CL-10639903-6265

[redacted]

Energy Consultant

[redacted]

Sewell, NJ [redacted]

SEP - 9 2014

RE: Date of loss: June 30, 2014
Vehicle: 2006 Toyota Camry XLE
VIN: 4T1BE30K66U[redacted]

8/26/14

Dear Sir:

I'm writing you to tell you of a problem with my 2006 Toyota Camry XLE. The first is an incident that happened five years ago and just recently I had another incident. In both instances the car suddenly accelerated uncontrollably. I believe it has to do with the electronic throttle controller, the computer (software), and gas pedal (embedded firmware).The NHTSA needs to look into this problem. If I'm right it is an industry wide problem.

The first incident occurred in August of 2009. I was pulling into a parking space at a Denny's restaurant and all of a sudden the car accelerated out of control went over the curb and was going towards the wall. I immediately shut down the engine using the key. The car stopped instantaneously. Since I was still recovering from a large stroke, I thought it was due to my stroke.

The second incident happened in June 2014. I was pulling into a parking space at a McDonald's and suddenly the car accelerated out of control went over the curb and into a fence. I immediately turned the key to the off position and the car instantaneously stopped. I towed it to the local Toyota dealership. I asked them to inspect the car. On August 25, 2014 we got a letter from Toyota that they thoroughly looked over the car and saw no problems mechanically. Though all long I was convinced the problem was electronic in nature.

I am getting rid of the car. Luckily there were no injuries in both incidences.

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ET
91914
SMD

Sincerely,

[redacted]

Owner: [redacted] Sewell, NJ [redacted]
Vehicle: 2006 Toyota Camry XLE 4 door sedan VIN: 4T1BE30K66U[redacted]

First incident of sudden acceleration: August 30, 2009

When braking and pulling into a parking space (at a local Denny's), the car felt like the throttle was fully open and it could not be stopped with the brakes. The key was then turned in the ignition to the OFF position and the car stopped. The car had jumped a curb and impacted with the side of a building. The airbag didn't employ and no one was injured.

A police officer at the scene said that the black box information was now lost because we had turned off the engine. We didn't know the car had this feature. At the Toyota dealership in Turnersville, NJ where the car was towed, we asked that the brakes be checked because the car wouldn't stop. They told us that if nothing lit on the dash, there was nothing wrong with the car.

We chalked this incident up to a driving mistake and we paid $4,113.53 in repairs to the car. This also resulted in higher premiums for our car insurance and a payout by Allstate for property damage.

Early in 2010 we started to collect information on Toyota and other incidents of sudden acceleration. But we were still unsure about the nature of the accident.

Second incident of sudden acceleration: June 30, 2014

Again when braking and entering a parking space (at a local McDonald's), the car suddenly surged forward. Again the key was turned in the ignition to OFF and the car stopped. There was less damage to the car but more damage to the property. A ticket for careless driving was issued. $85 was paid for this and by doing so you are considered pleading guilty.

This time we were sure that it was not a mechanical problem (once again nothing was lit on the dash). The throttle opened wide when only the brake was being applied. No airbag was set off and no one was injured.

The car was towed to the local Toyota dealer and we got a phone number to start a process of looking into the reasons for both incidents.

The black box info was downloaded and the car was test driven on July 22, 2014 by Robert Campbell of Engineering Analysis Associates (EAA). This is his phone number 301-802-7540. We were sent via e-mail the black box information.

On August 25, 2014 we received a letter from Toyota stating that there was nothing mechanically wrong with the car and that there were no manufacturing or design defects.

On August 27, 2014 we returned to the local Toyota dealership and sold the car to them for $7,000. At this time we are not replacing it until we have found a manufacturer who has solved this problem.

Enclosures:

Letter from Toyota dated August 19, 2014

Black Box downloaded material (July 22, 2014)

Receipt for repair for first incident (August 30, 2009)

Copy of the Title

Copy of the sale of car to Toyota Dealership in Turnersville

(A)

TOYOTA

Ronald I. Inton
Direct Phone (310) 468-1456
Fax (310) 381-8690

Toyota Motor Sales, U.S.A., Inc.
19001 South Western Avenue
Torrance, CA 90501
310 468-4000

August 19, 2014

[redacted]
Sewell, NJ [redacted]

RE: Date of Loss: June 30, 2014
Vehicle: 2006 Toyota Camry
VIN: 4T1BE30K66U[redacted]

Dear [redacted]

Thank you for contacting Toyota Customer Experience Center in regards to your incident on June 30, 2014.

You were concerned that you may have experienced unintended acceleration and possible brake malfunction. While driving your 2006 Toyota Camry, the vehicle suddenly surged forward and impacted several objects. Your vehicle's brakes may have malfunctioned since it was not able to stop the vehicle from its movement.

We arranged to have the vehicle inspected on July 22, 2014 at Toyota of Turnersville in regards to your concerns. Based on our inspection of your vehicle, we found no evidence that this incident was the result of any type of manufacturing or design defect.

The accelerator was thoroughly inspected and found to move smoothly with no restrictions or binding. There was no interference or obstruction found with the operation of the accelerator pedal. The accelerator pedal when released always returned to the idle position. The brake system was inspected and all components were in good condition; there was no damage or brake leak detected. The brake pad lining in all 4 wheel positions were adequate in thickness. There was no obstruction to the brake pedal and the inspection showed the brake system to be fully operational. During the stall test, your brakes overpowered your throttle and held vehicle in place. After road testing your vehicle at various speeds, conducting multiple acceleration, braking, and parking maneuver, we found no issues.

We are very sorry to hear about this unfortunate incident, and we do appreciate the opportunity to address your concerns.

Sincerely,

Ronald Inton
Toyota Motor Sales, U.S.A., Inc.

Case # 1406 300179

BOSCH

CDR CRASH DATA RETRIEVAL

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	4T1BE30K66U[redacted]
User	Robert Campbell
Case Number	[redacted]
EDR Data Imaging Date	07/22/2014
Crash Date	06/30/2014
Filename	4T1BE30K66U[redacted]ACM.CDRX
Saved on	Tuesday, July 22 2014 at 11:13:56
Collected with CDR version	Crash Data Retrieval Tool 13.0
Reported with CDR version	Crash Data Retrieval Tool 13.0
EDR Device Type	Airbag Control Module
Event(s) recovered	Front/Rear (2)

Comments

No comments entered.

Data Limitations

CDR Record Information:

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

General Information:

- The data recording specifications of Toyota's airbag ECUs are divided into the following seven categories. The specifications for 12EDR or later are designed to be compatible with NHTSA's 49CFR Part 563 rule.
  - 00EDR / 02EDR / 04EDR / 06EDR / 10EDR / 12EDR / 13EDR
- The airbag ECU records data for all or some of the following accident types: frontal crash, rear crash , side crash, and rollover events. Depending on the installed airbag ECU, data for side crash and/or rollover events may not be recorded.
- The airbag ECU records post-crash data and may record pre-crash data in the event of a frontal/rear crash. In addition, it may record post-crash data in the event of a side crash or rollover.
- The airbag ECU has the following recording pages (memory maps) for each accident type to store event data: three pages for frontal or rear crash, one page for a side crash (if airbag ECU is applicable) , and one page for rollover events. (if airbag ECU is applicable)
- The data recorded by the airbag ECU in the event of a frontal/rear crash includes information that indicates the sequence and interval of each previously-occurring frontal/rear crash event.
  - Time from Previous TRG
  - TRG Count
- The point in time at which the recording trigger is established is regarded as time zero for the recorded data. For the time indicated in "Lateral Delta-V", "Roll Angle" or "Lateral Acceleration", the first sampling point after the recording trigger establishment is regarded as time zero. The time zero of the data and the recording trigger establishment do not always occur simultaneously.

- The recording trigger judgment threshold value differs depending on the collision type (i.e., frontal crash, rear crash, side crash, or rollover event).
- Some of the data recorded by the airbag ECU is transmitted to the airbag ECU from various vehicle control modules by the vehicle's Controller Area Network (CAN).
- In some cases, the airbag ECU part number printed on the ECU label may not match the airbag ECU part number that the CDR tool reports. The part number retrieved by the CDR tool should be considered as the official ECU part number.
- The sampling interval of "Roll Angle" and "Lateral Acceleration" is 8 [ms] or 128 [ms]. A field indicating the sampling interval is not provided. The graph scaling can assist with derterming the sample rate. The time zero is indicated by count (0).
- "Prior Event" is the event that occurred before the "1st Prior Event" that reached the greatest MAX Delta-V. Therefore, "Prior Event" is not always the prior event of "1st Prior Event".

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

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

* For sensing a rollover

Data Definitions:
1)

- The "ON" setting for the "Freeze Signal" indicates a state in which the non-volatile memory can not be overwritten or deleted by the airbag ECU. After "Freeze Signal" has been turned ON, subsequent events will not be recorded.
- "Recording Status" indicates a state in which all recorded event data has been written into the non-volatile memory, or a state in which this process was interrupted and not fully written into the non-volatile memory. If "Recording Status" is "Incomplete", recorded event data may not be valid.
- "Time to Deployment Command" indicates the time between recording trigger establishment and the determination of airbag deployment. This value may differ from the actual time it takes for the airbag to fully deploy.
- Even if an airbag/pretensioner did not deploy due to the "front passenger airbag disable switch and/or "RSCA Disable Switch" in the ON position or other disabling criteria are met, the "Time to deployment command" data element for that airbag/pretensioner may still be recorded.
- "Engine RPM" indicates the number of engine revolutions, not the number of motor revolutions. The recorded value has an upper limit of 6,000 rpm. Resolution is 400 rpm and the value is rounded down and recorded. For example, if the actual engine speed is 799 rpm, the recorded value will be 400 rpm.
- The upper limit for the recorded "Vehicle Speed" value is 126 km/h (78.3mph). Resolution is 2km/h (1.2mph) and the value is rounded down and recorded. The accuracy of the "Vehicle Speed" value can be affected by various factors. These include, but not limited, to the following.
  - Significant changes in the tire's rolling radius
  - Wheel lock and wheel slip
- The "Accelerator Rate" value is recorded as a voltage or level. In the case of voltage, the voltage increases as the driver depresses the accelerator. In case of the level, the following three levels are recorded.
  - FULL / MIDDLE / OFF
- "Accelerator Rate" may be recorded as "OFF" even if the accelerator pedal is depressed lightly. In addition, "FULL" may be recorded when the accelerator pedal is depressed strongly but not fully.
- The "Drive" setting for the "Shift Position" value indicates the shift position state is other than "R,"(Reverse), "N" (Neutral), or "P" (Park). It also includes communication disruption. Regardless of an actual shift position, "Drive" is always set for M/T vehicles because the shift position signal is not available.
- Depending on the type of occupant sensor installed in the vehicle, one of the following three recording formats for "Occupancy Status, Passenger" will be utilized.
  - Occupied / Not Occupied
  - Adult / Child / Not Occupied
  - AM50 / AF05 / Child / Not Occupied
- Resolution of the "Air Bag Warning Lamp ON Time Since DTC was Set" is 15 minutes, and the value is rounded down and recorded.
- "Longitudinal Delta-V" indicates the change in forward speed after establishment of the recording trigger. This does not refer to vehicle speed, and it does not include the change in speed during the period from the start of the actual collision to establishment of the recording trigger.
- "Roll Angle peak" may not always match the peak value within the "Roll Angle" sampling points due to differences in data calculation method.
- For "Lateral Delta-V", the sensor location (B-pillar, front door, C-pillar, and slide door) shows the outline of a typical sensor position. Sensory location can be confirmed using the repair manual.
- "TRG Count" indicates the number of frontal/rear recording triggers that have been established. The calculated value does not include the number of times side or rollover recording triggers have been established. The sequence in which each frontal/rear event occurred can be verified from the "TRG Count". The lesser the "TRG Count" value, the older the data. The upper limit for the recorded value is 255 times. When more than one event reaches the upper limit, the actual "TRG Count" may be greater than what is

displayed for that event.

- Resolution of the "Time from Pre-Crash to TRG" is 100 [ms], and the value is rounded down and recorded.
- For "Time from Previous TRG", the recording trigger of side crash and rollover is not considered. The upper limit for the recorded value is 5000 [ms] or 5100 [ms] depending on the ECU part number. Resolution is 20 [ms] and the value is rounded down and recorded. When it's displayed as 5100ms, the actual "Time from Previous TRG" may be longer than what is displayed for that event.
- If 2 or more frontal/rear events occur successively within a period of 5000ms (or 5120ms for ECUs with 1.024 data sampling intervals), the actual sample time before the trigger is not displayed for subsequent events. The sample time before trigger will only be displayed for the first event of the successive events. For subsequent events (i.e second event or later events), the pre-crash "Time (sec)" data is replaced by integers -5 through -1 and the heading "Time (sec)" is replaced with "Sample Count". The time between "Sample Count" integers (-5 through -1) cannot be determined. The time between the last integer and TRG cannot be determined.
- "Pre-Crash Data Status" indicates data communication status of the vehicle. If communication disruption or other failure is occur, "Invalid" is set. Moreover, "Invalid" is set for some M/T vehicles because the shift position signal is not transmitted for them even if the other data is valid.

05002_ToyotaDENSO_r022

System Status at Time of Retrieval

ECU Part Number	89170-33310
ECU Generation	02EDR
Recording Status, All Pages	Complete
Diagnostic Trouble Codes Exist	No
Total Number of Front/Rear Crash Events	2
Freeze Signal	OFF

Front/Rear Event Record Summary at Retrieval

Events Recorded	TRG Count	Crash Type	Time (msec)	Event & Crash Pulse Data Recording Status
Most Recent Frontal/Rear Event	3	Front/Rear Crash	0	Complete (Front/Rear Page 0)
1st Prior Frontal/Rear Event	2	Front/Rear Crash	-5000 or greater	Complete (Front/Rear Page 1)

System Status at Front Airbag Deployment

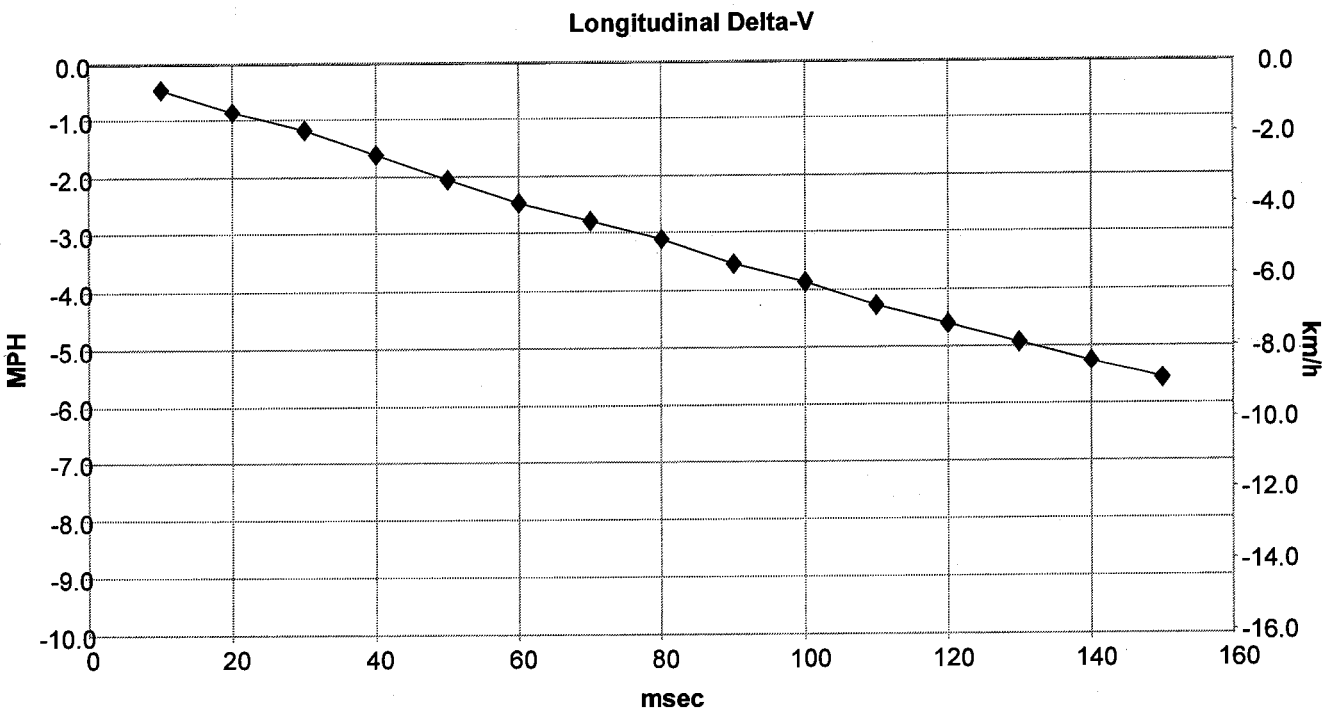
Time to Deployment Command, Front Airbag, Driver (msec)	Not Commanded
Time to Deployment Command, Front Airbag, Passenger (msec)	Not Commanded
Event Severity Status, Driver	N/A
Event Severity Status, Passenger	N/A

System Status at Event (Most Recent Frontal/Rear Event, TRG 3)

Recording Status, Front/Rear Crash Info.	Complete
TRG Count	3
Time From Previous TRG (msec)	5000 or greater
Buckle Switch, Driver	Buckled
Buckle Switch, Passenger	Unbuckled
Occupancy Status, Passenger	Not Occupied
Seat Position, Driver	Rearward

Longitudinal Crash Pulse (Most Recent Frontal/Rear Event, TRG 3 - table 1 of 2)

Max Longitudinal Delta-V (MPH [km/h])	-5.6 [-9.0]



Longitudinal Crash Pulse (Most Recent Frontal/Rear Event, TRG 3 - table 2 of 2)

Time (msec)	Longitudinal Delta-V (MPH [km/h])
10	-0.4 [-0.7]
20	-0.9 [-1.4]
30	-1.2 [-1.9]
40	-1.6 [-2.6]
50	-2.0 [-3.3]
60	-2.5 [-4.0]
70	-2.8 [-4.5]
80	-3.1 [-5.0]
90	-3.5 [-5.7]
100	-3.9 [-6.2]
110	-4.3 [-6.9]
120	-4.6 [-7.4]
130	-4.9 [-7.9]
140	-5.2 [-8.4]
150	-5.6 [-9.0]

DTCs Present at Start of Event (Most Recent Frontal/Rear Event, TRG 3)

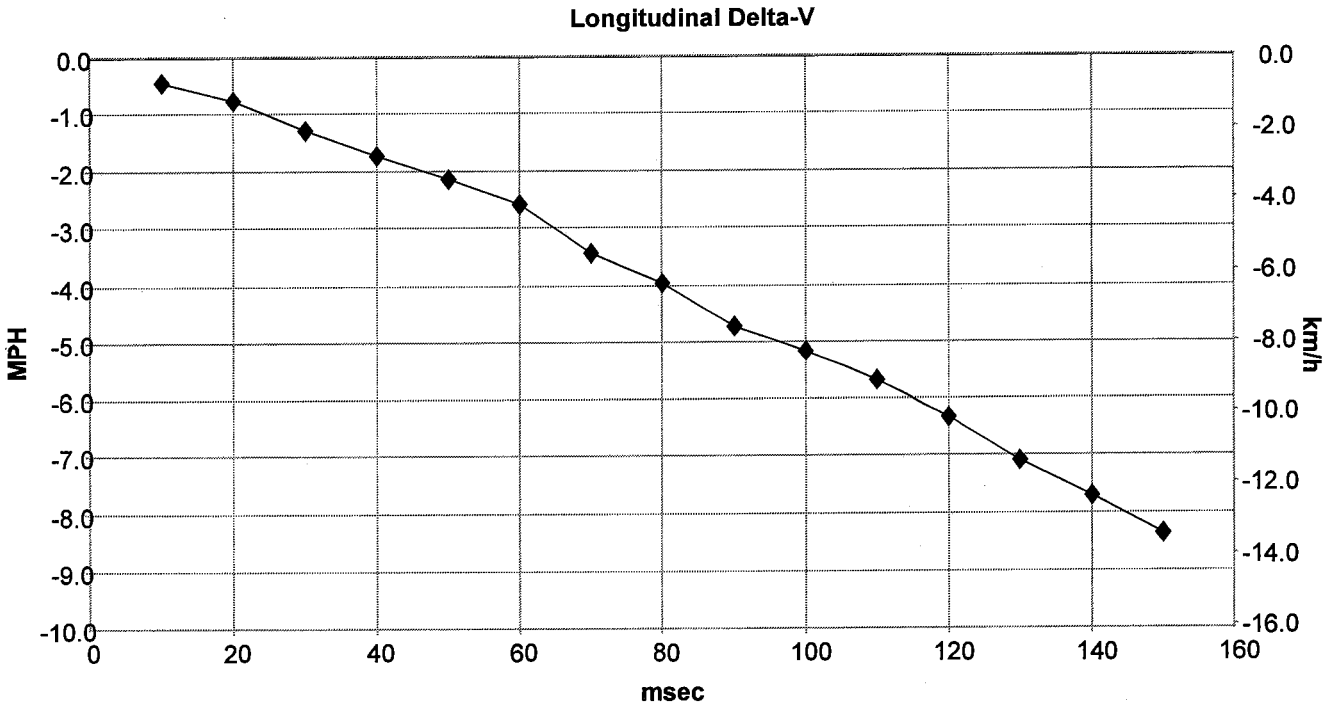
Ignition Cycle Since DTC was Set (times)	0
Airbag Warning Lamp ON Time Since DTC was Set (min)	0
Diagnostic Trouble Codes	None

System Status at Event (1st Prior Frontal/Rear Event, TRG 2)

Recording Status, Front/Rear Crash Info.	Complete
TRG Count	2
Time From Previous TRG (msec)	5000 or greater
Buckle Switch, Driver	Buckled
Buckle Switch, Passenger	Buckled
Occupancy Status, Passenger	AM50
Seat Position, Driver	Rearward

Longitudinal Crash Pulse (1st Prior Frontal/Rear Event, TRG 2 - table 1 of 2)

Max Longitudinal Delta-V (MPH [km/h])	-8.4 [-13.4]



Longitudinal Crash Pulse (1st Prior Frontal/Rear Event, TRG 2 - table 2 of 2)

Time (msec)	Longitudinal Delta-V (MPH [km/h])
10	-0.4 [-0.7]
20	-0.8 [-1.2]
30	-1.3 [-2.1]
40	-1.7 [-2.8]
50	-2.1 [-3.4]
60	-2.6 [-4.1]
70	-3.4 [-5.5]
80	-4.0 [-6.4]
90	-4.7 [-7.6]
100	-5.1 [-8.3]
110	-5.7 [-9.1]
120	-6.3 [-10.2]
130	-7.1 [-11.4]
140	-7.7 [-12.4]
150	-8.4 [-13.4]

DTCs Present at Start of Event (1st Prior Frontal/Rear Event, TRG 2)

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

Hexadecimal Data

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

PIDs

PID	Data
00	BC 00 00 01
01	00
03	33 33 33 31 30 33 33 31 30 30 33 33 31 30 30 33 33 30 34 30 33 33 30 34 30 30 36 30 37 30 30 36 30 37 30
04	02 02 01 01
05	02
06	00
20	80 00 00 01
21	00 01
40	00 00 00 01
60	00 00 00 01
80	00 00 00 01
A0	00 00 00 01
C0	00 00 00 01
E0	C0 10 00 00
E1	00 00
E2	00 5B 1F 11 00
EC	00

EEPROM

Address Data (-- = data not imaged from ECU)
(** = no response from ECU)

0	-- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
10	-- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
20	-- -- -- -- -- -- -- -- -- -- -- -- -- -- 00 00
30	00 00 FF FF 00 80 00 00 00 00 00 00 00 00 FF FF
40	A9 04 54 04 00 03 00 04 00 04 00 04 00 03 00 03
50	00 04 00 03 00 04 00 03 00 03 00 03 00 03 00 03
60	00 FA 01 03 00 00 00 00 00 00 00 00 00 00 00 00
70	00 00 00 00 00 00 00 00 AA 04 44 03 00 05 00 04
80	00 04 00 04 00 08 00 05 00 07 00 04 00 05 00 06
90	00 07 00 06 00 06 00 04 00 FA 08 02 00 00 00 00
A0	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
B0	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
C0	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
D0	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
E0	00 00 00 00 00 00 00 00

Disclaimer of Liability

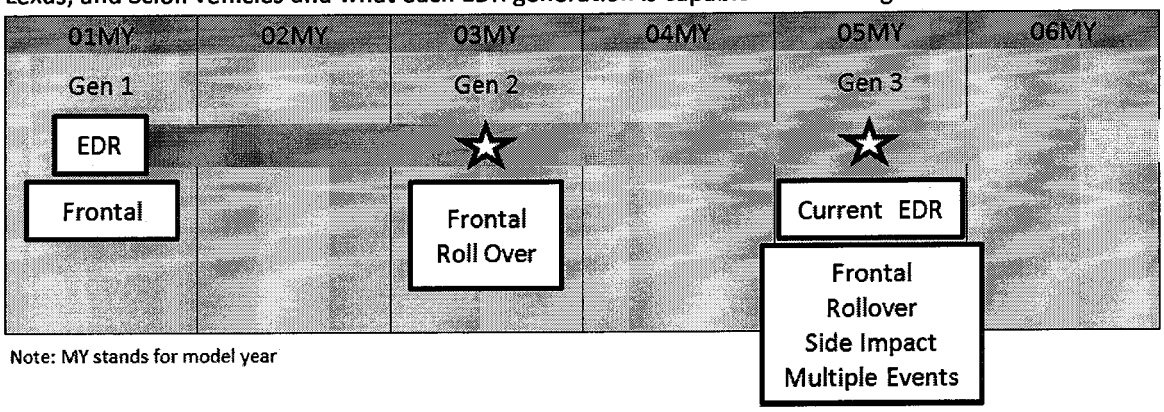
The users of the CDR product and reviewers of the CDR reports and exported data shall ensure that data and information supplied is applicable to the vehicle, vehicle's system(s) and the vehicle ECU. Robert Bosch LLC and all its directors, officers, employees and members shall not be liable for damages arising out of or related to incorrect, incomplete or misinterpreted software and/or data. Robert Bosch LLC expressly excludes all liability for incidental, consequential, special or punitive damages arising from or related to the CDR data, CDR software or use thereof.

Event Data Recorder - Reference Document

An Event Data Recorder (EDR) is a part of the Supplemental Restraint System (SRS) ECU that records data for some types of collision events for future safety research or analysis. The EDR will record data when the vehicle experiences a rapid change in speed that exceeds a specified threshold. The threshold to start recording is above changes in speeds that are considered normal driving use. For example, stopping hard with the brakes would not cause a recording, but hitting a curb may. EDRs were installed on Toyota/Lexus/Scion vehicles because they have the capability to serve several purposes, such as assisting in vehicle development, quality control and/or safety research. An EDR is also helpful in determining the circumstances that caused an airbag to be deployed or not deployed.

EDR Generations

Starting with the 2001 Lexus LS400, EDRs were incorporated into to all Toyota, Lexus and Scion vehicles by 2007. SRS ECUs with EDRs were typically installed at full model change years, which generally occur every 4 to 6 years, depending on the model. The chart below outlines the three generations of EDRs installed on Toyota, Lexus, and Scion vehicles and what each EDR generation is capable of recording.



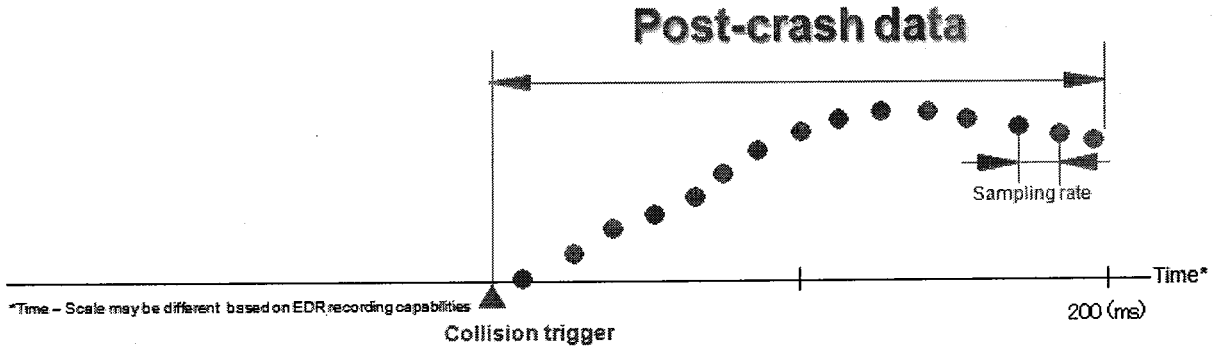
Note: MY stands for model year

Post-Crash & Pre-Crash data

Post-Crash Data - All vehicles equipped with an EDR will record post-crash data

If an impact occurs that has exceeded the rapid change in speed threshold, the EDR system will begin to record data for varying lengths of time depending on the parameters it is capable of recording. Figure 1 shows a collision 'trigger' and the data sampling rate recorded in the EDR.

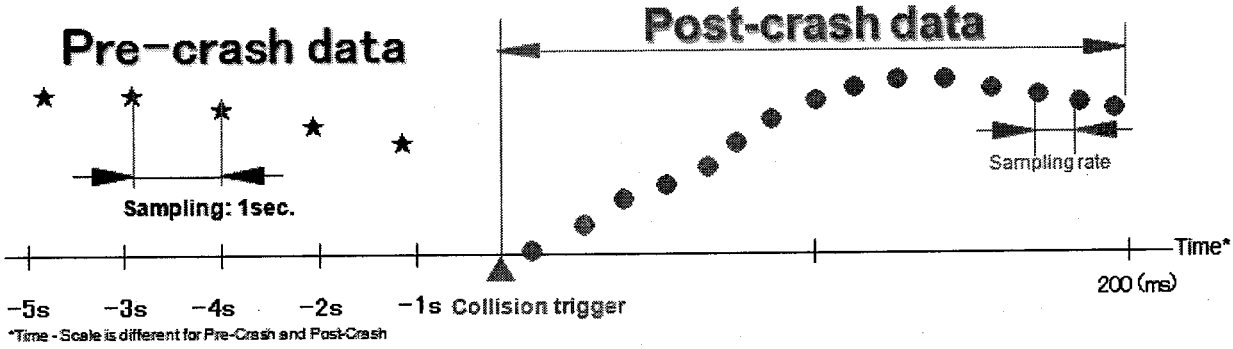
Figure 1



Pre-Crash Data - Not all models have an EDR capable of recording pre-crash data

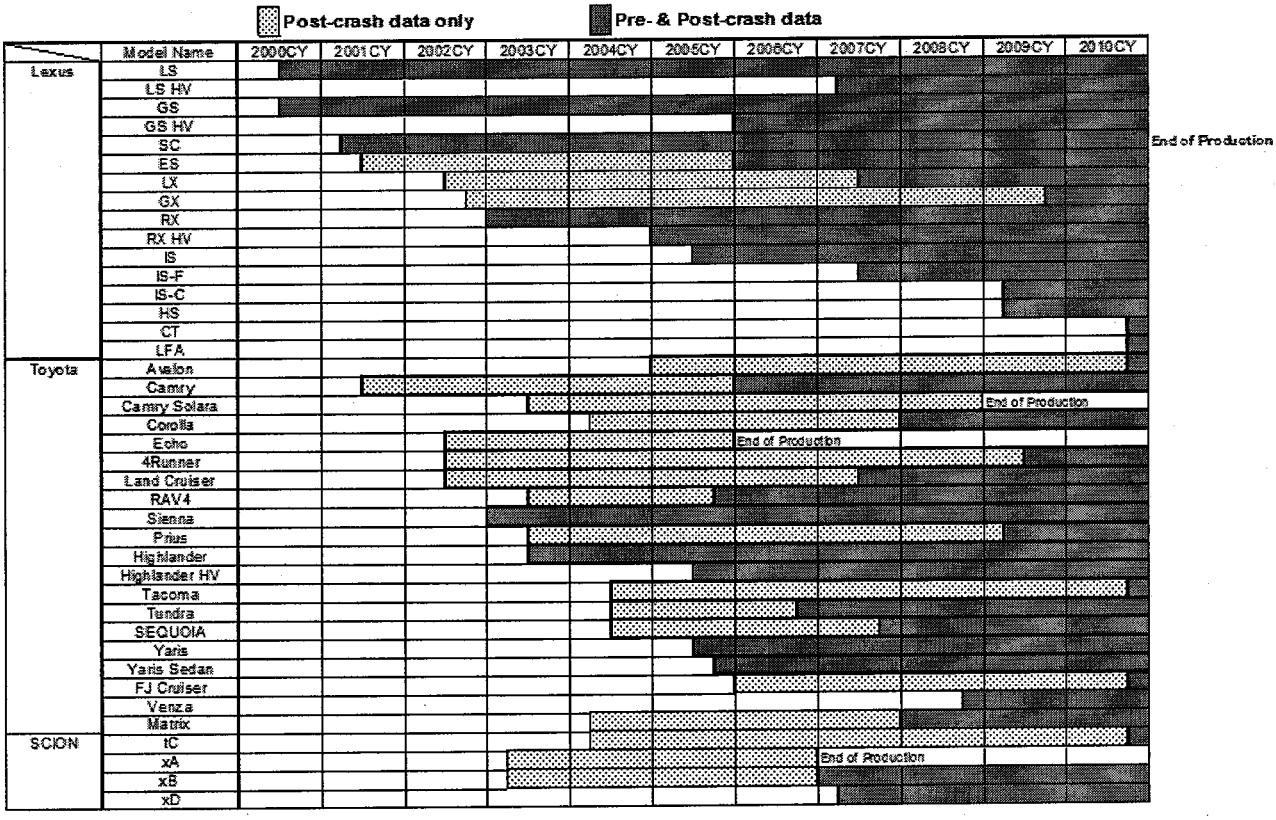
As explained in the Post-crash section, the EDR System begins recording data when an impact exceeds the rapid change in speed threshold. On certain models, the EDR will also record about 5 seconds of data that took place before the impact. Figure 2 shows the sampling rate of Pre-Crash data is different than Post-Crash data.

Figure 2



Post Crash & Pre-Crash Applicability Chart

The chart below provides EDR capability of each model and the corresponding calendar year (CY) it was built. Vehicles and the corresponding year that have a yellow bar are equipped with EDR that have the ability to record post-crash data only. Vehicles and the corresponding year that have a red bar, are equipped with EDRs capable of pre & post-crash data recording.



EDR - Frequently Asked Questions

What is an EDR? An Event Data Recorder (EDR) is part of the Supplemental Restraint System (SRS) ECU that records data for some types of collision events for future safety research or analysis. An event is a change in vehicle speed that is more than typical of everyday use. For example, stopping hard with the brakes would not cause a recording, but hitting a curb may cause the EDR to record an event.

Are EDRs required in cars? They are currently not required.

Is the EDR a black box? No, the EDR is not a black box like on an airplane. It does not record sounds or conversations and does not have the capacity like an airplane blackbox. The EDR is simply part of the Supplemental Restraint System (SRS) ECU that only records certain vehicle data for a short period of time before or during a collision.

What causes the EDR to record? The EDR starts to record when the vehicle experiences a rapid change in speed (like acceleration or deceleration) that exceeds a specified threshold higher than normal use. Hard braking will not cause an EDR to record, because that may be considered normal use. Impacting a curb hard may cause a recording as the vehicle body may change speed much quicker than normal use.

Why were EDRs installed in Toyota/Lexus/Scion vehicles? EDRs have the capability to serve several purposes, such as assisting in vehicle development, quality control or safety research. Airbag deployment occurs very rapidly and it may be difficult to determine exactly what occurred during a collision. Although indirect methods may be used to determine airbag deployment circumstances, an EDR is a more direct method to understand airbag deployment circumstances.

Do all EDRs record the same information? No. Due to different vehicle designs and changes in equipment, the information recorded varies by model and model year.

Were there other recording systems before EDR in Toyota vehicles? Yes, some vehicles in the past had some impact recording capabilities, but these were not considered reliable for field use. There is no current capability to read these predecessors to EDRs.

How accurate is the EDR data? The accuracy of the data from the EDR depends on the collision and the EDR capabilities. Government studies of Toyota EDRs indicate that Toyotas EDRs have similar capabilities to other vehicle manufacturers.

What has Toyota done to validate its EDRs and EDR tools? Toyota has been analyzing data from vehicles since they were first introduced to ensure the reliability of the EDR technology. Toyota performs imaging of our own vehicles as part of crash testing. Toyota also performs EDR imaging from U.S. Government crash testing and investigations, and when requested, in law enforcement investigations.

How does the EDR record information? During a collision, the EDR calculates the delta V based on accelerometer data every 10 milliseconds and puts it into the permanent memory. During the intervals, other data is also placed into memory. If all the data is not transferred into the permanent memory, a writing flag is put on the report. If all data is successfully transferred, the report states 'Finished writing'. In some very severe impacts, electrical connections or internal EDR components may be damaged, resulting in incomplete data transfer to the permanent memory.

How long is an event stored in the EDR? If the airbags are deployed in a collision, the EDR data is locked and cannot be erased or overwritten. If the airbags have not been deployed in previous EDR events, an event that causes the vehicle to experience a rapid change in speed (example: hitting a curb) that exceeds a specified threshold will overwrite previous EDR events.

Why is a signed consent form required before performing imaging? Various states have privacy regulations that require consent before performing an EDR image.

How is EDR data retrieved and does the retrieval process affect/change the data contained in the EDR? Depending on the vehicle's condition, data can be imaged in one of two ways. The EDR tool is either connected through the vehicles DLC port, or the EDR is removed from the vehicle and the EDR tool is connected directly to the SRS ECU. Neither method alters or erases EDR data during the process. In some rare circumstances such as water immersions- the EDR data may not be able to be imaged.

What will I receive after the EDR image process has taken place on my vehicle? After the imaging has been completed, the EDR report and other reference documents will be provided.

What is the difference between vehicle speed and delta V? Vehicle speed is how fast the vehicle moves relative to the ground - usually in miles per hour. It is understood that vehicle speed is the straight line speed of the entire vehicle. Delta V is the change in vehicle speed over milliseconds and is usually discussed as longitudinal, lateral or total delta V.

Is there more than one deltaV? In some EDR reports there are longitudinal and lateral delta V data.

Why can't the EDR tool operator just tell the customer what the report says? Crashes can be very complex events. The EDR report is just one piece of information and without knowing other critical crash information, the EDR data could be misinterpreted with the context for the overall crash.

Can the EDR tell me the date and time of collision? No, the EDR does not have a time stamp function.

(c)

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TVILLE, NJ [redacted] 06/TOYOTA/

4 T I B E 3 8 K 8 8 U [redacted]

08/31/09

[redacted] MO: 0

JOB# 1 CHARGES

LABOR

J# 1 96BSZ	BODY REPAIR	HOURS: 19.00 TECH(S):155	912.00
	RT FRT DAMAGE		

PARTS	QTY	FP	NUMBER	DESCRIPTION	LIST PRICE	UNIT PRICE	
	1		52021AA040	52021AA0 REINF	173.95	173.95	173.95
	1		5211906908	52119069 COVER FR	243.54	243.54	243.54
	1		52029AA030	52029AA0 REINF	29.65	29.65	29.65
	1		52125AA020	52125AA0 EXTEN	29.81	29.81	29.81
	1		52115AA020	52115AA0 INSERT	18.69	18.69	18.69
	1		52611AA040	52611AA0 ABS	60.27	60.27	60.27
	1		5711706030	57117060 REINF	55.99	55.99	55.99
	1		8111006180	81110061 HEADLAMP	276.64	276.64	276.64
	1		8121006040	81210060 LAMP	249.19	249.19	249.19
	1		53801AA020	53801AA0 FENDER	249.93	249.93	249.93
	1		53875AA011	53875AA0 LINER	70.99	70.99	70.99
	1		5144106030	51441060 COVER	82.40	82.40	82.40
	1		75710AA050	75710AA0 MOLDIGN	94.17	94.17	94.17
						TOTAL - PARTS	1635.22

G.O.G. & SUPPLIES

13.8	PAINT & MATERIALS	@	28.000	/UNIT	386.40
1.0	BODY SUPPLIES	@	42.000	/UNIT	42.00
				TOTAL - GOG	428.40

JOB# 1 TOTALS

LABOR	912.00
PARTS	1635.22
G.O.G.	428.40
JOB# 1 JOURNAL PREFIX BSCB JOB# 1 TOTAL	2975.62

JOB# 2 CHARGES

LABOR

J# 2 95BSZ	BODY REFINISH	HOURS: 14.10 TECH(S):5002	676.80

JOB# 2 TOTALS

LABOR	676.80
JOB# 2 JOURNAL PREFIX BSCB JOB# 2 TOTAL	676.80

JOB# 3 CHARGES

LABOR

J# 3+98BSZ	BODY MECHANICAL	HOURS: 2.00 TECH(S):221	144.00
	ALIGN		

JOB# 3 TOTALS

LABOR	144.00
JOB# 3 JOURNAL PREFIX BSCB JOB# 3 TOTAL	144.00

JOB# 4 CHARGES

LABOR

CUSTOMER COPY

[CONTINUED ON NEXT PAGE] 09:45am

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[redacted]TVILLE, NJ [redacted] 06/TOYOTA/

4 T I B E 3 8 K 8 8 U [redacted]

08/31/09

[redacted] MO: 0

LABOR----------

J# 4+90BSZ	DETAIL DEPT	HOURS:	TECH(S):1117	44.26

MISC------CODE--------DESCRIPTION----------CONTROL NO---------

SS	SHOP SUPPLIES		4.00
		TOTAL - MISC	4.00

JOB# 4 TOTALS----------

LABOR	44.26
MISC	4.00
JOB# 4 JOURNAL PREFIX BSCB JOB# 4 TOTAL	48.26

TECHNICIAN CERTIFICATION----------

221	PAUL SIMONIN	E

TOTALS----------

TOTAL LABOR....	1777.06
TOTAL PARTS....	1635.22
TOTAL SUBLET...	0.00
TOTAL G.O.G....	428.40
TOTAL MISC CHG.	4.00
TOTAL MISC DISC	0.00
TOTAL TAX.....	268.85
TOTAL INVOICE $	**4113.53**

****
* [ ] CASH [ ] CHECK CK NO. [ ] *
* [ ] VISA [ ] MASTERCARD [ ] DISCOVER *
* [ ] AMER XPRESS [ ] OTHER [ ] CHARGE *
****

BODY SHOP LIC #03111A

8/30/09 TIA

CUSTOMER SIGNATURE

CUSTOMER COPY

[END OF INVOICE] 09:45am

(5)

CERTIFICATE OF TITLE

HOLD TO LIGHT TO VIEW NEW JERSEY WATERMARK

PREFIX	IDENTIFICATION NUMBER	SUFFIX	YEAR	MAKE	MODEL	BODY TYPE
2	4T1BE 30K66 U[redacted]		2006	TOY	CAM	4 DR

TYPE OF TITLE	DUPLICATE NO.	GVW/WC/LGTH	COLOR/MTL/HP	DEALER I.D.	AXLES/PROP	FUEL
STANDARD		7	BL	25880N	2	

FEE	ISSUE DATE	VIN-REPLACEMENT	MILEAGE	STATUS
20.00	02-10-2009		26581	A

F-FLOOD S-SALVAGE
P-POLICE T-TAXI
L-LEMON LAW
A-ACTUAL MILEAGE
N-NOT THE ACTUAL MILEAGE
M-MILEAGE EXCEEDS THE MECHANICAL LIMITS

OWNER(S)

[redacted]

SEWELL NJ [redacted]

NUMBER OF OWNERS: 1

NUMBER OF LIENHOLDERS: 0

OWNER DL/CC #: [redacted]

I, CHIEF ADMINISTRATOR OF THE MOTOR VEHICLE COMMISSION, OF THE STATE OF NEW JERSEY, DO HEREBY CERTIFY THAT EVIDENCE OF PURCHASE OF OWNERSHIP, IN COMPLIANCE WITH THE LAWS OF THE STATE OF NEW JERSEY, OF THE DESCRIBED ARTICLE, HAS BEEN RECORDED AND FILED WITH ME, AND I DO HEREBY ISSUE THIS CERTIFICATE OF OWNERSHIP SUBJECT TO SECURITY AGREEMENT OR LIEN, IF ANY, AS STATED.

SIGNATURE

CONTROL NUMBER [redacted]

State of New Jersey
MOTOR VEHICLE COMMISSION

SECOND LIENHOLDER
DATE

SECOND RELEASE
LIEN RELEASED BY:
SIGNATURE
TITLE DATE

FIRST LIENHOLDER
DATE

FIRST RELEASE
LIEN RELEASED BY:
SIGNATURE
TITLE DATE

[redacted]

ISM/SS-1 (R11/07)

ALTERATION OR ERASURE VOIDS THIS TITLE. KEEP IN SAFE PLACE

VOID IF ALTERED

Received
8-27-14
AAA

(E)

TURNERSVILLE AUTOMALL

USED CAR PURCHASE ORDER

Date: 8-27-14

Name of Seller: [redacted]

Address: [redacted]
SEWELL NJ [redacted]

Year	Make	Model
2006	TOYOTA	CAMRY

VIN#	Color	Mileage	Stock#
4T1BE30K664[redacted]	BLUE	416,811	

Date Vehicle Received: 8-27-14

Floor Plan ☐ Yes ☐ No **ACV** 7,000.00

Payoff Information

Lien Holder Name:

Address:

Phone Number	Payoff Amount	Date Good Until	Per Diem
[redacted]			

Buyer Signature

David S. [illegible]
Seller Signature

CHECK REQUEST

Make Check out to:
- ☒ Seller
- ☐ Lien Holder

Make Difference Check out to (if applicable):
- ☐ Seller
- ☐ Other – Name:

Address: SAME

Date:

- ☒ Mail Check
- ☐ Return Check

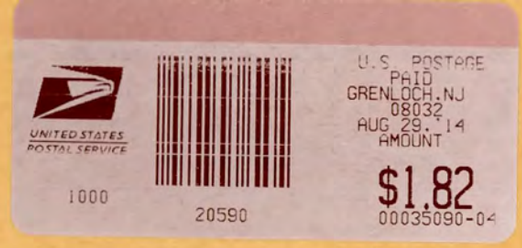
Check Amount: 7,000.00

To:

Requested By: MARC **Approved By:**

* Please attach a trade pack, 2nd power of attorney, buyer's orders, drivers license, title (if applicable) and any other additional paperwork needed to purchase vehicle.

Sewell NJ [redacted]



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