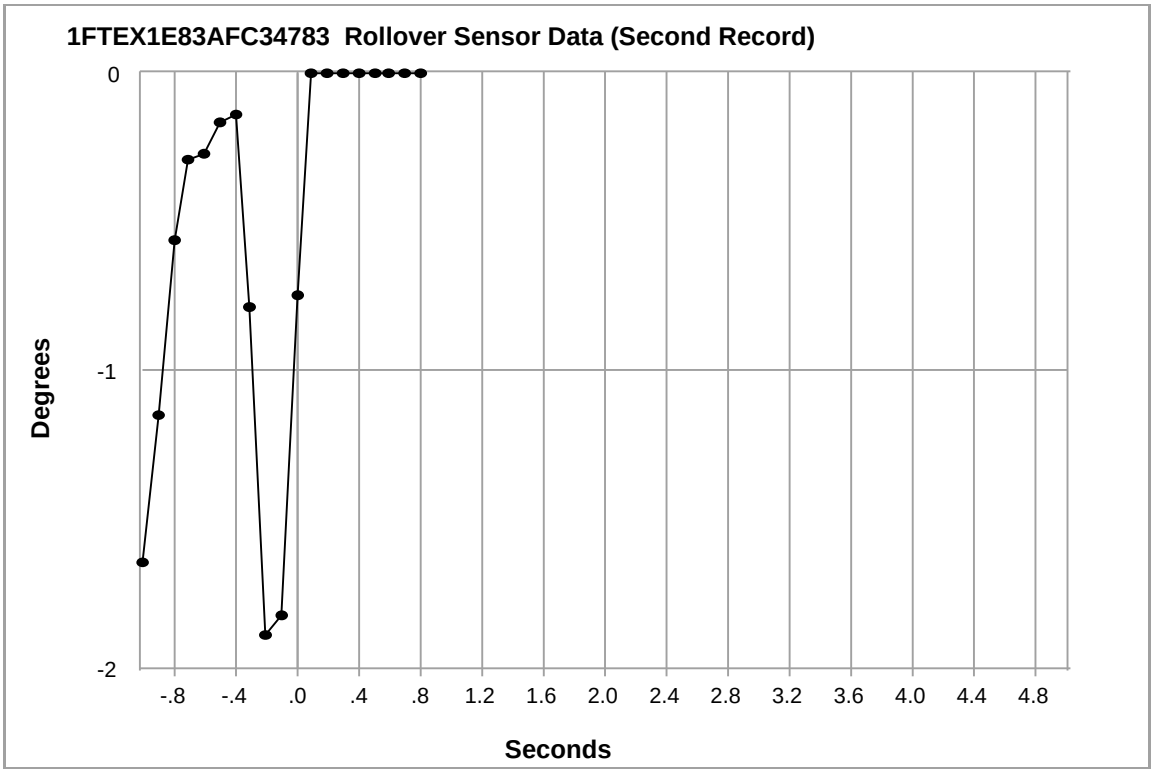
Longitudinal Crash Pulse (Second Record)

Time (msec)	Delta-V, longitudinal (MPH)	Delta-V, longitudinal (km/h)
0.0	0.01	0.02
10.0	0.25	0.40
20.0	0.56	0.91
30.0	0.77	1.23
40.0	0.80	1.29
50.0	0.63	1.01
60.0	0.49	0.79
70.0	0.52	0.84
80.0	0.73	1.18
90.0	0.95	1.53
100.0	1.23	1.98
110.0	1.40	2.26
120.0	1.53	2.46
130.0	1.64	2.64
140.0	1.70	2.73
150.0	1.86	3.00
160.0	2.16	3.47
170.0	2.38	3.82
180.0	2.54	4.08
190.0	2.67	4.30
200.0	2.78	4.48
210.0	2.89	4.65
220.0	3.00	4.83
230.0	3.18	5.12
240.0	3.42	5.50
250.0	3.66	5.89



Lateral Crash Pulse (Second Record)

Time (msec)	Delta-V, lateral (MPH)	Delta-V, lateral (km/h)
0.0	0.02	0.03
10.0	0.21	0.34
20.0	0.27	0.44
30.0	0.21	0.34
40.0	-0.01	-0.01
50.0	-0.08	-0.13
60.0	-0.03	-0.05
70.0	-0.06	-0.09
80.0	-0.04	-0.07
90.0	0.15	0.24
100.0	0.26	0.42
110.0	0.33	0.53
120.0	0.35	0.57
130.0	0.38	0.61
140.0	0.36	0.57
150.0	0.37	0.59
160.0	0.43	0.69
170.0	0.49	0.79
180.0	0.48	0.77
190.0	0.44	0.71
200.0	0.43	0.69
210.0	0.47	0.76
220.0	0.53	0.85
230.0	0.57	0.92
240.0	0.62	1.00
250.0	0.65	1.05



Rollover Sensor Data (Second Record)

Time (sec)	Vehicle roll angle (degrees)
-1.0	-1.64
-0.9	-1.15
-0.8	-0.56
-0.7	-0.29
-0.6	-0.27
-0.5	-0.16
-0.4	-0.14
-0.3	-0.78
-0.2	-1.89
-0.1	-1.82
0.0	-0.75
0.1	0.0
0.2	0.0
0.3	0.0
0.4	0.0
0.5	0.0
0.6	0.0
0.7	0.0
0.8	0.0
0.9	N/A
1.0	N/A

Time (sec)	Vehicle roll angle (degrees)
1.1	N/A
1.2	N/A
1.3	N/A
1.4	N/A
1.5	N/A
1.6	N/A
1.7	N/A
1.8	N/A
1.9	N/A
2.0	N/A
2.1	N/A
2.2	N/A
2.3	N/A
2.4	N/A
2.5	N/A
2.6	N/A
2.7	N/A
2.8	N/A
2.9	N/A
3.0	N/A
3.1	N/A

Time (sec)	Vehicle roll angle (degrees)
3.2	N/A
3.3	N/A
3.4	N/A
3.5	N/A
3.6	N/A
3.7	N/A
3.8	N/A
3.9	N/A
4.0	N/A
4.1	N/A
4.2	N/A
4.3	N/A
4.4	N/A
4.5	N/A
4.6	N/A
4.7	N/A
4.8	N/A
4.9	N/A
5.0	N/A

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.

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02 00 00 00

41 4C 33 34 2D 31 34 42 33 32 31 2D 46 41 00 00 00 00 00 00 00 00 00 00

37 31 33 36 38 39 36 31 30 30 30 30 30 30 30 30

42 52 33 33 2D 31 34 43 30 32 38 2D 41 42 00 00 00 00 00 00 00 00 00 00

0C A9 EF 50 00 00 00 00 00 00 00 00 00 00 00 00

99 B2 14 C1 00 00 00 00 00 00 00 00 00 00 00 00

12 83 70 05 00 00 00 00 00 00 00 00 00 00 00 00

0C A9 E9 FD 00 00 00 00 00 00 00 00 00 00 00 00

48 70 54 C1 00 00 00 00 00 00 00 00 00 00 00 00

0C AB 6D BD 00 00 00 00 00 00 00 00 00 00 00 00

31 46 54 45 58 31 45 38 33 41 46 43 33 34 37 38 33

31 46 54 45 58 31 45 38 33 41 46 43 33 34 37 38 33 00 00 00 00 00 00 00
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Event Record 1

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42 6C 00 00 45 6C 00 00 A8 2B 4C 00 3A 02 00 00 FC 6A 00 00 1E EA FF FF 68 ED D3 FF
9E 7F 2B 00 7C 32 00 00 2F 13 2C 00 D2 19 2C 00 CC 26 2C 00 8A 3A 2C 00 C1 4C 2C 00
0D 57 2C 00 DA 5E 2C 00 83 68 2C 00 73 6F 2C 00 62 72 2C 00 F7 75 2C 00 6A 79 2C 00
10 7B 2C 00 D3 7C 2C 00 93 7D 2C 00 99 7D 2C 00 69 7D 2C 00 F0 7C 2C 00 DB 7C 2C 00
59 7D 2C 00 96 7E 2C 00 B0 7F 2C 00 32 80 2C 00 19 80 2C 00 F6 7F 2C 00 9B 7F 2C 00
27 80 D4 FF 38 80 D4 FF 29 81 D4 FF 57 82 D4 FF 6B 81 D4 FF 3C 7F D4 FF D9 7C D4 FF
70 75 D4 FF C1 6E D4 FF 53 6C D4 FF BE 6A D4 FF 96 6A D4 FF AE 6A D4 FF C1 6A D4 FF
E3 6B D4 FF 5B 6D D4 FF F7 6D D4 FF 17 6E D4 FF CC 6D D4 FF F6 6C D4 FF 9F 6C D4 FF
BC 6C D4 FF 8D 6C D4 FF 87 6C D4 FF 1D 6D D4 FF 6E 6D D4 FF 9A D0 A7 D0 F5 D0 05 D1
38 CF 20 CC 51 CC 53 CF 6A D1 6A D1 6A D1 6A D1 6A D1 6A D1 6A D1 6A D1 A4 CF FB CE
D8 CE 1D CF 59 CF 54 CF 4C CF 4C CF A9 CE FE CD F6 CD 1C CE 53 CE 4A CE 16 CE 11 CE
1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE
1D CE 1B CE 1A CE 1A CE 1A CE 1A CE 1A CE 11 CE 11 CE 0D CE 3C CD 77 CC D1 CC 34 CE
D9 CF 30 27 30 27 30 27 30 27 30 27 30 27 30 27 30 27 30 27 03 27 03 27 03 27 03 27
03 27 30 27 5D 27 5D 27 8A 27 B7 27 11 28 6B 28 C5 28 11 28 03 27 03 27 5D 27 5D 27
8A 27 B7 27 8A 27 5D 27 30 27 30 27 03 27 03 27 30 27 30 27 30 27 30 27 30 27 30 27
30 27 30 27 30 27 30 27 30 27 30 27 30 27 30 27 30 27 30 27 5E 07 43 07 6F 07 60 07
3E 07 65 07 52 07 56 07 77 07 77 07 8C 07 89 07 9B 07 BA 07 D7 07 DA 07 B5 07 8C 07
04 07 0F 06 ED 05 9C 04 F5 03 D3 05 12 04 EA 04 F3 07 1E 08 D5 07 AE 07 A2 07 A0 07
82 07 A0 07 48 07 4B 07 74 07 37 07 37 07 15 07 27 07 4D 07 41 07 5E 07 46 07 65 07
6D 07 43 07 5E 07 3A 07 46 07 14 08 FB 07 19 08 F9 07 0A 08 1D 08 FE 07 F4 07 0B 08
E8 07 FB 07 F0 07 D5 07 B1 07 FF 07 FE 07 CD 07 1B 08 7F 08 67 08 0E 09 88 09 1F 09
55 08 37 08 20 08 FF 07 27 08 3D 08 B6 08 79 08 61 08 31 08 C7 07 07 08 E5 07 F8 07
A9 07 2D 08 DE 07 DE 07 13 08 EF 07 28 08 FE 07 22 08 08 08 0A 08 26 08 17 08 1E 08
FF 46 E6 46 E6 46 FF 46 E6 46 CD 46 D9 46 FF 46 18 47 C0 46 8E 46 A7 46 8E 46 8E 46
FF 46 B4 46 24 47 4A 47 95 47 2B 48 FF 48 1F 4A DA 4A 25 49 C7 47 F9 47 B4 46 31 47
EC 47 12 48 1E 48 56 47 E6 46 8E 46 75 46 75 46 8E 46 E6 46 CD 46 B4 46 E6 46 FF 46
D9 46 FF 46 F2 46 FF 46 31 47 18 47 FF 46 FF 46 FF 46 94 75 C6 75 B9 75 94 75 30 75
E5 74 62 75 B9 75 C6 75 AD 75 17 75 30 75 A0 75 D2 75 17 73 4F 74 62 77 82 78 BA 77
CC 76 2A 76 3D 77 C6 75 7A 71 99 70 B4 78 8E 74 D2 75 D9 76 C6 75 C0 74 E5 74 0B 75
EB 73 81 74 B9 75 68 76 2A 76 A7 74 62 75 C6 75 C6 75 55 75 30 75 6E 75 6E 75 D2 75
C6 75 3C 75 FE 74 49 75 00 00 2B 00 00 00 00 00 0D 00 00 00 3F 00 00 00 00 00 00 00
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00 00 00 78 1F 00 34 0B 00 00 2C 77 1D 00 34 0D 00 00 63 78 1B 00 34 62 00 00 00 72
1D C0 34 0B 00 00 52 80 31 00 34 63 00 00 00 00 00 54 41 05 00 00 00 00 00 34 40 0B
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Event Record 2

42 6C 00 00 45 6C 00 00 A8 2B 4C 00 3A 02 00 00 C9 FB FF FF F7 00 00 00 79 88 D3 FF
1A 92 2B 00 96 2E 00 00 7B 77 2C 00 AB 76 2C 00 92 75 2C 00 DD 74 2C 00 BB 74 2C 00
58 75 2C 00 D2 75 2C 00 B4 75 2C 00 FB 74 2C 00 38 74 2C 00 3D 73 2C 00 A6 72 2C 00
38 72 2C 00 D1 71 2C 00 A1 71 2C 00 0D 71 2C 00 07 70 2C 00 44 6F 2C 00 B4 6E 2C 00
3E 6E 2C 00 D8 6D 2C 00 7D 6D 2C 00 16 6D 2C 00 78 6C 2C 00 A4 6B 2C 00 CF 6A 2C 00
F4 6D D4 FF A4 6E D4 FF D8 6E D4 FF A1 6E D4 FF DF 6D D4 FF 9C 6D D4 FF CD 6D D4 FF
B2 6D D4 FF C0 6D D4 FF 6A 6E D4 FF CF 6E D4 FF 0D 6F D4 FF 20 6F D4 FF 37 6F D4 FF
24 6F D4 FF 2F 6F D4 FF 64 6F D4 FF 99 6F D4 FF 92 6F D4 FF 71 6F D4 FF 66 6F D4 FF
8C 6F D4 FF BD 6F D4 FF E4 6F D4 FF 0F 70 D4 FF 2A 70 D4 FF 9A D0 A7 D0 F5 D0 05 D1
38 CF 20 CC 51 CC 53 CF 6A D1 6A D1 6A D1 6A D1 6A D1 6A D1 6A D1 6A D1 A4 CF FB CE
D8 CE 1D CF 59 CF 54 CF 4C CF 4C CF A9 CE FE CD F6 CD 1C CE 53 CE 4A CE 16 CE 11 CE
1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE 1D CE
1D CE 1B CE 1A CE 1A CE 1A CE 1A CE 1A CE 11 CE 11 CE 0D CE 3C CD 77 CC D1 CC 34 CE
D9 CF 30 27 30 27 30 27 30 27 30 27 30 27 30 27 30 27 30 27 03 27 03 27 03 27 03 27
03 27 30 27 5D 27 5D 27 8A 27 B7 27 11 28 6B 28 C5 28 11 28 03 27 03 27 5D 27 5D 27
8A 27 B7 27 8A 27 5D 27 30 27 30 27 03 27 03 27 30 27 30 27 30 27 30 27 30 27 30 27
30 27 30 27 30 27 30 27 30 27 30 27 30 27 30 27 30 27 30 27 5E 07 43 07 6F 07 60 07
3E 07 65 07 52 07 56 07 77 07 77 07 8C 07 89 07 9B 07 BA 07 D7 07 DA 07 B5 07 8C 07
04 07 0F 06 ED 05 9C 04 F5 03 D3 05 12 04 EA 04 00 00 1E 08 D5 07 AE 07 A2 07 A0 07
82 07 A0 07 48 07 4B 07 74 07 37 07 37 07 15 07 27 07 4D 07 41 07 5E 07 46 07 65 07
6D 07 43 07 5E 07 3A 07 46 07 14 08 FB 07 19 08 F9 07 0A 08 1D 08 FE 07 F4 07 0B 08
E8 07 FB 07 F0 07 D5 07 B1 07 FF 07 FE 07 CD 07 1B 08 7F 08 67 08 0E 09 88 09 1F 09
55 08 37 08 20 08 EC 09 27 08 3D 08 B6 08 79 08 61 08 31 08 C7 07 07 08 E5 07 F8 07
A9 07 2D 08 DE 07 DE 07 13 08 EF 07 28 08 FE 07 22 08 08 08 0A 08 26 08 17 08 1E 08
FF 46 E6 46 E6 46 FF 46 E6 46 CD 46 D9 46 FF 46 18 47 C0 46 8E 46 A7 46 8E 46 8E 46
FF 46 B4 46 24 47 4A 47 95 47 2B 48 FF 48 1F 4A DA 4A 25 49 C7 47 F9 47 32 4D 31 47
EC 47 12 48 1E 48 56 47 E6 46 8E 46 75 46 75 46 8E 46 E6 46 CD 46 B4 46 E6 46 FF 46
D9 46 FF 46 F2 46 FF 46 31 47 18 47 FF 46 FF 46 FF 46 94 75 C6 75 B9 75 94 75 30 75
E5 74 62 75 B9 75 C6 75 AD 75 17 75 30 75 A0 75 D2 75 17 73 4F 74 62 77 82 78 BA 77
CC 76 2A 76 3D 77 C6 75 7A 71 99 70 B4 78 E1 7F D2 75 D9 76 C6 75 C0 74 E5 74 0B 75
EB 73 81 74 B9 75 68 76 2A 76 A7 74 62 75 C6 75 C6 75 55 75 30 75 6E 75 6E 75 D2 75
C6 75 3C 75 FE 74 49 75 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
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1D C0 34 0B 00 00 52 80 31 00 34 63 00 00 00 00 00 54 41 05 00 00 00 00 00 34 40 0B
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Disclaimer of Liability

The users of the CDR product and reviewers of the CDR reports and exported data shall ensure that data and information supplied is applicable to the vehicle, vehicle's system(s) and the vehicle ECU. Robert Bosch LLC 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. Robert Bosch LLC expressly excludes all liability for incidental, consequential, special or punitive damages arising from or related to the CDR data, CDR software or use thereof.

25 JUN 26

CITY OF BROOKLYN)
PARMA MUNICIPAL COURT)
CRIMINAL DIVISION) **SEARCH WARRANT**

TO: THE CHIEF OF POLICE OF THE BROOKLYN POLICE DEPARTMENT AND/OR DETECTIVE BRETT DALTON #62 AND/OR ANY LAW ENFORCEMENT OFFICER OF THE CLEVELAND DIVISION OF POLICE AS AUTHORIZED.

WHEREAS: Affiant has exhibited probable cause necessary to search the below listed property, wherein affiant avers that he has reasonable cause to believe, and does believe, that equipment known as an: Sensing Diagnostic Module [SDM] / Event Data Recorder [EDR], contained within a 2010 Ford 150, pickup truck, black in color, bearing Ohio Registration KNM1437, V.I.N.: 1FTEX1E83AFC34783 that is currently in the possession of the Brooklyn Police Department located at 8000 Memphis Ave, Brooklyn, Ohio 44144; there is now being kept, concealed, and possessed the following evidence of a criminal offense:

> Any and all information within the above-listed items including but not limited to machine-readable data, all previously erased data, as well as all images stored and/or exchanged in electronic form; any and all images or any other electronic data involving speed/velocity, deployment, use of airbags at the time of event and/or any and all other evidence tending to establish violation of the criminal laws of the State of Ohio, to wit: R.C. 4511. + 2925. 331

I am satisfied that there is probable cause to believe that the property described is being concealed on the above-described equipment, including but not limited to hard-drives, discs, back up tapes, hardware and software and that grounds for issuance of this search warrant exist.

THEREFORE: You are hereby commanded in the name of the State of Ohio, with the necessary and proper assistance, to serve this warrant and search forthwith with the necessary assistance for the property specified by making bit-by-bit, also known as mirror images, mirror image copies thereof with any qualified and necessary assistance, and that

once said mirror images are made, that affiant and/or other investigating officers/agents are authorized to search said mirror images for the above described information. If any of the above-described property or any part thereof be found there, you are commanded to seize it, leaving a copy of this warrant and a receipt for the property taken, to prepare a written inventory of the property seized, to return this warrant to the undersigned or any Judge of the Court of Common Pleas, and to bring the property found on such search forthwith before said Judge, or some other judge or magistrate of the county having cognizance thereof.

Given my hand this 26th day of June 2025.

Tm Dobeck

Judge, Parma Municipal Court
Cuyahoga County, Ohio

dss4c31

EXHIBIT A

CITY OF BROOKLYN)
) SS:
COUNTY OF CUYAHOGA)

PARMA MUNICIPAL COURT
CRIMINAL DIVISION

AFFIDAVIT FOR
SEARCH WARRANT

Before me a Judge of the Parma Municipal Court, Cuyahoga County, personally appeared the undersigned Detective Brett Dalton #62 who being first duly sworn deposes and says that he is a member of the Brooklyn Police Department, Detective Bureau, and that his training and experience include the following: twenty-one (21) years as a police officer, of which the last eleven (11) years as a member of the Brooklyn Police Department. Affiant is currently assigned to the Detective Bureau and has been for the past four (4) years. Affiant has eight (8) years of experience as an Investigator with the Accident Investigation Unit. Affiant has received training at the Cuyahoga Community College Police Academy. Affiant received extensive training at the Ohio Peace Officer Training Academy, pertaining with accident reconstruction. Affiant avers that he has conducted over 25 investigations into automobile accidents that resulted in a fatality and/or serious injury and has made numerous arrests. Affiant states that he has probable cause to believe, and does believe, that in equipment known as: Sensing Data Module [SDM] / Event Data Recorder [EDR], contained within a 2010 Ford 150, pickup truck, black in color, bearing Ohio Registration KNM1437, V.I.N.: 1FTEX1E83AFC34 that is currently in the possession of the Brooklyn Police Department located at 8000 Memphis Ave, Brooklyn, Ohio 44144; there is now being kept, concealed, and possessed the following evidence of a criminal offense:

25BW037

FILED
25 JUN 26 AM 11:08

Any and all information within the above-listed items including but not limited to machine-readable data, all previously erased data, as well as all images stored and/or exchanged in electronic form; any and all images or any other electronic data involving speed/velocity, deployment, use of airbags at the time of event and/or any and all other evidence tending to establish violation of the criminal laws of the State of Ohio, to wit: R.C. 4511 and 2925.331.

The facts upon which affiant bases such belief is as follows:

1. Affiant avers that he was assigned to the investigation of a Motor Vehicle Accident on Tuesday, June 24, 2025 that resulted in a fatality of one occupant. The affiant avers that the accident occurred during a police pursuit with the Parma Heights Police Department (PHPD Report #[redacted]).

2. Affiant avers that Patrick Kerr (45/W/M) was operating a 2010 Ford 150, pickup truck, black in color, bearing Ohio Registration KNM1437, V.I.N.: 1FTEX1E83AFC34.

3. Affiant avers that KERR operated the 2010 Ford F-150 northbound on Tiedeman Rd. Affiant avers that the posted speed limit on Tiedeman Rd. where the accident occurred is 35 miles per hour.

4. Affiant avers that KERR was traveling at a high rate of speed, fleeing from the police. KERR approached the I-480 westbound ramps and failed to stop for a red light, striking a 2022 Nissan Altima. The operator of the Nissan was making a left turn off the I-480 westbound ramp, heading southbound on Tiedeman Rd. The Nissan was then pushed into a 1998 Ford Taurus that was also making the left turn. The operator of the Nissan was pronounced deceased on-scene.

5. Affiant avers that when officers arrived on-scene, KERR was found holding a firearm to his head, threatening suicide. Officers attempted to de-escalate the situation with KERR but were unsuccessful. The SWAT team was called to the scene and negotiators spoke with KERR for approximately four (4) hours. The incident ended with KERR being fatally shot by a tactical officer after exiting the pickup truck with the gun.

6. Affiant avers that Detective Brett Dalton #62 and P.O. Jason Hryn #578 of the Cleveland Division of Police, Accident Investigation Unit (AIU), will conduct the bit by bit search of the above described EDR. Affiant avers that Detective Brett Dalton #62 and P.O. Jason Hryn #578 are authorized by the Brooklyn Police Department to conduct this search.

25SW027

7. Affiant avers that based on his training and experience and the above-described facts that he has probable cause to believe and does believe that there is evidence of violation of Revised Code 4511 and 2921.331.

FURTHER AFFIANT SAYETH NAUGHT.

Det. #62

Det. Brett Dalton #62
Brooklyn Police Department

Sworn to before me and subscribed in my presence this 26th day of June, 2025.

Judge, Parma Municipal Court
Cuyahoga County, Ohio

SW 38 + 39

SEARCH WARRANT RETURN

I received the attached Search Warrant on June 26, 2025 and have executed it as follows:

On 6/26/2025 at 1233 hrs. I searched

__the person ___the premises __X_the automobile _____ item

Described in the warrant and I left a copy of the warrant with:

The vehicle (Owner deceased)

(Person searched or owner of place searched or on premises)

Together with a receipt for the items seized.

SEE ATTACHED INVENTORY LIST

This inventory was made in the presence of Det. Kyle Pitts #64

I swear that this inventory is a true and detailed account of all property taken by me on the warrant.

Signed Det #62

25 JUL -1 AM 10:20

SUBSCRIBED AND SWORN to and returned before me this 1st day of July, 2025.

Judge/ Magistrate, Parma Municipal Court, Ohio

JOURNAL ENTRY

On this the 1st day of July, 2025, and upon the Receipt of the within Search Warrant, it is hereby ordered and decreed that the above described property be held by the Prosecuting Attorney for Cuyahoga County, Ohio until disposed of and dealt with according to law.

Judge/ Magistrate, Parma Municipal Court, Ohio

COMPLAINT #[redacted]

BROOKLYN POLICE DEPARTMENT

SEARCH WARRANT INVENTORY LIST

PAGE NUMBER 1 OF 1

NAME Patrick Kerr DATE OF WARRANT June 26 25 TYPE OF WARRANT Search

ADDRESS 1307 So Swallowood Oval DATE / TIME ENTERED 1233

CITY / PHONE Kent OH 44240 DATE / TIME EXITED 1342

ITEM #	ITEM/S FOUND	LOCATION FOUND	FINDER/S
1	Air Bag Module (EDR) S/N-2UB713689611	2010 Ford F150 / VIN# 1FTEX1E83AFC34	Dalton #62 / Washburn #55
2	See Attached BCI Evidence Receipt	SAA	Lauena McClintock

INVENTORY OFFICER Det. [illegible] #62 WITNESS [signature] RECEIVED BY Det. [illegible] #62

WHITE: COURT COPY — PINK: POLICE COPY — YELLOW: INVENTORY COPY

SUPERVISOR

Evidence Receipt for Case #: 2025-2000

Agency:
Prepared By:
Case Date: Jun 24, 2025
Offense(s): Officer Involved Critical Incident
Victim(s):
Witness(es):
Suspect(s):
Scene #: 2
Scene Address: 8000 Memphis Avenue, Brooklyn, OH 44144

Evidence #	Item Description	Location	Collected By	Date/Time
1	Envelope containing Live Bullet -- Blazer 9mm Luger	Front Passenger Floorboard	Laurna McClintock	
2	Envelope containing Medication -- [redacted] in black bag	Front Driver Floorboard	Laurna McClintock	
3	Envelope containing Medication -- [redacted] n black bag	Front Driver Floorboard	Laurna McClintock	
4	Envelope containing Medication -- [redacted] in black bag	Front Driver Floorboard	Laurna McClintock	
5	Paper Bag containing Laptop Computer -- HP laptop located in backpack	Rear Passenger Floorboard	Laurna McClintock	
6	Paper Bag containing Gun Case --	Rear Drivers Seat	Laurna McClintock	
7	Paper Bag containing Towel -- White towel	Rear Driver Floorboard	Laurna McClintock	
8	Paper Bag containing Towel -- White towel	Rear Drivers Seat	Laurna McClintock	
9	Envelope containing Plant Material --	Center Console	Laurna McClintock	

Released By	Released To	Date/Time
#ReleasedBySig#	#ReleasedToSig#	#ReleasedByTime#

SW 40

SEARCH WARRANT RETURN

I received the attached Search Warrant on June 26, 2025 and have executed it as follows:

On 6/27/2025 at 0845 hrs. I searched

__the person ___the premises __X_the automobile _____ item

Described in the warrant and I left a copy of the warrant with:
The vehicle (Owner deceased)
(Person searched or owner of place searched or on premises)

25 JUL -1 AM 10:19
FILED
PARMA MUNICIPAL COURT

Together with a receipt for the items seized.

SEE ATTACHED INVENTORY LIST

This inventory was made in the presence of Det. Brad Washburn #55

I swear that this inventory is a true and detailed account of all property taken by me on the warrant.

Signed Det. Hall

SUBSCRIBED AND SWORN to and returned before me this 1st day of July, 2025.

Judge/ Magistrate, Parma Municipal Court, Ohio

JOURNAL ENTRY

On this the 1st day of July, 2025, and upon the Receipt of the within Search Warrant, it is hereby ordered and decreed that the above described property be held by the Prosecuting Attorney for Cuyahoga County, Ohio until disposed of and dealt with according to law.

Judge/ Magistrate, Parma Municipal Court, Ohio

COMPLAINT # [redacted]

BROOKLYN POLICE DEPARTMENT

SEARCH WARRANT INVENTORY LIST

PAGE NUMBER 1 OF 1

NAME Ronald Liszka DATE OF WARRANT 6/26/2025 TYPE OF WARRANT Search

ADDRESS 2021 King James Pkwy DATE / TIME ENTERED 0845

CITY / PHONE Westlake OH 44145 DATE / TIME EXITED 0908

ITEM #	ITEM/S FOUND	LOCATION FOUND	FINDER/S
1	Air Bag Module (EDR) S/N # AEE9A222148249	2022 Nissan Altima VIN# 1N4BL4CV8NN349020	Dalton #62 / Washburn #55

INVENTORY OFFICER LT [illegible] #62 WITNESS [illegible] #55 RECEIVED BY LT [illegible] #62

WHITE: COURT COPY — PINK: POLICE COPY — YELLOW: INVENTORY COPY

SUPERVISOR

23SW048

CITY OF BROOKLYN)
PARMA MUNICIPAL COURT)
CRIMINAL DIVISION) **SEARCH WARRANT**

TO: THE CHIEF OF POLICE OF THE BROOKLYN POLICE DEPARTMENT AND/OR DETECTIVE BRETT DALTON #62 AND/OR ANY LAW ENFORCEMENT OFFICER OF THE CLEVELAND DIVISION OF POLICE AS AUTHORIZED.

FILED 25 AUG 26 AM 9:00

WHEREAS: Affiant has exhibited probable cause necessary to search the below listed property, wherein affiant avers that he has reasonable cause to believe, and does believe, that equipment known as an: Sensing Diagnostic Module [SDM] / Event Data Recorder [EDR], contained within a 2022 Nissan Altima, White in color, bearing Ohio Registration KFE5172, V.I.N.: 1N4BL4CV8NN349020 that is currently stored in the impound lot of Parma Towing Lot #2, located at 9045 Brookpark Road, Parma, OH 44129; there is now being kept, concealed, and possessed the following evidence of a criminal offense:

> Any and all information within the above-listed items including but not limited to machine-readable data, all previously erased data, as well as all images stored and/or exchanged in electronic form; any and all images or any other electronic data involving speed/velocity, deployment, use of airbags at the time of event and/or any and all other evidence tending to establish violation of the criminal laws of the State of Ohio, to wit: R.C. 4511 and 2921.331.

I am satisfied that there is probable cause to believe that the property described is being concealed on the above-described equipment, including but not limited to hard-drives, discs, back up tapes, hardware and software and that grounds for issuance of this search warrant exist.

THEREFORE: You are hereby commanded in the name of the State of Ohio, with the necessary and proper assistance, to serve this warrant and search forthwith with the necessary assistance for the property specified by making bit-by-bit, also known as mirror images, mirror image copies thereof with any qualified and necessary assistance, and that

once said mirror images are made, that affiant and/or other investigating officers/agents are authorized to search said mirror images for the above described information. If any of the above-described property or any part thereof be found there, you are commanded to seize it, leaving a copy of this warrant and a receipt for the property taken, to prepare a written inventory of the property seized, to return this warrant to the undersigned or any Judge of the Parma Municipal Court, and to bring the property found on such search forthwith before said Judge, or some other judge or magistrate of the county having cognizance thereof.

Given my hand this 26th day of June 2025.

Tim Debech

Judge, Parma Municipal Court
Cuyahoga County, Ohio

25SW048

EXHIBIT A

CITY OF BROOKLYN)
) SS:
COUNTY OF CUYAHOGA)

PARMA MUNICIPAL COURT
CRIMINAL DIVISION

AFFIDAVIT FOR
SEARCH WARRANT

Before me a Judge of the Parma Municipal Court, Cuyahoga County, personally appeared the undersigned Detective Brett Dalton #62 who being first duly sworn deposes and says that he is a member of the Brooklyn Police Department and that his training and experience include the following: twenty-one (21) years as a police officer, of which the last eleven (11) years as a member of the Brooklyn Police Department. Affiant is currently assigned to the Detective Bureau and has been for the past four (4) years. Affiant has eight (8) years of experience as an Investigator with the Accident Investigation Unit. Affiant has received training at the Cuyahoga Community College Police Academy. Affiant received extensive training at the Ohio Peace Officer Training Academy, pertaining with accident reconstruction. Affiant avers that he has conducted over 25 investigations into automobile accidents that resulted in a fatality and/or serious injury and has made numerous arrests. Affiant states that he has probable cause to believe, and does believe, that in equipment known as: Sensing Data Module [SDM] / Event Data Recorder [EDR], contained within a 2022 Nissan Altima, White in color, bearing Ohio Registration KFE5172, V.I.N.: 1N4BL4CV8NN349020 that is currently stored in the impound lot of Parma Towing, Lot #2 located at 9045 Brookpark Road, Parma, OH 44129; there is now being kept, concealed, and possessed the following evidence of a criminal offense:

25SW040

Any and all information within the above-listed items including but not limited to machine-readable data, all previously erased data, as well as all images stored and/or exchanged in electronic form; any and all images or any other electronic data involving speed/velocity, deployment, use of airbags at the time of event and/or any and all other evidence tending to establish violation of the criminal laws of the State of Ohio, to wit: R.C. 4511 and 2925.331.

The facts upon which affiant bases such belief is as follows:

1. Affiant avers that he was assigned to the investigation of a Motor Vehicle Accident on Tuesday, June 24, 2025 that resulted in a fatality of one occupant. The affiant avers that the accident occurred during a police pursuit with the Parma Heights Police Department (PHPD Report #[redacted].

2. Affiant avers that Patrick Kerr (45/W/M) was operating a 2010 Ford 150, pickup truck, black in color, bearing Ohio Registration KNM1437, V.I.N.: 1FTEX1E83AFC34 that is currently in the possession of the Brooklyn Police Department located at 8000 Memphis Ave, Brooklyn, Ohio 44144.

3. Affiant avers that KERR operated the 2010 Ford F-150 northbound on Tiedeman Rd. Affiant avers that the posted speed limit on Tiedeman Rd. where the accident occurred is 35 miles per hour.

4. Affiant avers that KERR was traveling at a high rate of speed, fleeing from the police. KERR approached the I-480 westbound ramps and failed to stop for a red light, striking a 2022 Nissan Altima. The operator of the Nissan was making a left turn off the I-480 westbound ramp, heading southbound on Tiedeman Rd. The operator of the Nissan was pronounced deceased on-scene. The Nissan was then pushed into a 1998 Ford Taurus that was also making the left turn.

5. Affiant avers that when officers arrived on-scene, KERR was found holding a firearm to his head, threatening suicide. Officers attempted to de-escalate the situation with KERR but were unsuccessful. The SWAT team was called to the scene and negotiators spoke with KERR for approximately four (4) hours. The incident ended with KERR being fatally shot by a tactical officer after exiting the pickup truck with the gun.

6. Affiant avers that Detective Brett Dalton #62 and P.O. Jason Hryn #578 of the Cleveland Division of Police, Accident Investigation Unit (AIU), will conduct the bit by bit search of the above described EDR. Affiant avers that Detective Brett Dalton #62 and P.O. Jason Hryn #578 are authorized by the Brooklyn Police Department to conduct this search.

25 JW 0 4 1

7. Affiant avers that based on his training and experience and the above-described facts that he has probable cause to believe and does believe that there is evidence of violation of Revised Code 4511 and 2921.331.

FURTHER AFFIANT SAYETH NAUGHT.

Det. #62

Det. Brett Dalton #62
Brooklyn Police Department

Sworn to before me and subscribed in my presence this 26th day of June, 2025.

Judge, Parma Municipal Court
Cuyahoga County, Ohio