

U.S. Department of Transportation National Highway Traffic Safety Administration		Vehicle Owner's Questionnaire To Report Vehicle Safety Defects 1-888-DASH-2-DOT (1-888-327-4236) INTERNET:www.nhtsa.dot.gov/hotline		FOR AGENCY USE ONLY 100148	
		Date Received 05-FEB-2021 APR 28 2021		Repository <input type="checkbox"/> Reference No. 11394784	
OWNER INFORMATION (Type or Print)					
Name		Address		Daytime Telephone Number	
City		State		Evening Telephone Number	
QEENSVILLAGE		NY			
The information you provide will be used to identify potential safety-related defects. We may share your information with the applicable vehicle manufacturer during an investigation or recall in accordance with the routine uses described in the agency's Privacy Act notice. See 49 FR 53971 (Sep. 3, 2004).					
VEHICLE INFORMATION					
17 digit Vehicle Identification Number Located at bottom of windshield on driver's side		Make		Model	
5TDBK3EH3DS		TOYOTA		HIGHLANDER	
Date Purchased		Dealer's Name and Telephone Number		Engine:	
		HILLSIDE TOYOTA		No: Cylinders	
Original Owner		Dealer's City		State	
<input type="checkbox"/>		N.Y. 11435		N.Y.	
Transmission Type		Powertrain		Multiple Failure:	
<input type="checkbox"/> Antilock Brakes <input type="checkbox"/> Cruise Control				Incident Date(s)	
				31-DEC-2020	
FAILED COMPONENT(S)/PART(S) INFORMATION					
Vehicle Component Code: 200000 WHEELS				Failure Mileage	
				35000	
				Failure Speed	
				50	
ADDITIONAL ITEMS TO BE COMPLETED WHEN REPORTING A TIRE FAILURE					
Tire Make		Tire Model (Name or Number)		Tire Size (Example P215/65R15)	
DOT No. (Example: DOTM19ABC036)		<input type="checkbox"/> Original Equipment <input type="checkbox"/> Prior Repair		Failure Location:	
Tire Component Code		Tire Failure Type:			
ADDITIONAL ITEMS TO BE COMPLETED WHEN REPORTING A CHILD SEAT FAILURE					
Make:		Date Manufactured:		Model No./Name:	
Seat Type:		Installation System:			
Child Seat Component Code:		Failed Part:			
APPLICABLE INCIDENT INFORMATION					
(Please describe in detail the incident(s), failure(s), crash(es), and injury(ies).)					
Crash		Fire		Number of Persons Injured	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		1	
				Number of Deaths	
				0	
				Reported to Police	
				N	
Narrative Description of Incident(S), Crash(es), and Injury(ies). Please describe (1) events leading up to the failure, (2) failure and its consequences, and (3) what was done to correct the failure; i.e., parts repaired or replaced (and if old part is available).					
TL-THE CONTACT OWNS A 2013 TOYOTA HIGHLANDER. THE CONTACT STATED THAT WHILE DRIVING AT 50 MPH, THE VEHICLE WHEELS HYDROPLANNED CAUSING THE CONTACT TO LOSS CONTROL AND CRASH INTO A CENTER CONCRETE WALL. NO AIRBAG DEPLOYED. THE CONTACT SUSTAINED INJURIES TO THE CHEST. THE CONTACT DID GO TO THE HOSPITAL COUPLE OF HOURS LATER TO TREAT INJURIES TO THE RIBS WHICH WERE FRACTURED. THE CONTACT DID NOT STAY OVERNIGHT. NO POLICE REPORT WAS MADE. NO MEDICAL ATTENTION WAS CONTACTED. THE VEHICLE WAS STILL DRIVEABLE THE CONTACT MANAGED TO DRIVE THE VEHICLE TO AN INDEPENDENT MECHANIC LOT WHERE AT THIS TIME THE VEHICLE IS SITTING. THE VEHICLE WAS NOT DIAGNOSED OR REPAIRED. NO INSURANCE COMPANY WAS CONTACTED. NO DEALER WAS CONTACTED. THE MANUFACTURER WAS NOT NOTIFIED OF THE FAILURE. THE FAILURE MILEAGE WAS APPROXIMATELY 35,000. CK					
Include, if available: Police/Fire Department Report, Photos, and Repair Invoice. ATTACH ADDITIONAL SHEETS IF NECESSARY					
The Privacy Act of 1974-Public Law 93-579 This information is requested pursuant to authority vested in the National Highway Traffic Safety Act and subsequent amendments. You are under no obligation to respond this questionnaire. Your response may be used to assist the NHTSA in determining whether a Manufacturer should take appropriate action to correct a safety defect. If the NHTSA proceeds with administrative enforcement or litigation against a manufacturer, your response, or a statistical summary thereof, may be used in support of the agency's action.					

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/Frame Number	5TDBK3EH3D[REDACTED]
User	[REDACTED]
Case Number	[REDACTED]
EDR Data Imaging Date	02/26/2021
Crash Date	12/31/2020
Filename	5TDBK3EH3DS[REDACTED].ACM.CDRX
Saved on	Friday, February 26 2021 at 10:08:45
Imaged with CDR version	Crash Data Retrieval Tool 21.0
Imaged with Software Licensed to (Company Name)	Engineering Analysis Associates
Reported with CDR version	Crash Data Retrieval Tool 21.0
Reported with Software Licensed to (Company Name)	Engineering Analysis Associates
EDR Device Type	Airbag Control Module
Event(s) recovered	Front/Rear (1)

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 any of the front passenger seat airbags, side airbags, or Curtain Shield Airbags have deployed, data will not be overwritten or deleted by the airbag ECU following that event. If none of the airbags have deployed, the data of that event may be overwritten by a following event even if other airbags (pretensioner, rear seat airbag, etc.) have deployed.

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 Tech Stream, 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 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 / 15EDR / 17EDR / 19EDR

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.

This airbag ECU records record pre-crash data and post-crash data.

- If a single event occurs independently, the data for that event is recorded on a one-to-one basis.

- If multiple events occur successively (within a period of approximately 500ms), the establishment of the recording trigger for the first event is defined as the "pre-crash recording trigger". Pre-crash data for the first event and post-crash data for each successive event is then recorded.

The airbag ECU has two recording pages (memory maps) to store pre-crash data. Additionally, to store post-crash data, the airbag ECU has two recording pages for each accident type: two pages for frontal and rear crash; two pages for a side crash, and two pages for rollover event.

The data recorded by the airbag ECU includes correlating information between each previously occurring event (i.e., information that clarifies the collision event sequence. This correlation information consists of the following items.

- Time from Previous Pre-Crash TRG

- Linked Pre-Crash Page

- Time from Pre-Crash TRG

- TRG Count

- Previous Crash Type

In frontal and rear collision events, the first point where a longitudinal cumulative delta-V of over 0.8 km/h (0.5 mph) is reached is regarded as time zero for the recorded data. In side impact collision and rollover events, the point in time at which the recording trigger is established is regarded as time zero for the recorded data.

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.

In frontal and rear collision events, the record time varies depending on the period during which a longitudinal cumulative delta-V of over 0.8 km/h (0.5 mph) is reached, and time series data is recorded for up to 250 ms. The record time described above is indicated as "Length of Delta-V, "Delta-V, Longitudinal" outside the record time is indicated by area shaded in the table, and not indicated in the graph.

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
Maximum Delta-V, Longitudinal	Forward
Delta-V, Longitudinal	Forward
Maximum Delta-V Lateral, Side Satellite Sensor 1	Left to Right
Maximum Delta-V Lateral, Side Satellite Sensor 2	Left to Right
Maximum Delta-V Lateral, Side Satellite Sensor 3	Left to Right
Maximum Delta-V Lateral, Side Satellite Sensor 4	Left to Right
Delta-V Lateral, Side Satellite Sensor 1	Left to Right
Delta-V Lateral, Side Satellite Sensor 2	Left to Right
Delta-V Lateral, Side Satellite Sensor 3	Left to Right
Delta-V Lateral, Side Satellite Sensor 4	Left to Right
Roll Angle Peak	Clockwise Rotation
Roll Angle at the Time of TRG	Clockwise Rotation
Roll Rate	Clockwise Rotation
Lateral Acceleration, Airbag ECU Sensor *	Left to Right
Longitudinal Acceleration, VSC Sensor	Forward
Yaw Rate	Left Turn
Steering Input	Left Turn

* For sensing a rollover

Data Definitions:

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.

If the "Occupant Size Classification, Front Passenger" displays "Child" or "Not Occupied", "Side Air Bag Deployment, Time to Deploy" and "Pretensioner Deployment, Time to Fire" may indicate a time even if deployment did not occur on the (for following part no's):

- 89170-07280, 35400, 35410, 35470, 42660, 0R120, 0R080, 0R081, 0R150

"Engine RPM" indicates the number of engine revolutions, not the number of motor revolutions. The recorded value has an upper limit of 12,800 rpm. Resolution is 100 rpm and the value is rounded down and recorded. For example, if the actual engine speed is 799 rpm, the recorded value will be 700 rpm.

If the electric vehicle is using a calculated/virtual engine RPM for drivetrain control, "Engine RPM" may be recorded, but should not be used during data analysis.

The upper limit for the recorded "Vehicle Speed" value is 200 km/h (125mph). Resolution is 1km/h (0.6mph) 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.

"Accelerator Pedal" has two recording specifications. Both the recorded value increases as the driver depresses the accelerator.

- Percentage of accelerator pedal depressed (recorded as 0-100%).
- Output voltage of accelerator pedal module (recorded as 0-5(V)).

If MT transmission vehicle of some limited model, "Shift Position" may display "Drive" regardless of the actual shift position.

Depending on the type of occupant sensor installed in the vehicle, one of the following three recording formats for "Occupant Size Classification, Front Passenger" will be utilized.

- Occupied / Not Occupied
- AM50 / AF05 / Child / Not Occupied
- AM50 / AF05 / Child or Not Occupied

"Cruise Control Status" indicates whether the cruise control system is actuated or not. OFF indicates that the cruise control system is not actuated, but can also indicate that the vehicle is not equipped with the system.

"Air Bag Warning Lamp, On/Off", "Ignition Cycle, Crash", "Seat Track Position Switch, Foremost, Status, Driver", "Occupant Size Classification, Front Passenger", "Safety Belt Status, Driver", "Safety Belt Status, Front Passenger", "Frontal Air Bag Suppression Switch Status, Front Passenger", and "RSCA Disable Switch" indicate the state approximately 1 second before time zero. They may not always indicate the state at the moment of collision.

The upper and lower limits for the recorded value of "Motor RPM" is 17,500 rpm and -7,500 rpm respectively. Resolution is 100 rpm and the value is rounded down and recorded.

"Brake Oil Pressure" has an upper limit of 12.14 Mpa. In the case of the vehicle that has not VSC system, "0 Mpa" or "Invalid" may be displayed.
"Longitudinal Acceleration, VSC Sensor" has upper and lower limits for the recorded value of 8.973 m/s² and -8.973 m/s² respectively. This acceleration sensor does not sense collisions.

"Sequential Shift Range" displaying "Undetermined" indicates the shift range is undetermined or was not being used.

Some vehicles will not be equipped with all "Drive Mode" types indicated in the "Drive Mode" table. If some or all drive modes are not applicable to vehicle, "OFF" or "Invalid" may be displayed. The item in the "Drive Mode" table may not match the name of switch or indicator that equipped the vehicle.

The upper and lower limits for the recorded value of "Steering Input" is 375 deg and -375 deg respectively. Resolution is 3 deg and the value is rounded down and recorded.

Resolution of the "Air Bag Warning Lamp ON Time Since DTC was Set" is 15 minutes, and the value is rounded down and recorded.

"Delta-V, Longitudinal" indicates the change in forward speed after time zero. 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 time zero.

"Location of Side Satellite Sensor" shows the outline of a typical sensor position. Sensory location can be confirmed using the repair manual.

For "Lateral Delta-V", the acceleration sensor installed in the airbag ECU is not used but the satellite sensor is used for the "Lateral Delta-V" calculation.

"Time from Previous Pre-Crash TRG" indicates the time between the establishment of an event's pre-crash recording trigger to the establishment of a more recent event's pre-crash recording trigger. The upper limit for the recorded value is 16,381 milliseconds. In the event of establishment of the first pre-crash recording trigger after the ignition is switched ON, the upper limit value(max value) is recorded.

"TRG Count" indicates a calculated value of the number of times recording triggers have been established for all crash types. The sequence in which each event occurred can be verified from the "TRG Count". The smaller the "TRG Count" value, the older the data. The upper limit for the recorded value is 65,533 times. When more than one event reaches the upper limit, the actual "TRG Count" may be greater than what is displayed for that event.

"Linked Pre-Crash Page" is used to link "paged" pre-crash data with "paged" post-crash data. When old pre-crash data is overwritten by new pre-crash data, the "Linked Pre-Crash Page" value may record a page number that is not actually linked.

Resolution of the "Time from Pre-Crash to TRG" is 50 [ms], and the value is rounded up and recorded.

"Roll Angle at the Time of TRG" and "Roll Angle Peak" do not represent the actual roll angle of the vehicle. These values are used internally by the airbag ECU for sensing a rollover.

05012_ToyotaS02std_r026

System Status at Time of Retrieval

ECU Part Number	89170-0E150
EDR Generation	12EDR
Complete File Recorded	Yes
Freeze Signal	OFF
Freeze Signal Factor	None
Diagnostic Trouble Codes Exist	No
Ignition Cycle Download (times)	5935
Multi-event, number of events (times)	1
Time from event 1 to 2 (s)	N/A
Time from Previous Pre-Crash TRG (msec)	16381 or greater
Latest Pre-Crash Page	0
Contains Unlinked Pre-Crash Data	No

Event Record Summary at Retrieval

Events Recorded	TRG Count	Crash Type	Time (msec)	Pre-Crash & DTC Data Recording Status	Event & Crash Pulse Data Recording Status
Most Recent Event	1	Front/Rear Crash	0	Complete (Page 0)	Complete (Front/Rear Page 0)

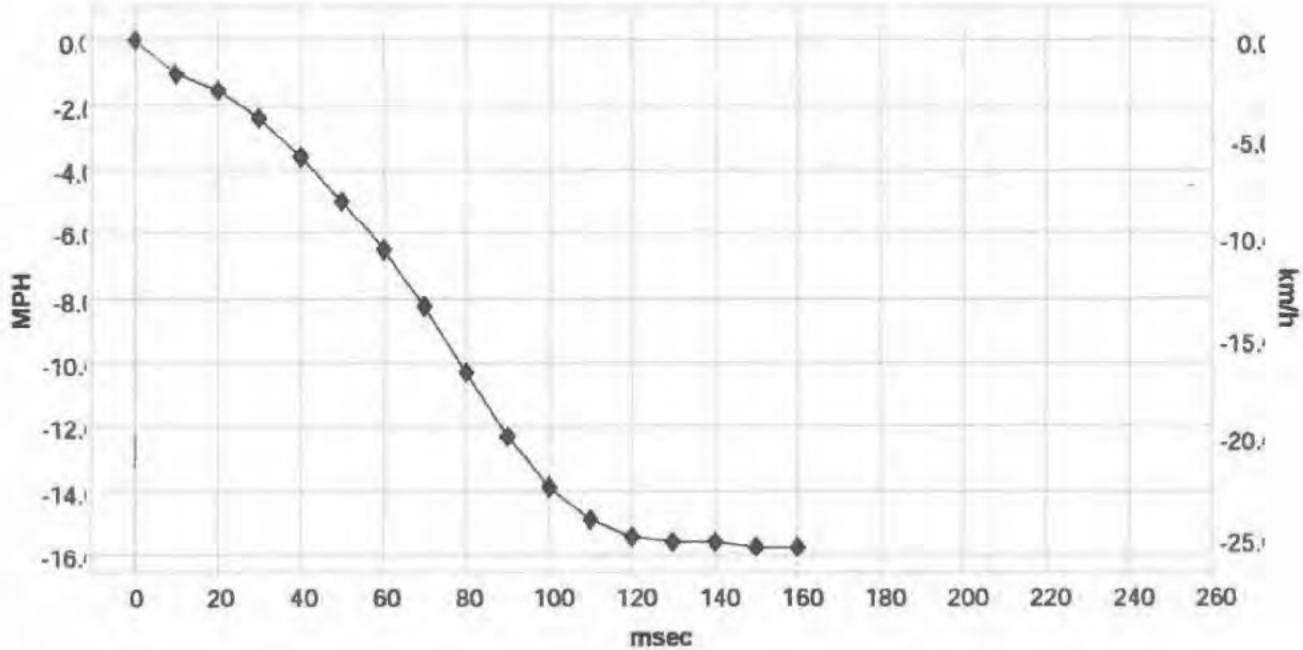
System Status at Event (Most Recent Event, TRG 1)

Recording Status, Front/Rear Crash Info	Complete
Crash Type	Front/Rear Crash
TRG Count (times)	1
Previous Crash Type	No Event
Time from Pre-Crash TRG (msec)	0
Linked Pre-Crash Page	0
Frontal Airbag Deployment, Time to 1st Stage Deployment, Driver (msec)	No
Frontal Airbag Deployment, Time to 1st Stage Deployment, Front Passenger (msec)	No
Pretensioner Deployment, Time to Fire, Driver (msec)	No
Pretensioner Deployment, Time to Fire, Front Passenger (msec)	No
Frontal Airbag Deployment, Time to 2nd Stage, Driver (msec)	N/A
Frontal Airbag Deployment, Time to 2nd Stage, Front Passenger (msec)	N/A
Active Head Restraint, Time to Deploy, Driver (msec)	SNA
Active Head Restraint, Time to Deploy, Front Passenger (msec)	SNA
Side Curtain Airbag Deployment, Time to Deploy, Driver (msec)	SNA
Side Curtain Airbag Deployment, Time to Deploy, Passenger (msec)	SNA
Rear Window Airbag Deployment, Time to Deploy (msec)	SNA

Longitudinal Crash Pulse (Most Recent Event, TRG 1 - table 1 of 2)

Recording Status, Time Series Data	Complete
Time from Time Zero to TRG (msec)	48.0
Length of Delta-V (msec)	160
Max. Longitudinal Delta-V (MPH [km/h])	-15.8 [-25.4]
Time, Maximum Delta-V, Longitudinal (msec)	142.5
Power Supply Status at Max. Delta-V	ON

Longitudinal Delta-V



Deployment Time Marker Key

- 1 Driver Airbag Deployment Time
- 2 Passenger Airbag Deployment Time
- 3 Driver/Passenger Pretensioner
- 4 Driver 2nd Stage Airbag Deployment Time
- 5 Passenger 2nd Stage Airbag Deployment
- 6 Driver/Passenger AHR
- 7 Driver/Passenger CSA
- 8 Rear Window Airbag Deployment Time

Longitudinal Crash Pulse (Most Recent Event, TRG 1 - table 2 of 2)

Time (msec)	Longitudinal Delta-V (MPH [km/h])	Power Supply Status
0	0.0 [0.0]	ON
10	-1.0 [-1.7]	ON
20	-1.5 [-2.5]	ON
30	-2.4 [-3.9]	ON
40	-3.6 [-5.8]	ON
50	-5.0 [-8.0]	ON
60	-6.5 [-10.5]	ON
70	-8.2 [-13.2]	ON
80	-10.3 [-16.5]	ON
90	-12.3 [-19.9]	ON
100	-13.9 [-22.3]	ON
110	-14.9 [-24.0]	ON
120	-15.4 [-24.8]	ON
130	-15.6 [-25.1]	ON
140	-15.6 [-25.1]	ON
150	-15.8 [-25.4]	ON
160	-15.8 [-25.4]	ON
170	0.0 [0.0]	ON
180	0.0 [0.0]	ON
190	0.0 [0.0]	ON
200	0.0 [0.0]	ON
210	0.0 [0.0]	ON
220	0.0 [0.0]	ON
230	0.0 [0.0]	ON
240	0.0 [0.0]	ON
250	0.0 [0.0]	ON

DTCs Present at Time of Event (Most Recent Event, TRG 1)

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

Pre-Crash Data, 1 Sample (Most Recent Event, TRG 1)

Recording Status, Pre-Crash/Occupant	Complete
Time from Pre-Crash to TRG (msec)	450
Safety Belt Status, Driver	ON
Safety Belt Status, Front Passenger	OFF
Occupant Size Classification, Front Passenger	Not Occupied
Frontal Airbag Suppression Switch Status, Front Passenger	SNA
RSCA Disable Switch	SNA
Seat Track Position Switch, Foremost, Status, Driver	No
Airbag Warning Lamp, On/Off	OFF
Ignition Cycle, Crash (times)	5892

Pre-Crash Data, -5 to 0 seconds (Most Recent Event, TRG 1)

Time (sec)	-4.95	-4.45	-3.95	-3.45	-2.95	-2.45	-1.95	-1.45	-0.95	-0.45	0 (TRG)
Vehicle Speed (MPH (km/h))	53.4 (86)	42.3 (68)	51 (82)	48.5 (78)	46 (74)	43.5 (70)	34.8 (56)	28 (45)	23.6 (38)	19.9 (32)	16.2 (26)
Accelerator Pedal, % Full (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0
Percentage of Engine Throttle (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Engine RPM (RPM)	2,300	2,000	1,900	1,500	1,300	1,700	1,600	1,300	1,100	900	800
Motor RPM (RPM)	invalid	invalid	invalid	invalid	invalid	invalid	invalid	invalid	invalid	invalid	invalid
Service Brake, ON/OFF	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	ON	ON
Brake Oil Pressure (Mpa)	0.43	2.69	6.00	1.20	1.78	2.26	5.33	0.00	0.05	8.59	10.80
Longitudinal Acceleration, VSC Sensor (m/sec ²)	0.718	1.292	2.441	-1.651	-0.790	-3.158	2.871	2.153	-1.795	2.441	8.973
Yaw Rate (deg/Sec)	-0.98	-0.49	-15.62	-22.45	-21.96	10.25	61.00	38.55	28.75	29.77	34.16
Steering Input (degrees)	-27	-75	-147	18	105	273	195	-18	-222	-375	375
Shift Position	Seq	Seq	Seq	Seq	Seq	Seq	Seq	Seq	Seq	Seq	Seq
Sequential Shift Range	4	4	4	4	4	4	4	4	4	4	4
Cruise Control Status	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Drive Mode, PWR	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid
Drive Mode, ECO	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid
Drive Mode, Sport	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid
Drive Mode, Snow	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid
Drive Mode, EV	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid

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 60 00 01
	01	00
	03	30 45 31 35 30 30 30 30 45 35 30 30 30 45 35 30 30 30 45 35 30 30 30 45 35 30 30 30 45 38 30 30 30 45 38 30 30 30 45 42 30 30 30 45 42
	04	02 02 01 01
	05	01
	06	00
	0A	01
	0B	00
	20	80 00 00 01
	21	02 9F
	40	00 00 00 01
	60	FF FF F0 01
	61	02 02 E8 00 C8 E0 05 00 02 80 02 80 05 00 05 00 00 00 00 05 00 05 00 19 00 29 B1 85 5F 00 00
	62	00 00 3F FD 17 2F 00 00 00 00
	63	55 20 17 04 10 10 00 00 BB BB BB BB BB B0 56 44 52 4E 4A 46 38 2D 26 20 1A 00 00 00 00 00 00 06 00 00 00 55 54 14 17 14 13 0F 00 11 10 0D 0B 09 08 44 44 44 44 44 40
	64	00 00
	65	55 00
	66	00 00
	67	55 E0 00 00 01 FE FE FE FE FE 33 FD FD FF FE
	68	00 00
	69	00 60 11 00 00 00 06 00 09 00 0E 00 15 00 10 00 26 00 30 00 3C 00 48 00 51 00 57 00 5A 00 5B 00 5B 00 5C 00 5C 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 5C 01 1D
	6A	00 00
	6B	00 00
	6C	00 00
	6D	00 00
	6E	00 00
	6F	00 60 00 00 00 00 00
	70	00 00
	71	00 00
	72	00 00
	73	09 38 7D 19 25 2F 6F 00 01 83 E1 F7 E7 CF 06 23 58 41 FA B6 83 83 FE FF E0 D2 D3 15 7D 4F 3B 3D 46 F6 EE DE E9 F5 D4 D8 E2 E7 DE 83 00
	74	00 00

```
80 00 00 00 01
A0 0C 00 00 01
A5 50 50 50 50 50 50 50 50 50 50 50 FE FE FE FE FE FE FE FE FE FE
   14 14 14 14 14 14 14 14 14 14 14
A6 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
   00 00 00 00 00 00 00 00 00 00 00
```

INVOICE

BAYSIDE AUTO CARE, CORP
162-08 CROCHERON AVENUE
FLUSHING, NY 11358
1718 886 6633
Reg #7108596

Date: 12/31/20
Job number: [REDACTED]
License plate: [REDACTED]
Year/Make: '13 TOYOTA
Model: HIGHLANDER
V.I.N.: 2TDBK3EH3DS [REDACTED]
Mileage: In: 33,423 Out: 33,423
Technician: MIKE
Other: 3.5

[REDACTED]
QUEENS VILLAGE NY [REDACTED]

Authorization taken by: ROBERT

A/C SERVICE

AIR CONDITIONING SYSTEM PERFORMANCE TEST. CHECK
BELT & TENSION. ADD REFRIGERENT & OIL AS REQUIRED.
LEAK TEST & CHECK HOSES. CHECK EVAPORATOR OUTPUT.

- 1 REFRIGERANT
- 2 REFRIGERANT OIL

4 WHEEL ALIGNMENT

COMPUTER ALIGN 4 WHEELS. SET ALL ADJUSTABLE ANGLES FRONT
AND REAR TO SPECIFICATION. CHECK FRONT END COMPONENTS. SET
TIRE PRESSURE. ROAD TEST VEHICLES.

WORK PERFORMED (Labor @ 90.00)

CHASSIE PULL
REPAIR PAINT REFINISH PAINT AN
CLEAR COAT
INCLUDE PAINT /CLEAR COAT

6,650.00

PARTS

- 4 LUG NUTS
- 1 HOOD LATCH
- 1 RADIATOR SUPPORT
- 1 UPPER GRILLE
- 1 LOWER GRILLE
- 1 REFORCMENT FR BUMPE
- 1 FR BUMPER ABSORBER
- 2 HEAD LIGHT ASSY
- 1 PA AC CONDENSOR
- 1 PA OIL COOLER AT
- 1 PA RADIATOR
- 3 ANTIFREEZE

- 2 FR BUMPER RETAINER
- 2 HEADLIGHT BRACKET
- 2 FOG LAMP COVER
- 2 FOG LAMP ASSY

TOTAL COSTS

Labor	6,650.00

Subtotal	6,650.00
Sales tax (8.875%)	590.19

Total	7,240.19
Amount due	7,240.19

I hereby authorize the above repair work to be done. You and your employees may operate the above listed vehicle for the purpose of inspection or delivery at my risk. An express mechanic's lien is acknowledged on the above vehicle to secure the amount of repairs thereto. It is also understood that you will not be held responsible for loss or damage to vehicles or articles left in them in case of fire, theft or any other cause beyond your control.

SIGNED _____



Stephanie Kirk
Direct Phone (469)292-4017

Toyota Motor North America, Inc.
6563 Headquarters Drive
Plano, TX 75024

March 8, 2021

Via e-mail to: [REDACTED]

[REDACTED]
Queens Village, NY [REDACTED]

RE: Date of Loss : December 31, 2020
 Vehicle : 2013 Toyota Highlander
 VIN : 5TDBK3EH3D [REDACTED]

Dear [REDACTED]

Thank you for contacting Toyota's Brand Engagement Center regarding the above-referenced incident. You reported that the Supplemental Restraint System (SRS) front air bags in the 2013 Toyota Highlander did not deploy during an accident.

Toyota Motor North America, Inc. (TMNA) assigned Engineering Analysis Associates (EAA) who performed a thorough inspection and read out the Event Data Recorder (EDR) of your vehicle at the Bayside Auto Care Facility on February 26, 2021. At the time of the inspection some of the vehicle's damaged parts were already removed, and your vehicle had 33,392 miles. The EDR readout indicated the supplemental restraint system SRS airbags in your vehicle were operating properly at the time of the accident. In this incident, the crash forces were not severe enough to cause deployment. There were no Diagnostic Trouble Codes (DTCs) stored in the airbag control module at the time of the crash. The EDR also indicates the airbags were not commanded to deploy in response to this incident.

The inspection revealed that the impact was to the left front area of the vehicle. The left front bumper bar and the left front side member were damaged. There was a lack of rearward deformation to the front of the vehicle. Consistent with the angulation of the impact and the minimal frontal deformation, there was insufficient abrupt frontal deceleration of the vehicle to deploy the supplemental restraint system front airbags. This incident did not meet the criteria for front airbag deployment.

Please understand, the front airbags will deploy in response to abrupt frontal deceleration in severe frontal impacts to help reduce the likelihood of serious head and/or chest injuries, but they will not eliminate all injuries. Furthermore, airbags will not deploy in all accidents but only in certain types of crashes. The seat belts are the primary restraint system, and their purpose is to help provide occupant protection in crashes, while the airbag system is a supplemental restraint system to the vehicle's seat belts. Based on the inspection of the vehicle and EDR readout, we did not find any evidence of a defect relating to your concern.

There is an outstanding open recall on your vehicle that has not been completed: Safety Recall E0H - Remedy Notice. We recommend that you have the recall performed.

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

Sincerely,

A handwritten signature in cursive script that reads "Stephanie Kirk".

Stephanie Kirk
Toyota Motor North America, Inc.









