

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	3GCNWAEF5LG293370
User	M. Mikhailov
Case Number	02083717-2020
EDR Data Imaging Date	01/27/2021
Crash Date	12/29/2020
Filename	3GCNWAEF5LG293370_ACM.CDRX
Saved on	Wednesday, January 27 2021 at 12:40:18
Imaged with CDR version	Crash Data Retrieval Tool 21.0
Imaged with Software Licensed to (Company Name)	U-haul Engineering Services
Reported with CDR version	Crash Data Retrieval Tool 21.0
Reported with Software Licensed to (Company Name)	U-haul Engineering Services
EDR Device Type	Airbag Control Module
Event(s) recovered	Record 1 (Deployment)

Comments

BP3184C
Benchtop image

Data Limitations

Recorded Crash Events:

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

- Head Rest Deployment
- Battery Cut-Off Deployment

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

Rollover Events contains Pre-Crash and Crash data. Rollover event follow the same rules as FSR Deployment events.

The SDM can store up to three Events.

There are two types of PedPro crash events. The first is the Non-Deployment PedPro Event. A Non-Deployment PedPro Event records data but does not deploy anything. A Non-Deployment PedPro Event may contain Pre-Crash and Crash data. The second type of PedPro recorded crash event is the Deployment PedPro Event. It also may contain Pre-Crash and Crash data. Deployment Events cannot be overwritten or cleared by the SDM.

The SDM can store up to two PedPro Events.

Data:

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

For Rollover Events, the SDM may record Lateral Acceleration, Vertical Acceleration, and Roll Rate data, if the SDM is rollover capable. This data reflects what the sensing system experienced during the recorded portion of the event. For Rollover Deployment Events, the SDM will record up to 700 milliseconds of data before the Deployment criteria is met and 290 milliseconds after the Deployment criteria is met.

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

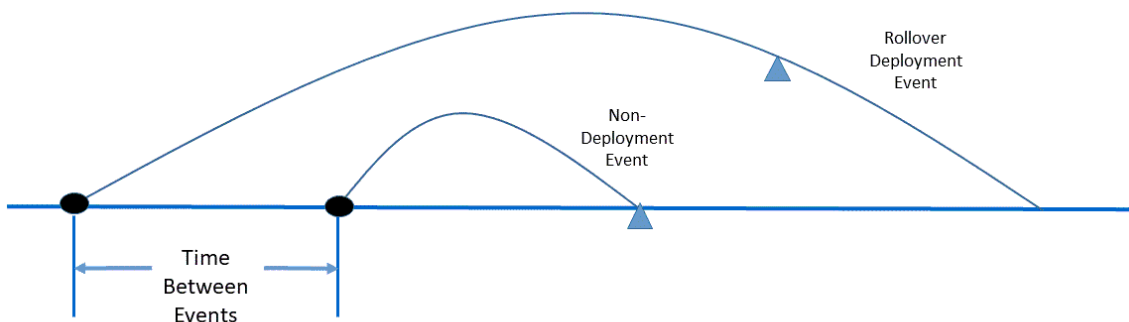
-The Maximum SDM Recorded Vehicle Velocity Change may occur between the recorded 10 millisecond sample points of the SDM Recorded Vehicle Velocity Change.

-If the SDM Recorded Vehicle Velocity Change data exceeds the max output range of -127 km/h then the exceeded values will be displayed with an offset of a +256 km/h. If the SDM Recorded Vehicle Velocity Change data exceeds the max output range of +126 km/h then the exceeded values will be displayed with an offset of a -256 km/h.

-Event Recording Complete will indicate if data from the recorded event has been fully written to the SDM memory or if it has been interrupted and not fully written.

-SDM Recorded Vehicle Speed accuracy can be affected by various factors, including but not limited to the following:

- Significant changes in the tire's rolling radius
- Final drive axle ratio changes
- Wheel lockup and wheel slip
- Brake Switch Circuit Status indicates the open/closed state of the brake switch circuit or the commanded state of the brake lamps.
- Pre-Crash data is recorded asynchronously. The 0.5 second Pre-crash data value (most recent recorded data point) is the data point last sampled before Time Zero. That is to say, the last data point may have been captured just before Time Zero but no more than 0.5 second before Time Zero. All subsequent Pre-crash data values are referenced from this data point.
- Pre-Crash Electronic Data Validity Check Status indicates "Data Invalid" if:
 - The SDM receives a message with an "invalid" flag from the module sending the pre-crash data
- Pre-Crash Electronic Data Validity Check Status indicates "Data Not Available" if:
 - No data is received from the module sending the pre-crash data
- For diesel powered vehicles, the data displayed as Throttle Position (%) is actually the data for the Air Inlet Flap Position. This is not the same as the throttle position for a gasoline powered engine.
- Belt Switch Circuit Status indicates the status of the seat belt switch circuit.
- The ignition cycle counter will increment when the power mode cycles from OFF/Accessory to RUN. Applying and removing of battery power to the module will not increment the ignition cycle counter.
- Ignition Cycles Since DTCs Were Last Cleared can record a maximum value of 253 cycles and can only be reset by a scan tool.
- Dynamic Deployment Event Counters tracks the number of Deployment events that have occurred during the SDM's lifetime.
- Dynamic Event Counters tracks the number of qualified events (either Deployments, Non-deploy, or Rollover events) that have occurred during the SDM's lifetime.
- For Deployment Events, DTC B0052 (Deployment commanded) shall be recorded with the remainder of the data for this event even though it occurred after Event Enable.
- For frontal Deployment Events, only the highest severity event is reported. For example, Stage 2 severity events include Pretensioner severity and Stage 1 severity.
- Once a firing loop has been commanded to be deployed, it will not be commanded to be deployed again during the same ignition cycle. Firing loop times for subsequent deployment type events, during the same ignition cycle, will record the deployment times as N/A.
- The airbag control module may continue to function after the vehicle has been turned off or to accessory, for a set period of time, this is called Prolongation. However, all other vehicle modules may have their functions shut down during Prolongation. For example, if the SIR warning lamp is commanded on by the airbag control module, during Prolongation, and is recorded in the EDR as being commanded on, the actual state of the warning lamp would be off to an observer since the vehicle display cluster would have been in the off state. Vehicle pre-event and system data may be recorded in the EDR as their commanded state, default state, or data invalid state.
- A Concurrent Event is when two events are happening nearly simultaneously. The "Concurrent Event Flag Set" parameter will indicate "Yes" if one event begins, but before that event is qualified, another event begins and is qualified.
- A Non-Deployment event typically becomes qualified if that event exceeds the 5 MPH (8 km/h) delta V recording threshold and the event has concluded. A deployment event (FSR or Rollover) becomes qualified when a deployment has been commanded for that event.
- Example of a Concurrent Event:
A Rollover event begins. Before the Rollover event is qualified, a Non-Deployment event begins and is qualified. Sometime after the Non-Deployment event is qualified, the Rollover event is qualified. The Non-Deployment event will be recorded in the first open record even though the Rollover event enabled before the Non-Deployment event. The Rollover event will be recorded in the next open record. The "Concurrent Event Flag Set" parameter will indicate "Yes" for the Rollover event. The "Time Between Events" parameter will indicate the time from the start of the Rollover event to the start of the Non-Deployment event.



Event Record #1	Event Record #2
Event Record Type = Non – Deployment	Event Record Type = Rollover
Concurrent Event Flag = No	Concurrent Event Flag = Yes
Time Between Events = NA	Time Between Events = XX seconds

- The GM parameter name is displayed in parentheses after the NHTSA Part 563 parameter name.
- All data should be examined in conjunction with other available physical evidence from the vehicle and scene.

Data Source:

All SDM recorded data is measured, calculated, and stored internally, except for the following:

- Vehicle Status Data (Pre-Crash) is transmitted by the Body Control Module, via the vehicle's communication network.
- The Belt Switch Circuit is wired directly to the SDM.

Data Element Sign Convention:

The following table provides an explanation of the sign notation for data elements that may be included in this CDR report. Directional references to sign notation are all from the perspective of the driver when seated in the vehicle facing the direction of forward vehicle travel.

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

Hexadecimal Data:

Data that the vehicle manufacturer has specified for data 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 tool.

01059_SDM40-delphi_r010

System Status at Time of Retrieval

ESS # 1 Traceability Data, Component Identifier	AU
ESS # 1 Traceability Data, Part Number/Broadcast Code	9412
ESS # 1 Traceability Data, Supplier Code	D
ESS # 1 Traceability Data, Traceability Number	A00000000
ESS # 1 Verification Data	13,519,412
ESS # 2 Traceability Data, Component Identifier	AT
ESS # 2 Traceability Data, Part Number/Broadcast Code	9412
ESS # 2 Traceability Data, Supplier Code	D
ESS # 2 Traceability Data, Traceability Number	A00000000
ESS # 2 Verification Data	13,519,412
ESS # 3 Traceability Data, Component Identifier	AH
ESS # 3 Traceability Data, Part Number/Broadcast Code	4197
ESS # 3 Traceability Data, Supplier Code	D
ESS # 3 Traceability Data, Traceability Number	A00000000
ESS # 3 Verification Data	13,514,197
ESS # 4 Traceability Data, Component Identifier	AJ
ESS # 4 Traceability Data, Part Number/Broadcast Code	4197
ESS # 4 Traceability Data, Supplier Code	D
ESS # 4 Traceability Data, Traceability Number	A00000000
ESS # 4 Verification Data	13,514,197
ESS # 5 Traceability Data, Traceability Number	A00000000
ESS # 5 Traceability Data, Component Identifier	
ESS # 5 Traceability Data, Part Number/Broadcast Code	0000
ESS # 5 Traceability Data, Supplier Code	D
ESS # 5 Verification Data	0
ESS # 6 Traceability Data, Component Identifier	
ESS # 6 Traceability Data, Part Number/Broadcast Code	0000
ESS # 6 Traceability Data, Supplier Code	D
ESS # 6 Traceability Data, Traceability Number	A00000000
ESS # 6 Verification Data	0
ESS # 7 Traceability Data, Component Identifier	
ESS # 7 Traceability Data, Part Number/Broadcast Code	0000
ESS # 7 Traceability Data, Supplier Code	D
ESS # 7 Traceability Data, Traceability Number	A00000000
ESS # 7 Verification Data	0
ESS # 8 Traceability Data, Component Identifier	
ESS # 8 Traceability Data, Part Number/Broadcast Code	0000
ESS # 8 Traceability Data, Supplier Code	D
ESS # 8 Traceability Data, Traceability Number	A00000000
ESS # 8 Verification Data	0
AOS Data Key	0
SDM Primary Key Definition (Key 1-2)	17
SDM Primary Key Definition (Key 3-4)	10
Dynamic Deployment Event Counter	1
Multi-Event, Number of Events (Dynamic Event Counter)	1
Dynamic OnStar Notification Event Counter	1
Driver Frontal Stage 2 Commanded after Event End for Event Record #1	No
Passenger Frontal Stage 2 Commanded after Event End for Event Record #1	No
Driver Frontal Stage 2 Commanded after Event End for Event Record #2	No
Passenger Frontal Stage 2 Commanded after Event End for Event Record #2	No
Driver Frontal Stage 2 Commanded after Event End for Event Record #3	No
Passenger Frontal Stage 2 Commanded after Event End for Event Record #3	No
Longitudinal Accelerometer Range (g)	113
Lateral Accelerometer Range (g)	113
Dynamic PedPro Deploy Event Counter	0
Dynamic PedPro Event Counter	0
Vehicle Identification Number (VIN)	3GCNWAEF5LG293370
System Type	Delphi SDM40 with integrated IMU
Ignition Cycle, Download (Ignition Cycles at Investigation)	5,207

System Status at Event (Record 1)

Complete File Recorded (Event Recording Complete)	Yes
Event Record Type	Deployment
Crash Record Locked	Yes
OnStar Deployment Status Data Sent	Yes
OnStar SDM Recorded Vehicle Velocity Change Data Sent	Yes
High Voltage Disable Notification Sent	Yes
Deployment Commanded in Energy Reserve Mode	No
Deployment Event Counter	1
Multi-Event, Number of Events (Event Counter)	1
OnStar Notification Event Counter	1
Algorithm Active - Frontal	Yes
Algorithm Active - Side	Yes
Algorithm Active - Rollover	Yes
Algorithm Active - Rear	Yes
Ignition Cycle, Crash (Ignition Cycles at Event)	5,179
Time From Event 1 to 2 (Time Between Events) (msec)	Data Not Available
Concurrent Event Flag Set	No
Event Severity Status: Frontal Pretensioner	No
Event Severity Status: Frontal Stage 1	Yes
Event Severity Status: Frontal Stage 2	No
Event Severity Status: Left Side	No
Event Severity Status: Right Side	No
Event Severity Status: Rear	No
Event Severity Status: Rollover	No
Event Severity Status: Battery Disconnect Switch - Side Event	No
Safety Belt Status, Driver (Driver Belt Switch Circuit Status)	Buckled
Safety Belt Status, Right Front Passenger (Passenger Belt Switch Circuit Status)	Not Buckled
Center Front Row Belt Switch Circuit Status (If Equipped)	Data Not Available
Center Row 3 Belt Switch Circuit Status (If Equipped)	Data Not Available
Passenger Seat Occupancy Status	Empty
Occupant Size Right Front Passenger Child (Passenger Classification Status)	No (Not Applicable)
Passenger Air Bag ON Indicator Status	Off
Passenger Air Bag OFF Indicator Status	On
Low Tire Pressure Warning Lamp Status 0.5 Seconds prior to Time Zero	Off
Frontal Air Bag Warning Lamp (SIR Warning Lamp Status 0.5 Seconds Prior to Time Zero)	Off
SIR Warning Lamp ON/OFF Time Continuously (seconds)	655,330
Number of Ignition Cycles SIR Warning Lamp was ON/OFF Continuously	2,169
Ignition Cycles Since DTCs Were Last Cleared 0.5 Seconds Prior to Time Zero	253
Maximum Delta-V, Longitudinal (Maximum Longitudinal SDM Recorded Vehicle Velocity Change for FSR Event) (MPH [km/h])	-11.8 [-19]
Time, Maximum Delta-V (Time From FSR Time Zero to Maximum Longitudinal SDM Recorded Vehicle Velocity Change) (msec)	122
Maximum Delta-V, Lateral (Maximum Lateral SDM Recorded Vehicle Velocity Change for FSR Event) (MPH [km/h])	-3.1 [-5]
Time Maximum Delta-V, Lateral (Time From FSR Time Zero to Maximum Lateral SDM Recorded Vehicle Velocity Change) (msec)	170
Maximum Resultant Delta-V – Longitudinal Component for FSR Event (MPH [km/h])	-11.8 [-19]
Maximum Resultant Delta-V – Lateral Component for FSR Event (MPH [km/h])	-3.1 [-5]
Time from FSR Time Zero to time of the Maximum Resultant Delta-V (msec)	170
Blended Event FSR 1 Severity Type	Frontal (Pretensioner/Stage 1/Stage 2)
Blended Event FSR 2 Severity Type	Data Not Available
Blended Event Time from FSR 1 Time Zero to FSR 2 Time Zero (msec)	Data Not Available
Blended Event FSR 3 Severity Type	Data Not Available

Blended Event Time from FSR 1 Time Zero to FSR 3 Time Zero (msec)	Data Not Available
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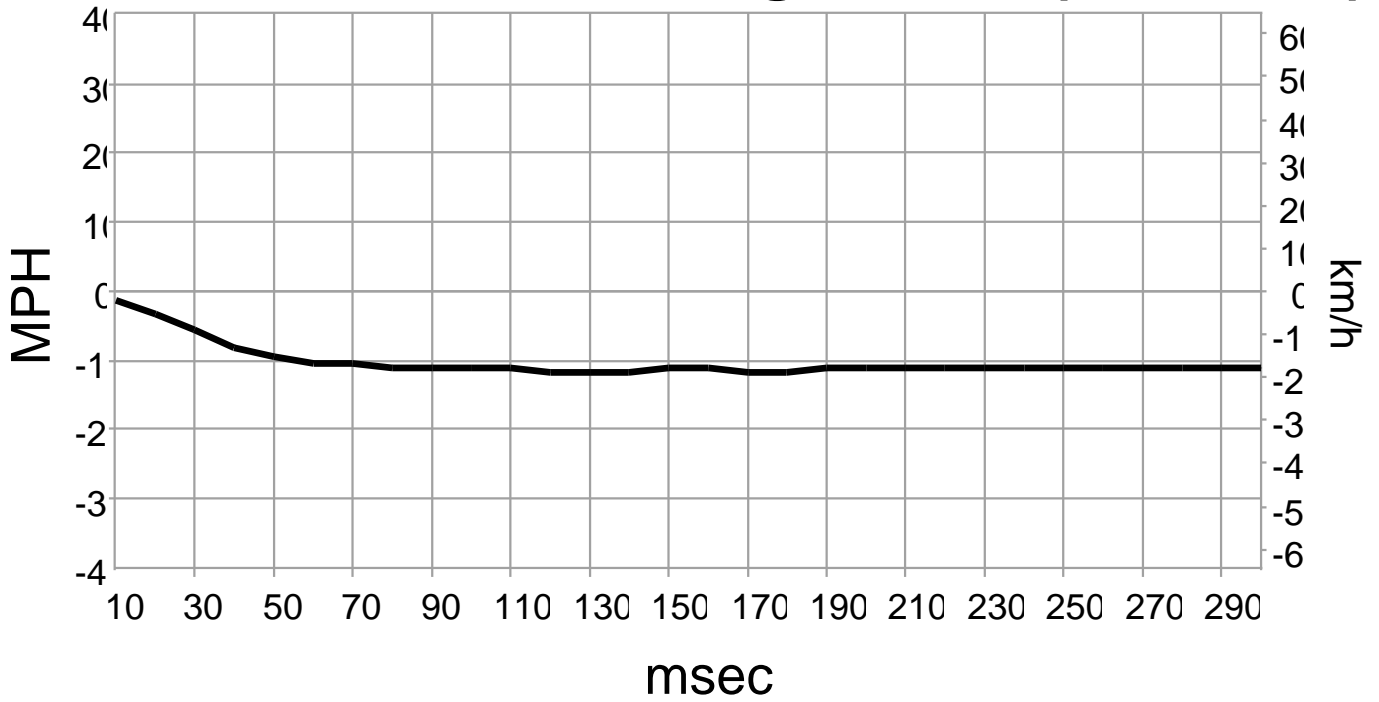
Diagnostic Trouble Codes 0.5 Seconds Prior to Time Zero (Record 1)

DTC 1	B0052-00
DTC 2	N/A
DTC 3	N/A
DTC 4	N/A
DTC 5	N/A
DTC 6	N/A
DTC 7	N/A
DTC 8	N/A
DTC 9	N/A

Deployment Command Data (Record 1)

Driver 1st Stage Deployment Loop Commanded	Yes
Passenger 1st Stage Deployment Loop Commanded	No
Driver 2nd Stage Deployment Loop Commanded	Yes
Passenger 2nd Stage Deployment Loop Commanded	No
Driver Pretensioner Deployment Loop #1 Commanded	Yes
Passenger Pretensioner Deployment Loop #1 Commanded	Yes
Driver Pretensioner Deployment Loop #2 Commanded	Yes
Passenger Pretensioner Deployment Loop #2 Commanded	Yes
Driver Thorax Loop Commanded	No
Passenger Thorax Loop Commanded	No
Left Row 1 Roof Rail/Head Curtain Loop Commanded	No
Right Row 1 Roof Rail/Head Curtain Loop Commanded	No
Frontal Air Bag Deployment, Time to 1st Stage Deployment, Driver (Driver 1st Stage Time From Time Zero to Deployment Command Criteria Met) (msec)	28
Frontal Air Bag Deployment, Time to 1st Stage Deployment, Right Front Passenger (Passenger 1st Stage Time From Time Zero to Deployment Command Criteria Met) (msec)	Data Not Available
Frontal Air Bag Deployment, Time to 2nd Stage, Driver (Driver 2nd Stage Time From Time Zero to Deployment Command Criteria Met) (msec)	149
Frontal Air Bag Deployment, Time to 2nd Stage, Right Front Passenger (Passenger 2nd Stage Time From Time Zero to Deployment Command Criteria Met) (msec)	Data Not Available
Pretensioner Deployment, Time to Fire, Driver (Driver Pretensioner Time From Time Zero to Deployment Loop #1 Command Criteria Met) (msec)	9
Pretensioner Deployment, Time to Fire, Right Front Passenger (Passenger Pretensioner Time From Time Zero to Deployment Loop #1 Command Criteria Met) (msec)	9
Pretensioner Deployment, Time to Fire, Driver (Driver Pretensioner Time From Time Zero to Deployment Loop #2 Command Criteria Met) (msec)	19
Pretensioner Deployment, Time to Fire, Right Front Passenger (Passenger Pretensioner Time From Time Zero to Deployment Loop #2 Command Criteria Met) (msec)	15
Side Air Bag Deployment, Time to Deploy, Driver (Driver Thorax Time From Time Zero to Deployment Command Criteria Met) (msec)	Data Not Available
Side Air Bag Deployment, Time to Deploy, Right Front Passenger (Passenger Thorax Time From Time Zero to Deployment Command Criteria Met) (msec)	Data Not Available
Left Row 1 Curtain Time From Time Zero to Deployment Command Criteria Met (msec)	Data Not Available
Right Row 1 Curtain Time From Time Zero to Deployment Command Criteria Met (msec)	Data Not Available

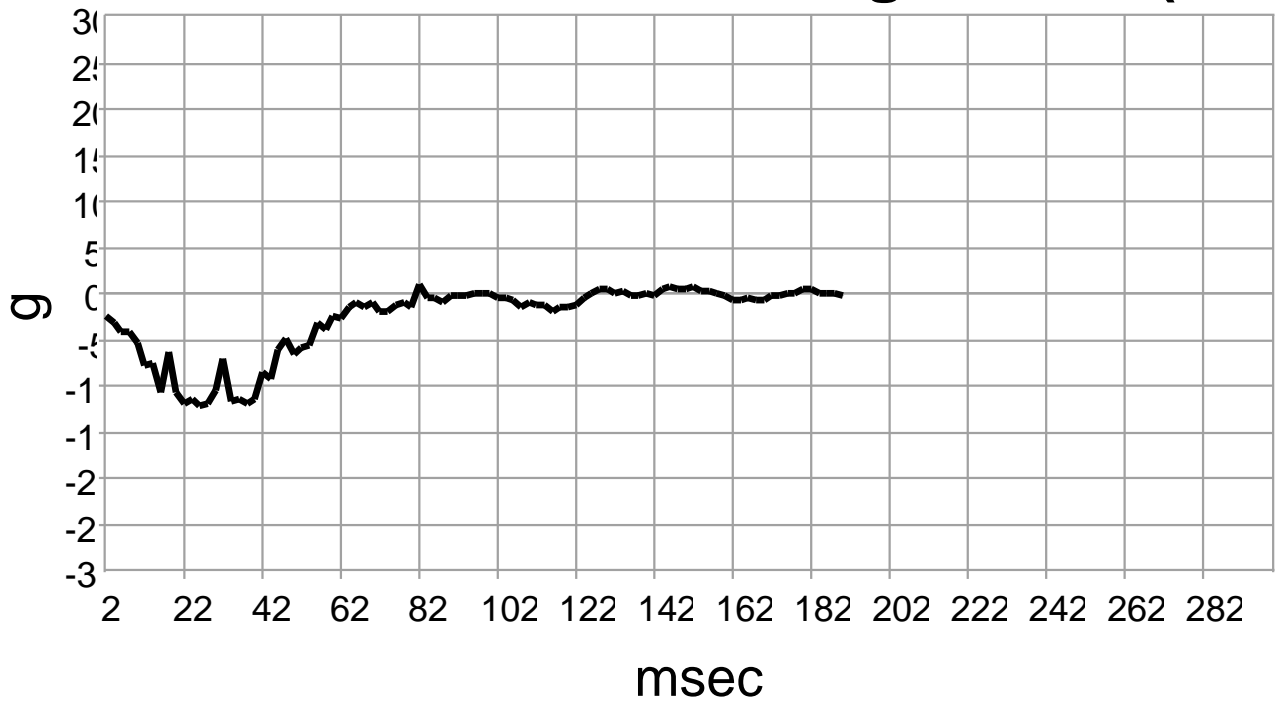
Delta-V, Longitudinal (Record 1)



Longitudinal Delta-V (Record 1)

Time (msec)	Delta-V, Longitudinal (SDM Recorded Vehicle Longitudinal Velocity Change for FSR Event) (MPH [km/h])
10	-1.2 [-2]
20	-3.1 [-5]
30	-5.6 [-9]
40	-8.1 [-13]
50	-9.3 [-15]
60	-10.6 [-17]
70	-10.6 [-17]
80	-11.2 [-18]
90	-11.2 [-18]
100	-11.2 [-18]
110	-11.2 [-18]
120	-11.8 [-19]
130	-11.8 [-19]
140	-11.8 [-19]
150	-11.2 [-18]
160	-11.2 [-18]
170	-11.8 [-19]
180	-11.8 [-19]
190	-11.2 [-18]
200	-11.2 [-18]
210	-11.2 [-18]
220	-11.2 [-18]
230	-11.2 [-18]
240	-11.2 [-18]
250	-11.2 [-18]
260	-11.2 [-18]
270	-11.2 [-18]
280	-11.2 [-18]
290	-11.2 [-18]
300	-11.2 [-18]

Acceleration, Longitudinal (Record

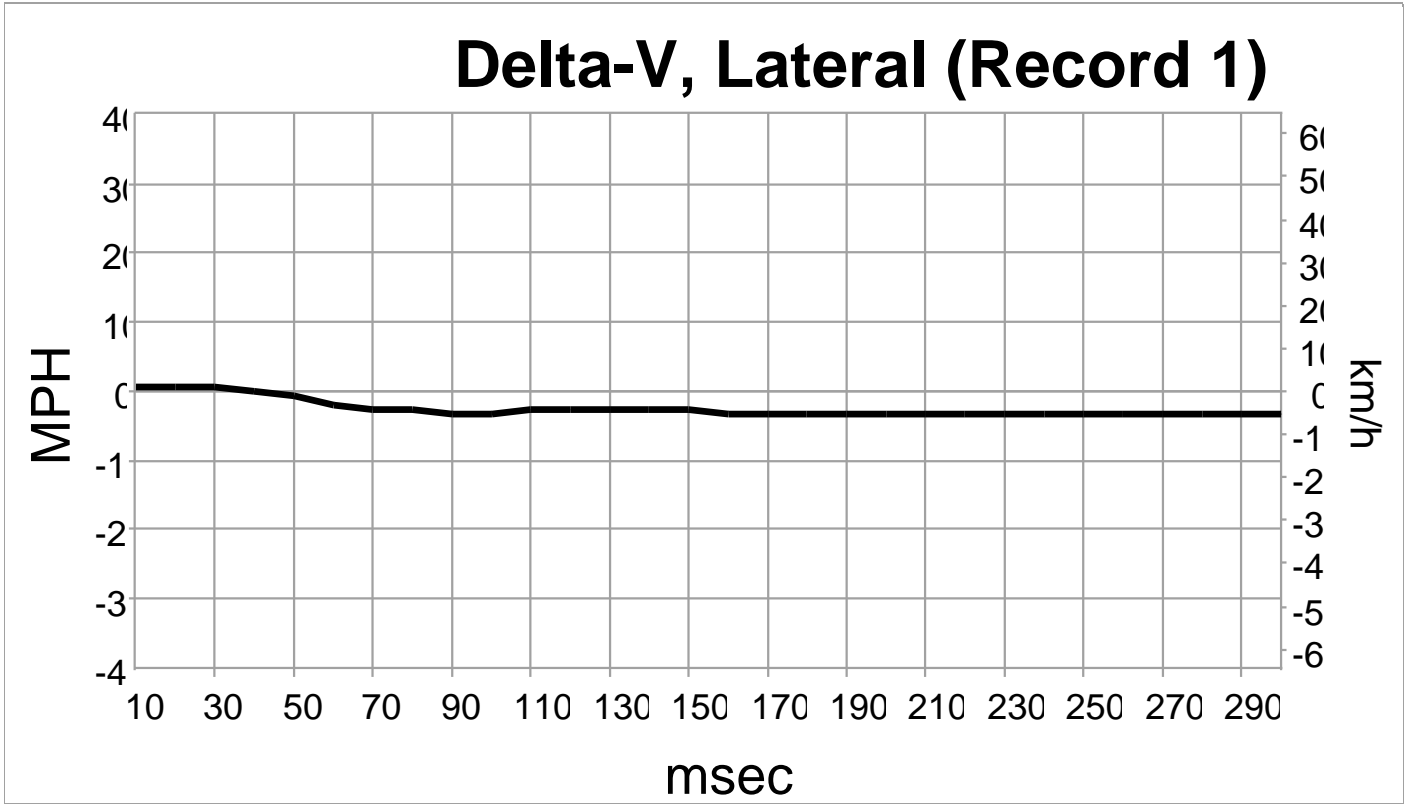


Longitudinal Acceleration (Record 1)

Time (msec)	Longitudinal Acceleration (SDM Recorded Vehicle Longitudinal Acceleration for FSR Event) (g)
2	-2.38
4	-3.13
6	-4.13
8	-4.25
10	-5.38
12	-7.75
14	-7.50
16	-10.75
18	-6.38
20	-10.75
22	-11.88
24	-11.50
26	-12.13
28	-12.00
30	-10.50
32	-7.00
34	-11.75
36	-11.38
38	-12.00
40	-11.38
42	-8.63
44	-9.25
46	-6.13
48	-4.88
50	-6.63
52	-5.88
54	-5.63
56	-3.25
58	-3.88
60	-2.38
62	-2.75
64	-1.50
66	-0.88
68	-1.38
70	-1.00
72	-1.88
74	-1.88
76	-1.25
78	-1.00
80	-1.50
82	0.87
84	-0.50
86	-0.50
88	-1.00
90	-0.13
92	-0.13
94	-0.13
96	0.00
98	0.12
100	0.12
102	-0.38
104	-0.38
106	-0.63
108	-1.38
110	-0.88
112	-1.25

Time (msec)	Longitudinal Acceleration (SDM Recorded Vehicle Longitudinal Acceleration for FSR Event) (g)
114	-1.25
116	-1.88
118	-1.38
120	-1.38
122	-1.25
124	-0.38
126	0.12
128	0.50
130	0.37
132	0.12
134	0.25
136	-0.13
138	-0.13
140	0.00
142	-0.13
144	0.50
146	0.62
148	0.50
150	0.37
152	0.62
154	0.25
156	0.25
158	0.12
160	-0.25
162	-0.63
164	-0.75
166	-0.38
168	-0.63
170	-0.63
172	-0.25
174	-0.13
176	0.00
178	0.12
180	0.37
182	0.37
184	0.12
186	0.12
188	0.12
190	-0.13
192	Data Not Available
194	Data Not Available
196	Data Not Available
198	Data Not Available
200	Data Not Available
202	Data Not Available
204	Data Not Available
206	Data Not Available
208	Data Not Available
210	Data Not Available
212	Data Not Available
214	Data Not Available
216	Data Not Available
218	Data Not Available
220	Data Not Available
222	Data Not Available
224	Data Not Available
226	Data Not Available

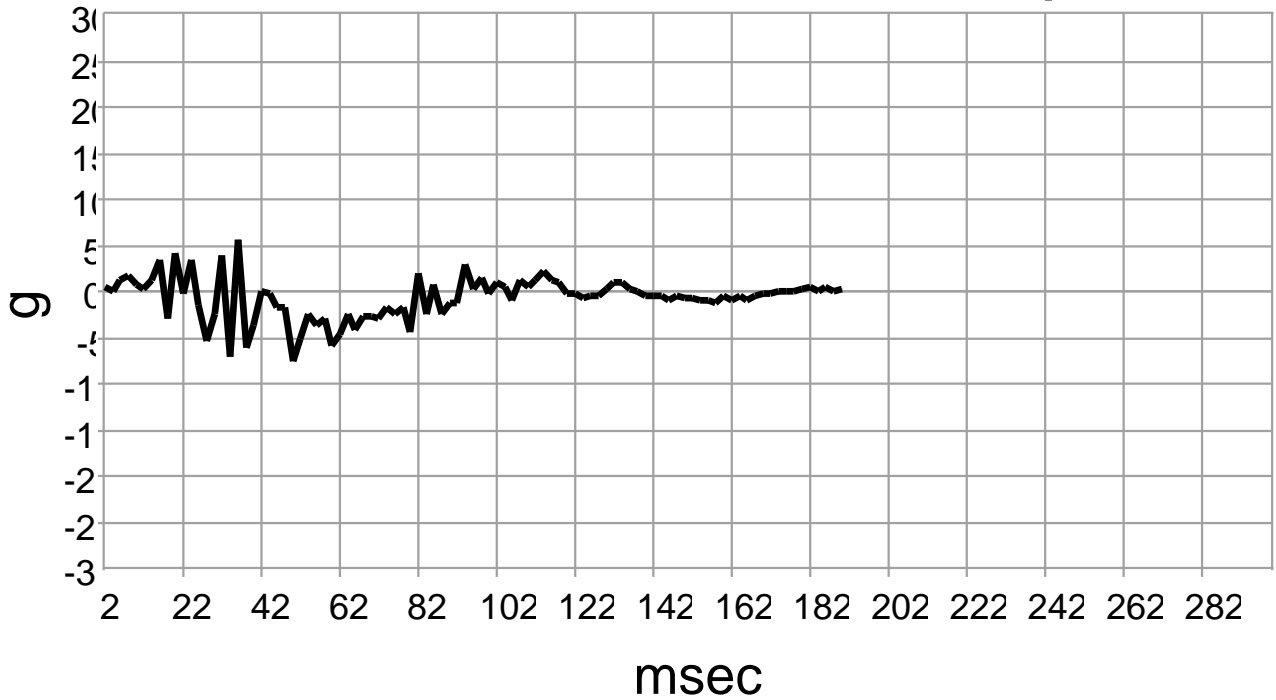
Time (msec)	Longitudinal Acceleration (SDM Recorded Vehicle Longitudinal Acceleration for FSR Event) (g)
228	Data Not Available
230	Data Not Available
232	Data Not Available
234	Data Not Available
236	Data Not Available
238	Data Not Available
240	Data Not Available
242	Data Not Available
244	Data Not Available
246	Data Not Available
248	Data Not Available
250	Data Not Available
252	Data Not Available
254	Data Not Available
256	Data Not Available
258	Data Not Available
260	Data Not Available
262	Data Not Available
264	Data Not Available
266	Data Not Available
268	Data Not Available
270	Data Not Available
272	Data Not Available
274	Data Not Available
276	Data Not Available
278	Data Not Available
280	Data Not Available
282	Data Not Available
284	Data Not Available
286	Data Not Available
288	Data Not Available
290	Data Not Available
292	Data Not Available
294	Data Not Available
296	Data Not Available
298	Data Not Available
300	Data Not Available



Lateral Delta-V (Record 1)

Time (msec)	Delta-V, Lateral (SDM Recorded Vehicle Lateral Velocity Change for FSR Event) (MPH [km/h])
10	0.6 [1]
20	0.6 [1]
30	0.6 [1]
40	0.0 [0]
50	-0.6 [-1]
60	-1.9 [-3]
70	-2.5 [-4]
80	-2.5 [-4]
90	-3.1 [-5]
100	-3.1 [-5]
110	-2.5 [-4]
120	-2.5 [-4]
130	-2.5 [-4]
140	-2.5 [-4]
150	-2.5 [-4]
160	-3.1 [-5]
170	-3.1 [-5]
180	-3.1 [-5]
190	-3.1 [-5]
200	-3.1 [-5]
210	-3.1 [-5]
220	-3.1 [-5]
230	-3.1 [-5]
240	-3.1 [-5]
250	-3.1 [-5]
260	-3.1 [-5]
270	-3.1 [-5]
280	-3.1 [-5]
290	-3.1 [-5]
300	-3.1 [-5]

Acceleration, Lateral (Record 1)



Lateral Acceleration (Record 1)

Time (msec)	Lateral Acceleration (SDM Recorded Vehicle Lateral Acceleration for FSR Event) (g)
2	0.37
4	0.12
6	1.25
8	1.62
10	0.75
12	0.25
14	1.25
16	3.37
18	-3.00
20	4.12
22	-0.25
24	3.37
26	-1.38
28	-5.38
30	-2.50
32	4.00
34	-7.13
36	5.50
38	-6.13
40	-3.75
42	0.00
44	-0.13
46	-1.75
48	-1.63
50	-7.63
52	-5.13
54	-2.50
56	-3.63
58	-2.88
60	-5.88
62	-4.63
64	-2.38
66	-4.13
68	-2.63
70	-2.63
72	-2.88
74	-1.63
76	-2.38
78	-1.75
80	-4.50
82	1.87
84	-2.38
86	0.75
88	-2.50
90	-1.13
92	-1.13
94	2.87
96	0.25
98	1.50
100	-0.25
102	0.87
104	0.37
106	-0.88
108	1.12
110	0.50
112	1.25
114	2.25

Time (msec)	Lateral Acceleration (SDM Recorded Vehicle Lateral Acceleration for FSR Event) (g)
116	1.25
118	1.00
120	-0.13
122	-0.13
124	-0.63
126	-0.38
128	-0.38
130	0.25
132	0.87
134	1.00
136	0.25
138	0.00
140	-0.50
142	-0.50
144	-0.50
146	-0.88
148	-0.38
150	-0.63
152	-0.63
154	-0.88
156	-0.88
158	-1.13
160	-0.50
162	-0.88
164	-0.38
166	-0.88
168	-0.50
170	-0.25
172	-0.25
174	0.12
176	0.00
178	0.12
180	0.25
182	0.37
184	0.12
186	0.37
188	0.12
190	0.25
192	Data Not Available
194	Data Not Available
196	Data Not Available
198	Data Not Available
200	Data Not Available
202	Data Not Available
204	Data Not Available
206	Data Not Available
208	Data Not Available
210	Data Not Available
212	Data Not Available
214	Data Not Available
216	Data Not Available
218	Data Not Available
220	Data Not Available
222	Data Not Available
224	Data Not Available
226	Data Not Available
228	Data Not Available
230	Data Not Available

Time (msec)	Lateral Acceleration (SDM Recorded Vehicle Lateral Acceleration for FSR Event) (g)
232	Data Not Available
234	Data Not Available
236	Data Not Available
238	Data Not Available
240	Data Not Available
242	Data Not Available
244	Data Not Available
246	Data Not Available
248	Data Not Available
250	Data Not Available
252	Data Not Available
254	Data Not Available
256	Data Not Available
258	Data Not Available
260	Data Not Available
262	Data Not Available
264	Data Not Available
266	Data Not Available
268	Data Not Available
270	Data Not Available
272	Data Not Available
274	Data Not Available
276	Data Not Available
278	Data Not Available
280	Data Not Available
282	Data Not Available
284	Data Not Available
286	Data Not Available
288	Data Not Available
290	Data Not Available
292	Data Not Available
294	Data Not Available
296	Data Not Available
298	Data Not Available
300	Data Not Available

Roll Rate (Record 1)

Contains No Recorded Data

Acceleration, Lateral, Rollover (Record 1)

Contains No Recorded Data

Acceleration, Normal, Rollover (Record 1)

Contains No Recorded Data

Pre-Crash Data -5.0 to -0.5 sec (Record 1) - Table 1 of 2

Time (sec)	Accelerator Pedal Position, % Full (Accelerator Pedal Position) (%)	Service Brake (Brake Switch Circuit State)	Engine RPM (Engine Speed) (RPM)	Engine Throttle, % Full (Throttle Position) (%)	Speed, Vehicle Indicated (Vehicle Speed) (MPH [km/h])	System Power Mode Status	System Backup Po Mode Stat
-5.0	16	Off	1,152	23	47.2 [76]	Run	Run
-4.5	16	Off	1,216	23	47.2 [76]	Run	Run
-4.0	16	Off	1,216	22	47.2 [76]	Run	Run
-3.5	16	Off	1,280	23	46.6 [75]	Run	Run
-3.0	16	Off	1,216	39	46.6 [75]	Run	Run
-2.5	16	Off	1,280	33	46.6 [75]	Run	Run
-2.0	17	Off	1,216	36	46.6 [75]	Run	Run
-1.5	17	Off	1,216	31	46.0 [74]	Run	Run
-1.0	4	Off	1,216	28	46.0 [74]	Run	Run
-0.5	0	On	1,152	1	45.4 [73]	Run	Run

Pre-Crash Data -5.0 to -0.5 sec (Record 1) - Table 2 of 2

Time (sec)	System Backup Power Mode Enabled	CommEnable Status	SDM Power Mode Status	Ignition Prolongation Timer (seconds)
-5.0	No	Active	Run	0.0
-4.5	No	Active	Run	0.0
-4.0	No	Active	Run	0.0
-3.5	No	Active	Run	0.0
-3.0	No	Active	Run	0.0
-2.5	No	Active	Run	0.0
-2.0	No	Active	Run	0.0
-1.5	No	Active	Run	0.0
-1.0	No	Active	Run	0.0
-0.5	No	Active	Run	0.0

Pre-Crash Data -2.0 to -0.5 sec (Record 1)

Time (sec)	Cruise Control Resume Switch Active	Cruise Control Active	Cruise Control Set Switch Active	Reduced Engine Power Mode Indicator	Engine Torque (N-m)
-2.0	No	No	No	Off	141
-1.5	No	No	No	Off	148
-1.0	No	No	No	Off	147
-0.5	No	No	No	Off	37

Hexadecimal Data

DPID \$11
FF 0F 00 00 0F 0E 41

DPID \$15
01 02 03 04 05 06 07

DPID \$16
08 09 0A 0D 0E 00 00

DPID \$17
00 00 00 00 00 00 00

DPID \$1F
01 01 02 02 00 00 00

DPID \$20
00 00 00 00 00 00 00

DPID \$30
00 FF 00 00 00 00 00

DPID \$32
00 FF 14 57 00 00 00

DPID \$51
0B 00 00 00 00 00 00

DID \$01
41 55 39 34 31 32 44 41 30 30 30 30 30 30 30 30

DID \$02
00 CE 4A 34

DID \$03
41 54 39 34 31 32 44 41 30 30 30 30 30 30 30 30

DID \$04
00 CE 4A 34

DID \$05
41 48 34 31 39 37 44 41 30 30 30 30 30 30 30 30

DID \$06
00 CE 35 D5

DID \$07
41 4A 34 31 39 37 44 41 30 30 30 30 30 30 30 30

DID \$08
00 CE 35 D5

DID \$09
00 00 30 30 30 30 44 41 30 30 30 30 30 30 30 30

DID \$0A
00 00 00 00

DID \$0B
00 00 30 30 30 30 44 41 30 30 30 30 30 30 30 30

DID \$0C

00 00 00 00

DID \$0D

00 00 30 30 30 30 44 41 30 30 30 30 30 30 30

DID \$0E

00 00 00 00

DID \$0F

00 00 30 30 30 30 44 41 30 30 30 30 30 30 30

DID \$10

00 00 00 00

DID \$11

00 00

DID \$22

17 10

DID \$30

01 00 01 01 00 71 71 00 00 00

DID \$31

0000	A5	F8	01	00	01	01	0F	14	3B	FF
0010	FF	00	00	00	02	AF	00	00	00	00
0020	00	4C	FC	FC	F0	00	00	F0	1C	00
0030	04	11	11	10	10	10	10	10	10	40
0040	00	00	00	00	00	00	12	13	13	13
0050	14	13	14	13	13	12	06	EA	07	C5
0060	07	C8	07	BA	01	1C	1F	24	21	27
0070	17	16	17	17	49	4A	4A	4B	4B	4B
0080	4B	4C	4C	4C	00	FF	FD	08	79	FD
0090	80	52	00	FF	FF	FF	FF	FF	FF	FF
0100	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
0110	FF	FF	FF	FF	FF	FF	FF	6C	3D	7A
0120	55	6C	7A	55	00	E0	FF	E0	FF	1C
0130	FF	95	FF	09	09	13	0F	FF	FF	FF
0140	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
0150	FF	FF	FF	FF	FF	FF	FF	00	00	00
0160	00	00	FF	FF	FF	FF	FF	00	00	00
0170	00	00	00	00	00	00	00	7D	80	7A
0180	80	76	80	72	7F	70	7E	6E	7C	6E
0190	7B	6D	7B	6D	7A	6D	7A	6D	7B	6C
0200	7B	6C	7B	6C	7B	6D	7B	6D	7A	6C
0210	7A	6C	7A	6D	7A	6D	7A	6D	7A	6D
0220	7A	6D	7A	6D	7A	6D	7A	6D	7A	6D
0230	7A	6D	7A	6D	7A	6D	7A	7F	11	80
0240	24	7E	C6	80	0B	7E	62	80	7C	7E
0250	56	80	A1	7D	E5	80	4A	7C	F8	80
0260	18	7D	11	80	7C	7B	CC	81	50	7D
0270	81	7E	D3	7B	CC	81	9B	7B	5B	7F
0280	E6	7B	81	81	50	7B	42	7F	75	7B
0290	4F	7D	E5	7B	E5	7F	05	7D	43	81
0300	8F	7B	68	7D	36	7B	8D	82	25	7B
0310	4F	7D	9A	7B	8D	7E	88	7C	A0	7F
0320	FF	7C	62	7F	F2	7D	9A	7F	50	7E
0330	17	7F	5C	7D	68	7D	04	7D	B3	7D
0340	FE	7D	CC	7F	05	7E	BA	7E	94	7E
0350	7B	7E	DF	7F	11	7D	B3	7E	EC	7E
0360	30	7F	69	7F	11	7F	A7	7E	62	7F
0370	75	7E	F8	7F	9B	7E	F8	7F	43	7E
0380	DF	7F	43	7F	5C	7F	82	7F	11	7F
0390	9B	7F	50	7F	69	7E	3D	80	56	80
0400	BA	7F	CD	7F	11	7F	CD	80	4A	7F
0410	9B	7F	05	7F	F2	7F	8E	7F	F2	7F
0420	8E	7F	F2	81	1E	7F	FF	80	18	80

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0460 7C 7F 82 80 E0 7F 43 80 7C 7F
0470 75 80 63 7F 75 7F F2 7F 82 7F
0480 F2 7F D9 7F C0 80 0B 7F D9 80
0490 31 7F D9 80 24 80 18 80 0B 80
0500 56 80 18 80 63 7F F2 80 18 7F
0510 F2 7F FF 7F FF 7F CD 7F F2 7F
0520 CD 80 31 7F CD 80 3D 7F A7 80
0530 31 7F D9 80 24 7F C0 80 3D 7F
0540 C0 80 18 7F A7 80 18 7F A7 80
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0570 C0 7F CD 7F C0 7F E6 7F E6 7F
0580 E6 7F F2 80 0B 7F FF 7F FF 80
0590 0B 80 0B 80 24 80 18 80 24 80
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1080 FF FF FF FF FF FF FF FF FF FF
1090 FF FF FF FF FF FF FF FF FF FF
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1100  FF FF FF FF FF FF FF FF FF FF
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1150  55 50 48 48 48 48 48 00 00 00
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1180  00 00 00 00 00 00 00 34 2E AA
1190  01 01 A5 01 00 3B 14 00 00 FF
1200  FF FF FF FF 7F 00 04 11 11 10
1210  10 10 10 10 10 00 00 00 00 00
1220  40 00 00 00 00 12 13 13 13 14
1230  13 14 13 13 12 EA 06 C5 07 C8
1240  07 BA 07 01 1C 1F 24 21 27 17
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1260  4C 4C 4C 00 00 48 48 48 48 48
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1310  08 FF FF D4 1A 10 00 0F A0 FF
1320  FF FD FF FF FF 4C FC FC 00 F0
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1430  00 1C 00 00 00 A5 FF FF FF FF
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1450  02 A5 FF FF FF FF FF FF FF FF
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1480  00 00 06 A5 FF 0F 00 0F 00 00
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1660  FF 00 00 FF FF FF A5 FF FF FF
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1690  FF FF FF FF FF FF FF FF FF FF
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1750  FF FF FF 00 00 00 00 00 00 00
1760  00 00 00 FF FF FF FF FF FF FF

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1890  00 00 00 00 00 00 00 00 00 00
1900  00 00 00 00 01 1C 02 FF A5 01
1910  00 00 01 00 00 00 13 00 03 00
1920  19 00 01 00 21 00 0A 00 22 00
1930  0D 00 2B 00 06 00 3E 00 02 00
1940  3C 00 0A 00 56 00 1B 00 33 00
1950  E8 FF 56 00 21 00 5F 00 FE FF
1960  5C 00 1B 00 61 00 F5 FF 60 00
1970  D5 FF 54 00 EC FF 0E A5 FF FF
1980  38 00 20 00 5E 00 C7 FF 5B 00
1990  2C 00 60 00 CF FF 5B 00 E2 FF
2000  45 00 00 00 4A 00 FF FF 31 00
2010  F2 FF 27 00 F3 FF 35 00 C3 FF
2020  2F 00 D7 FF 2D 00 EC FF 1A 00
2030  E3 FF 1F 00 E9 FF 13 00 D1 FF
2040  0E A5 FF FF 16 00 DB FF 0C 00
2050  ED FF 07 00 DF FF 0B 00 EB FF
2060  08 00 EB FF 0F 00 E9 FF 0F 00
2070  F3 FF 0A 00 ED FF 08 00 F2 FF
2080  0C 00 DC FF F9 FF 0F 00 04 00
2090  ED FF 04 00 06 00 08 00 EC FF
2100  01 00 F7 FF 0E A5 FF FF 01 00
2110  F7 FF 01 00 17 00 00 00 02 00
2120  FF FF 0C 00 FF FF FE FF 03 00
2130  07 00 03 00 03 00 05 00 F9 FF
2140  0B 00 09 00 07 00 04 00 0A 00
2150  0A 00 0A 00 12 00 0F 00 0A 00
2160  0B 00 08 00 0B 00 FF FF 0E A5
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2180  FF FF FD FF FC FF FD FF FD FF
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2210  FC FF 01 00 FC FF FC FF FC FF
2220  FB FF F9 FF FC FF FD FF FD FF
2230  FB FF 0E A5 FF FF FB FF FB FF
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2250  F7 FF 02 00 FC FF 05 00 F9 FF
2260  06 00 FD FF 03 00 F9 FF 05 00
2270  FC FF 05 00 FE FF 02 00 FE FF
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2290  01 00 FD FF 02 00 0E A5 FF FF
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2310  03 00 FF FF 01 00 01 00 02 00
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2370  FF FF FF FF FF FF FF FF FF FF
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2420  FF FF FF FF FF FF FF FF FF FF
2430  FF FF FF FF FF FF FF FF FF FF

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2560  09 01 0D 00 0F FF 11 FD 05 A5
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2770  00 00 00 00 00 00 00 00 00 00
2780  00 00 00 00 00 00 00 00 00 00
2790  00 00 00 00 00 00 00 00 00 00
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DID \$32

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0070  FF FF FF FF FF FF FF FF FF FF
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0250  FF FF FF FF FF FF FF FF FF FF
0260  FF FF FF FF FF FF FF FF FF FF
0270  FF FF FF FF FF FF FF FF FF FF
0280  FF FF FF FF FF FF FF FF FF FF
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3GCNWAEF5LG293370

[illegible]

[illegible]

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2790  FF FF FF FF FF FF FF FF FF FF
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DID \$33

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