

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.

Comments

Crash [REDACTED] VIN [REDACTED]

Data Limitations

AIRBAG CONTROL MODULE (ACM) DATA LIMITATIONS FOR [REDACTED]

GENERAL INFORMATION:

CAUTION: During Bench top imaging, make sure the ACM is not moved, tilted or turned over while connected to and powered by the CDR Interface Module. Also, after a CDR imaging process, wait 2 minutes after power is removed from the ACM before attempting to move the module. Not following these general ACM guidelines for bench top imaging could cause new events to be recorded in the ACM.

The ACM current fault status will be altered if the ACM is powered-up without having all of the other vehicle inputs connected (e.g., bench top imaging). This situation will occur when the CDR tool is connected directly to the ACM. This will not affect the stored fault data information in any of the Event Records. Always make a note in the CDR case comments section when an ACM bench top imaging process is being performed.

The recorded Event will contain Pre-Crash data.

- T0 (where '0' is subscript) (-0.1 sec.), the start of event condition, it is the point at which the occupant restraint control wakeup algorithm is activated. Please note that the algorithm wakeup may be different for front, rear (based on acceleration thresholds), side (based on acceleration and pressure thresholds), and roll-over events (based on angular rate threshold)
- An EDR Record is stored for both non-deployment (Unlocked records, re-writable) and deployment (Locked records) events
- Trigger Threshold - the trigger that start an EDR storage (both locked and unlocked records).
A change in vehicle velocity, in either the longitudinal or lateral direction, that equals or exceeds 8km/h within 150ms (both for non-deployment and deployment events) interval or the deployment of a restraint (in case of rollover events only deployment events can be possible so in this case the trigger is the deployment). The trigger metric shall be reset once Tend for the event has been established.
- Multi-Event Crash - The occurrence of 2 events (Deployment and Not Deployment Events) when the second event occurs within 5 seconds to T0 of the first event in the same ignition cycle. If the second deployment event T0 occurs prior to Tend of the first event, data relating to the second event may be included in the first event record and the event may be considered a single event. If the second event occurs after Tend of the first event, data relating to that event shall be included in a different event record.
- As the VIN may be used to determine the configuration of the restraint system, it is imperative that the correct VIN be entered into the CDR software during the imaging process.

CDR FILE INFORMATION:

Event(s) Recovered:

- Most Recent Event - Data of the most recent event is displayed in the report
- 1st Prior Event - Two events are stored in the ACM, Data displayed is of the first prior event.

CDR RECORD INFORMATION:

- 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
Delta-V, Longitudinal	Forward acceleration
Maximum Delta-V, Longitudinal	Forward acceleration
Steering Input	Turning to the Left
Delta-V, Lateral	From Left To Right *
Maximum Delta-V, Lateral	From Left To Right *
Yaw Rate	Turning to the Left
Angular Rate	A Clockwise rotation

* from the perspective of the driver when seated in the vehicle facing the direction of forward vehicle travel

- Depending on when power to the ACM is lost, during an event, all or part of the event data record may not be recorded. Two scenarios may be recorded under this condition:
 - "Erased\Contains no Event Data" may be displayed in the "Event(s) Recovered" section of the report indicating no pre-crash vehicle data.
 - An event may be displayed in the "Event(s) Recovered" section of the report and "Contains Event Data but was Interrupted During Recording" will be displayed for Vehicle Event Recorder Status.
- The System Configuration sections indicate the inputs and outputs that the ACM for a particular vehicle monitors and/or controls.
- A "Present" for a particular item in the System Configuration at Event section of the report indicates that the associated device was configured in Vehicle Configuration at the time of event.
- System Status at Event Section of the report:
 - "Complete File Recorded" - it is reported as "Yes" only if the Event Recorded Statuses of all of the blocks (pre-crash data, post-crash data, sampled data, event data...) of the EDR record are equal to "Complete File Recorded". If one of these Event Recorded Statuses is different from "Complete File Recorded" then this field of the report will indicate "No"
 - "Time from Event 1 to 2 (sec)" - This indicates the time from t0 of the first event to t0 of the second event (if the time between the two events is greater than 5s then "FFFF" is reported)
 - "Event Number": this indicates how many events (Deployment and Non Deployment Events) were detected prior to and including the current record was stored. It is a sequential number associated with each event that has occurred.
 - "Total Number of Event Recorded" - It is the total number of events (Deployment and Non Deployment Events) detected by ACM. This counter is updated even if EDR data is locked and regardless of the ignition cycle.
 - "Multi-Event Number of Events" - In case of multi events, this indicates which event of the set of multi events the current data set refers to.
- A "Yes" for a particular item in the Deployment Command Data section of the report indicates that the ACM commanded the deployment /activation of the associated device.
- A "Yes" for a particular Type Of Impact in the Deployment Command Data section of the report indicates if that particular type of impact happened
- <DTC_Position#X > in the "DTCs Present at start of Event" section of the report indicates the DTC code in the X position of the DTC chrono stack of ACM present at start of Event
- <DTC_Position#1_status> in the "DTCs Present at start of Event" section of the report indicates the status of the DTC in the X position of the DTC chrono stack of ACM present at the start of Event. It can be "Stored" or "Active"
- Pre-Crash data from the various electronic control modules in the vehicle is transmitted to the Airbag Control Module via the vehicle's communication network.
- The accuracy of the recorded Speed Vehicle Indicated will be affected if the vehicle had the tire size or the final drive axle ratio changed from the factory build specifications.
- Speed, Vehicle Indicated is reported as an average of the drive wheels.
- The MIL (Malfunction Indicator Lamp) Status for the various recorded systems indicates the requested state of the applicable malfunction indicator lamp at the time that the data was captured. Note: Some fault codes could be stored due to component/system damage from the accident.

- Longitudinal delta-V is recorded from T0 to 0.30s (respect to T0), every 2ms
- Lateral delta-V is recorded from T0 to 0.30s (respect to T0), every 2ms
- Angular rate sensor data is recorded from -2.5s (respect to T0) to 2.5s (respect to T0), every 20ms

NOTE: The appropriate diagnostic tool should be used to read any stored Diagnostic Trouble Codes (DTCs) in the various electronic modules (ACM, PCM, ABS, TCM, etc., where applicable) for use in interpretation of some vehicle specific recorded data.

VEHICLE DATA DEFINITIONS:

For additional definitions, please refer to the CDR Help File Glossary

System Status at Event

- Ignition Cycle, Crash: means the number (count) of power cycles applied to the recording device at the time when the crash event occurred since the first time an EDR event was stored
- Key ON Counter, Download: means the number (count) of power cycles applied to the recording device at the time when the data was downloaded since the first time an EDR event was stored
- Command Ignition: Key Status during event
- XXX Serial Number: these signals reports the serial numbers of the associated devices
- Supplier Identification: the supplier of ACM module
- Safety Belt Status, XXX: This indicates if the seat belt is fastened, unfastened, if a fault of some sort is present or if there is a lack of communication
- Seat Track Position Status, XXX: This indicates if the seat track is in the Frontal Zone, Not in the Frontal Zone, if it is not configured, not responding or faulted
- Front Passenger PPD Status: This indicates if the passenger seat is occupied or not occupied, Faulted or Not Responding
- Airbag Warning Lamp On - Off: this indicate the PAD Lamp Status that ACM is requesting to Cluster (that drives the PAD Lamp)
- Warning Lamp Status (from Cluster): it indicates if (at time of Event) the Airbag Warning Lamp is On, Off, Blinking or if there are errors that affect its functionality (from Cluster control module)
- Max Delta - V Longitudinal: means the maximum value of the cumulative change in velocity, as recorded by the EDR, of the vehicle along the longitudinal axis, starting from crash time zero and ending at 0.3 seconds.
- Time, Maximum Delta - V Longitudinal: means the time from crash time zero to the point where the maximum value of the cumulative change in velocity is found, as recorded by the EDR, along the longitudinal axis.
- Max Delta - V Lateral: means the maximum value of the cumulative change in velocity, as recorded by the EDR, of the vehicle along the lateral axis, starting from crash time zero and ending at 0.3 seconds.
- Time, Maximum Delta - V Lateral: means the time from crash time zero to the point where the maximum value of the cumulative change in velocity is found, as recorded by the EDR, along the lateral axis.
- Odometer At Event: the value (in km) of the odometer at the time of the Event (from Cluster Control Module)
- VIN Original (17 bytes): Vehicle identification number as received through the CAN bus and stored in the module ACM. This number may not match the current VIN
- VIN at event (last 8 bytes): VIN calculated from Current VIN stored in the module EDR during the ignition cycle in which the event occurred
- XXX Sensor is Faulted: these signals indicates "True" if a fault is detected on the associated devices
- XXX Discrimination: internal ACM flag which states plausibility and specific states of the external sensors (e.g which sensor was involved in deployment decision)
- XXX Plausibility: internal ACM flag which states plausibility and specific states of the external sensors (e.g which sensor was involved in deployment decision)
- Internal Railing Flag: internal accelerometer has been railed at its maximum sensing limit at some point during event. One for the X and one for the Y direction.
- Internal Railing Flag time relative to Time T0: time respect to T0 when the Railing Flag is raised. One for the X and one for the Y direction
- "Operation off energy reserve at time T0"- Indication shall be set if at T0 of an event the module is functioning off of energy reserve to deploy restraint devices or write EDR. Start of another event reset the flag.
- Operation System Time at Event: The operation system time at event shall be a snapshot of the module operation time at T0. The operation system time at event is a snapshot from the module operation time counter which indicates the number of seconds that the module has been powered up. The resolution is in seconds.
- Operation After Power Loss During Crash: Indication shall be set if at any point during the impact the module is functioning off of energy reserve to deploy restraint devices or write EDR. Start of another event reset the flag.
- System Voltage At Event, Bussed: System voltage at time T0 received from CAN (from Body control module)
- Supply Voltage at Event, ECU: the measured system voltage at time T0 at ACM
- Supply Voltage at Event, Energy Reserve: the measured module energy reserve voltage at time T0
- State of Charge: State of charge of the battery car provided by the Intelligent Battery Sensor of the vehicle through CAN bus.
- Passenger Airbag Disable Lamp Failure Status (from IC): PAD Lamp status diagnosed by Cluster (that drives the PAD Lamp)
- Passenger Airbag Disable Indicator (from ORC): this indicate the PAD Lamp Status that ACM is requesting to Cluster (that drives the PAD Lamp)
- Passenger Airbag Disable Charge Status: this indicates if the Passenger Airbag Charges are Enabled or Disabled. This information comes directly from ACM.
- BSM sensor blocked: "True" if Blind Spot sensors reports a fault\are not able to perform the measurements (from Blind Spot control

module)

System Configuration at Event

- Software Version: the hexadecimal value that indicates the SW Version flashed on the ACM
- Configured for BUX or DOM Market: if ACM is configured BUX or DOM. This is the internal configuration of ACM, not the Vehicle Configuration written in Body Control Module
- Left Hand Driver / Right Hand Driver: if ACM is configured Left Hand Driver or Right Hand Driver. This is the internal configuration of ACM, not the Vehicle Configuration written in Body Control Module
- Cruise Feature is Present: If Cruise Control functionality is present. (from Body Control Module's Vehicle Configuration)
- ACC Type: type of Active Cruise Control present on vehicle. (from Body Control Module's Vehicle Configuration)
- Forward Collision Warning present: if FCW functionality is present. (from Body Control Module's Vehicle Configuration)
- Lane Departure Warning present: if LDW functionality is present. (from Body Control Module's Vehicle Configuration)
- Dynamic tire circumference: the dynamic tire circumference. (from Body Control Module's Vehicle Configuration)

System Configuration at Retrieval

- Serial Number of XXX: the serial number of the XXX device connected to ACM module. Displayed FF if device is disconnected

Pre-Crash Data -5 to -0.1 sec (Most Current Values Recorded Prior to Event) sampled every 100ms

- Speed, Vehicle Indicated: speed vehicle from bus net. In MPH (from Brake control module)
- Accelerator Pedal, % Full: acceleration pedal position in percentage (from Engine control module)
- Raw Pedal #1: raw value of the primary acceleration pedal position sensor, in V. (from Engine control module)
- Raw Pedal #2: raw value of the secondary acceleration pedal position sensor, in V. (from Engine control module)
- Engine Throttle, % Full: electronic throttle position in percentage (from Engine control module - not for gasoline vehicles)
- Raw Throttle #1: raw value of the primary throttle position sensor, in V. (from Engine control module - not for gasoline vehicles)
- Raw Throttle #2: raw value of the primary throttle position sensor in V (from Engine control module - not for gasoline vehicles)
- Engine RPM: the engine rotation per minute. (from Engine control module)
- Brake Pedal State: indicates if the brake pedal is pressed, not pressed or faulted. (from Brake control module)
- Brake Status: indicates if the vehicle is braking, taking in consideration all of the braking events (also the automatic ones). (from Brake control module)
- Stability Control: indicates if the stability control is "Off", "On" or "Engaged". Information derived from signals in bus net (coming from Brake control module)
- ESC Lamp: indicates the status of the Stability Control in Error Lamp. (from Brake control module)
- Brake indication Lamp on Request: indicates the status of the Parking Brake Lamp. (from Brake control module)
- Traction Control Active: indicate if the Traction Control system is Active. (from Brake control module)
- Emergency braking: indicates if the emergency braking is Active (from Brake control module)
- Brake Intervention Enabled: indicate if Brake Control Module can perform brake interventions (from Brake control module)
- Maximum (hard) braking (ALS controls all wheels): indicates if a Full Braking is active (from Brake control module)
- Any ABS brake event: indicates if an Anti-lock Brake event is Active (from Brake control module)
- Brake Booster Vacuum Level: the brake booster vacuum level in KPa (from Brake control module)
- Brake Master Cylinder Pressure: the pressure in the brake system in bar (from Brake control module)
- Actual Brake Torque: Brake Torque during event in Nm (from Brake control module)
- Wheel Speed XX: the wheel speed in rotation per minute (from Brake control module)
- Steering Angle: the steering wheel angle in deg (from Steering Column Control Module)
- Steering wheel angle sensor status: Steering angle Sensor status (from Steering Column Control Module)
- EPB Warning Lamp: indicates the status of the EPB Warning Lamp (from Brake Control Module)
- Parking Brake Status: the status of the Park Brake actuator (from Brake Control Module)
- EPB Actual Force: show current average clamp force of the calipers as a real time value (from Brake Control Module)
- ESS Engine State: Engine Status (from Engine control Module)
- Engine Drive Mode Status: Engine Drive mode (from Engine control module)
- Outside Air Temperature: outside Temperature in Celsius (from Body Control module)
- Current driver torque demanded: represents the maximum amount of flywheel torque requested between gas pedal input by the driver, Cruise Control and ACC after being filtered for torque shaping/smoothing. (from Engine control module)
- Current Engine Torque: the actual torque (Nm) generated by the engine at the flywheel. (from Engine control module)
- Engine Torque Request from ESP: absolute engine torque requested by Brake module to the Engine module (from Brake control module)
- Torque request from ESP is Active to indicate the ability of the Engine control module to honor a torque request from the Brake control module (from Engine control module)
- Engine Torque Request from TCM: absolute engine torque requested by Traction Control Module to the Engine module (from Traction control module)
- Torque request from TCM is Active: to indicate the ability of the Engine control module to honor a torque request from the Traction control module (from Engine control module)
- Engine Torque Request from ACC: absolute engine torque requested by Drive Assistance control module (from Drive Assistance control module)
- Torque request from ACC is Active: to indicate the ability of the Engine control module to honor a torque request from the Drive assistance control module (from Engine control module)
- Yaw Rate (from ORC): yaw rate measured by ACM

- Yaw Rate Raw (from ESC): yaw rate broadcasted on the net bus by Brake control (from Brake control module)
- Yaw Rate Offset (from ESC): accounts for static and dynamic offset (temperature drift compensation and center of gravity compensation). The compensated yaw rate data shall be calculated by subtracting the yaw rate offset from the raw yaw rate raw signal by Brake control module (from Brake control module)
- Lateral Acceleration: lateral acceleration measured by ACM in m/s²
- Longitudinal Acceleration: longitudinal acceleration measured by ACM in m/s²
- Speed Limiter Status: only on [REDACTED] model (from Engine control module)
- Driver is overriding cruise set speed: (from Engine control module)
- Rear ELSD system status: the status of the rear Electronic Slip Differential module (from Electronic Slip Differential Module)
- DAS Request Active: the request from the Drive Assistance control module; used for Adaptive Cruise Control functionality (from Drive Assistance control module)
- FCW system Operating State: If the Forward Collision Warning functionality is On or Off. This signal drives the Forward Collision Warning Off telltale (from Drive Assistance control module)
- ACC Drive Command: In case of Active Cruise Control stop, If the target vehicle begins moving less than 2 seconds after the host vehicle comes to a standstill, the host vehicle shall begin moving automatically. This is the Drive Assistance control Module request to the Brake control module to release the braking
- ACC Stop Command: The Active Cruise Control stop request (from Drive Assistance control module)
- Closest In path Vehicle is fused: indicate whether the closest in-path vehicle detected by the Drive Assistance control Module is fused with the object information that the front facing camera module provides (from Drive Assistance control module)
- Brake Jerk: the response of the Brake control module to the Drive Assistance control module's request for a brake jerk (from Brake control module)
- DASM Acceleration Request: deceleration requests for the advanced brake assist feature in m/s² (from Drive Assistance control module)
- Object Of Interest Distance: provides the distance to the reactionary object of interest, meaning that this is the distance to the object that the Drive Assistance control module is currently reacting to (from Drive Assistance control module)

Pre-Crash Data -5 to -0.1 sec (Most Current Values Recorded Prior to Event) sampled every 250ms

- Raw Manifold Pressure: intake manifold pressure in kPa (from Engine control module)
- ETC Lamp: Electronic Throttle Control Lamp status (from Engine control module)
- ETC Lamp, Flashing: "Yes" if Electronic Throttle Control Lamp is flashing (from Engine control module)
- Cruise Control System is ON: "Yes" if the cruise control is activated/ready ("No" if Drive Assistance control module is configured present) (from Engine control module)
- Cruise Control System is ENGAGED: "Yes" if the cruise control is engaged ("No" if Drive Assistance control module is configured present) (from Engine control module)
- PRND Status: provide shifter state (from Traction control module)
- Driving Program display Code (from TCM): indicates what mode the transmission is in (from Traction control module)
- PRND Display Request: this indicate the gear to be displayed (from Traction control module)
- TRANS in Limp Home: transmission is in limp home mode (from Traction control module)
- Actual Gear: current gear (from Traction control module)
- Tire Pressure Monitor Indicator Lamp: Tire pressure Lamp status (from Tire Pressure control module)
- Tire Pressure Status, XX: Tire Inflation States of the XX wheel (from Tire Pressure control module)
- Tire Pressure, XX: Pressure in the XX wheel, in psi (from Tire Pressure control module)
- Active Damping Control Status: Active Damping System status (from the Active Damping control module)
- ADS Red Lamp On Request: communicates Active Damping System Red Lamp indication request (from the Active Damping control module)
- Service Air Suspension: "ON" if the Air Suspension control module is in fault (from Air Suspension control module)
- Air Suspension Status: (from Air Suspension control module)
- Air Suspension System Faulted: "True" if the Air Suspension control module is in fault (from Air Suspension control module)
- FCW sensitivity setting: Forward Collision Warning sensitivity setting (from Drive Assistance control module)
- ACC Faulted: "True" if the Active Cruise Control system is faulted (from Drive Assistance control module)
- ACC On Off Status: status of the Active Cruise Control functionality (from Drive Assistance control module)
- FCW Braking On: "True" if the Forward Collision Warning braking is enabled (from Drive Assistance control module)
- FCW Error: Forward Collision Warning functionality Fault status (from Drive Assistance control module)
- ACC HMI Screen: HMI request to the cluster (from Drive Assistance control module)
- Desired Set Speed in miles per hour: Active Cruise Control selected speed (from Drive Assistance control module)
- LDW message status in cluster: Lane Departure Warning message pop up request to Cluster (from front facing camera module)
- LDW telltale status: Lane Departure Warning telltale status (from front facing camera module)
- LDW display Status in Cluster: Lane Departure Warning message request to Cluster (from front facing camera module)
- AS chime type: type of chime that inform the customer of the activation and deactivation of the audible warning (from Drive Assistance control module)
- ACC FCW Not Available Clean Radar: "True" if front radar is blocked (from Drive Assistance control module)
- ACC Front Facing Camera Blocked: "True" if front facing camera is blocked (from Drive Assistance control module)
- Stop Start request - shift to park: engine control module is requesting for a shift to park to the traction control module (from Engine control module)
- Stop Start - Warning Status: Stop & Start warning status message - pop up (from Engine control module)
- Stop Start - Display status: Stop & Start status message - in the cluster Stop & Start display (from Engine control module)
- Trans Ready for Auto Stop: "True" is transmission control module is ready for a Stop & Start (from Traction control module)
- Port Flow Per Cylinder per Stroke: Port flow per cylinder per stroke (from engine control module)
- Actual Rear Differential Torque Lock: (from Electronic Differential Slip control module)

- Hill Start Assist Brake Pressure: this pressure value corresponds to the pressure required to hold the vehicle at a standstill at the beginning of the active Hill Start Assist event, in bar (from Brake control module)
- Drive Style Status: (from Body Control module)
- XXX Door Ajar: ajar status of the XXX Door (from Body Control Module)

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System Status at Time of Retrieval

ECU Serial Number	[REDACTED] 2520
Supplier Identification	Bosch
ECU Supply Voltage at Time of Retrieval (V)	11.3
VIN, Original	[REDACTED]

System Configuration at Time of Retrieval

Configured for BUX or DOM Market	BUX
Configured Left or Right Hand Driver	LHD
Configured for Driver Frontal Airbag	Yes
Configured for 1st Row Driver Seatbelt Anchor Pretensioner (SAP)	Yes
Configured for 1st Row Driver Retractor Pretensioner (SRP)	Yes
Configured for Passenger Frontal Airbag	Yes
Configured for 1st Row Passenger Seatbelt Anchor Pretensioner (SAP)	Yes
Configured for 1st Row Passenger Retractor Pretensioner (SRP)	Yes
Configured for 1st Row Right Side Seat Airbag	Yes
Configured for 1st Row Right Side Curtain Airbag	Yes
Configured for 1st Row Left Side Seat Airbag	Yes
Configured for 1st Row Left Side Curtain Airbag	Yes
Configured for Driver Seatbelt Switch	Yes
Configured for Driver Seat Track Position Sensor	No
Configured for Passenger Seatbelt Switch	Yes
Configured for Passenger Seat Track Position Sensor	No
Configured for Passenger Occupant Detection Sensor (ODS)	Yes
Configured for Pyrofuse Squib	Yes
Serial Number of Front LEFT Acceleration Impact Sensor	32 2A E8 A6 59 27
Serial Number of Front RIGHT Acceleration Impact Sensor	32 2A E8 A6 5A 30
Serial Number of Left Side B-Pillar Acceleration Impact Sensor	32 2A E8 A6 32 34
Serial Number of Right Side B-Pillar Acceleration Impact Sensor	B5 28 9D 24 2B 18
Serial Number of Left Side C-Pillar Acceleration Impact Sensor	B5 28 9D 24 09 23
Serial Number of Right Side C-Pillar Acceleration Impact Sensor	30 2A E8 A6 55 33
Serial Number of Left Side Pressure Impact Sensor	A7 28 F4 5E 2A 15
Serial Number of Right Side Pressure Impact Sensor	32 2A ED C7 32 0F
Configured for Driver Inflator Knee Bag (DIKB)	Yes

System Status at Event (Most Recent Event (Non-Deployment))

Complete File Recorded	Yes
Ignition Cycle, Download	1,188
Ignition Cycle, Crash	1,169
Multi-Event, Number of Event	1
Time From Event 1 to 2 (sec)	>5
Safety Belt Status, Driver	Buckled
Driver Seat Belt Fault Status (Unfiltered)	Buckled
Safety Belt Status, Passenger	Unbuckled
Airbag Warning Lamp Status (from IC)	Off Not failed
Airbag Warning Lamp On - Off	Off
Time, Airbag Warning Lamp On Before impact (min)	15
Maximum Delta-V, Longitudinal (MPH [km/h])	-17.4 [-28]
Time, Maximum Delta-V, Longitudinal (msec)	127
Maximum Delta-V, Lateral (MPH [km/h])	0.0 [0]
Time, Maximum Delta-V, Lateral (msec)	0
Operation System Time at Event (sec)	1,488,572
Event Number	1
Total Number of Events Recorded	1
Operation off energy reserve at time t0	No
Operation after power loss during crash	No
System Voltage at Event, Bussed (V)	14.50
Supply Voltage at Event, ECU (V)	14.50
Energy Reserve (V)	24.30
State of Charge (%)	78
Temperature, Outside (Deg C)	1
Odometer at Event (miles [km])	9095.3 [14,637.5]
VIN at Event, Last 8 Digits	J1287830
Passenger Airbag Disable Lamp Failure Status (from IC)	OFF Not failed
Passenger Airbag Disable Indicator (from ORC)	Off
Passenger Airbag Disable Charge Status	Enabled
Front Passenger PPD Status	Not Present
Command Ignition	IGN RUN
BSM sensor blocked	False
Front Left Acceleration Impact Sensor is Faulted	False
Left B-Pillar Acceleration Impact Sensor is Faulted	False
Left C-Pillar Acceleration Impact Sensor is Faulted	False
Side Left Pressure Impact Sensor is Faulted	False
Front Right Acceleration Impact Sensor is Faulted	False
Right B-Pillar Acceleration Impact Sensor is Faulted	False
Right C-Pillar Acceleration Impact Sensor is Faulted	False
Side Right Pressure Impact Sensor is Faulted	False
X Axis Accelerometer is Faulted	False
Y Axis Accelerometer is Faulted	False
Left B-pillar Sat Discrimination	No
Right B-pillar Sat Discrimination	No
Left C-pillar Sat Discrimination	No
Right C-pillar Sat Discrimination	No
Left Door P-Sat Discrimination	No
Right Door P-Sat Discrimination	No
Left B-Pillar Acceleration Impact Sensor - Plausibility	No
Right B-Pillar Acceleration Impact Sensor - Plausibility	No
Left C-pillar Sat - Plausibility	No
Right C-pillar Sat - Plausibility	No
Left Door P-Sat - Plausibility	No
Right Door P-Sat - Plausibility	No
ORC internal sensor - Plausibility	No
Internal X Railing Flag	Fail Not Present
Internal Y Railing Flag	Fail Not Present
Internal X Railing Flag time relative to T0 (msec)	65,535
Internal Y Railing Flag time relative to T0 (msec)	65,535

System Configuration at Event (Most Recent Event (Non-Deployment))

Software Version	11 0A 00
Left Hand Driver / Right Hand Driver	Left
Cruise Feature is Present	True
ACC Type	NONE
Forward Collision Warning present	False
Lane Departure Warning present	False
Dynamic Tire Circumference	2,234
Configured for Driver Frontal Airbag, 1st Stage	Yes
Configured for Driver Frontal Airbag, 2nd Stage	Yes
Configured for 1st Row Driver Seatbelt Anchor Pretensioner (SAP)	Yes
Configured for 1st Row Driver Retractor Pretensioner (SRP)	Yes
Configured for Passenger Frontal Airbag, 1st Stage	Yes
Configured for Passenger Frontal Airbag, 2nd Stage	Yes
Configured for 1st Row Passenger Seatbelt Anchor Pretensioner (SAP)	Yes
Configured for 1st Row Passenger Retractor Pretensioner (SRP)	Yes
Configured for 1st Row RIGHT Side Seat Airbag	Yes
Configured for 1st Row RIGHT Side Curtain Airbag	Yes
Configured for 1st Row LEFT Side Seat Airbag	Yes
Configured for 1st Row LEFT Side Curtain Airbag	Yes
Configured for Driver Seatbelt Switch	Yes
Configured for Passenger Seatbelt Switch	Yes
Configured for Passenger Occupant Detection Sensor (ODS)	Yes
Configured for Pyrofuse Squib	Yes
Configured for Driver Inflator Knee Bag (DIKB)	Yes

Deployment Command Data (Most Recent Event (Non-Deployment))

Type Of Impact - Type A	No
Type Of Impact - Type B	No
Type Of Impact - Type C	No
Type Of Impact - Type F	No
Type Of Impact - Type I	No
Type Of Impact - Type K	No
Type Of Impact - Type M	No
Type Of Impact - Type X	No
Frontal Airbag Deployment, 1st Stage, Driver	No
Frontal Airbag Deployment, 2nd Stage, Driver	No
Frontal Airbag Deployment, Time from T0 to 1st Stage Deployment, Driver (msec)	0
Frontal Airbag Deployment, Time from T0 to 2nd Stage Deployment, Driver (msec)	0
Frontal Airbag Deployment, 1st Stage, Passenger	No
Frontal Airbag Deployment, 2nd Stage, Passenger	No
Frontal Airbag Deployment, Time from T0 to 1st Stage Deployment, Passenger (msec)	0
Frontal Airbag Deployment, Time from T0 to 2nd Stage Deployment, Passenger (msec)	0
Retractor Pretensioner, Driver	No
Retractor Pretensioner, Passenger	No
Side Seat Airbag Deployment, Left	No
Side Curtain Airbag Deployment, Left	No
Side Seat Airbag Deployment, Right	No
Side Curtain Airbag Deployment, Right	No
Knee Airbag Deployment, Driver	No
1st Row Driver Seatbelt Anchor Pretensioner Deployment	No
1st Row Passenger Seatbelt Anchor Pretensioner Deployment	No
Pyrofuse Deployment	No

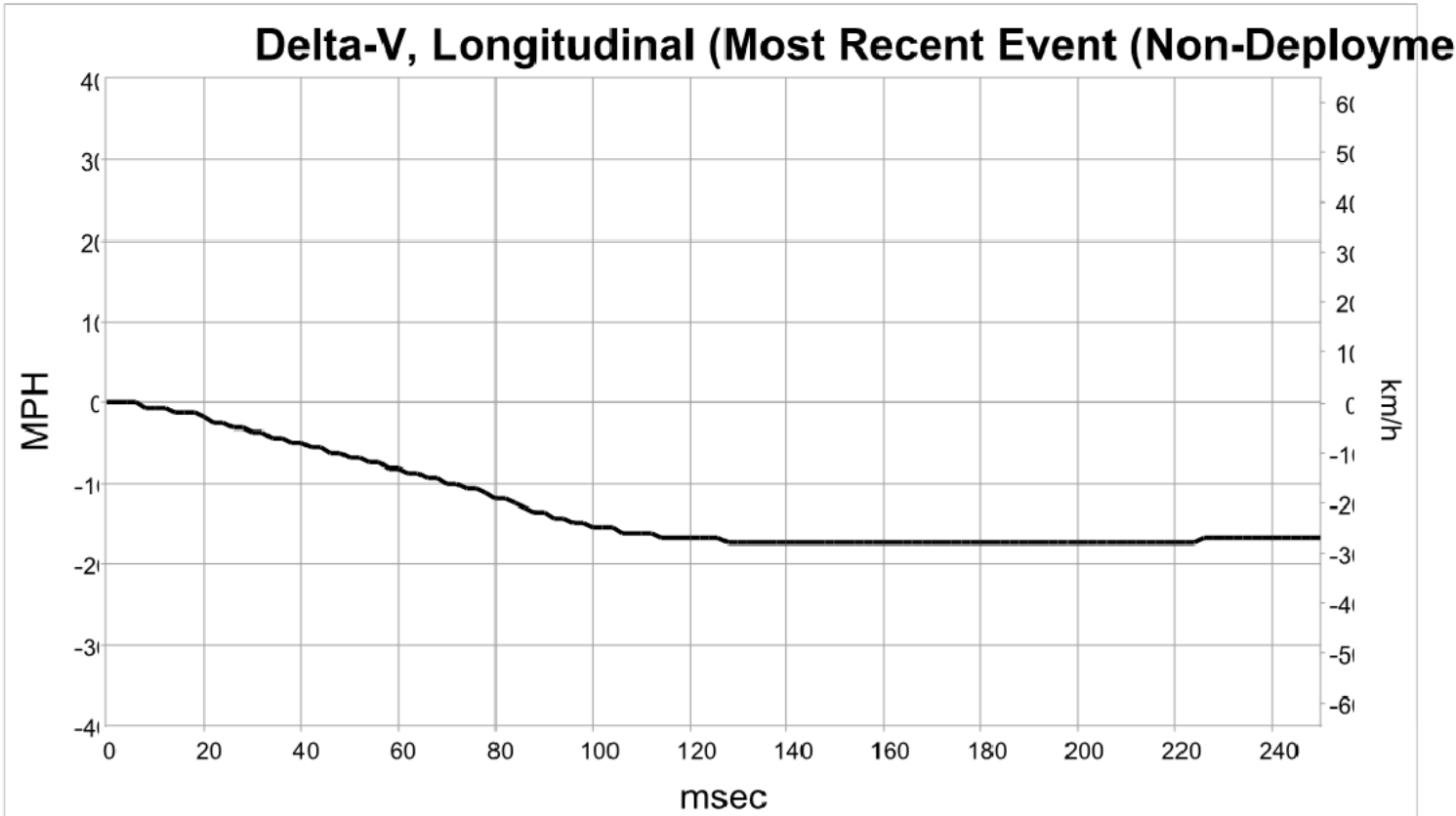


DTCs Present at Start of Event (Most Recent Event (Non-Deployment))

DTCs not Present.

Longitudinal Crash Pulse (Most Recent Event (Non-Deployment))

Delta-V, Longitudinal, Recorder Status	Complete
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Longitudinal Crash Pulse (Most Recent Event (Non-Deployment))

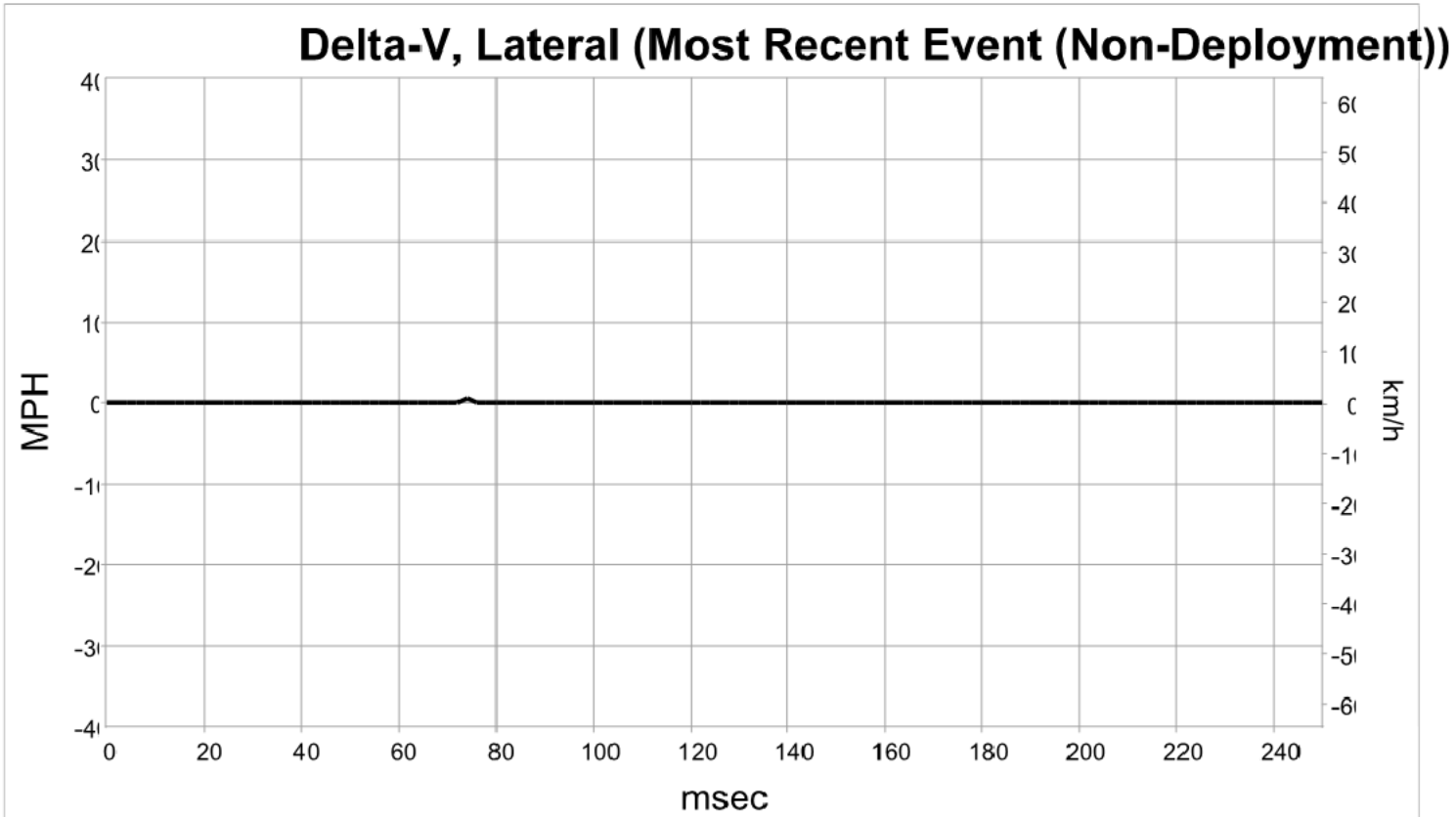
Time (msec)	Delta-V, Longitudinal (MPH [km/h])
0	0 [0]
2	0 [0]
4	0 [0]
6	0 [0]
8	-1 [-1]
10	-1 [-1]
12	-1 [-1]
14	-1 [-2]
16	-1 [-2]
18	-1 [-2]
20	-2 [-3]
22	-2 [-4]
24	-2 [-4]
26	-3 [-5]
28	-3 [-5]
30	-4 [-6]
32	-4 [-6]
34	-4 [-7]
36	-4 [-7]
38	-5 [-8]
40	-5 [-8]
42	-6 [-9]
44	-6 [-9]
46	-6 [-10]
48	-6 [-10]
50	-7 [-11]
52	-7 [-11]
54	-7 [-12]
56	-7 [-12]
58	-8 [-13]
60	-8 [-13]
62	-9 [-14]
64	-9 [-14]
66	-9 [-15]
68	-9 [-15]
70	-10 [-16]
72	-10 [-16]
74	-11 [-17]
76	-11 [-17]
78	-11 [-18]
80	-12 [-19]
82	-12 [-19]
84	-12 [-20]
86	-13 [-21]
88	-14 [-22]
90	-14 [-22]
92	-14 [-23]
94	-14 [-23]
96	-15 [-24]
98	-15 [-24]

Time (msec)	Delta-V, Longitudinal (MPH [km/h])
100	-16 [-25]
102	-16 [-25]
104	-16 [-25]
106	-16 [-26]
108	-16 [-26]
110	-16 [-26]
112	-16 [-26]
114	-17 [-27]
116	-17 [-27]
118	-17 [-27]
120	-17 [-27]
122	-17 [-27]
124	-17 [-27]
126	-17 [-27]
128	-17 [-28]
130	-17 [-28]
132	-17 [-28]
134	-17 [-28]
136	-17 [-28]
138	-17 [-28]
140	-17 [-28]
142	-17 [-28]
144	-17 [-28]
146	-17 [-28]
148	-17 [-28]
150	-17 [-28]
152	-17 [-28]
154	-17 [-28]
156	-17 [-28]
158	-17 [-28]
160	-17 [-28]
162	-17 [-28]
164	-17 [-28]
166	-17 [-28]
168	-17 [-28]
170	-17 [-28]
172	-17 [-28]
174	-17 [-28]
176	-17 [-28]
178	-17 [-28]
180	-17 [-28]
182	-17 [-28]
184	-17 [-28]
186	-17 [-28]
188	-17 [-28]
190	-17 [-28]
192	-17 [-28]
194	-17 [-28]
196	-17 [-28]
198	-17 [-28]

Time (msec)	Delta-V, Longitudinal (MPH [km/h])
200	-17 [-28]
202	-17 [-28]
204	-17 [-28]
206	-17 [-28]
208	-17 [-28]
210	-17 [-28]
212	-17 [-28]
214	-17 [-28]
216	-17 [-28]
218	-17 [-28]
220	-17 [-28]
222	-17 [-28]
224	-17 [-28]
226	-17 [-27]
228	-17 [-27]
230	-17 [-27]
232	-17 [-27]
234	-17 [-27]
236	-17 [-27]
238	-17 [-27]
240	-17 [-27]
242	-17 [-27]
244	-17 [-27]
246	-17 [-27]
248	-17 [-27]
250	-17 [-27]
252	-17 [-27]
254	-17 [-27]
256	-17 [-27]
258	-17 [-27]
260	-17 [-27]
262	-17 [-27]
264	-17 [-27]
266	-17 [-27]
268	-17 [-27]
270	-17 [-27]
272	-17 [-27]
274	-17 [-27]
276	-17 [-27]
278	-17 [-27]
280	-17 [-27]
282	-17 [-27]
284	-17 [-27]
286	-17 [-27]
288	-17 [-27]
290	-17 [-27]
292	-17 [-27]
294	-17 [-27]
296	-17 [-27]
298	-17 [-27]
300	-17 [-27]

Lateral Crash Pulse (Most Recent Event (Non-Deployment))

Delta-V, Lateral Recorder Status Complete



Lateral Crash Pulse (Most Recent Event (Non-Deployment))

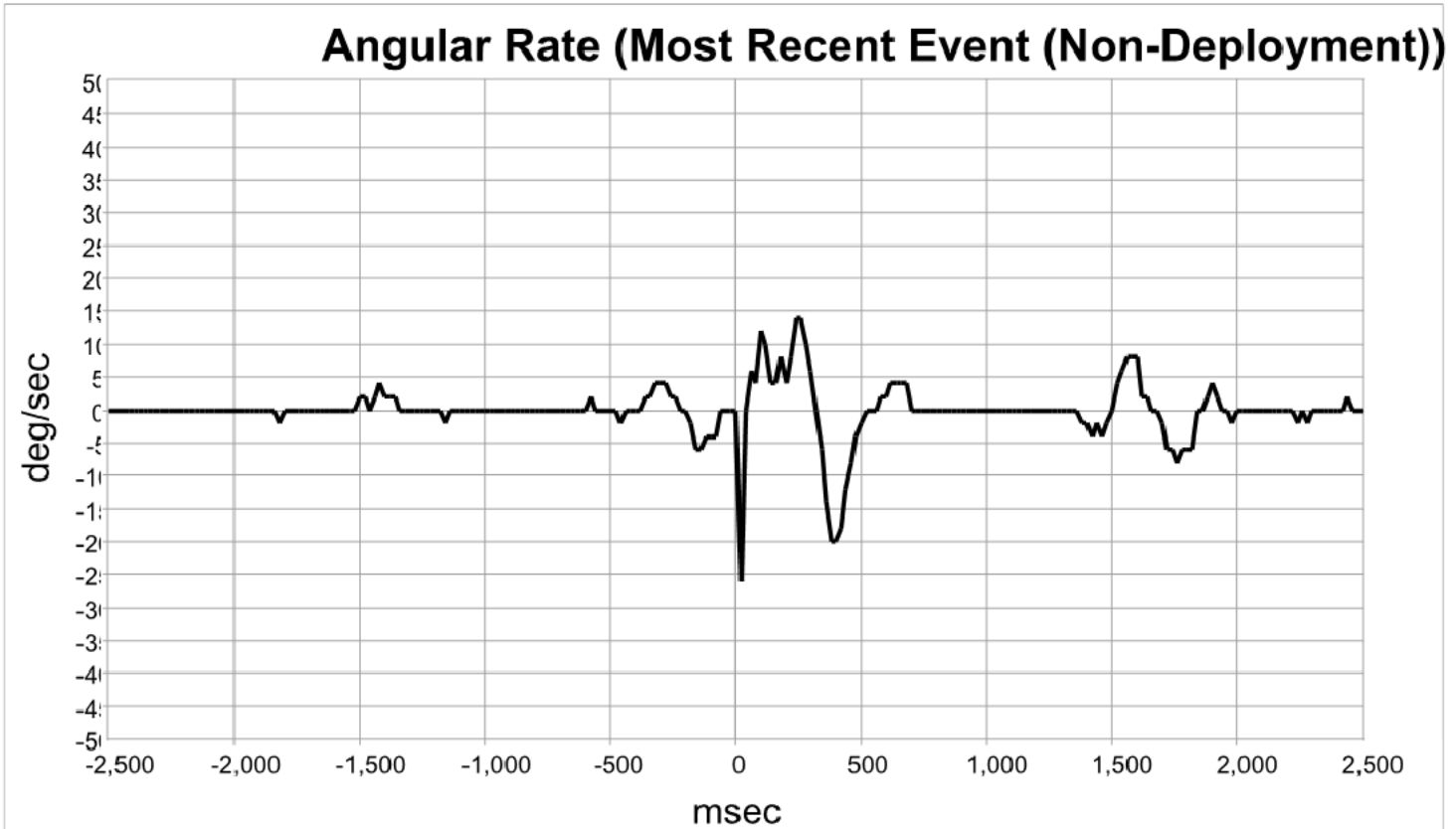
Time (msec)	Delta-V, Lateral (MPH [km/h])
0	0 [0]
2	0 [0]
4	0 [0]
6	0 [0]
8	0 [0]
10	0 [0]
12	0 [0]
14	0 [0]
16	0 [0]
18	0 [0]
20	0 [0]
22	0 [0]
24	0 [0]
26	0 [0]
28	0 [0]
30	0 [0]
32	0 [0]
34	0 [0]
36	0 [0]
38	0 [0]
40	0 [0]
42	0 [0]
44	0 [0]
46	0 [0]
48	0 [0]
50	0 [0]
52	0 [0]
54	0 [0]
56	0 [0]
58	0 [0]
60	0 [0]
62	0 [0]
64	0 [0]
66	0 [0]
68	0 [0]
70	0 [0]
72	0 [0]
74	1 [1]
76	0 [0]
78	0 [0]
80	0 [0]
82	0 [0]
84	0 [0]
86	0 [0]
88	0 [0]
90	0 [0]
92	0 [0]
94	0 [0]
96	0 [0]
98	0 [0]

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

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

Angular Rate (Most Recent Event (Non-Deployment))

Angular Rate, Recorder Status Complete



Angular Rate (Most Recent Event (Non-Deployment))

Time (msec)	Angular Rate (deg/sec)
-2500	0.0
-2480	0.0
-2460	0.0
-2440	0.0
-2420	0.0
-2400	0.0
-2380	0.0
-2360	0.0
-2340	0.0
-2320	0.0
-2300	0.0
-2280	0.0
-2260	0.0
-2240	0.0
-2220	0.0
-2200	0.0
-2180	0.0
-2160	0.0
-2140	0.0
-2120	0.0
-2100	0.0
-2080	0.0
-2060	0.0
-2040	0.0
-2020	0.0
-2000	0.0
-1980	0.0
-1960	0.0
-1940	0.0
-1920	0.0
-1900	0.0
-1880	0.0
-1860	0.0
-1840	0.0
-1820	-2.0
-1800	0.0
-1780	0.0
-1760	0.0
-1740	0.0
-1720	0.0
-1700	0.0
-1680	0.0
-1660	0.0
-1640	0.0
-1620	0.0
-1600	0.0
-1580	0.0
-1560	0.0
-1540	0.0
-1520	0.0

Time (msec)	Angular Rate (deg/sec)
-1500	2.0
-1480	2.0
-1460	0.0
-1440	2.0
-1420	4.0
-1400	2.0
-1380	2.0
-1360	2.0
-1340	0.0
-1320	0.0
-1300	0.0
-1280	0.0
-1260	0.0
-1240	0.0
-1220	0.0
-1200	0.0
-1180	0.0
-1160	-2.0
-1140	0.0
-1120	0.0
-1100	0.0
-1080	0.0
-1060	0.0
-1040	0.0
-1020	0.0
-1000	0.0
-980	0.0
-960	0.0
-940	0.0
-920	0.0
-900	0.0
-880	0.0
-860	0.0
-840	0.0
-820	0.0
-800	0.0
-780	0.0
-760	0.0
-740	0.0
-720	0.0
-700	0.0
-680	0.0
-660	0.0
-640	0.0
-620	0.0
-600	0.0
-580	2.0
-560	0.0
-540	0.0
-520	0.0

Time (msec)	Angular Rate (deg/sec)
-500	0.0
-480	0.0
-460	-2.0
-440	0.0
-420	0.0
-400	0.0
-380	0.0
-360	2.0
-340	2.0
-320	4.0
-300	4.0
-280	4.0
-260	2.0
-240	2.0
-220	0.0
-200	0.0
-180	-2.0
-160	-6.0
-140	-6.0
-120	-4.0
-100	-4.0
-80	-4.0
-60	0.0
-40	0.0
-20	0.0
0	0.0
20	-26.0
40	0.0
60	6.0
80	4.0
100	12.0
120	10.0
140	4.0
160	4.0
180	8.0
200	4.0
220	8.0
240	14.0
260	14.0
280	10.0
300	6.0
320	0.0
340	-6.0
360	-14.0
380	-20.0
400	-20.0
420	-18.0
440	-12.0
460	-8.0
480	-4.0

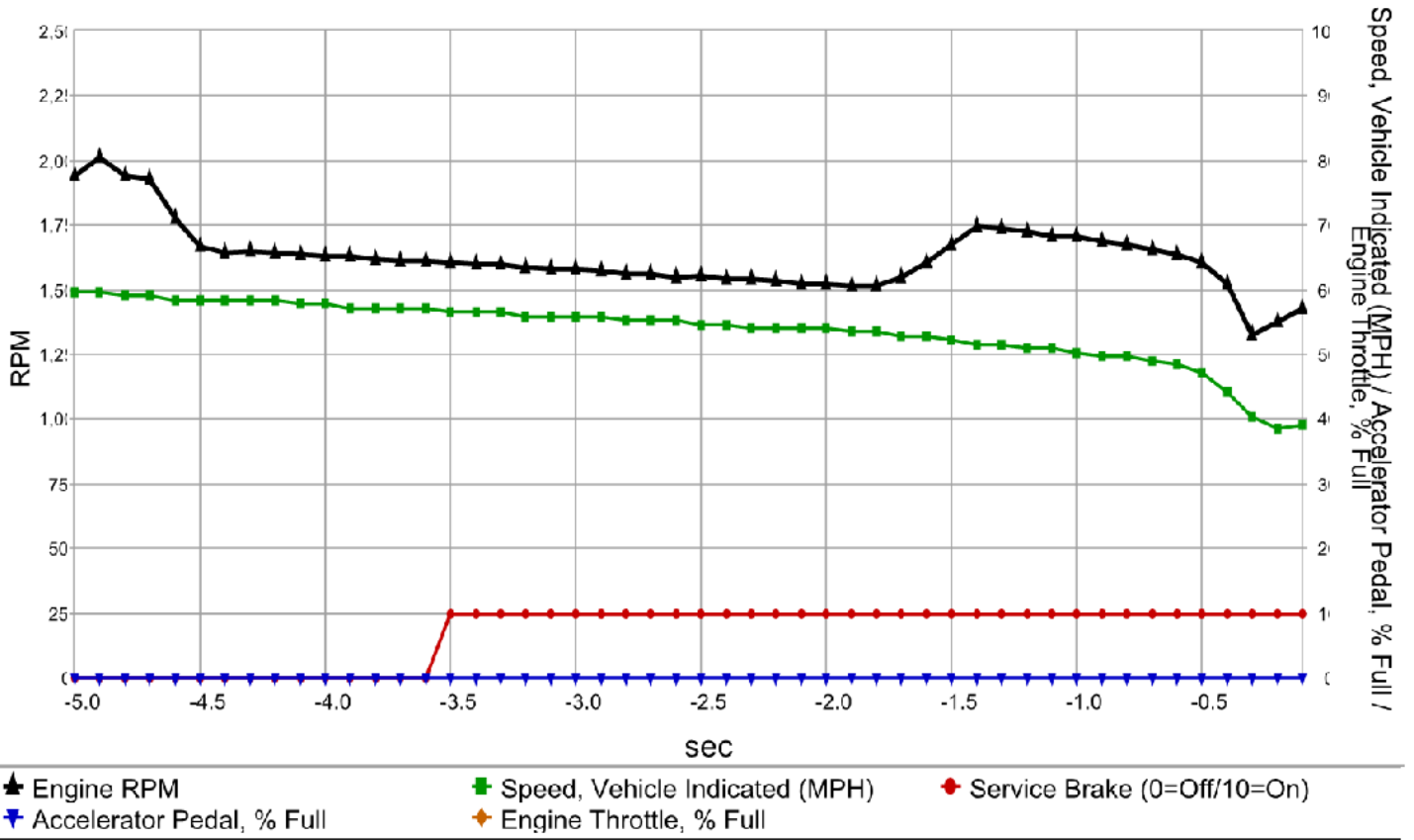
Angular Rate (Most Recent Event (Non-Deployment))

Time (msec)	Angular Rate (deg/sec)
500	-2.0
520	0.0
540	0.0
560	0.0
580	2.0
600	2.0
620	4.0
640	4.0
660	4.0
680	4.0
700	0.0
720	0.0
740	0.0
760	0.0
780	0.0
800	0.0
820	0.0
840	0.0
860	0.0
880	0.0
900	0.0
920	0.0
940	0.0
960	0.0
980	0.0
1000	0.0
1020	0.0
1040	0.0
1060	0.0
1080	0.0
1100	0.0
1120	0.0
1140	0.0
1160	0.0
1180	0.0
1200	0.0
1220	0.0
1240	0.0
1260	0.0
1280	0.0
1300	0.0
1320	0.0
1340	0.0
1360	0.0
1380	-2.0
1400	-2.0
1420	-4.0
1440	-2.0
1460	-4.0
1480	-2.0

Time (msec)	Angular Rate (deg/sec)
1500	0.0
1520	4.0
1540	6.0
1560	8.0
1580	8.0
1600	8.0
1620	2.0
1640	2.0
1660	0.0
1680	0.0
1700	-2.0
1720	-6.0
1740	-6.0
1760	-8.0
1780	-6.0
1800	-6.0
1820	-6.0
1840	0.0
1860	0.0
1880	2.0
1900	4.0
1920	2.0
1940	0.0
1960	0.0
1980	-2.0
2000	0.0
2020	0.0
2040	0.0
2060	0.0
2080	0.0
2100	0.0
2120	0.0
2140	0.0
2160	0.0
2180	0.0
2200	0.0
2220	0.0
2240	-2.0
2260	0.0
2280	-2.0
2300	0.0
2320	0.0
2340	0.0
2360	0.0
2380	0.0
2400	0.0
2420	0.0
2440	2.0
2460	0.0
2480	0.0
2500	0.0



Pre-Crash Data -5 to -0.1 Sec



**Pre-Crash Data -5.0 to 0 sec (100 msec) (Most Recent Event (Non-Deployment)) -
Table 1 of 6**

Time (sec)	Pre-Crash Recorder Status	Speed, Vehicle Indicated (MPH [km/h])	Accelerator Pedal, % Full (%)	Raw Pedal #1 (V)	Raw Pedal #2 (V)	Engine Throttle, % Full (%)	Raw Throttle #1 (V)	Raw Throttle #2 (V)
-5.0	Complete	60 [96]	0	0.410	0.195	SNA	4.980	4.980
-4.9	Complete	60 [96]	0	0.410	0.195	SNA	4.980	4.980
-4.8	Complete	59 [95]	0	0.410	0.195	SNA	4.980	4.980
-4.7	Complete	59 [95]	0	0.410	0.195	SNA	4.980	4.980
-4.6	Complete	58 [94]	0	0.410	0.195	SNA	4.980	4.980
-4.5	Complete	58 [94]	0	0.410	0.195	SNA	4.980	4.980
-4.4	Complete	58 [94]	0	0.410	0.195	SNA	4.980	4.980
-4.3	Complete	58 [94]	0	0.410	0.214	SNA	4.980	4.980
-4.2	Complete	58 [94]	0	0.410	0.195	SNA	4.980	4.980
-4.1	Complete	58 [93]	0	0.410	0.195	SNA	4.980	4.980
-4.0	Complete	58 [93]	0	0.410	0.195	SNA	4.980	4.980
-3.9	Complete	57 [92]	0	0.410	0.195	SNA	4.980	4.980
-3.8	Complete	57 [92]	0	0.410	0.195	SNA	4.980	4.980
-3.7	Complete	57 [92]	0	0.410	0.195	SNA	4.980	4.980
-3.6	Complete	57 [92]	0	0.410	0.195	SNA	4.980	4.980
-3.5	Complete	57 [91]	0	0.410	0.195	SNA	4.980	4.980
-3.4	Complete	57 [91]	0	0.410	0.195	SNA	4.980	4.980
-3.3	Complete	57 [91]	0	0.410	0.195	SNA	4.980	4.980
-3.2	Complete	56 [90]	0	0.410	0.195	SNA	4.980	4.980
-3.1	Complete	56 [90]	0	0.410	0.195	SNA	4.980	4.980
-3.0	Complete	56 [90]	0	0.410	0.195	SNA	4.980	4.980
-2.9	Complete	56 [90]	0	0.410	0.195	SNA	4.980	4.980
-2.8	Complete	55 [89]	0	0.410	0.195	SNA	4.980	4.980
-2.7	Complete	55 [89]	0	0.410	0.195	SNA	4.980	4.980
-2.6	Complete	55 [89]	0	0.410	0.195	SNA	4.980	4.980
-2.5	Complete	55 [88]	0	0.410	0.195	SNA	4.980	4.980
-2.4	Complete	55 [88]	0	0.410	0.214	SNA	4.980	4.980
-2.3	Complete	54 [87]	0	0.410	0.195	SNA	4.980	4.980
-2.2	Complete	54 [87]	0	0.410	0.195	SNA	4.980	4.980
-2.1	Complete	54 [87]	0	0.410	0.195	SNA	4.980	4.980
-2.0	Complete	54 [87]	0	0.410	0.195	SNA	4.980	4.980
-1.9	Complete	53 [86]	0	0.410	0.195	SNA	4.980	4.980
-1.8	Complete	53 [86]	0	0.410	0.195	SNA	4.980	4.980
-1.7	Complete	53 [85]	0	0.410	0.195	SNA	4.980	4.980
-1.6	Complete	53 [85]	0	0.410	0.214	SNA	4.980	4.980
-1.5	Complete	52 [84]	0	0.410	0.214	SNA	4.980	4.980
-1.4	Complete	52 [83]	0	0.410	0.195	SNA	4.980	4.980
-1.3	Complete	52 [83]	0	0.410	0.195	SNA	4.980	4.980
-1.2	Complete	51 [82]	0	0.410	0.195	SNA	4.980	4.980
-1.1	Complete	51 [82]	0	0.410	0.195	SNA	4.980	4.980
-1.0	Complete	50 [81]	0	0.410	0.195	SNA	4.980	4.980
-0.9	Complete	50 [80]	0	0.410	0.214	SNA	4.980	4.980
-0.8	Complete	50 [80]	0	0.410	0.214	SNA	4.980	4.980
-0.7	Complete	49 [79]	0	0.410	0.195	SNA	4.980	4.980
-0.6	Complete	48 [78]	0	0.410	0.195	SNA	4.980	4.980
-0.5	Complete	47 [76]	0	0.410	0.195	SNA	4.980	4.980
-0.4	Complete	44 [71]	0	0.410	0.195	SNA	4.980	4.980
-0.3	Complete	40 [65]	0	0.410	0.195	SNA	4.980	4.980
-0.2	Complete	39 [62]	0	0.410	0.195	SNA	4.980	4.980
-0.1	Complete	39 [63]	0	0.410	0.214	SNA	4.980	4.980
0.0	Complete	36 [58]	0	0.410	0.195	SNA	4.980	4.980

Pre-Crash Data -5.0 to 0 sec (100 msec) (Most Recent Event (Non-Deployment)) - Table 2 of 6

Time (sec)	Engine RPM (RPM)	Brake Pedal State	Brake Status	Stability Control	ESC Lamp	Brake Incidcation Lamp on Request	Traction Control Active	Emergency Braking
-5.0	1,940	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-4.9	2,011	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-4.8	1,943	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-4.7	1,930	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-4.6	1,776	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-4.5	1,668	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-4.4	1,641	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-4.3	1,650	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-4.2	1,644	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-4.1	1,636	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-4.0	1,628	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-3.9	1,628	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-3.8	1,620	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-3.7	1,610	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-3.6	1,610	Pedal Upstopped	Brake Off	On	OFF	OFF	False	False
-3.5	1,603	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-3.4	1,597	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-3.3	1,596	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-3.2	1,587	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-3.1	1,580	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-3.0	1,579	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-2.9	1,571	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-2.8	1,564	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-2.7	1,564	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-2.6	1,549	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-2.5	1,553	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-2.4	1,543	Pedal Pressed	Brake On	On	OFF	OFF	False	False

Time (sec)	Engine RPM (RPM)	Brake Pedal State	Brake Status	Stability Control	ESC Lamp	Brake Incidcation Lamp on Request	Traction Control Active	Emergency Braking
-2.3	1,539	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-2.2	1,537	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-2.1	1,526	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-2.0	1,522	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-1.9	1,515	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-1.8	1,519	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-1.7	1,546	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-1.6	1,608	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-1.5	1,674	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-1.4	1,743	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-1.3	1,737	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-1.2	1,724	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-1.1	1,708	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-1.0	1,707	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-0.9	1,686	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-0.8	1,672	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-0.7	1,655	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-0.6	1,639	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-0.5	1,606	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-0.4	1,525	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-0.3	1,327	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-0.2	1,379	Pedal Pressed	Brake On	On	OFF	OFF	False	False
-0.1	1,426	Pedal Pressed	Brake On	On	OFF	OFF	False	False
0.0	1,461	Pedal Pressed	Brake On	On	OFF	OFF	False	False

**Pre-Crash Data -5.0 to 0 sec (100 msec) (Most Recent Event (Non-Deployment)) -
Table 3 of 6**

Time (sec)	Brake Intervention Enabled	Maximum (hard) braking (ALS controls all wheels)	Any ABS brake event	Brake Booster Vacuum Level (kPa)	Brake Master Cylinder Pressure (bar)	Actual Brake Torque (Nm)	Wheel Speed LF (RPM)	Wheel Speed RF (RPM)
-5.0	True	False	False	-96.6	0	0	717	718
-4.9	True	False	False	-96.6	0	0	714	712
-4.8	True	False	False	-97.1	0	0	712	711
-4.7	True	False	False	-96.6	0	0	711	711
-4.6	True	False	False	-96.6	0	0	711	711
-4.5	True	False	False	-96.6	0	0	705	707
-4.4	True	False	False	-97.1	0	0	704	703
-4.3	True	False	False	-97.1	0	0	701	701
-4.2	True	False	False	-97.1	0	0	700	699
-4.1	True	False	False	-96.6	0	0	696	697
-4.0	True	False	False	-96.6	0	0	695	695
-3.9	True	False	False	-96.6	0	0	692	693
-3.8	True	False	False	-96.6	0	0	690	690
-3.7	True	False	False	-96.6	0	0	687	687
-3.6	True	False	False	-96.6	0	0	685	684
-3.5	True	False	False	-96.6	0	0	683	682
-3.4	True	False	False	-96.6	0	6	682	682
-3.3	True	False	False	-96.6	0	21	679	679
-3.2	True	False	False	-96.6	0	18	675	676
-3.1	True	False	False	-96.6	0	15	674	674
-3.0	True	False	False	-96.6	0	12	672	672
-2.9	True	False	False	-96.6	0	18	671	670
-2.8	True	False	False	-97.1	0	30	668	667
-2.7	True	False	False	-96.6	1	75	664	664
-2.6	True	False	False	-96.6	1	87	662	662
-2.5	True	False	False	-96.6	1	111	661	660
-2.4	True	False	False	-96.6	1	117	658	658
-2.3	True	False	False	-96.6	1	123	655	655
-2.2	True	False	False	-96.6	2	156	653	653
-2.1	True	False	False	-96.6	3	231	651	651
-2.0	True	False	False	-96.6	4	363	648	648
-1.9	True	False	False	-96.6	5	471	645	645
-1.8	True	False	False	-96.6	5	498	641	641
-1.7	True	False	False	-96.6	6	513	637	637
-1.6	True	False	False	-96.6	6	579	634	633
-1.5	True	False	False	-96.6	7	636	634	631
-1.4	True	False	False	-96.6	9	789	627	626
-1.3	True	False	False	-96.6	10	927	622	623
-1.2	True	False	False	-96.6	11	963	618	618
-1.1	True	False	False	-96.6	11	957	614	613
-1.0	True	False	False	-96.6	11	957	608	608
-0.9	True	False	False	-96.6	11	954	603	602
-0.8	True	False	False	-96.6	11	981	598	598
-0.7	True	False	False	-96.6	11	1,017	593	593
-0.6	True	False	False	-96.6	20	1,635	585	585
-0.5	True	False	False	-96.0	50	3,873	570	571
-0.4	True	False	False	-95.5	93	7,725	542	546
-0.3	True	False	False	-94.9	127	9,051	507	510
-0.2	True	True	True	-94.4	156	4,158	218	291
-0.1	True	True	True	-94.9	161	5,589	467	484
0.0	True	True	True	-94.9	166	6,303	447	451

**Pre-Crash Data -5.0 to 0 sec (100 msec) (Most Recent Event (Non-Deployment)) -
Table 4 of 6**

Time (sec)	Wheel Speed LR (RPM)	Wheel Speed RR (RPM)	Steering Angle (deg)	Steering wheel angle sensor status	EPB Warning Lamp	Parking Brake Status	EPB Actual Force (daN)	ESS Engine State
-5.0	717	717	-4	Sensor OK	OFF	REL	0	Run
-4.9	717	716	-4	Sensor OK	OFF	REL	0	Run
-4.8	713	714	-5	Sensor OK	OFF	REL	0	Run
-4.7	710	712	-5	Sensor OK	OFF	REL	0	Run
-4.6	707	706	-3	Sensor OK	OFF	REL	0	Run
-4.5	706	703	-2	Sensor OK	OFF	REL	0	Run
-4.4	704	704	-3	Sensor OK	OFF	REL	0	Run
-4.3	703	702	-3	Sensor OK	OFF	REL	0	Run
-4.2	699	700	-3	Sensor OK	OFF	REL	0	Run
-4.1	695	697	-3	Sensor OK	OFF	REL	0	Run
-4.0	693	694	-3	Sensor OK	OFF	REL	0	Run
-3.9	692	692	-3	Sensor OK	OFF	REL	0	Run
-3.8	689	689	-3	Sensor OK	OFF	REL	0	Run
-3.7	688	687	-3	Sensor OK	OFF	REL	0	Run
-3.6	685	685	-3	Sensor OK	OFF	REL	0	Run
-3.5	683	684	-3	Sensor OK	OFF	REL	0	Run
-3.4	680	681	-3	Sensor OK	OFF	REL	0	Run
-3.3	677	677	-3	Sensor OK	OFF	REL	0	Run
-3.2	675	675	-3	Sensor OK	OFF	REL	0	Run
-3.1	674	673	-3	Sensor OK	OFF	REL	0	Run
-3.0	671	671	-3	Sensor OK	OFF	REL	0	Run
-2.9	671	670	-3	Sensor OK	OFF	REL	0	Run
-2.8	667	667	-3	Sensor OK	OFF	REL	0	Run
-2.7	665	665	-3	Sensor OK	OFF	REL	0	Run
-2.6	662	663	-3	Sensor OK	OFF	REL	0	Run
-2.5	658	660	-3	Sensor OK	OFF	REL	0	Run
-2.4	656	657	-3	Sensor OK	OFF	REL	0	Run
-2.3	655	655	-3	Sensor OK	OFF	REL	0	Run
-2.2	652	652	-3	Sensor OK	OFF	REL	0	Run
-2.1	650	650	-3	Sensor OK	OFF	REL	0	Run
-2.0	648	648	-3	Sensor OK	OFF	REL	0	Run
-1.9	645	645	-3	Sensor OK	OFF	REL	0	Run
-1.8	642	641	-3	Sensor OK	OFF	REL	0	Run
-1.7	637	637	-4	Sensor OK	OFF	REL	0	Run
-1.6	634	633	-4	Sensor OK	OFF	REL	0	Run
-1.5	631	630	-4	Sensor OK	OFF	REL	0	Run
-1.4	624	624	-4	Sensor OK	OFF	REL	0	Run
-1.3	623	624	-4	Sensor OK	OFF	REL	0	Run
-1.2	616	618	-4	Sensor OK	OFF	REL	0	Run
-1.1	612	614	-4	Sensor OK	OFF	REL	0	Run
-1.0	607	608	-4	Sensor OK	OFF	REL	0	Run
-0.9	601	603	-4	Sensor OK	OFF	REL	0	Run
-0.8	597	598	-4	Sensor OK	OFF	REL	0	Run
-0.7	591	592	-3	Sensor OK	OFF	REL	0	Run
-0.6	584	585	-3	Sensor OK	OFF	REL	0	Run
-0.5	569	570	-3	Sensor OK	OFF	REL	0	Run
-0.4	540	524	-5	Sensor OK	OFF	REL	0	Run
-0.3	512	468	-5	Sensor OK	OFF	REL	0	Run
-0.2	470	489	-4	Sensor OK	OFF	REL	0	Run
-0.1	472	472	-5	Sensor OK	OFF	REL	0	Run
0.0	446	424	-9	Sensor OK	OFF	REL	0	Run

Pre-Crash Data -5.0 to 0 sec (100 msec) (Most Recent Event (Non-Deployment)) - Table 5 of 6

Time (sec)	Engine Driver Mode Status	Outside Air Temperature (deg C)	Current driver torque demanded (Nm)	Current Engine Torque (Nm)	Engine Torque Request from ESP (Nm)	Torque request from ESP is Active	Engine Torque Request from TCM (Nm)	Torque request from TCM is Active
-5.0	Normal	0.5	-41.0	74.5	0.0	False	1,547.5	True
-4.9	Normal	0.5	-42.0	16.0	0.0	False	1,547.5	True
-4.8	Normal	0.5	-41.0	-11.7	0.0	False	1,547.5	True
-4.7	Normal	0.5	-41.0	-23.5	0.0	False	1,547.5	True
-4.6	Normal	0.5	-38.5	-27.2	0.0	False	1,547.5	True
-4.5	Normal	0.5	-39.2	-22.0	0.0	False	-19.0	True
-4.4	Normal	0.5	-39.2	-22.0	0.0	False	-22.0	True
-4.3	Normal	0.5	-39.5	-23.2	0.0	False	-24.0	True
-4.2	Normal	0.5	-39.5	-25.5	0.0	False	1,547.5	True
-4.1	Normal	0.5	-39.2	-26.5	0.0	False	1,547.5	True
-4.0	Normal	0.5	-39.0	-26.7	0.0	False	1,547.5	True
-3.9	Normal	0.5	-39.0	-27.0	0.0	False	1,547.5	True
-3.8	Normal	0.5	-39.0	-27.0	0.0	False	1,547.5	True
-3.7	Normal	1.0	-38.5	-26.7	0.0	False	1,547.5	True
-3.6	Normal	0.5	-38.5	-26.7	0.0	False	1,547.5	True
-3.5	Normal	0.5	-38.5	-26.5	0.0	False	1,547.5	True
-3.4	Normal	1.0	-38.5	-26.5	0.0	False	1,547.5	True
-3.3	Normal	1.0	-38.5	-26.5	0.0	False	1,547.5	True
-3.2	Normal	0.5	-38.2	-26.5	0.0	False	1,547.5	True
-3.1	Normal	0.5	-38.2	-26.5	0.0	False	1,547.5	True
-3.0	Normal	1.0	-38.2	-26.5	0.0	False	1,547.5	True
-2.9	Normal	0.5	-38.0	-26.2	0.0	False	1,547.5	True
-2.8	Normal	0.5	-38.0	-26.2	0.0	False	1,547.5	True
-2.7	Normal	1.0	-38.0	-26.2	0.0	False	1,547.5	True
-2.6	Normal	1.0	-37.7	-26.0	0.0	False	1,547.5	True
-2.5	Normal	0.5	-38.0	-26.2	0.0	False	1,547.5	True
-2.4	Normal	1.0	-38.0	-26.0	0.0	False	1,547.5	True
-2.3	Normal	1.0	-37.7	-26.0	0.0	False	1,547.5	True
-2.2	Normal	0.5	-38.0	-26.2	0.0	False	1,547.5	True
-2.1	Normal	1.0	-38.0	-26.2	0.0	False	1,547.5	True
-2.0	Normal	1.0	-38.0	-26.2	0.0	False	-25.0	True
-1.9	Normal	0.5	-38.0	-18.0	0.0	False	-16.0	True
-1.8	Normal	1.0	-38.2	-13.2	0.0	False	-11.0	True
-1.7	Normal	1.0	-38.5	-9.2	0.0	False	-8.0	True
-1.6	Normal	1.0	-39.7	-9.5	0.0	False	-9.0	True
-1.5	Normal	0.5	-40.0	-9.5	0.0	False	-9.0	True
-1.4	Normal	1.0	-39.2	-18.2	0.0	False	-20.0	True
-1.3	Normal	1.0	-38.5	-24.0	0.0	False	-26.0	True
-1.2	Normal	0.5	-38.2	-27.5	0.0	False	1,547.5	True
-1.1	Normal	1.0	-38.0	-28.0	0.0	False	1,547.5	True
-1.0	Normal	1.0	-37.7	-28.0	0.0	False	1,547.5	True
-0.9	Normal	1.0	-37.5	-27.7	0.0	False	1,547.5	True
-0.8	Normal	1.0	-37.0	-27.5	0.0	False	1,547.5	True
-0.7	Normal	1.0	-37.0	-27.5	0.0	False	1,547.5	True
-0.6	Normal	0.5	-36.5	-27.0	0.0	False	1,547.5	True
-0.5	Normal	0.5	-35.7	-26.5	0.0	False	1,547.5	True
-0.4	Normal	1.0	-34.5	-22.0	0.0	False	-19.0	True
-0.3	Normal	1.0	-33.7	-14.0	0.0	False	-12.0	True
-0.2	Normal	1.0	-35.2	-7.0	0.0	False	-5.0	True
-0.1	Normal	1.0	-36.5	-2.2	0.0	False	-2.0	True
0.0	Normal	0.5	-36.5	-3.2	0.0	False	-13.0	True

Pre-Crash Data -5.0 to 0 sec (100 msec) (Most Recent Event (Non-Deployment)) - Table 6 of 6

Time (sec)	Yaw Rate (from ORC) (deg/sec)	Yaw Rate Raw (from ESC)	Yaw Rate Offset (from ESC)	Lateral Acceleration (m/s ²)	Longitudinal Acceleration (m/s ²)	Speed Limiter Status	Driver is overriding cruise set speed	Rear ELSD system status
-5.0	-0.88	-0.61	0.00	0.14	-0.26	N A	False	DEF
-4.9	-0.64	-0.61	0.00	-0.04	-0.08	N A	False	DEF
-4.8	-0.48	-0.37	0.00	-0.02	-0.48	N A	False	DEF
-4.7	-0.80	-0.61	0.00	-0.40	-0.44	N A	False	DEF
-4.6	-0.72	-0.12	0.00	0.12	-0.12	N A	False	DEF
-4.5	-0.32	-0.37	0.00	0.34	-0.74	N A	False	DEF
-4.4	-0.08	0.00	0.00	-0.04	-0.56	N A	False	DEF
-4.3	0.16	0.12	0.00	0.00	-0.32	N A	False	DEF
-4.2	-0.08	0.12	0.00	0.00	-0.28	N A	False	DEF
-4.1	-0.08	0.00	0.00	-0.10	-0.44	N A	False	DEF
-4.0	-0.08	0.00	0.00	0.00	-0.50	N A	False	DEF
-3.9	-0.08	0.00	0.00	0.16	-0.48	N A	False	DEF
-3.8	-0.08	0.00	0.00	0.24	-0.46	N A	False	DEF
-3.7	0.00	0.00	0.00	0.30	-0.58	N A	False	DEF
-3.6	-0.16	0.00	0.00	-0.14	-0.42	N A	False	DEF
-3.5	-0.08	0.00	0.00	-0.14	-0.28	N A	False	DEF
-3.4	-0.16	0.00	0.00	-0.04	-0.56	N A	False	DEF
-3.3	-0.08	0.00	0.00	0.00	-0.52	N A	False	DEF
-3.2	-0.08	0.00	0.00	0.14	-0.44	N A	False	DEF
-3.1	-0.32	0.00	0.00	0.26	-0.38	N A	False	DEF
-3.0	-0.08	0.00	0.00	0.06	-0.52	N A	False	DEF
-2.9	-0.08	0.00	0.00	0.00	-0.44	N A	False	DEF
-2.8	0.16	0.00	0.00	-0.08	-0.38	N A	False	DEF
-2.7	-0.08	0.00	0.00	0.08	-0.32	N A	False	DEF
-2.6	-0.08	0.00	0.00	-0.20	-0.54	N A	False	DEF
-2.5	-0.16	0.00	0.00	-0.04	-0.62	N A	False	DEF
-2.4	-0.16	0.00	0.00	0.02	-0.46	N A	False	DEF
-2.3	-0.24	-0.12	0.00	0.00	-0.44	N A	False	DEF
-2.2	-0.16	0.00	0.00	0.14	-0.46	N A	False	DEF
-2.1	-0.16	-0.12	0.00	0.08	-0.66	N A	False	DEF
-2.0	-0.08	0.00	0.00	0.26	-0.84	N A	False	DEF
-1.9	-0.08	0.00	0.00	0.14	-1.02	N A	False	DEF
-1.8	-0.16	-0.12	0.00	0.02	-0.96	N A	False	DEF
-1.7	-0.08	-0.12	0.00	-0.04	-0.98	N A	False	DEF
-1.6	-0.16	0.00	0.00	-0.32	-0.96	N A	False	DEF
-1.5	-0.32	-0.12	0.00	-0.24	-1.54	N A	False	DEF
-1.4	-0.08	0.00	0.00	0.10	-1.38	N A	False	DEF
-1.3	-0.24	0.12	0.00	-0.26	-1.20	N A	False	DEF
-1.2	-0.08	-0.12	0.00	0.16	-1.54	N A	False	DEF
-1.1	-0.08	0.00	0.00	0.24	-1.72	N A	False	DEF
-1.0	-0.40	-0.12	0.00	0.22	-1.70	N A	False	DEF
-0.9	-0.24	0.00	0.00	0.00	-1.44	N A	False	DEF
-0.8	-0.40	-0.37	0.00	-0.14	-1.66	N A	False	DEF
-0.7	-0.16	0.00	0.00	-0.02	-1.38	N A	False	DEF
-0.6	-0.32	0.00	0.00	0.06	-2.36	N A	False	DEF
-0.5	-0.24	0.00	0.00	0.08	-5.08	N A	False	DEF
-0.4	0.16	0.00	0.00	-0.18	-8.50	N A	False	DEF
-0.3	3.68	1.71	0.00	0.26	-11.08	N A	False	DEF
-0.2	0.96	3.30	0.00	0.84	-9.28	N A	False	DEF
-0.1	-1.84	-1.10	0.00	-4.40	-5.58	N A	False	DEF
0.0	0.00	-0.61	0.00	-1.36	-8.74	N A	False	DEF

**Pre-Crash Data -5.0 to 0 sec (250 msec) (Most Recent Event (Non-Deployment)) -
Table 1 of 6**

Time (sec)	Pre-Crash Recorder Status	Raw Manifold Pressure (kPa)	MIL On Request	Request MIL Blink	ETC Lamp	ETC Lamp, Flashing	Cruise Control System is ON	Cruise Control System is ENGAGED
-5.00	Complete	203.2	Off	No	Off	No	No	No
-4.75	Complete	185.6	Off	No	Off	No	No	No
-4.50	Complete	150.4	Off	No	Off	No	No	No
-4.25	Complete	142.4	Off	No	Off	No	No	No
-4.00	Complete	133.6	Off	No	Off	No	No	No
-3.75	Complete	131.2	Off	No	Off	No	No	No
-3.50	Complete	128.8	Off	No	Off	No	No	No
-3.25	Complete	127.2	Off	No	Off	No	No	No
-3.00	Complete	125.6	Off	No	Off	No	No	No
-2.75	Complete	124.8	Off	No	Off	No	No	No
-2.50	Complete	123.2	Off	No	Off	No	No	No
-2.25	Complete	123.2	Off	No	Off	No	No	No
-2.00	Complete	121.6	Off	No	Off	No	No	No
-1.75	Complete	121.6	Off	No	Off	No	No	No
-1.50	Complete	120.8	Off	No	Off	No	No	No
-1.25	Complete	120.8	Off	No	Off	No	No	No
-1.00	Complete	122.4	Off	No	Off	No	No	No
-0.75	Complete	122.4	Off	No	Off	No	No	No
-0.50	Complete	123.2	Off	No	Off	No	No	No
-0.25	Complete	123.2	Off	No	Off	No	No	No
0.00	Complete	120.8	Off	No	Off	No	No	No

**Pre-Crash Data -5.0 to 0 sec (250 msec) (Most Recent Event (Non-Deployment)) -
Table 2 of 6**

Time (sec)	Cruise Control System is OFF	PRND Status	Driving Program display Code (from TCM)	PRND Display Request	TRANS in Limp Home	Actual Gear	Tire Pressure Monitor Indicator Lamp	Tire Pressure status, LF
-5.00	Yes	D	TX NORMAL	D	No	D6	Off	Normal
-4.75	Yes	D	TX NORMAL	D	No	D6	Off	Normal
-4.50	Yes	D	TX NORMAL	D	No	D6	Off	Normal
-4.25	Yes	D	TX NORMAL	D	No	D7	Off	Normal
-4.00	Yes	D	TX NORMAL	D	No	D7	Off	Normal
-3.75	Yes	D	TX NORMAL	D	No	D7	Off	Normal
-3.50	Yes	D	TX NORMAL	D	No	D7	Off	Normal
-3.25	Yes	D	TX NORMAL	D	No	D7	Off	Normal
-3.00	Yes	D	TX NORMAL	D	No	D7	Off	Normal
-2.75	Yes	D	TX NORMAL	D	No	D7	Off	Normal
-2.50	Yes	D	TX NORMAL	D	No	D7	Off	Normal
-2.25	Yes	D	TX NORMAL	D	No	D7	Off	Normal
-2.00	Yes	D	TX NORMAL	D	No	D7	Off	Normal
-1.75	Yes	D	TX NORMAL	D	No	D7	Off	Normal
-1.50	Yes	D	TX NORMAL	D	No	D7	Off	Normal
-1.25	Yes	D	TX NORMAL	D	No	D7	Off	Normal
-1.00	Yes	D	TX NORMAL	D	No	D6	Off	Normal
-0.75	Yes	D	TX NORMAL	D	No	D6	Off	Normal
-0.50	Yes	D	TX NORMAL	D	No	D6	Off	Normal
-0.25	Yes	D	TX NORMAL	D	No	D6	Off	Normal
0.00	Yes	D	TX NORMAL	D	No	D6	Off	Normal

**Pre-Crash Data -5.0 to 0 sec (250 msec) (Most Recent Event (Non-Deployment)) -
Table 3 of 6**

Time (sec)	Tire Pressure status, RF	Tire Pressure status, LR	Tire Pressure status, RR	Tire Pressure, LF (psi)	Tire Pressure, RF (psi)	Tire Pressure, LR (psi)	Tire Pressure, RR (psi)	Active Damping Control Status
-5.00	Normal	Normal	Normal	39	39	39	41	MODE 1
-4.75	Normal	Normal	Normal	39	39	39	41	MODE 1
-4.50	Normal	Normal	Normal	39	39	39	41	MODE 1
-4.25	Normal	Normal	Normal	39	39	39	41	MODE 1
-4.00	Normal	Normal	Normal	39	39	39	41	MODE 1
-3.75	Normal	Normal	Normal	39	39	39	41	MODE 1
-3.50	Normal	Normal	Normal	39	39	39	41	MODE 1
-3.25	Normal	Normal	Normal	39	39	39	41	MODE 1
-3.00	Normal	Normal	Normal	39	39	39	41	MODE 1
-2.75	Normal	Normal	Normal	39	39	39	41	MODE 1
-2.50	Normal	Normal	Normal	39	39	39	41	MODE 1
-2.25	Normal	Normal	Normal	39	39	39	41	MODE 1
-2.00	Normal	Normal	Normal	39	39	39	41	MODE 1
-1.75	Normal	Normal	Normal	39	39	39	41	MODE 1
-1.50	Normal	Normal	Normal	39	39	39	41	MODE 1
-1.25	Normal	Normal	Normal	39	39	39	41	MODE 1
-1.00	Normal	Normal	Normal	39	39	39	41	MODE 1
-0.75	Normal	Normal	Normal	39	39	39	41	MODE 1
-0.50	Normal	Normal	Normal	39	39	39	41	MODE 1
-0.25	Normal	Normal	Normal	39	39	39	41	MODE 1
0.00	Normal	Normal	Normal	39	39	39	41	MODE 1

**Pre-Crash Data -5.0 to 0 sec (250 msec) (Most Recent Event (Non-Deployment)) -
Table 4 of 6**

Time (sec)	ADS Red Lamp On Request	Stop Start request - shift to park	Stop Start - Warning Status	Stop Start - Display status	Trans Ready for Auto Stop	Port Flow Per Cylinder per Stroke (Mg\cycle\cil)	Actual Rear Differential Torque Lock (Nm)	Hill Start Assist Brake Pressure (bar)
-5.00	OFF	False	NONE	READY	False	0.0	SNA	1
-4.75	OFF	False	NONE	READY	False	0.0	SNA	1
-4.50	OFF	False	NONE	READY	False	0.0	SNA	1
-4.25	OFF	False	NONE	READY	False	0.0	SNA	1
-4.00	OFF	False	NONE	READY	False	0.0	SNA	1
-3.75	OFF	False	NONE	READY	False	0.0	SNA	1
-3.50	OFF	False	NONE	READY	False	0.0	SNA	1
-3.25	OFF	False	NONE	READY	False	0.0	SNA	1
-3.00	OFF	False	NONE	READY	False	0.0	SNA	1
-2.75	OFF	False	NONE	READY	False	0.0	SNA	1
-2.50	OFF	False	NONE	READY	False	0.0	SNA	1
-2.25	OFF	False	NONE	READY	False	0.0	SNA	1
-2.00	OFF	False	NONE	READY	False	0.0	SNA	1
-1.75	OFF	False	NONE	READY	False	0.0	SNA	1
-1.50	OFF	False	NONE	READY	False	0.0	SNA	1
-1.25	OFF	False	NONE	READY	False	0.0	SNA	1
-1.00	OFF	False	NONE	READY	False	0.0	SNA	1
-0.75	OFF	False	NONE	READY	False	0.0	SNA	1
-0.50	OFF	False	NONE	READY	False	0.0	SNA	1
-0.25	OFF	False	NONE	READY	False	0.0	SNA	1
0.00	OFF	False	NONE	READY	False	0.0	SNA	1

Pre-Crash Data -5.0 to 0 sec (250 msec) (Most Recent Event (Non-Deployment)) - Table 5 of 6

Time (sec)	Drive Style Status	Driver Door Ajar	Driver Door Ajar 2	Passenger Door Ajar	Hood Door Ajar	BSM service request	BSM Configuration Status	BSM Left Side Warning
-5.00	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-4.75	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-4.50	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-4.25	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-4.00	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-3.75	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-3.50	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-3.25	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-3.00	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-2.75	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-2.50	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-2.25	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-2.00	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-1.75	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-1.50	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-1.25	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-1.00	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-0.75	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW

Time (sec)	Drive Style Status	Driver Door Ajar	Driver Door Ajar 2	Passenger Door Ajar	Hood Door Ajar	BSM service request	BSM Configuration Status	BSM Left Side Warning
-0.50	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
-0.25	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW
0.00	NORMAL	CLOSED SSA	CLOSED SSB	SNA	CLOSED SSA	False	ENABLED LED CHIME	NW

**Pre-Crash Data -5.0 to 0 sec (250 msec) (Most Recent Event (Non-Deployment)) -
Table 6 of 6**

Time (sec)	BSM Right Side Warning
-5.00	NW
-4.75	NW
-4.50	NW
-4.25	NW
-4.00	NW
-3.75	NW
-3.50	NW
-3.25	NW
-3.00	NW
-2.75	NW
-2.50	NW
-2.25	NW
-2.00	NW
-1.75	NW
-1.50	NW
-1.25	NW
-1.00	NW
-0.75	NW
-0.50	NW
-0.25	NW
0.00	NW

Hexadecimal Data

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

62 F1 00 00 44 00 03

62 F1 32 36 37 30 31 30 30 38 38 35 20

62 F1 54 00 03

62 F1 8C 54 43 38 36 31 32 38 30 37 30 31 32 35 32 30

62 F1 90 5A 41 4D 35 37 54 53 47 39 4A 31 32 38 37 38 33 30

62 10 06 71

62 02 B1 01 CC 01 01 02 48 04 A4 04 91 02 3B C7 12 08 BA 00 16 B6 BC 81 01 FF FF 00 00 0F
11 0A 00 91 91 F3 4E 51 4A 31 32 38 37 38 33 30 00 E4 00 33 00 00 00 00 00 00 00 00 00 00
00 48 00 00 00 00 00 00 FF FF FF FF 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00
37 F0 3F 00 B0 23 C0 01 02

62 02 B2 FF
FF
FF
FF
FF FF FF FF FF FF FF FF FF

62 A0 02 01 03 03 00 03 00 86 01 00 00 00 10 00

62 A0 04 3D 00 00 08 00 00 00 00

71 01 03 01 01 00 CC 05 04 2D 06 82 08 35 1A 03 50 03 7B 03 7E 03 85 1D 0D 05 B5 03 FF FF
15 0A FF 00 02 07 3E 07 C3 1F FF 07 D0 07 9C 01 08 00 07 BC 06 4B 7F C3 80 51 0F EF 00 00
00 00 00 0C CB FF

71 01 03 01 01 01 CC 05 04 2D 06 50 07 47 1A 03 B0 03 B0 03 A6 03 C8 1F 95 05 92 03 FF FF
15 0B FF 00 02 07 3E 07 C7 1F FF 07 D0 07 C8 01 07 E9 07 24 06 E9 7F 92 80 52 0F F7 00 00
00 00 00 0C CB FF

71 01 03 01 01 02 CC 05 04 2E 06 1B 05 6A 1A 03 D1 03 AB 01 B3 02 46 1E E1 05 63 03 FF FF
15 0A FF 00 02 07 43 07 B4 1F FF 07 D0 07 BC 01 08 0C 08 2A 06 30 81 4A 80 52 0F F8 00 00
00 00 00 0C CB FF

71 01 03 01 01 03 CC 05 04 2D 04 FC 0B C9 02 03 A8 03 FF 03 F5 03 FB 20 B5 05 2F 03 FF FF
15 0A FF 00 02 07 49 07 98 1F FF 07 D0 07 A0 01 08 2E 08 0D 05 D6 80 AB 80 52 0F F6 00 00
00 00 00 0C CB FF

71 01 03 01 01 04 CC 05 04 2C 03 A4 0A 0F 02 04 17 04 38 04 3B 04 43 23 A2 05 F5 03 FF FF
15 0A FF 00 02 07 46 07 78 1F FF 07 D0 07 84 01 08 02 07 F7 06 57 80 00 80 52 0F F7 00 00
00 00 00 0C CB FF

71 01 03 01 01 05 CC 05 04 2B 01 F8 05 0B 02 04 74 04 72 04 73 04 76 26 14 06 46 03 FF FF
15 0A FF 00 02 07 41 07 66 1F FF 07 D0 1F FE 01 07 FD 08 04 07 02 80 00 80 51 0F FA 00 00
00 00 00 0C CB FF

71 01 03 01 01 06 CC 05 04 2A 00 CA 02 21 02 04 92 04 90 04 91 04 91 27 18 06 67 03 FF FF
15 0A FF 00 02 07 3E 07 64 1F FF 07 D0 1F FE 01 07 FC 08 03 07 8A 80 00 80 51 0F FB 00 00
00 00 00 0C CB FF

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