INDIANA UNIVERSITY

TRANSPORTATION RESEARCH CENTER
School of Public and Environmental Affairs
501 S. Madison Street, Suite 105
Bloomington, Indiana 47403-2452
(812) 855-3908 Fax: (812) 855-3537

ON-SITE CERTIFIED ADVANCED 208-COMPLIANT VEHICLE INVESTIGATION

CASE NUMBER - IN10013
LOCATION - TEXAS
VEHICLE - 2007 Ford Mustang Convertible
CRASH DATE - January 2010

Submitted:

September 30, 2010

Contract Number: DTNH22-07-C-00044

Prepared for:

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

Technical Report Documentation Page

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15. *Supplementary Notes* On-site certified advanced 208-compliant vehicle investigation involving a 2007 Ford Mustang convertible and a 2008 Ford Focus.			
16. *Abstract* This on-site investigation focused on a 2007 Ford Mustang convertible and the sources of the driver's injuries. The Mustang was occupied by a restrained 17-year-old female driver and a restrained 16-year-old female front right passenger. The driver was traveling east through a 4-leg urban intersection. The driver of a 2008 Ford Focus was traveling west through the intersection and was executing a left turn to travel south. The front plane of the Mustang impacted the right side plane of the Focus. The force direction on the Mustang was within the 11 o'clock sector and the impact force was sufficient to trigger a deployment of the driver's and front right passenger's frontal air bags. The driver of the Mustang sustained a fractured wrist from contacting the center instrument panel. She was transported by the ambulance to a trauma center where she was treated in the emergency room and released. The driver had an open reduction and internal fixation of the radius fracture eight days following the crash. The front row right passenger was not injured in the crash.			
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This on-site investigation focused on a 2007 Ford Mustang convertible (**Figure 1**) and the sources of the driver's injuries. This crash was brought to our attention by the National Highway Traffic Safety Administration (NHTSA) on March 15, 2010 through the sampling activities of the National Automotive Sampling System-General Estimates System (NASS-GES). This investigation was assigned on April 12, 2010. The crash involved the Mustang and a 2008 Ford Focus. The crash occurred in January, 2010, at 1636 hours, in Texas and was investigated by the city police department. The crash scene, Mustang, and Focus were inspected on April 13-14, 2010. The Event Data Recorders (EDR) for each vehicle were also imaged. An interview with the Mustang driver's mother was conducted on September 28, 2010. This report is based on the police crash report, crash scene inspection, vehicle inspections, medical records for the driver of the Mustang, EDR data, interview information, and evaluation of the evidence.

Figure 1: The damaged and partially repaired 2007 Ford Mustang convertible

CRASH CIRCUMSTANCES

Crash Environment: This crash occurred within a 4-leg urban intersection during daylight hours and clear weather conditions. The intersection was controlled by 3-phase traffic signals. The Mustang was traveling east on a 7-lane, undivided, city street. The eastbound roadway had a right turn lane, three through lanes, and a left turn lane. The right turn lane was 3.9 m (12.8 ft) in width. The first through lane from the right was 3.6 m (11.8 ft) in width and the remaining lanes were approximately 3.1 m (10.2 ft) in width. The Focus was traveling west on a 6-lane, undivided, city street. The westbound roadway had two through lanes and a left turn lane. The first through lane from the right was 3 m (9.8 ft) in width. The second through lane was 3.9 m (12.8 ft) in width and the left turn lane was 3.1 m (10.2 ft) in width. The roadway pavement markings consisted of solid white turn lane lines, broken white through lane lines, solid white turn arrows, solid white stop bars, and designated pedestrian crossings. Each roadway was dry bituminous and the intersection was dry concrete. The grade for the Mustang was negative 1.6%, while the grade for the Focus was level. The speed limit was 64 km\h (40 mph). The Crash Diagram is on page 9 of this report.

Pre-Crash: The Mustang was occupied by a restrained 17-year-old female driver and a restrained 16-year-old female front right passenger. The driver was traveling east in the second through lane from the right (**Figure 2**) and intended to continue east through the intersection. The Focus was stopped heading west at the intersection in the left turn lane (**Figure 3**) and the restrained 32-year-old female driver intended to turn left and travel south. The traffic signal was in the green phase for both vehicles.

Figure 2: Approach of the Mustang to the intersection; arrow shows approach of the Focus

Figure 3: Approach of the Focus turning left from the left turn lane

EDR Pre-Crash Data: The Mustang's EDR recorded 23.6 seconds of pre-crash data in 0.2 second intervals. From -23.6 sec to -2.0 sec the vehicle was recorded traveling approximately 69 km/h (43 mph). The brake switch circuit was recorded as "On" 1.8 seconds prior to algorithm enable (AE) and remained on throughout the crash. The EDR report for the Mustang is presented at the end of the this report[1]. The pre-crash data recorded by the Focus' EDR is presented in the following table. The EDR report for the Focus is also attached at the end of this report[2].

Time (sec)	-4	-3	-2	-1	0
Accelerator Position	25%	22%	22%	19%	0%
Speed mph (km/h)	0.0 (0.0)	7.6 (12.2)	12.6 (20.3)	15.6 (25.1)	13.1 (21.1)
Brake	No	No	No	No	Yes

Crash: The driver of the Focus initiated a left turn through the intersection across the path of the Mustang. The driver of the Mustang applied the brakes and the front plane of the Mustang (**Figure 4**) impacted the right side plane of the Focus (**Figure 5**). The force direction on the Mustang was within the 11 o'clock sector and the impact force was sufficient to trigger a deployment of the driver's and front right passenger's frontal air bags. Both vehicles came to final rest within the intersection. The Mustang was heading northeast. The Focus was heading southeast.

1 Pages 9-11 of the EDR report have been omitted for confidentiality purposes.

2 Pages 8-12 of the EDR report have been omitted for confidentiality purposes.

Figure 4: Front of Mustang; vehicle was under repair; bumper fascia placed on end of frame rails; bumper bar had been salvaged

Figure 5: The Focus sustained impact damage on the right fender and right front door

Post-Crash: The police were notified of the crash at 1636 hours and arrived on scene at 1648 hours. The driver of the Mustang was transported by ambulance to a trauma center. The front right passenger of the Mustang was not injured. Both vehicles were towed from the scene due to damage.

CASE VEHICLE

Case Vehicle: The 2007 Ford Mustang was a rear wheel drive, 4-passenger, 2-door coupe convertible (VIN: 1ZVFT84NX75------) that was manufactured in May 2007. It was equipped with a 2.0-liter, 4-cylinder engine, 4-speed automatic transmission, 4-wheel anti-lock brakes with electronic brake force distribution, and a tire pressure monitoring system. The front row was equipped with bucket seats, adjustable head restraints, lap-and-shoulder safety belts, and dual stage driver and front right passenger frontal air bags. The second row was equipped with a bench seat, lap-and-shoulder safety belts, and Lower Anchors and Tethers for Children (LATCH) in the outboard seating positions. The vehicle's specified wheelbase was 272 cm (107.1 in).

CASE VEHICLE DAMAGE

Exterior Damage: The Mustang sustained front plane damage during the impact with the Focus. The front bumper fascia, both headlamp/turn signal assemblies, hood, and left fender were directly damaged. The direct damage began at the left corner of the front bumper fascia and extended 156 cm (61.4 in) across the bumper fascia. It was not possible to measure a front crush profile since the vehicle was under repair.

Damage Classification: The Collision Deformation Classification (CDC) for the front impact was 11FDEW1 (340 degrees). The Missing Vehicle algorithm of the WinSMASH program calculated the total Delta V as 12 km/h (7.5 mph). The longitudinal and lateral velocity changes were -11 km/h (-6.8 mph) and 4 km/h (2.5 mph), respectively. The results were borderline, since they were based only on the crush on the Focus.

The manufacturer's recommended tire size was P215/65R16. The Mustang was equipped with the recommended size tires. The vehicle's tire data are shown in the table below.

Tire	*Measured Pressure*		*Vehicle Manufacturer's Recommended Cold Tire Pressure*		*Tread Depth*		*Damage*	*Restricted*	*Deflated*
	kPa	psi	kPa	psi	milli-meters	32nd of an inch			
LF	221	32	241	35	3	4	None	No	No
LR	207	30	241	35	3	4	None	No	No
RR	200	29	241	35	3	4	None	No	No
RF	214	31	241	35	3	4	None	No	No

Vehicle Interior: The inspection of the interior of the Mustang revealed no discernable evidence of occupant contact. There was no deformation of the steering wheel or compression of the energy absorbing steering column. All the doors remained closed and operational. All of the window glazings were either closed for operable windows or fixed for the others. There was no damage to any of the window glazings. The vehicle sustained no passenger compartment intrusion.

EVENT DATA RECORDER

The EDR was imaged using version 3.4 of the Bosch Crash Data Retrieval tool via connection to the diagnostic link connector. The EDR recorded only pre-crash data, which is discussed in the pre-crash section of this report on page 2. The EDR report is attached at the end of this report.

AUTOMATIC RESTRAINT SYSTEM

The Mustang was equipped with a Certified Advanced 208-Compliant (CAC) frontal air bag system that consisted of dual stage driver and front right passenger frontal air bags, a driver seat position sensor, front safety belt usage sensors, retractor-mounted safety belt pretensioners and a front passenger weight sensor. The impact sensor was located on the center radiator support. The manufacturer has certified that the vehicle is compliant to the Advanced Air Bag portion of the Federal Motor Vehicle Safety Standard (FMVSS) No. 208. Both of the vehicle's frontal air bags deployed in this crash.

The driver's frontal air bag was located within the steering wheel hub and the module cover was a two flap configuration constructed of pliable vinyl. Each flap was 6.5 cm (2.6 in) in width and 17 cm (6.7 in) in height. A circular Mustang logo 6 cm (2.4 in) in diameter was mounted on the right flap. An inspection of the air bag module cover flaps revealed that they opened at the designated tear points and were undamaged. The deployed air bag (**Figure 6**) was 57 cm (22.4 in) in diameter and had two 7 cm (2.8 in) wide internal tethers. Two cross-shaped vent ports 4

cm 1.6 in) in width and height were located on the back of the air bag at the 11 and 1 o'clock positions. Inspection of the deployed air bag revealed no discernable evidence of occupant contact and no damage.

The front right passenger's frontal air bag was located within the middle of the instrument panel. The module cover consisted of two horizontal flaps constructed of medium gauge vinyl. Each flap was 41 cm (16.1 in) in width and 7 cm (2.8 in) in height. An inspection of the module cover flaps revealed that they opened at the designated tear points and were undamaged. The deployed air bag (**Figure 7**) was rectangular with a width of 51 cm (20.1 in) and a height of 65 cm (25.6 in) and had two cross-shaped vent ports 6 cm (2.4 in) in width and height. The vent ports were located on the left and right sides near the top of the air bag. Inspection of the air bag revealed no discernable evidence of occupant contact and no damage.

Figure 6: The driver's deployed frontal air bag

Figure 7: The deployed front passenger's frontal air bag

MANUAL RESTRAINT SYSTEM

The Mustang was equipped with lap-and-shoulder safety belts for all the seating positions. The driver's safety belt consisted of continuous loop belt webbing, an Emergency Locking Retractor (ELR), a sliding latch plate, and a fixed upper anchor. The front right passenger safety belt was similarly equipped with the exception of an ELR/Automatic Locking Retractor (ALR). The front row safety belts were equipped with retractor-mounted pretensioners. The second row safety belts were similar to the front right passenger safety belt.

Figure 8: Load abrasion on the driver's latch plate belt guide

The inspection of the driver's safety belt assembly revealed that the pretensioner actuated. The retractor was jammed with a length of belt webbing extending out of the retractor consistent with usage. The belt webbing was 103 cm (40.6 in) in length as measured from the stop button to the upper anchor. A load abrasion was present on the latch plate belt guide (**Figure 8**). This evidence indicated that the driver was restrained in this crash.

The inspection of the front right passenger's safety belt assembly revealed a small load abrasion on the latch plate belt guide (**Figure 9**). While the pretensioner probably actuated, there was no evidence to confirm it. The retractor was not jammed and the belt webbing freely extended and retracted. The load mark evidence on the latch plate belt guide indicated that the front right passenger was restrained in this crash.

Figure 9: Load abrasion on front passenger's latch plate belt guide

CASE VEHICLE DRIVER KINEMATICS

The restrained driver of the Mustang [17-year-old female, 163 cm (64 in) and 54 kg (120 lbs)] was seated in an unknown posture. At the time of the inspection, the seat track was located in the rear position and the seat back was reclined 35 degrees. The tilt steering column was located in the center position. The driver was wearing sunglasses at the time of the crash.

The front plane impact with the Focus displaced the driver forward and left opposite the 11 o'clock direction of force. She loaded the safety belt and her right hand probably contacted the instrument panel, which caused a comminuted, impacted fracture of the right distal radius and a fracture of the right ulnar styloid process. While there was no discernable evidence of occupant contact on the frontal air bag, the driver also probably loaded the air bag.

CASE VEHICLE DRIVER INJURIES

The driver was transported by ambulance to a trauma centerl where she was treated in the emergency room and released. The driver had an open reduction and internal fixation of the radius fracture eight days following the crash. The driver missed 15 school days as a result of her injuries. The table below presents the driver' injuries and injury sources.

Injury Number	Injury Description (including Aspect)	NASS Injury Code & AIS 2005	Injury Source	Source Confidence	Source of Injury Data
1	Fracture, comminuted, impacted[3], right distal radius with volar angulation and greater than 3 fragments[4]	moderate 752371.2,1	Center instrument panel	Probable	Emergency room records

[3] The driver had an open reduction and internal fixation (ORIF) performed on her right wrist 8 days post-crash. She was treated and release during her initial hospital visit. The ORIF was performed on an outpatient basis.
The following terms are defined in DORLAND'S ILLUSTRATED MEDICAL DICTIONARY as follows:
fracture (frak/cher): 1. the breaking of a part, especially a bone. 2. a break or rupture in a bone.
impacted f.: fracture in which one fragment is firmly driven into the other.
volar (vo/ler): pertaining to the palm or sole; plantar; indicating the flexor surface of the forearm, wrist, or hand.

[4] There was an ulnar column fragment, the radio-styloid fragment, another volar fragment in the middle column, and then the shaft.

Injury Number	Injury Description (including Aspect)	NASS Injury Code & AIS 2005	Injury Source	Source Confidence	Source of Injury Data
2	Fracture right ulnar styloid process, not further specified	moderate 752353.2,1	Center instrument panel	Probable	Emergency room records

CASE VEHICLE FRONT ROW RIGHT PASSENGER KINEMATICS

The front right passenger of the Mustang [16-year-old female, 152 cm (60 in) and 45 kg (100 lbs)] was seated in an unknown posture. At the time of the inspection, the seat track was adjusted to the rear position and the seat back was reclined 35 degrees. The passenger was wearing sunglasses at the time of the crash.

The front plane impact with the Focus displaced the front passenger forward and left opposite the 11 o'clock direction of force and she loaded the safety belt. While there was no discernable evidence of occupant contact on the frontal air bag, the passenger probably loaded the air bag.

CASE VEHICLE FRONT ROW PASSENGER INJURIES

The front row right passenger sustained no injury and was not transported to a hospital.

OTHER VEHICLE

The 2008 Ford Focus SE was a front wheel drive, 5-passenger, 4-door sedan (VIN: 1FAHP35N58W------) equipped with a 2.0L, I-4 engine, and 4-speed automatic transmission. The front row was equipped with bucket seats, lap-and-shoulder safety belts, dual stage driver and front passenger frontal air bags, seat-mounted side impact air bags, and side impact inflatable curtain (IC) air bags that protected the front and second row outboard seating positions. The right IC air bag deployed in this crash. No other air bags deployed.

Exterior Damage: The Focus sustained right side plane damage during the impact with the Mustang. The right fender, front wheel, and right front door were directly damaged. The direct damage began 169 cm (66.5 in) forward of the right rear axle and extended 162 cm (63.8 in) forward along the right side. A crush profile was estimated based on the damaged components remaining on the vehicle. The maximum residual crush was estimated to be 17 cm (6.7 in), which occurred at C_5. The table below presents the estimated crush profile.

Units	Event	Direct Damage		Field L	C_1	C_2	C_3	C_4	C_5	C_6	Direct	Field L
		Width CDC	Max Crush								±D	±D
cm	1	162	17	162	0	1	4	9	17	13	121	121
in		63.8	6.7	63.8	0.0	0.4	1.6	3.5	6.7	5.1	47.6	47.6

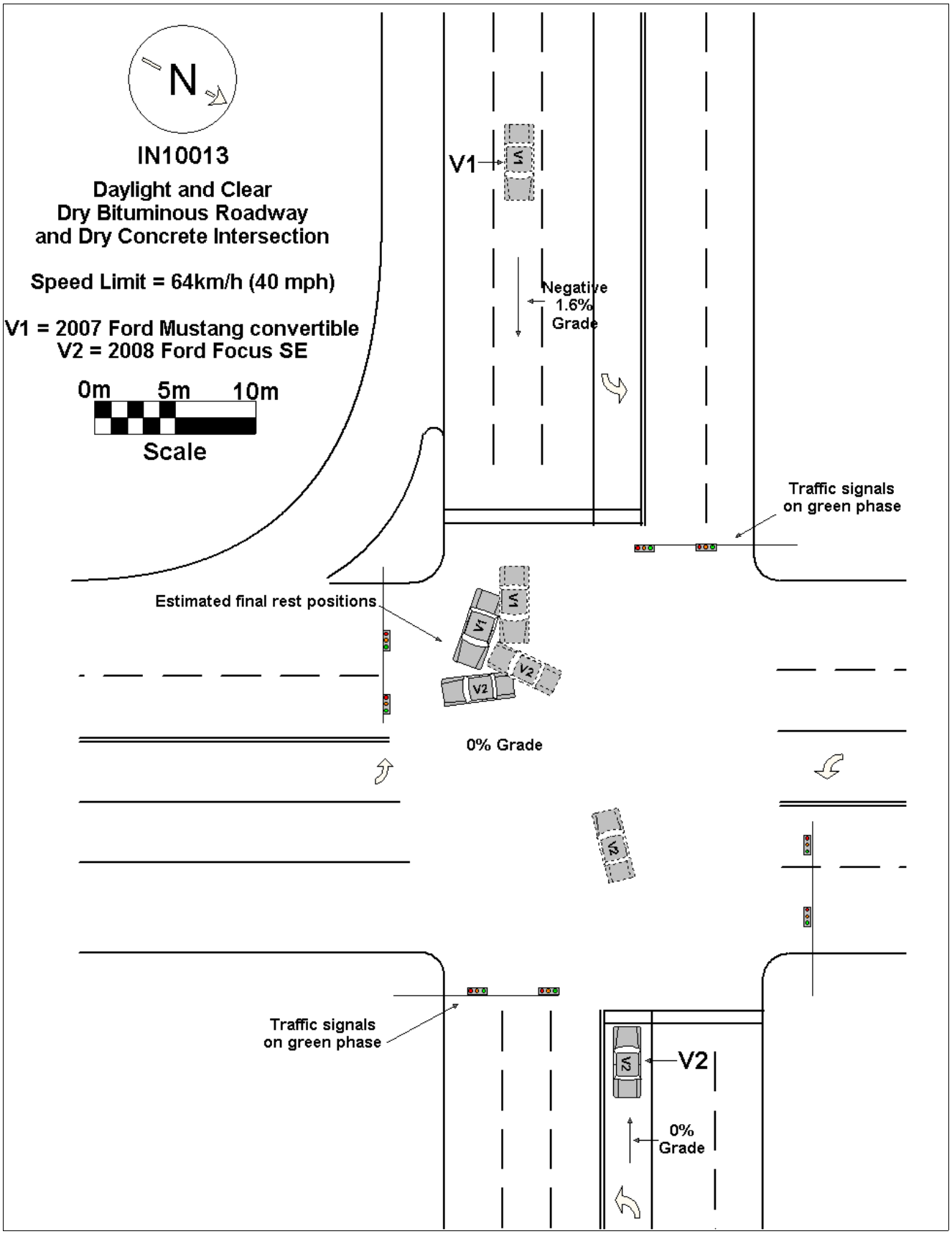
Damage Classification: The CDC for the right side plane damage was 02RYEW2 (50 degrees). The Missing Vehicle algorithm of the WinSMASH program calculated the vehicle's total Delta V as 15 km/h (9.3 mph). The longitudinal and lateral velocity changes were -10 km/h (-6.2 mph) and -11 km/h (-6.8 mph), respectively. The results appeared reasonable.

The Ford's EDR was imaged using version 3.4 of the Bosch Crash Data Retrieval Tool software via connection to the diagnostic link connector. The EDR recorded a deployment event and 5 seconds of pre-crash data. The driver's safety belt switch circuit status was recorded as "Buckled" and the seat position as "Not Forward." The right IC air bag deployment time was recorded as 41 msec. The driver's pretensioner deployment time was recorded as 20 msec. The cumulative longitudinal and lateral velocity changes were recorded as -13.08 km/h (-8.13 mph) and -11.39 (-7.08 mph), respectively. The pre-crash data is discussed on page 2 in the pre-crash section of this report. The EDR report is attached at the end of this report.

The manufacturer's recommended tire size was P195/60R15. The Ford was equipped with the recommended size tires. The vehicle's tire data are shown in the table below.

Tire	*Measured Pressure*		*Vehicle Manufacturer's Recommended Cold Tire Pressure*		*Tread Depth*		*Damage*	*Restricted*	*Deflated*
	kPa	psi	kPa	psi	milli-meters	32nd of an inch			
LF	221	32	221	32	6	7	None	No	No
LR	228	33	221	32	6	7	None	No	No
RR	228	33	221	32	5	6	None	No	No
RF	76	11	221	32	6	7	None	No	Yes

Other Vehicle's Driver: The police crash report indicated that the driver (32-year-old, female) of the Focus was restrained by the lap-and-shoulder safety belt. The second row center passenger (4-year-old, male) was restrained in a Child Restraint System (CRS). Neither occupant was transported to a hospital, and they did not sustain any police reported injuries.


N
IN10013
Daylight and Clear
Dry Bituminous Roadway
and Dry Concrete Intersection
Speed Limit = 64km/h (40 mph)
V1 = 2007 Ford Mustang convertible
V2 = 2008 Ford Focus SE
0m 5m 10m
Scale
V1
Negative
1.6%
Grade
Traffic signals
on green phase
Estimated final rest positions
V1
V1
V2
V2
0% Grade
V2
Traffic signals
on green phase
V2
V2
0%
Grade

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	1ZVFT84NX75******
User	
Case Number	
EDR Data Imaging Date	
Crash Date	
Filename	MUSTANG.CDR
Saved on	Tuesday, April 13 2010 at 12:47:37 PM
Collected with CDR version	Crash Data Retrieval Tool 3.4
Reported with CDR version	Crash Data Retrieval Tool 3.4
EDR Device Type	powertrain control module
Restraint Deployment Signal Received	Yes

Comments

No comments entered.

Data Limitations

The retrieval of this data has been authorized by the vehicle's owner, or other legal authority such as a subpoena or search warrant, as indicated by the CDR tool user on Tuesday, April 13 2010 at 12:47:37 PM .

FORD POWERTRAIN CONTROL MODULE EVENT DATA INTERPRETATION GUIDE

1. This document is intended to assist you in reading the data that has been retrieved from a Powertrain Control Module ("PCM") contained in a Ford vehicle. This document is further intended to provide general guidelines and is not intended to provide information regarding the interpretation of a specific read-out.

2. The data points in the “PCM EDR Data” tables shown in this report occur every 0.2 seconds of time. It should be pointed out that “Relative Time (calc.)” in these tables is calculated based on the 0.2 second time interval and is displayed relative to the receipt of a Restraint Deployment Signal from the RCM. The “Relative Time (calc.)” Information is not data which is retrieved from the PCM but is calculated based on the above information.

3. In the event that one of the vehicle's restraint devices (e.g., the vehicle's airbag or pretensioner) have deployed as a result of a collision, the Restraint Control Module or RCM will send a Restraints Deployment Signal (RDS) to the PCM via the vehicle data bus or through a direct wired connection. If the PCM receives an RDS, it will lock the data. It should be pointed out that the RCM and Vehicle Data Bus both require power for tenths of a second after the collision in order to send a signal or flag to the PCM.

4. If no RDS flag has been received from the RCM and there is still power to the PCM, the PCM data will not lock and the circular buffer will continuously overwrite itself when the vehicle’s ignition is in the run position. In this event, data contained in the PCM that was relevant to the collision may be lost. However, if power was lost as a result of the collision, or the ignition key was turned off shortly after the event, there may still be data relating to the collision in the PCM.

5. Finding the data relating to the moment of impact:

a.) With regard to the PCM EDR Data tables where a Restraint Deployment Signal is received, the data is displayed in ordered of the “Relative Time (calc.)” parameter beginning with the oldest recorded frame of data.

The moment of impact can be found by reviewing the data contained in the RDS column. Specifically, the data samples recorded with an RDS flag equal to “Received” in the PCM EDR Data tables signify points recorded after the PCM received the RDS signal from the RCM. If the PCM has received an RDS flag, the moment of impact is typically set at the RDS = “Not Received” in the PCM EDR Data tables reading that immediately precedes a reading of RDS = “Received”. The last RDS = “Received” data point signifies the last data point recorded in the event.

b.) With regard to the PCM EDR Data tables where a Restraint Deployment Signal is not received, the data is displayed in order of the “Buffer Address” parameter data beginning with the lowest address value. The PCM buffer is circular and the data point of first address listed in the PCM EDR Data tables does not necessarily signify the beginning of the PCM recording. The start and stop time of the PCM recording could be in the middle of the Table.

The moment of impact usually correlates with a discontinuity of the data listed in the table. If a single, significant discontinuity in the data is found, the data point immediately preceding the discontinuity is likely to be the last data point recorded. This point usually signifies impact time zero. If there is no single significant discontinuity, the data must be examined in detail to determine the largest discontinuity in the largest number of data elements. If no single largest discontinuity can be determined, it may not be possible to determine the moment of impact.

6. The PCM Data Tables further show a column labeled as the “Key on Timer - 63.75 Max (sec)” or PUTMR. The PUTMR shows the length of time that the PCM was functioning for the most recent key cycle. The timer ascends to a maximum value of 63.75 seconds. If the data was not locked by an

RDS flag and the ignition key was turned off and on again, the PCM will begin to write new data starting at the beginning of the data table. While it is not common, there are instances where the first portion of the data table has subsequent-key-on, post-crash data; while the latter portion of the data table has data from the key cycle in which the crash occurred. In other rare cases, an event has occurred in less than 25 seconds after key on and older data from prior key cycles has been left in the latter part of the buffer. Review the Key on Timer - 63.75 Max (sec) (PUTMR) data for discontinuities to determine if this has occurred.

7. Data displayed in the Key on Timer - 63.75 Max (sec) column has a resolution of 0.25 seconds and rounds actual data to the nearest 0.25 seconds. The data points occur every 0.2 seconds.

Actual time	Key on Timer display
0.0	0.0
0.2	0.25
0.4	0.50
0.6	0.50
0.8	0.75
1.0	1.00

8. Recorded Vehicle Speed is proportional to transmission output shaft speed and accuracy can be affected if the vehicle has had the tire size or inflation pressure or the final drive axle ratio changed from the factory build specifications.

PCM Data Source:
• All PCM recorded data is fed directly from sensors to the PCM where raw signals are processed, and stored internally, except for the following parameters which are transmitted via the vehicle's communication network:

- Stability Control
- Traction Control
- ABS
- Restraint Deployment Signal

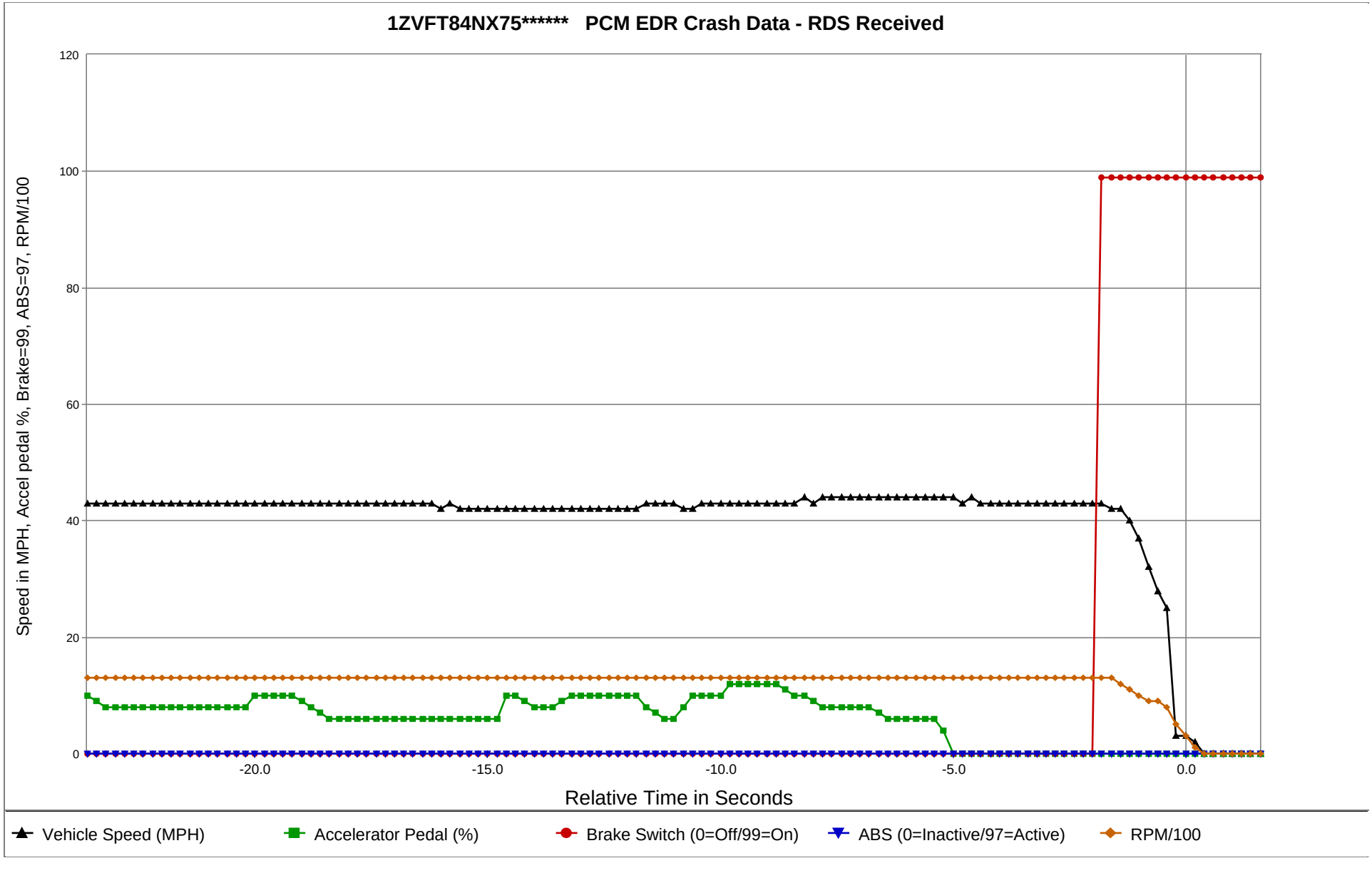
02005_PCM-1-2_r001

PCM Module Information

Vehicle Identification Number (from PCM)	1ZVFT84NX75******
PCM File Name (calibration level)	FMAG0M6.HEX*
PCM Part Number	7R3A-12A650-ANA

BOSCH

CDR CRASH DATA RETRIEVAL SYSTEM



PCM EDR Data (1)

Buffer Address (Hex)	Relative Time (calc.) (Seconds)	Restraint Deployment Signal (Received / Not Received)	Speed, Vehicle Indicated (MPH [km/h])	Accelerator Pedal % Full (%)	Engine Throttle % Full (%)	Brake Switch (On / Off)	Brake SC De-ac (On / Off)	ABS (Active / Inactive)	Transmission - Neutral (Neutral / Not Neutral)
EA000660	-23.6	Not Received	42.7 [68.7]	9.5	9	OFF	OFF	Not Active	Not Neutral
EA000670	-23.4	Not Received	42.7 [68.7]	9	9	OFF	OFF	Not Active	Not Neutral
EA000680	-23.2	Not Received	42.7 [68.7]	8.5	8.5	OFF	OFF	Not Active	Not Neutral
EA000690	-23.0	Not Received	42.8 [68.9]	8	7.5	OFF	OFF	Not Active	Not Neutral
EA0006A0	-22.8	Not Received	42.8 [68.9]	8	7.5	OFF	OFF	Not Active	Not Neutral
EA0006B0	-22.6	Not Received	42.8 [68.9]	7.5	7	OFF	OFF	Not Active	Not Neutral
EA0006C0	-22.4	Not Received	42.7 [68.7]	8	7	OFF	OFF	Not Active	Not Neutral
EA0006D0	-22.2	Not Received	42.8 [68.9]	8	7	OFF	OFF	Not Active	Not Neutral
EA0006E0	-22.0	Not Received	42.7 [68.7]	8	7	OFF	OFF	Not Active	Not Neutral
EA0006F0	-21.8	Not Received	42.7 [68.7]	8	7	OFF	OFF	Not Active	Not Neutral
EA000700	-21.6	Not Received	42.7 [68.7]	8	7	OFF	OFF	Not Active	Not Neutral
EA000710	-21.4	Not Received	42.7 [68.7]	8	7	OFF	OFF	Not Active	Not Neutral
EA000720	-21.2	Not Received	42.7 [68.7]	8	7	OFF	OFF	Not Active	Not Neutral
EA000730	-21.0	Not Received	42.8 [68.9]	8	7	OFF	OFF	Not Active	Not Neutral
EA000740	-20.8	Not Received	42.8 [68.9]	8	7	OFF	OFF	Not Active	Not Neutral
EA000750	-20.6	Not Received	42.7 [68.7]	8	7	OFF	OFF	Not Active	Not Neutral
EA000760	-20.4	Not Received	42.7 [68.7]	7.5	7	OFF	OFF	Not Active	Not Neutral
EA000770	-20.2	Not Received	42.7 [68.7]	8	7	OFF	OFF	Not Active	Not Neutral
EA000780	-20.0	Not Received	42.7 [68.7]	9.5	9.5	OFF	OFF	Not Active	Not Neutral
EA000790	-19.8	Not Received	42.7 [68.7]	9.5	9.5	OFF	OFF	Not Active	Not Neutral
EA0007A0	-19.6	Not Received	42.8 [68.9]	9.5	9.5	OFF	OFF	Not Active	Not Neutral
EA0007B0	-19.4	Not Received	42.8 [68.9]	9.5	9.5	OFF	OFF	Not Active	Not Neutral
EA0007C0	-19.2	Not Received	42.8 [68.9]	9.5	9.5	OFF	OFF	Not Active	Not Neutral
EA0007D0	-19.0	Not Received	42.8 [68.9]	9	9.5	OFF	OFF	Not Active	Not Neutral
EA0007E0	-18.8	Not Received	42.9 [69]	8	7.5	OFF	OFF	Not Active	Not Neutral
EA0007F0	-18.6	Not Received	42.9 [69]	7	7	OFF	OFF	Not Active	Not Neutral
EA000010	-18.4	Not Received	42.9 [69]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000020	-18.2	Not Received	42.9 [69]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000030	-18.0	Not Received	42.8 [68.9]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000040	-17.8	Not Received	42.8 [68.9]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000050	-17.6	Not Received	42.8 [68.9]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000060	-17.4	Not Received	42.7 [68.7]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000070	-17.2	Not Received	42.7 [68.7]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000080	-17.0	Not Received	42.7 [68.7]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000090	-16.8	Not Received	42.7 [68.7]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA0000A0	-16.6	Not Received	42.6 [68.5]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA0000B0	-16.4	Not Received	42.6 [68.5]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA0000C0	-16.2	Not Received	42.6 [68.5]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA0000D0	-16.0	Not Received	42.5 [68.4]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA0000E0	-15.8	Not Received	42.5 [68.4]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA0000F0	-15.6	Not Received	42.5 [68.4]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000100	-15.4	Not Received	42.4 [68.2]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000110	-15.2	Not Received	42.4 [68.2]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000120	-15.0	Not Received	42.3 [68.1]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000130	-14.8	Not Received	42.3 [68.1]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000140	-14.6	Not Received	42.3 [68.1]	9.5	7.5	OFF	OFF	Not Active	Not Neutral
EA000150	-14.4	Not Received	42.3 [68.1]	10	9.5	OFF	OFF	Not Active	Not Neutral
EA000160	-14.2	Not Received	42.2 [67.9]	9	9.5	OFF	OFF	Not Active	Not Neutral
EA000170	-14.0	Not Received	42.3 [68.1]	7.5	7	OFF	OFF	Not Active	Not Neutral
EA000180	-13.8	Not Received	42.3 [68.1]	7.5	7	OFF	OFF	Not Active	Not Neutral
EA000190	-13.6	Not Received	42.3 [68.1]	7.5	7	OFF	OFF	Not Active	Not Neutral
EA0001A0	-13.4	Not Received	42.3 [68.1]	9	7.5	OFF	OFF	Not Active	Not Neutral
EA0001B0	-13.2	Not Received	42.3 [68.1]	9.5	9	OFF	OFF	Not Active	Not Neutral
EA0001C0	-13.0	Not Received	42.2 [67.9]	9.5	9.5	OFF	OFF	Not Active	Not Neutral
EA0001D0	-12.8	Not Received	42.3 [68.1]	9.5	9.5	OFF	OFF	Not Active	Not Neutral
EA0001E0	-12.6	Not Received	42.4 [68.2]	9.5	9.5	OFF	OFF	Not Active	Not Neutral
EA0001F0	-12.4	Not Received	42.4 [68.2]	9.5	9.5	OFF	OFF	Not Active	Not Neutral
EA000200	-12.2	Not Received	42.4 [68.2]	9.5	9.5	OFF	OFF	Not Active	Not Neutral
EA000210	-12.0	Not Received	42.4 [68.2]	9.5	9.5	OFF	OFF	Not Active	Not Neutral
EA000220	-11.8	Not Received	42.4 [68.2]	9.5	9.5	OFF	OFF	Not Active	Not Neutral
EA000230	-11.6	Not Received	42.5 [68.4]	8.5	8	OFF	OFF	Not Active	Not Neutral
EA000240	-11.4	Not Received	42.5 [68.4]	7	7	OFF	OFF	Not Active	Not Neutral
EA000250	-11.2	Not Received	42.6 [68.5]	6	6.5	OFF	OFF	Not Active	Not Neutral
EA000260	-11.0	Not Received	42.5 [68.4]	6	6.5	OFF	OFF	Not Active	Not Neutral
EA000270	-10.8	Not Received	42.5 [68.4]	8	7	OFF	OFF	Not Active	Not Neutral
EA000280	-10.6	Not Received	42.5 [68.4]	9.5	9	OFF	OFF	Not Active	Not Neutral

Buffer Address (Hex)	Relative Time (calc.) (Seconds)	Restraint Deployment Signal (Received / Not Received)	Speed, Vehicle Indicated (MPH [km/h])	Accelerator Pedal % Full (%)	Engine Throttle % Full (%)	Brake Switch (On / Off)	Brake SC De-ac (On / Off)	ABS (Active / Inactive)	Transmission - Neutral (Neutral / Not Neutral)
EA000290	-10.4	Not Received	42.5 [68.4]	9.5	9.5	OFF	OFF	Not Active	Not Neutral
EA0002A0	-10.2	Not Received	42.5 [68.4]	10	9.5	OFF	OFF	Not Active	Not Neutral
EA0002B0	-10.0	Not Received	42.6 [68.5]	10	10	OFF	OFF	Not Active	Not Neutral
EA0002C0	-9.8	Not Received	42.6 [68.5]	12	11	OFF	OFF	Not Active	Not Neutral
EA0002D0	-9.6	Not Received	42.8 [68.9]	12.5	11.5	OFF	OFF	Not Active	Not Neutral
EA0002E0	-9.4	Not Received	42.8 [68.9]	12.5	11.5	OFF	OFF	Not Active	Not Neutral
EA0002F0	-9.2	Not Received	42.9 [69]	12	11.5	OFF	OFF	Not Active	Not Neutral
EA000300	-9.0	Not Received	43 [69.2]	12	11	OFF	OFF	Not Active	Not Neutral
EA000310	-8.8	Not Received	43.2 [69.5]	11.5	11	OFF	OFF	Not Active	Not Neutral
EA000320	-8.6	Not Received	43.3 [69.7]	11	11	OFF	OFF	Not Active	Not Neutral
EA000330	-8.4	Not Received	43.3 [69.7]	10.5	10.5	OFF	OFF	Not Active	Not Neutral
EA000340	-8.2	Not Received	43.5 [70]	10	10	OFF	OFF	Not Active	Not Neutral
EA000350	-8.0	Not Received	43.5 [70]	9	9.5	OFF	OFF	Not Active	Not Neutral
EA000360	-7.8	Not Received	43.6 [70.2]	8.5	8.5	OFF	OFF	Not Active	Not Neutral
EA000370	-7.6	Not Received	43.6 [70.2]	8.5	8.5	OFF	OFF	Not Active	Not Neutral
EA000380	-7.4	Not Received	43.6 [70.2]	8.5	9	OFF	OFF	Not Active	Not Neutral
EA000390	-7.2	Not Received	43.6 [70.2]	8.5	8.5	OFF	OFF	Not Active	Not Neutral
EA0003A0	-7.0	Not Received	43.7 [70.3]	8.5	8.5	OFF	OFF	Not Active	Not Neutral
EA0003B0	-6.8	Not Received	43.7 [70.3]	8	8	OFF	OFF	Not Active	Not Neutral
EA0003C0	-6.6	Not Received	43.7 [70.3]	7	7	OFF	OFF	Not Active	Not Neutral
EA0003D0	-6.4	Not Received	43.7 [70.3]	6.5	6.5	OFF	OFF	Not Active	Not Neutral
EA0003E0	-6.2	Not Received	43.6 [70.2]	5.5	6.5	OFF	OFF	Not Active	Not Neutral
EA0003F0	-6.0	Not Received	43.7 [70.3]	5.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000400	-5.8	Not Received	43.6 [70.2]	5.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000410	-5.6	Not Received	43.7 [70.3]	5.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000420	-5.4	Not Received	43.6 [70.2]	5.5	6.5	OFF	OFF	Not Active	Not Neutral
EA000430	-5.2	Not Received	43.6 [70.2]	4.5	6	OFF	OFF	Not Active	Not Neutral
EA000440	-5.0	Not Received	43.6 [70.2]	0	5	OFF	OFF	Not Active	Not Neutral
EA000450	-4.8	Not Received	43.3 [69.7]	0	5	OFF	OFF	Not Active	Not Neutral
EA000460	-4.6	Not Received	43.5 [70]	0	5	OFF	OFF	Not Active	Not Neutral
EA000470	-4.4	Not Received	43.3 [69.7]	0	5	OFF	OFF	Not Active	Not Neutral
EA000480	-4.2	Not Received	43.1 [69.3]	0	5	OFF	OFF	Not Active	Not Neutral
EA000490	-4.0	Not Received	43.4 [69.8]	0	5	OFF	OFF	Not Active	Not Neutral
EA0004A0	-3.8	Not Received	43.2 [69.5]	0	5	OFF	OFF	Not Active	Not Neutral
EA0004B0	-3.6	Not Received	43.3 [69.7]	0	5	OFF	OFF	Not Active	Not Neutral
EA0004C0	-3.4	Not Received	43 [69.2]	0	5	OFF	OFF	Not Active	Not Neutral
EA0004D0	-3.2	Not Received	43.1 [69.3]	0	5	OFF	OFF	Not Active	Not Neutral
EA0004E0	-3.0	Not Received	43 [69.2]	0	5	OFF	OFF	Not Active	Not Neutral
EA0004F0	-2.8	Not Received	42.9 [69]	0	5	OFF	OFF	Not Active	Not Neutral
EA000500	-2.6	Not Received	42.8 [68.9]	0	5	OFF	OFF	Not Active	Not Neutral
EA000510	-2.4	Not Received	42.7 [68.7]	0	5	OFF	OFF	Not Active	Not Neutral
EA000520	-2.2	Not Received	42.6 [68.5]	0	5	OFF	OFF	Not Active	Not Neutral
EA000530	-2.0	Not Received	42.6 [68.5]	0	5	OFF	OFF	Not Active	Not Neutral
EA000540	-1.8	Not Received	42.7 [68.7]	0	5	ON	OFF	Not Active	Not Neutral
EA000550	-1.6	Not Received	42.4 [68.2]	0	5	ON	OFF	Not Active	Not Neutral
EA000560	-1.4	Not Received	42.1 [67.7]	0	5	ON	ON	Not Active	Not Neutral
EA000570	-1.2	Not Received	40.2 [64.7]	0	5	ON	ON	Not Active	Not Neutral
EA000580	-1.0	Not Received	36.6 [58.9]	0	4.5	ON	ON	Not Active	Not Neutral
EA000590	-0.8	Not Received	31.8 [51.2]	0	4.5	ON	ON	Not Active	Not Neutral
EA0005A0	-0.6	Not Received	28.1 [45.2]	0	4.5	ON	ON	Not Active	Not Neutral
EA0005B0	-0.4	Not Received	25.1 [40.4]	0	4.5	ON	ON	Not Active	Not Neutral
EA0005C0	-0.2	Not Received	2.9 [4.7]	0	1.5	ON	ON	Not Active	Not Neutral
EA0005D0	0.0	Not Received	3.5 [5.6]	0	9	ON	ON	Not Active	Not Neutral
EA0005E0	0.2	Received	1.5 [2.4]	0	9	ON	ON	Not Active	Not Neutral
EA0005F0	0.4	Received	0 [0]	0	9	ON	ON	Not Active	Not Neutral
EA000600	0.6	Received	0 [0]	0	9	ON	ON	Not Active	Not Neutral
EA000610	0.8	Received	0 [0]	0	9	ON	ON	Not Active	Not Neutral
EA000620	1.0	Received	0 [0]	0	9	ON	ON	Not Active	Not Neutral
EA000630	1.2	Received	0 [0]	0	9	ON	ON	Not Active	Not Neutral
EA000640	1.4	Received	0 [0]	0	9	ON	ON	Not Active	Not Neutral
EA000650	1.6	Received	0 [0]	0	9	ON	ON	Not Active	Not Neutral

PCM EDR Data (2)

Buffer Address (Hex)	Relative Time (calc.) (Seconds)	Transmission - Reverse (Reverse / Not Reverse)	Speed Control (On / Off)	Engine RPM (RPM)	Driveline Torque Commanded (N-m)	Driveline Torque Actual (N-m)	Traction Control (Active / Inactive)	Stability Control (Active / Inactive)	Key On Timer 63.75 Max (sec) (Seconds)
EA000660	-23.6	Not Reverse	OFF	1293.5	45	26	Not Active	Not Active	63.75
EA000670	-23.4	Not Reverse	OFF	1295	49	28	Not Active	Not Active	63.75
EA000680	-23.2	Not Reverse	OFF	1298	49	29	Not Active	Not Active	63.75
EA000690	-23.0	Not Reverse	OFF	1294.5	39	21	Not Active	Not Active	63.75
EA0006A0	-22.8	Not Reverse	OFF	1296	28	14	Not Active	Not Active	63.75
EA0006B0	-22.6	Not Reverse	OFF	1292.25	23	10	Not Active	Not Active	63.75
EA0006C0	-22.4	Not Reverse	OFF	1296.25	19	8	Not Active	Not Active	63.75
EA0006D0	-22.2	Not Reverse	OFF	1299.5	18	7	Not Active	Not Active	63.75
EA0006E0	-22.0	Not Reverse	OFF	1296	18	7	Not Active	Not Active	63.75
EA0006F0	-21.8	Not Reverse	OFF	1296	18	7	Not Active	Not Active	63.75
EA000700	-21.6	Not Reverse	OFF	1295.5	18	7	Not Active	Not Active	63.75
EA000710	-21.4	Not Reverse	OFF	1292.25	19	7	Not Active	Not Active	63.75
EA000720	-21.2	Not Reverse	OFF	1297.25	18	7	Not Active	Not Active	63.75
EA000730	-21.0	Not Reverse	OFF	1295.25	18	7	Not Active	Not Active	63.75
EA000740	-20.8	Not Reverse	OFF	1296.25	18	7	Not Active	Not Active	63.75
EA000750	-20.6	Not Reverse	OFF	1293	19	7	Not Active	Not Active	63.75
EA000760	-20.4	Not Reverse	OFF	1294	19	7	Not Active	Not Active	63.75
EA000770	-20.2	Not Reverse	OFF	1291.5	18	7	Not Active	Not Active	63.75
EA000780	-20.0	Not Reverse	OFF	1295.5	29	15	Not Active	Not Active	63.75
EA000790	-19.8	Not Reverse	OFF	1295.25	44	25	Not Active	Not Active	63.75
EA0007A0	-19.6	Not Reverse	OFF	1298	50	29	Not Active	Not Active	63.75
EA0007B0	-19.4	Not Reverse	OFF	1298.25	52	31	Not Active	Not Active	63.75
EA0007C0	-19.2	Not Reverse	OFF	1297.25	53	31	Not Active	Not Active	63.75
EA0007D0	-19.0	Not Reverse	OFF	1299.25	54	32	Not Active	Not Active	63.75
EA0007E0	-18.8	Not Reverse	OFF	1296	43	25	Not Active	Not Active	63.75
EA0007F0	-18.6	Not Reverse	OFF	1303.75	25	12	Not Active	Not Active	63.75
EA000010	-18.4	Not Reverse	OFF	1299	18	7	Not Active	Not Active	63.75
EA000020	-18.2	Not Reverse	OFF	1302.5	14	4	Not Active	Not Active	63.75
EA000030	-18.0	Not Reverse	OFF	1297.25	13	3	Not Active	Not Active	63.75
EA000040	-17.8	Not Reverse	OFF	1295.75	13	3	Not Active	Not Active	63.75
EA000050	-17.6	Not Reverse	OFF	1295.25	12	2	Not Active	Not Active	63.75
EA000060	-17.4	Not Reverse	OFF	1294	12	2	Not Active	Not Active	63.75
EA000070	-17.2	Not Reverse	OFF	1296.5	11	2	Not Active	Not Active	63.75
EA000080	-17.0	Not Reverse	OFF	1295.5	11	2	Not Active	Not Active	63.75
EA000090	-16.8	Not Reverse	OFF	1292	11	2	Not Active	Not Active	63.75
EA0000A0	-16.6	Not Reverse	OFF	1290.75	11	2	Not Active	Not Active	63.75
EA0000B0	-16.4	Not Reverse	OFF	1289.25	11	2	Not Active	Not Active	63.75
EA0000C0	-16.2	Not Reverse	OFF	1290.5	11	2	Not Active	Not Active	63.75
EA0000D0	-16.0	Not Reverse	OFF	1291.75	11	2	Not Active	Not Active	63.75
EA0000E0	-15.8	Not Reverse	OFF	1288.5	11	2	Not Active	Not Active	63.75
EA0000F0	-15.6	Not Reverse	OFF	1284.25	12	2	Not Active	Not Active	63.75
EA000100	-15.4	Not Reverse	OFF	1283	12	2	Not Active	Not Active	63.75
EA000110	-15.2	Not Reverse	OFF	1284	12	2	Not Active	Not Active	63.75
EA000120	-15.0	Not Reverse	OFF	1282.75	12	2	Not Active	Not Active	63.75
EA000130	-14.8	Not Reverse	OFF	1282.5	12	2	Not Active	Not Active	63.75
EA000140	-14.6	Not Reverse	OFF	1282.75	12	3	Not Active	Not Active	63.75
EA000150	-14.4	Not Reverse	OFF	1283.5	32	17	Not Active	Not Active	63.75
EA000160	-14.2	Not Reverse	OFF	1280.25	49	29	Not Active	Not Active	63.75
EA000170	-14.0	Not Reverse	OFF	1280	39	21	Not Active	Not Active	63.75
EA000180	-13.8	Not Reverse	OFF	1282.25	24	11	Not Active	Not Active	63.75
EA000190	-13.6	Not Reverse	OFF	1282.5	19	7	Not Active	Not Active	63.75
EA0001A0	-13.4	Not Reverse	OFF	1281.25	17	6	Not Active	Not Active	63.75
EA0001B0	-13.2	Not Reverse	OFF	1280.25	33	17	Not Active	Not Active	63.75
EA0001C0	-13.0	Not Reverse	OFF	1282.25	45	26	Not Active	Not Active	63.75
EA0001D0	-12.8	Not Reverse	OFF	1282.25	51	30	Not Active	Not Active	63.75
EA0001E0	-12.6	Not Reverse	OFF	1284.5	52	31	Not Active	Not Active	63.75
EA0001F0	-12.4	Not Reverse	OFF	1285	53	32	Not Active	Not Active	63.75
EA000200	-12.2	Not Reverse	OFF	1281.5	54	32	Not Active	Not Active	63.75
EA000210	-12.0	Not Reverse	OFF	1285	53	32	Not Active	Not Active	63.75
EA000220	-11.8	Not Reverse	OFF	1288.25	53	32	Not Active	Not Active	63.75
EA000230	-11.6	Not Reverse	OFF	1290	53	32	Not Active	Not Active	63.75
EA000240	-11.4	Not Reverse	OFF	1289.5	36	19	Not Active	Not Active	63.75
EA000250	-11.2	Not Reverse	OFF	1288.25	21	9	Not Active	Not Active	63.75
EA000260	-11.0	Not Reverse	OFF	1287	15	4	Not Active	Not Active	63.75
EA000270	-10.8	Not Reverse	OFF	1289	12	3	Not Active	Not Active	63.75
EA000280	-10.6	Not Reverse	OFF	1290.5	26	13	Not Active	Not Active	63.75

Buffer Address (Hex)	Relative Time (calc.) (Seconds)	Transmission - Reverse (Reverse / Not Reverse)	Speed Control (On / Off)	Engine RPM (RPM)	Driveline Torque Commanded (N-m)	Driveline Torque Actual (N-m)	Traction Control (Active / Inactive)	Stability Control (Active / Inactive)	Key On Timer 63.75 Max (sec) (Seconds)
EA000290	-10.4	Not Reverse	OFF	1290.75	43	24	Not Active	Not Active	63.75
EA0002A0	-10.2	Not Reverse	OFF	1290	49	29	Not Active	Not Active	63.75
EA0002B0	-10.0	Not Reverse	OFF	1288.25	56	34	Not Active	Not Active	63.75
EA0002C0	-9.8	Not Reverse	OFF	1291.25	66	41	Not Active	Not Active	63.75
EA0002D0	-9.6	Not Reverse	OFF	1297	81	52	Not Active	Not Active	63.75
EA0002E0	-9.4	Not Reverse	OFF	1296.75	89	57	Not Active	Not Active	63.75
EA0002F0	-9.2	Not Reverse	OFF	1306.25	89	57	Not Active	Not Active	63.75
EA000300	-9.0	Not Reverse	OFF	1306	90	58	Not Active	Not Active	63.75
EA000310	-8.8	Not Reverse	OFF	1306.25	85	55	Not Active	Not Active	63.75
EA000320	-8.6	Not Reverse	OFF	1312	81	51	Not Active	Not Active	63.75
EA000330	-8.4	Not Reverse	OFF	1309	76	48	Not Active	Not Active	63.75
EA000340	-8.2	Not Reverse	OFF	1317.5	70	44	Not Active	Not Active	63.75
EA000350	-8.0	Not Reverse	OFF	1319	65	40	Not Active	Not Active	63.75
EA000360	-7.8	Not Reverse	OFF	1320	52	31	Not Active	Not Active	63.75
EA000370	-7.6	Not Reverse	OFF	1323.25	45	26	Not Active	Not Active	63.75
EA000380	-7.4	Not Reverse	OFF	1319.5	43	24	Not Active	Not Active	63.75
EA000390	-7.2	Not Reverse	OFF	1324	41	23	Not Active	Not Active	63.75
EA0003A0	-7.0	Not Reverse	OFF	1323.5	38	21	Not Active	Not Active	63.75
EA0003B0	-6.8	Not Reverse	OFF	1322.25	36	19	Not Active	Not Active	63.75
EA0003C0	-6.6	Not Reverse	OFF	1323.25	26	12	Not Active	Not Active	63.75
EA0003D0	-6.4	Not Reverse	OFF	1323.5	17	6	Not Active	Not Active	63.75
EA0003E0	-6.2	Not Reverse	OFF	1325.5	12	2	Not Active	Not Active	63.75
EA0003F0	-6.0	Not Reverse	OFF	1324.25	10	1	Not Active	Not Active	63.75
EA000400	-5.8	Not Reverse	OFF	1323.25	9	0	Not Active	Not Active	63.75
EA000410	-5.6	Not Reverse	OFF	1323.25	8	0	Not Active	Not Active	63.75
EA000420	-5.4	Not Reverse	OFF	1319.25	8	0	Not Active	Not Active	63.75
EA000430	-5.2	Not Reverse	OFF	1320	8	0	Not Active	Not Active	63.75
EA000440	-5.0	Not Reverse	OFF	1321	2	-4	Not Active	Not Active	63.75
EA000450	-4.8	Not Reverse	OFF	1303.25	-6	-10	Not Active	Not Active	63.75
EA000460	-4.6	Not Reverse	OFF	1310.25	-12	-14	Not Active	Not Active	63.75
EA000470	-4.4	Not Reverse	OFF	1301.5	-12	-15	Not Active	Not Active	63.75
EA000480	-4.2	Not Reverse	OFF	1300.25	-11	-14	Not Active	Not Active	63.75
EA000490	-4.0	Not Reverse	OFF	1316	-13	-15	Not Active	Not Active	63.75
EA0004A0	-3.8	Not Reverse	OFF	1313.75	-14	-15	Not Active	Not Active	63.75
EA0004B0	-3.6	Not Reverse	OFF	1307.25	-13	-15	Not Active	Not Active	63.75
EA0004C0	-3.4	Not Reverse	OFF	1307.75	-13	-15	Not Active	Not Active	63.75
EA0004D0	-3.2	Not Reverse	OFF	1309	-13	-15	Not Active	Not Active	63.75
EA0004E0	-3.0	Not Reverse	OFF	1308.75	-14	-15	Not Active	Not Active	63.75
EA0004F0	-2.8	Not Reverse	OFF	1294	-12	-15	Not Active	Not Active	63.75
EA000500	-2.6	Not Reverse	OFF	1294.5	-13	-15	Not Active	Not Active	63.75
EA000510	-2.4	Not Reverse	OFF	1291	-13	-15	Not Active	Not Active	63.75
EA000520	-2.2	Not Reverse	OFF	1292.75	-13	-15	Not Active	Not Active	63.75
EA000530	-2.0	Not Reverse	OFF	1298	-14	-15	Not Active	Not Active	63.75
EA000540	-1.8	Not Reverse	OFF	1289.5	-14	-15	Not Active	Not Active	63.75
EA000550	-1.6	Not Reverse	OFF	1279.75	-13	-15	Not Active	Not Active	63.75
EA000560	-1.4	Not Reverse	OFF	1243.75	-11	-15	Not Active	Not Active	63.75
EA000570	-1.2	Not Reverse	OFF	1143.75	-8	-14	Not Active	Not Active	63.75
EA000580	-1.0	Not Reverse	OFF	1008.25	-6	-14	Not Active	Not Active	63.75
EA000590	-0.8	Not Reverse	OFF	940.25	-8	-14	Not Active	Not Active	63.75
EA0005A0	-0.6	Not Reverse	OFF	868.75	-5	-10	Not Active	Not Active	63.75
EA0005B0	-0.4	Not Reverse	OFF	755.75	1	-7	Not Active	Not Active	63.75
EA0005C0	-0.2	Not Reverse	OFF	516.5	-38	-70	Not Active	Not Active	63.75
EA0005D0	0.0	Not Reverse	OFF	314.75	-56	-108	Not Active	Not Active	63.75
EA0005E0	0.2	Not Reverse	OFF	101.75	-84	-311	Not Active	Not Active	63.75
EA0005F0	0.4	Not Reverse	OFF	0	-31	-263	Not Active	Not Active	63.75
EA000600	0.6	Not Reverse	OFF	0	-29	-218	Not Active	Not Active	63.75
EA000610	0.8	Not Reverse	OFF	0	-30	-218	Not Active	Not Active	63.75
EA000620	1.0	Not Reverse	OFF	0	-30	-232	Not Active	Not Active	63.75
EA000630	1.2	Not Reverse	OFF	0	-30	-232	Not Active	Not Active	63.75
EA000640	1.4	Not Reverse	OFF	0	-30	-232	Not Active	Not Active	63.75
EA000650	1.6	Not Reverse	OFF	0	-30	-232	Not Active	Not Active	63.75

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	1FAHP35N58W******
User	
Case Number	
EDR Data Imaging Date	
Crash Date	
Filename	FOCUS.CDR
Saved on	Wednesday, April 14 2010 at 12:14:07 PM
Collected with CDR version	Crash Data Retrieval Tool 3.4
Reported with CDR version	Crash Data Retrieval Tool 3.4
EDR Device Type	airbag control module
ACM Adapter Detected During Download	No
Event(s) Recovered	1
First Event Recorded	Deployment event status undefined

Comments

No comments entered.

Data Limitations

The retrieval of this data has been authorized by the vehicle's owner, or other legal authority such as a subpoena or search warrant, as indicated by the CDR tool user on Wednesday, April 14 2010 at 12:14:07 PM .

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

Airbag Module Data Limitations:

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

Airbag Module Data Sources:

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

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

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

02006_RCM-AB9_r001

System Status at Time of Data Retrieval

VIN as programmed into RCM at factory	1FAHP35N58W******
Current Lifetime Operating Timer (sec)	3,618,971
Deployment Command Counter	1
First Record Recording Status	Completed & Locked
Second Record Recording Status	No Data
Restraints Control Module Part Number	8S43-14B321-CB
Restraints Control Module (Serial Number)	201A9C23
Occupant Classification System ECU (Serial Number)	365?355514628092
Driver Front Crash Sensor (Serial Number)	039D30BC
Driver 1st Row Side Crash Sensor (Serial Number)	071B08AF
Passenger 1st Row Side Crash Sensor (Serial Number)	071A5017
Driver 2nd Row Side Crash Sensor (Serial Number)	03B6F8B5
Passenger 2nd Row Side Crash Sensor (Serial Number)	03A9AF0E

Deployment Data (First Record)

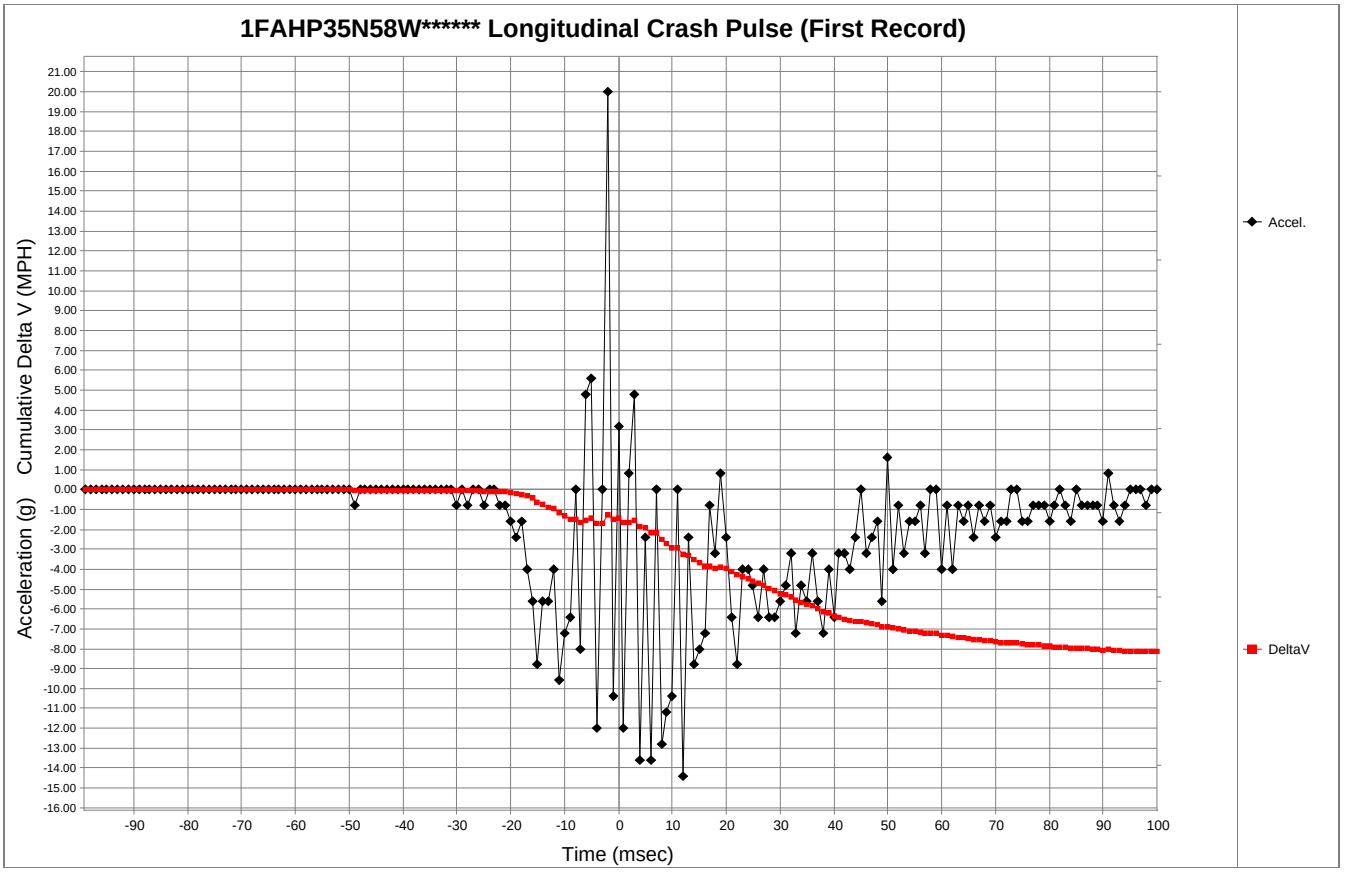
Driver First Stage Airbag Deployment Time (msec)	N/A
Driver Second Stage Airbag Deployment Time (msec)	N/A
Passenger First Stage Airbag Deployment Time (msec)	N/A
Passenger Second Stage Airbag Deployment Time (msec)	N/A
Driver Pretensioner Deployment Time (msec)	20.0
Passenger Pretensioner Deployment Time (msec)	N/A
Driver SIDE Airbag Deployment Time (msec)	N/A
Passenger SIDE Airbag Deployment Time (msec)	N/A
Driver CURTAIN Airbag Deployment Time (msec)	N/A
Passenger CURTAIN Deployment Time (msec)	41.0

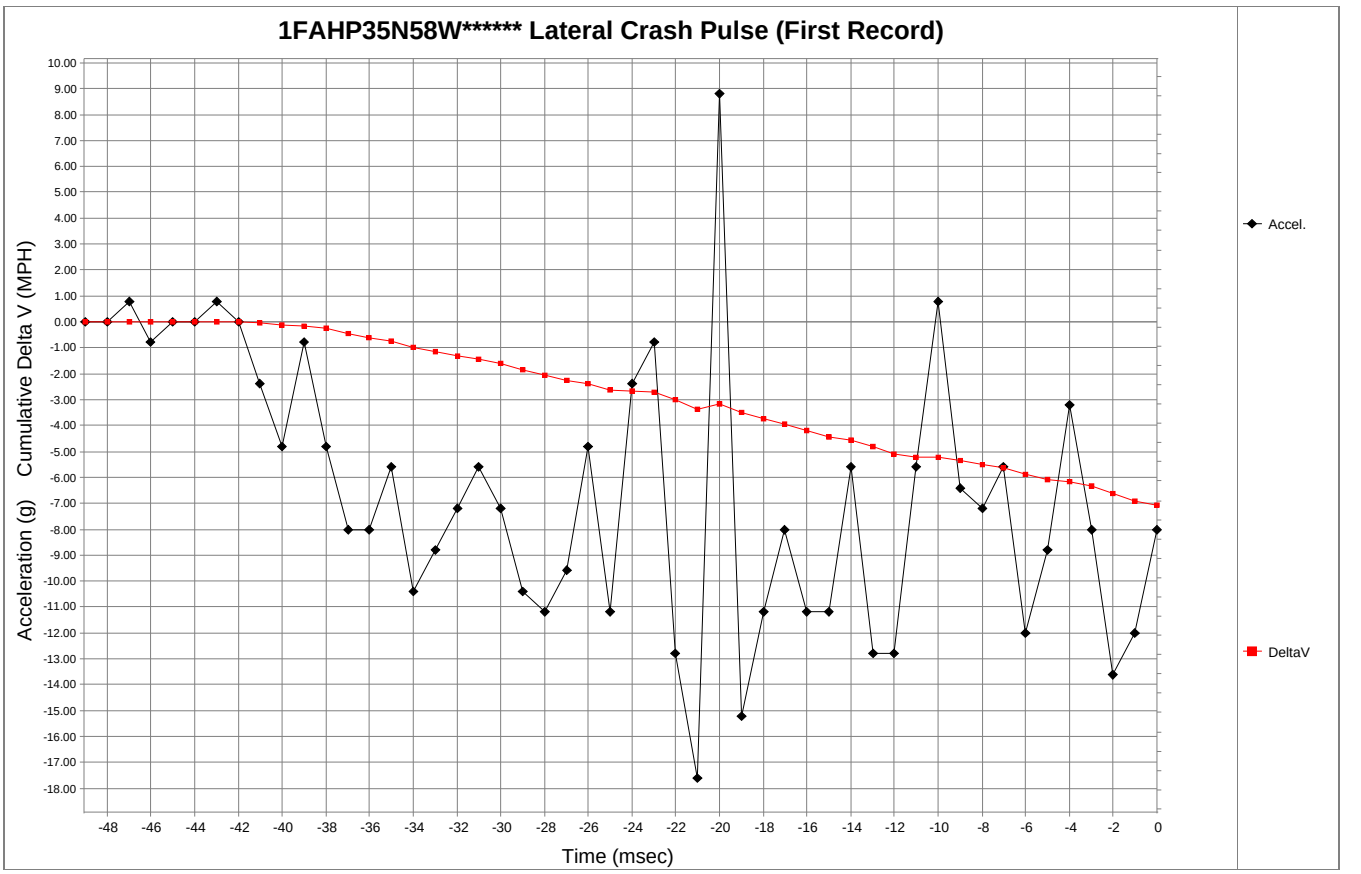
System Status at Event (First Record)

Lifetime Operating Timer at Algorithm Wake-up (sec)	3,617,870
Key On Timer at Algorithm Wake-up (sec)	293
Battery voltage at Algorithm Wake-up (volts)	13.62
RCM Energy Reserve voltage at Algorithm Wake-up (volts)	24.90
Driver Seat Belt Switch Circuit Status at Algorithm Wake-up	Buckled
Driver Seat Belt Switch Fault at Algorithm Wake-up	No
Driver Seat Track Forward of Switch Point at Algorithm Wake-up	Not Forward
Driver Seat Track Position Switch Fault at Algorithm Wake-up	No
Passenger Seat Belt Switch Circuit Status at Algorithm Wake-up	Unbuckled
Passenger Seat Belt Switch Fault at Algorithm Wake-up	No
Passenger Classification Status at Algorithm Wake-up	Empty
OCS Passenger State at Algorithm Wake-up	Empty
Driver Front Crash Sensor Fault at Algorithm Wake-up	No
Driver SIDE Crash Sensor Row 1 Fault at Algorithm Wake-up	No
Driver SIDE Crash Sensor Row 2 Fault at Algorithm Wake-up	No
Passenger Front Crash Sensor Fault at Algorithm Wake-up	No
Passenger SIDE Crash Sensor Row 1 Fault at Algorithm Wake-up	No
Passenger SIDE Crash Sensor Row 2 Fault at Algorithm Wake-up	No

Pre-Crash Data (First Record)

Time (sec)	-4	-3	-2	-1	0
Accelerator Pedal Position (%)	25	22	22	19	0
Vehicle Speed (MPH [km/h])	0.0 [0.0]	7.6 [12.2]	12.6 [20.3]	15.6 [25.1]	13.1 [21.1]
ABS Event in Progress	No	No	No	No	Yes
ESP Event in Progress	No	No	No	No	No
TCS Event in Progress	No	No	No	No	No
Brake Lamp Switch Depressed (from PCM)	No	No	No	No	Yes
RCM Serial Number Received by OCS	Yes	Yes	Yes	Yes	Yes
OCS Sensor Status	Empty	Empty	Empty	Empty	Empty
OCS System Level 1 Fault	No	No	No	No	No
OCS System Level 2 Fault	No	No	No	No	No
Vehicle Calibration ID	4F	4F	4F	4F	4F
Vehicle Model Year Calibration ID	08	08	08	08	08


1FAHP35N58W****** Longitudinal Crash Pulse (First Record)
Acceleration (g) Cumulative Delta V (MPH)
Time (msec)
Accel.
DeltaV


1FAHP35N58W****** Lateral Crash Pulse (First Record)
Acceleration (g) Cumulative Delta V (MPH)
Time (msec)
Accel.
DeltaV

Longitudinal Crash Pulse (First Record)

Time (msec)	Recorded Vehicle Longitudinal Acceleration (g)	Cumulative Longitudinal Velocity Change (MPH [km/h])
-99	0.00	0.00 [0.00]
-98	0.00	0.00 [0.00]
-97	0.00	0.00 [0.00]
-96	0.00	0.00 [0.00]
-95	0.00	0.00 [0.00]
-94	0.00	0.00 [0.00]
-93	0.00	0.00 [0.00]
-92	0.00	0.00 [0.00]
-91	0.00	0.00 [0.00]
-90	0.00	0.00 [0.00]
-89	0.00	0.00 [0.00]
-88	0.00	0.00 [0.00]
-87	0.00	0.00 [0.00]
-86	0.00	0.00 [0.00]
-85	0.00	0.00 [0.00]
-84	0.00	0.00 [0.00]
-83	0.00	0.00 [0.00]
-82	0.00	0.00 [0.00]
-81	0.00	0.00 [0.00]
-80	0.00	0.00 [0.00]
-79	0.00	0.00 [0.00]
-78	0.00	0.00 [0.00]
-77	0.00	0.00 [0.00]
-76	0.00	0.00 [0.00]
-75	0.00	0.00 [0.00]
-74	0.00	0.00 [0.00]
-73	0.00	0.00 [0.00]
-72	0.00	0.00 [0.00]
-71	0.00	0.00 [0.00]
-70	0.00	0.00 [0.00]
-69	0.00	0.00 [0.00]
-68	0.00	0.00 [0.00]
-67	0.00	0.00 [0.00]
-66	0.00	0.00 [0.00]
-65	0.00	0.00 [0.00]
-64	0.00	0.00 [0.00]
-63	0.00	0.00 [0.00]
-62	0.00	0.00 [0.00]
-61	0.00	0.00 [0.00]
-60	0.00	0.00 [0.00]
-59	0.00	0.00 [0.00]
-58	0.00	0.00 [0.00]
-57	0.00	0.00 [0.00]
-56	0.00	0.00 [0.00]
-55	0.00	0.00 [0.00]
-54	0.00	0.00 [0.00]
-53	0.00	0.00 [0.00]
-52	0.00	0.00 [0.00]
-51	0.00	0.00 [0.00]
-50	0.00	0.00 [0.00]

Time (msec)	Recorded Vehicle Longitudinal Acceleration (g)	Cumulative Longitudinal Velocity Change (MPH [km/h])
-49	-0.80	-0.02 [-0.03]
-48	0.00	-0.02 [-0.03]
-47	0.00	-0.02 [-0.03]
-46	0.00	-0.02 [-0.03]
-45	0.00	-0.02 [-0.03]
-44	0.00	-0.02 [-0.03]
-43	0.00	-0.02 [-0.03]
-42	0.00	-0.02 [-0.03]
-41	0.00	-0.02 [-0.03]
-40	0.00	-0.02 [-0.03]
-39	0.00	-0.02 [-0.03]
-38	0.00	-0.02 [-0.03]
-37	0.00	-0.02 [-0.03]
-36	0.00	-0.02 [-0.03]
-35	0.00	-0.02 [-0.03]
-34	0.00	-0.02 [-0.03]
-33	0.00	-0.02 [-0.03]
-32	0.00	-0.02 [-0.03]
-31	0.00	-0.02 [-0.03]
-30	-0.80	-0.04 [-0.06]
-29	0.00	-0.04 [-0.06]
-28	-0.80	-0.05 [-0.08]
-27	0.00	-0.05 [-0.08]
-26	0.00	-0.05 [-0.08]
-25	-0.80	-0.07 [-0.11]
-24	0.00	-0.07 [-0.11]
-23	0.00	-0.07 [-0.11]
-22	-0.80	-0.09 [-0.14]
-21	-0.80	-0.11 [-0.18]
-20	-1.60	-0.14 [-0.23]
-19	-2.40	-0.19 [-0.31]
-18	-1.60	-0.23 [-0.37]
-17	-4.00	-0.32 [-0.51]
-16	-5.60	-0.44 [-0.71]
-15	-8.80	-0.63 [-1.01]
-14	-5.60	-0.76 [-1.22]
-13	-5.60	-0.88 [-1.42]
-12	-4.00	-0.97 [-1.56]
-11	-9.60	-1.18 [-1.90]
-10	-7.20	-1.33 [-2.14]
-9	-6.40	-1.48 [-2.38]
-8	0.00	-1.48 [-2.38]
-7	-8.00	-1.65 [-2.66]
-6	4.80	-1.55 [-2.49]
-5	5.60	-1.42 [-2.29]
-4	-12.00	-1.69 [-2.72]
-3	0.00	-1.69 [-2.72]
-2	20.00	-1.25 [-2.01]
-1	-10.40	-1.48 [-2.38]
0	3.20	-1.41 [-2.27]

Longitudinal Crash Pulse (First Record) - Continued

Time (msec)	Recorded Vehicle Longitudinal Acceleration (g)	Cumulative Longitudinal Velocity Change (MPH [km/h])
1	-12.00	-1.67 [-2.69]
2	0.80	-1.65 [-2.66]
3	4.80	-1.55 [-2.49]
4	-13.60	-1.84 [-2.96]
5	-2.40	-1.90 [-3.06]
6	-13.60	-2.20 [-3.54]
7	0.00	-2.20 [-3.54]
8	-12.80	-2.48 [-3.99]
9	-11.20	-2.72 [-4.38]
10	-10.40	-2.95 [-4.75]
11	0.00	-2.95 [-4.75]
12	-14.40	-3.27 [-5.26]
13	-2.40	-3.32 [-5.34]
14	-8.80	-3.51 [-5.65]
15	-8.00	-3.69 [-5.94]
16	-7.20	-3.85 [-6.20]
17	-0.80	-3.86 [-6.21]
18	-3.20	-3.93 [-6.32]
19	0.80	-3.92 [-6.31]
20	-2.40	-3.97 [-6.39]
21	-6.40	-4.11 [-6.61]
22	-8.80	-4.30 [-6.92]
23	-4.00	-4.39 [-7.07]
24	-4.00	-4.48 [-7.21]
25	-4.80	-4.58 [-7.37]
26	-6.40	-4.72 [-7.60]
27	-4.00	-4.81 [-7.74]
28	-6.40	-4.95 [-7.97]
29	-6.40	-5.09 [-8.19]
30	-5.60	-5.22 [-8.40]
31	-4.80	-5.32 [-8.56]
32	-3.20	-5.39 [-8.67]
33	-7.20	-5.55 [-8.93]
34	-4.80	-5.66 [-9.11]
35	-5.60	-5.78 [-9.30]
36	-3.20	-5.85 [-9.41]
37	-5.60	-5.97 [-9.61]
38	-7.20	-6.13 [-9.87]
39	-4.00	-6.22 [-10.01]
40	-6.40	-6.36 [-10.24]
41	-3.20	-6.43 [-10.35]
42	-3.20	-6.50 [-10.46]
43	-4.00	-6.59 [-10.61]
44	-2.40	-6.64 [-10.69]
45	0.00	-6.64 [-10.69]
46	-3.20	-6.71 [-10.80]
47	-2.40	-6.76 [-10.88]
48	-1.60	-6.80 [-10.94]
49	-5.60	-6.92 [-11.14]
50	1.60	-6.88 [-11.07]
51	-4.00	-6.97 [-11.22]
52	-0.80	-6.99 [-11.25]
53	-3.20	-7.06 [-11.36]
54	-1.60	-7.10 [-11.43]
55	-1.60	-7.13 [-11.47]
56	-0.80	-7.15 [-11.51]
57	-3.20	-7.22 [-11.62]
58	0.00	-7.22 [-11.62]
59	0.00	-7.22 [-11.62]
60	-4.00	-7.31 [-11.76]
61	-0.80	-7.32 [-11.78]
62	-4.00	-7.41 [-11.93]
63	-0.80	-7.43 [-11.96]
64	-1.60	-7.46 [-12.01]
65	-0.80	-7.48 [-12.04]
66	-2.40	-7.53 [-12.12]
67	-0.80	-7.55 [-12.15]
68	-1.60	-7.59 [-12.21]
69	-0.80	-7.61 [-12.25]
70	-2.40	-7.66 [-12.33]
71	-1.60	-7.69 [-12.38]
72	-1.60	-7.73 [-12.44]
73	0.00	-7.73 [-12.44]
74	0.00	-7.73 [-12.44]
75	-1.60	-7.76 [-12.49]
76	-1.60	-7.80 [-12.55]
77	-0.80	-7.82 [-12.59]
78	-0.80	-7.83 [-12.60]
79	-0.80	-7.85 [-12.63]
80	-1.60	-7.89 [-12.70]
81	-0.80	-7.90 [-12.71]
82	0.00	-7.90 [-12.71]
83	-0.80	-7.92 [-12.75]
84	-1.60	-7.96 [-12.81]
85	0.00	-7.96 [-12.81]
86	-0.80	-7.97 [-12.83]
87	-0.80	-7.99 [-12.86]
88	-0.80	-8.01 [-12.89]
89	-0.80	-8.03 [-12.92]
90	-1.60	-8.06 [-12.97]
91	0.80	-8.04 [-12.94]
92	-0.80	-8.06 [-12.97]
93	-1.60	-8.10 [-13.04]
94	-0.80	-8.11 [-13.05]
95	0.00	-8.11 [-13.05]
96	0.00	-8.11 [-13.05]
97	0.00	-8.11 [-13.05]
98	-0.80	-8.13 [-13.08]
99	0.00	-8.13 [-13.08]
100	0.00	-8.13 [-13.08]

Lateral Crash Pulse (First Record)

Time (msec)	Recorded Vehicle Lateral Acceleration (g)	Cumulative Lateral Velocity Change (MPH [km/h])
-49	0.00	0.00 [0.00]
-48	0.00	0.00 [0.00]
-47	0.80	0.02 [0.03]
-46	-0.80	0.00 [0.00]
-45	0.00	0.00 [0.00]
-44	0.00	0.00 [0.00]
-43	0.80	0.02 [0.03]
-42	0.00	0.02 [0.03]
-41	-2.40	-0.04 [-0.06]
-40	-4.80	-0.14 [-0.23]
-39	-0.80	-0.16 [-0.26]
-38	-4.80	-0.26 [-0.42]
-37	-8.00	-0.44 [-0.71]
-36	-8.00	-0.61 [-0.98]
-35	-5.60	-0.74 [-1.19]
-34	-10.40	-0.97 [-1.56]
-33	-8.80	-1.16 [-1.87]
-32	-7.20	-1.32 [-2.12]
-31	-5.60	-1.44 [-2.32]
-30	-7.20	-1.60 [-2.57]
-29	-10.40	-1.83 [-2.95]
-28	-11.20	-2.07 [-3.33]
-27	-9.60	-2.28 [-3.67]
-26	-4.80	-2.39 [-3.85]
-25	-11.20	-2.63 [-4.23]
-24	-2.40	-2.69 [-4.33]
-23	-0.80	-2.70 [-4.35]
-22	-12.80	-2.99 [-4.81]
-21	-17.60	-3.37 [-5.42]
-20	8.80	-3.18 [-5.12]
-19	-15.20	-3.51 [-5.65]
-18	-11.20	-3.76 [-6.05]
-17	-8.00	-3.93 [-6.32]
-16	-11.20	-4.18 [-6.73]
-15	-11.20	-4.43 [-7.13]
-14	-5.60	-4.55 [-7.32]
-13	-12.80	-4.83 [-7.77]
-12	-12.80	-5.11 [-8.22]
-11	-5.60	-5.23 [-8.42]
-10	0.80	-5.22 [-8.40]
-9	-6.40	-5.36 [-8.63]
-8	-7.20	-5.51 [-8.87]
-7	-5.60	-5.64 [-9.08]
-6	-12.00	-5.90 [-9.50]
-5	-8.80	-6.09 [-9.80]
-4	-3.20	-6.16 [-9.91]
-3	-8.00	-6.34 [-10.20]
-2	-13.60	-6.64 [-10.69]
-1	-12.00	-6.90 [-11.10]
0	-8.00	-7.08 [-11.39]