INFORMATION REDACTED PURSUANT TOTHE FREEDOM
OF INFORMATION ACT (FOIA), 5 U.S.C.552(B)(6)

cl-11485635-1000

OFFICE OF THE ATTORNEY GENERAL
STATE OF ILLINOIS

KWAME RAOUL
ATTORNEY GENERAL

August 15, 2022

National Highway Traffic Safety Administration
1200 New Jersey Avenue, SE
Washington, D.C. 20590

Re: Toyota Motor North America
File No: [redacted]

Dear Sir/Madam:

The Consumer Protection Division of the Attorney General's Office has received a consumer complaint about a business whose practices you may have an interest in reviewing. This complaint is being sent to you for your information and review only and the consumer who filed this complaint with the Illinois Attorney Generai's Office has not been notified that we have copied your office on the attached complaint.

Thank you for your attention.

Sincerely,

ATTORNEY GENERAL
State of Illinois

Jonah Harlan

Jonah Harlan
Citizen's Advocate
Consumer Protection Division
jonah.harlan@ilag.gov

enclosure

Opened Date(Central Standard Time)
7/15/2022
7/15/2022
7/15/2022
7/15/2022
7/15/2022
7/15/2022
7/20/2022
7/20/2022
7/20/2022

Name	Main Assignee	Current Phase
2022-CONSC-00152339-Musicians Friend	Crockett, Cara	Open
2022-CONSC-00152346-Armendariz, Alexis Martinez	Crockett, Cara	Open
2022-CONSC-00152366-Affordable American Air Heating & Cooling	Crockett, Cara	Open
2022-CONSC-00152372-Wine & Spirits of Calumet Park	Crockett, Cara	Open
2022-CONSC-00152385-Mattress Firm	Crockett, Cara	Open
2022-CONSC-00152408-Walgreens *INV	Crockett, Cara	Open
2022-CONSC-00152585-Advance Tree Service LLC	Crockett, Cara	Open
2022-CONSC-00152616-American Home Shield	Crockett, Cara	Open
2022-CONSC-00152633-Jaslin Hotel	Crockett, Cara	Open

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ATTORNEY GENERAL
JUN 28 RECD '22

KWAME RAOUL

Procurador General de Illinois
Departamento de Fraude al Consumidor
100 W. Randolph Street
Chicago, IL 60601

Office Use Only
CLMS: [redacted]
AG: _____

(312) 814-3000 • (866) 310-8398 Español • TTY: 1-877-844-5461
www.IllinoisAttorneyGeneral.gov

SU INFORMACIÓN

Nombre: Sr., Sra., Srita (circule un [redacted]
Dirección: [redacted] CHICAGO IL [redacted]
Ciudad: CHICAGO Estado: IL Código Postal: [redacted] Condado: Cook
Número de Teléfono(s): Día: [redacted]
Correo Electrónico (opcional): [redacted]
¿Es una persona de la tercera edad? [redacted]
¿Quién lo refirió a esta [redacted]

NOMBRE DEL VENDEDOR O PROVEEDOR DE SERVICIO

Nombre: TOYOTA COMPANY NORTH AMERICA INC.
Dirección: 6565 HEADQUARTERS DRIVE PLANO, TX 75024
Ciudad: PLANO Estado: TX Código Postal: 75024
Teléfono: (469) 292-4017
Página de la Red: _____

Nombre de Otro Vendedor o Proveedor de Servicio(s):

Nombre: _____
Dirección: _____
Ciudad: _____ Estado: ____ Código Postal: _____
Teléfono: ( ) _____
Página de la Red: _____

¿Este asunto se ha presentado a otra agencia gubernamental, servicio de arbitraje o a un abogado? [redacted]
Si la respuesta es sí, por favor proporcione el nombre, dirección y número de teléfono.

_____

_____

¿Está alguna acción de corte pendien [redacted]

INFORMACIÓN SOBRE LA TRANSACCIÓN

Fecha de la transacción: 3-15-22

¿Firmó un contrato? ☒ Sí ☐ No

Fecha que firmó el contrato: 3-15-22 (Si la respuesta es sí, provea una copia.)

¿Se anunció el producto? ☐ Sí ☒ No

Si se anunció el producto, ¿cuando lo vio? _____

(Si es posible, provea una copia del anuncio.)

¿Cómo se anunció el servicio?

- ☐ Periódico/Revista
- ☐ Anuncio de la Radio
- ☐ Anuncio de Televisión
- ☐ Anuncio de la Internet
- ☐ Solicitación por Correo Electrónico
- ☐ Solicitación Directa por Correo
- ☐ Solicitación Telefónica
- ☐ Páginas Amarillas de Libro Telefónico
- ☐ Solicitación de Fax
- ☐ Solicitación de Puerta-en Puerta
- ☐ Exhibición en el Lugar de Negocio
- ☐ Exhibición en una feria de muestras/convención, etc.
- ☐ Otro (por favor especifique) FUE ACCIDENTE DE AUTO Y LOS AIRBAGS NO FUNCIONARÓN Y NO HAY CONSISTENCIA EN ALGUNOS ASPECTOS COMO A QUE VELOCIDAD FUNCIONAN Y A QUE VELOCIDAD FUE EL IMPACTO

Costo total de producto/servicio: $ IDK

Cantidad pagada hasta la fecha/enganche/depósito: $ _____

Método de pago (circule uno): (Adjunte copia.)

- ☐ Efectivo ☐ Cheque ☐ Giro Postal
- ☐ Tarjeta de Crédito ☐ Tarjeta de Débito ☐ Cheque de Banco
- ☐ Giro Bancario ☐ Débito Automático ☐ Otro (por favor especifique) COSTO DEL VEHICULO CUANDO LE ADAMID

¿Si usted pagó con una tarjeta de crédito, se ha comunicado con la compañía de su tarjeta de crédito para registrar la disputa? ☐ Sí ☒ No

(Bajo la Acta Federal de Cobro de Crédito Justos, usted tiene 60 días desde la fecha que usted recibió su estado mensual para disputar el cargo.)

¿Donde se llevo a cabo la transacción?

- ☐ En mi casa
- ☒ Por teléfono
- ☒ Por correo
- ☒ Por la Internet
- ☐ Feria de muestras/convención/demostración
- ☐ En el lugar de negocio
- ☐ Por fax
- ☐ Otro (por favor especifique) TOYOTA MOTOR NORTH AMERICA INC
- ☒ No ocurrió una transacción ES UN RECLAMO. RESPONSABILIDAD DE PRODUCTO

#ZAMIGUEL RAMIREZ TOYOTA BRAND ENGAGEMENT CENTER → 1800 331-4331

¿Usted se ha quejado con la compañía o individuo? ☒ Sí ☐ No

Si lo ha hecho, provee el nombre y el número de teléfono del individuo(s): VICTOR #1 TOYOTA CLAIM. CASE [redacted] JIM KLINK INVESTIGADOR TOYOTA 224-242-4669 KIMBERLY 586-578-7366 ENCARGADA DEL CASO Y STEPHANIE KIRK 469-292-4017 TOYOTA MOTOR NORTH AMERICA INC. DETERMINO QUE NO FUE UN ACCIDENTE FUERTE.

PARA USO DE QUEJAS RELACIONADAS CON VEHÍCULOS:

Marca: TOYOTA

Modelo: SEQUOIA SR5 2006

Año: 2006

Fecha de compra: NOV. 2006

Millaje actual: 168.033

Millaje en la compra: NUEVO DE AGENCIA 00

Nuevo: ☒ Sí ☐ No

"As-Is": ☐ Sí ☐ No

Garantía: ☒ Sí ☐ No

Si tiene garantía, fecha de expiración: N/A.

Nombre de garantía extendida: _____

ADICIONALMENTE LLAME OTRA VEZ POR QUE PEDI HABLAR CON UN SUPERVISOR PERO NO RECIBI MENSAJES O EMAILS NADA. LUEGO INSISTI POR ULTIMA VEZ EL DIA JUEVES 27 11:29 AM HABLE CON ALEXIS Y LUEGO LE PASO A SAMANTHA QUE LE DIJO QUE AQUI NO SABE A QUE VELOCIDAD SE DESPLIEGAN LOS AIRBAGS Y QUE NO LE PODIA AYUDAR POR QUE TENIA QUE LLAMAR A LA PERSONA QUE LLEVA EL CASO EN FIN NADIE SABE NADA.

Brevemente describa la transacción y su queja.
Puede usar hojas adicionales si es necesario.
Por favor adjunte copias de todos los contratos, cartas, recibos, cheques cancelados, o cualquier otro documento relacionado con su queja.
POR FAVOR NO ENVIE LOS ORIGINALES. MI HIJA TUVO UN ACCIDENTE EL 3-12-2022 EN LA 3113 N. LAKE SHORE DRIVE. EL IMPACTO FUE FUERTE AL EXTREMO QUE DESAPARECIÓ Y DESPRENDIÓ LA PARTE FRONTAL DEL VEHÍCULO TOYOTA SEQUOIA 2006 PLACAS [redacted] A LAS 3:30AM DONDE EL IMPACTO FUE MUY FUERTE Y NO SE DESPLEGARON LAS AIRBAGS CAUSANDO CONTUSIONES A MI HIJA A LA VEZ CAUSANDO DUDAS DE POR QUÉ NO FUNCIONARON, SEGÚN LA COMPAÑÍA TOYOTA DESPUÉS DE REVISAR LA CAJA NEGRA DETERMINARON TODOS LOS EFECTOS DEL ACCIDENTE EXCEPTO A QUÉ VELOCIDAD COLISIONÓ. Y QUE SEGÚN ELLOS EL IMPACTO NO FUE FUERTE, PERO ELLOS NO SABEN A QUE VELOCIDAD FUE, HE INCLUSO "NO SABEN" A QUE VELOCIDAD SE DEBEN DESPLEGAR SEGÚN LA IIHS-HLDI SI LA FRONTAL SE ACTIVAN A 100 12 MILLAS INCLUSO SIN CINTURÓN POR PROTECCIÓN A LOS PASAJEROS Y CONDUCTOR ASIMISMO ESTOS VEHÍCULOS TUVIERON RECALL DE AIRBAGS
¿Que forma de recompensa está buscando? (Por ejemplo, devolución, reparación, reembolso de dinero, entrega de producto, etc.) REEMPLAZO DE UN VEHÍCULO QUE SEA DE LAS MISMAS CARACTERÍSTICAS Y CON TODAS LAS GARANTÍAS DE SEGURIDAD QUE EXISTE UN VEHÍCULO LA INDEMNIZACIÓN POR FUTUROS EFECTOS DE ACCIDENTE CAUSADOS A MI HIJA.

LEA LO SIGUIENTE ANTES DE FIRMAR:

Al presentar esta queja, yo entiendo que la Procurador General no es mi abogada privada, sino que representa al público para hacer cumplir leyes creadas para proteger al público contra prácticas comerciales engañosas o ilegales. También sé que si tengo alguna pregunta en relación con mis responsabilidades o derechos legales, debo ponerme en contacto con un abogado privado. No tengo ningún inconveniente u objeción a que el contenido de esta queja se envié al negocio o persona contra quien se dirige la queja, a lo menos que lo indique en la caja abajo. La queja indicada arriba es verdadera y exacta, a mi mejor saber y entendimiento.

Firma: [redacted] Fecha: 6-28-22

☐ Indique aquí si solo quiere notificar a nuestra oficina de su queja y no quiere que se inicie un proceso de mediación.

Por favor regrese la forma completa a la dirección proporcionada en esta forma.
Formas no completas pueden ser regresadas.

ASI QUE LA COMPANIA DESESTIMO EL CASO Y DIJERON QUE NO PROCEDE EL RECLAMO, TALVEZ ESPERAN MUERTES PARA PONER ATENCIÓN.

ADJUNTO INFORMES DE LA PAGINA WEB DE LA INSTITUCIÓN EN ILLINOIS ACERCA DE A QUÉ VELOCIDAD SE DEBEN ACTIVAR LOS AIRBAGS, ASÍ MISMO TOMANDO EN CUENTO QUE LA VELOCIDAD EN LAKE SHORE DRIVES ES DE 45 MPH. / LA INSTITUCIÓN SE LLAMA LA IIHS. ESTA INFORMACION ES VITAL PARA EVITAR FUTUROS ACCIDENTES SIN PROTECCIÓN A TOYOTA COMPANY HACE CASO OMISO A ESTAS ADVERTENCIAS Y CARECEN DEL CONOCIMIENTO BASICO DE A QUE VELOCIDAD SE DEBEN ACTIVAR LAS AIRBAGS.

ADJUNTO FOTOS DEL VEHICULO. ADEMAS EL CARRO SE DETERMINO PERDIDA TOTAL Y PARA COMPRAR UN VEHICULO DE LAS MISMAS CARACTERISTICAS SON MUY CAROS. POR LO TANTO SOLICITO COMPENSACIÓN PARA MI HIJA POR FUTUROS TRAUMAS Y EFECTOS SECUNDARIOS A CAUSA DE ESTE ACCIDENTE Y EL REMPLAZO DE UN VEHICULO DE LAS MISMAS CARACTERISTICAS CON TODOS LOS REQUERIMIENTOS DE SEGURIDAD POR EL CUAL COMPRAMOS ESE VEHICULO POR LA ATENCION A ESTA CARTA ANTICIPO MIS AGRADECIMIENTOS

ADEMAS ESTE VEHICULO SOLO FUE UN SOLO DUEÑO EN ESTE CASO YO Y LUEGO SE LA REGALE A MI HIJA NO HUBO OTROS DUEÑOS MAS QUE NUESTRA FAMILIA

GRACIAS

NOTA: ADJUNTO MAS DE 45 FOTOS.

IIHS HLDI

Airbags

Airbags are one of the most important safety innovations of recent decades.

- Airbags provide crucial cushioning for people during a crash. They're normally hidden but inflate instantly when a crash begins.
- Front airbags have been required in all new passenger vehicles since the 1999 model year.
- Side airbags aren't specifically mandated, but nearly all manufacturers include them as standard equipment in order to meet federal side protection requirements.

Both front and side airbags save lives.

- Front airbags reduce driver fatalities in frontal crashes by 29 percent and fatalities of front-seat passengers age 13 and older by 32 percent (*Kahane, 2015*).
- Side airbags that protect the head reduce a car driver's risk of death in driver-side crashes by 37 percent and an SUV driver's risk by 52 percent (*McCartt & Kyrychenko, 2007*).

Engineers keep finding new ways to use airbags.

- Rear-window curtain airbags are designed to protect people in back seats in rear-end crashes.
- Far-side airbags keep drivers and front-seat passengers from hitting each other in a crash.
- Inflatable safety belts are aimed at reducing rear-seat chest injuries.

How front and side airbags work

Airbags are inflatable cushions built into a vehicle that protect occupants from hitting the vehicle interior or objects outside the vehicle (for example, other vehicles or trees) during a collision.

The instant a crash begins, sensors start to measure impact severity. If the crash is severe enough, the sensors signal inflators to fill the bags with gas in a fraction of a second.

Airbags don't typically require maintenance unless they deploy in a crash. In that case, they must be replaced at a repair shop that uses original equipment manufacturer (OEM) replacement parts to ensure that the new airbag is not counterfeit. Counterfeit airbags may fail to deploy or release metal shrapnel during deployment.

Front airbags

Since the 1999 model year, the federal government has required automakers to install driver and passenger airbags for frontal impact protection in all cars, light trucks and vans.

Front airbags are designed to inflate in moderate to severe frontal crashes to prevent a person's head and chest from contacting hard structures in the vehicle.

They offer the most protection when occupants are wearing safety belts and sitting properly in the seat but are designed to provide protection for all occupants.

Newer airbags have a safety belt sensor and use an algorithm to decide whether to deploy the bag in a given crash, depending on whether people are using safety belts.

Typically, a front airbag will deploy for unbelted occupants when the crash is the equivalent of an impact into a rigid wall at 10-12 mph. Most airbags will deploy at a higher threshold — about 16 mph — for belted occupants because the belts alone are likely to provide adequate protection up to these moderate speeds.

Front airbags may deploy to help protect occupants in side impacts if there is sufficient forward movement during the crash.

The driver airbag is located in the steering wheel. The passenger airbag is located in the dashboard.

Front dual airbag system

Knee airbag *(BMW)*

Some manufacturers provide supplemental knee airbags, mounted lower. Knee airbags are intended to distribute impact forces to reduce leg injuries. They may also help reduce forces on an occupant's chest and abdomen by controlling movement of the occupant's lower body.

Side airbags

Head- and chest-protecting side airbags are designed to inflate in side crashes to prevent people's heads and chests from contacting intruding parts of vehicle side structure, a striking vehicle or an object such as a tree or pole. Side airbags cushion and spread the load of impacts to prevent any part of the body from sustaining concentrated impact forces.

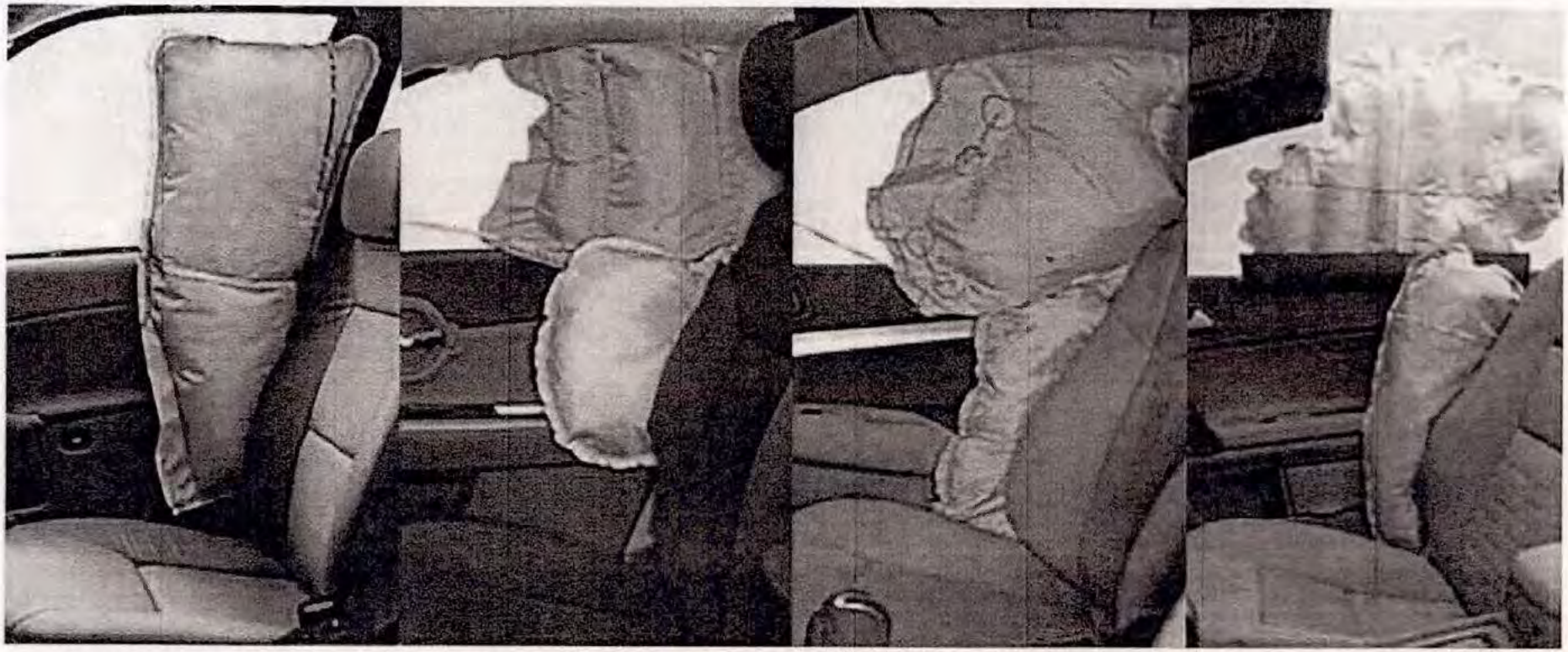
A head-protecting side airbag is particularly important because it may be the only thing between the occupant's head and the striking vehicle, since window glass can shatter in a crash.

Because of the small space between an occupant and the side of the vehicle, side airbags must deploy very quickly, typically within the first 10-20 milliseconds of a side crash. Deployment thresholds can be as low as 8 mph for narrow object crashes (e.g., trees and poles) and 18 mph for the more widely distributed side impacts (vehicle-to-vehicle crashes). Side airbags also deploy in certain types of frontal crashes.

A federal regulation on side-impact protection requires a certain level of head and torso protection for all occupants. While it doesn't specifically mandate side airbags, the required protection is typically achieved with them. As of the 2014 model year, virtually all new passenger vehicles must comply with this regulation. As a result, the vast majority of passenger vehicles come with side airbags as standard equipment.

A head-protecting curtain airbag is often the only barrier between the dummy's head and the striking vehicle.

Different types of side airbag systems



A combination airbag, deploying from the seatback, provides protection for the head and torso.

A head-protecting curtain airbag, which deploys from the roof rail, and a seat-mounted torso-protecting airbag

A head-protecting curtain airbag and seat-mounted torso and pelvis-protecting airbag

A head-protecting curtain airbag deploying from the door and seat-mounted torso and pelvis-protecting airbag

Rollover deployment of side airbags

Side curtain airbags can be designed to deploy in a rollover crash. Sensors that measure a vehicle's sideways movement and tilting can detect if a rollover is about to occur, triggering deployment. These airbags typically inflate within the first 10-20 milliseconds of a rollover crash and can remain inflated longer than regular side curtain airbags (10 or more seconds) to protect during multiple-roll crashes. They typically cover the window opening and inflate more stiffly to prevent ejection of the occupant.

The government doesn't specifically require side curtain airbags with this capability, but automakers have been using them to meet a requirement that all 2018 or newer vehicles prevent occupant ejection through side windows.

A side curtain airbag used to meet the federal safety standard to prevent occupant ejection remains inflated for more than 10 seconds, covering multiple rolls of the vehicle, and keeps occupants contained inside.

Lives saved by airbags

NHTSA estimates that as of 2017, 50,457 lives have been saved by frontal airbags (*National Center for Statistics and Analysis, 2020*).

In frontal crashes, front airbags reduce driver fatalities by 29 percent and fatalities of front-seat passengers age 13 and older by 32 percent (*Kahane, 2015*). NHTSA estimates that the combination of an airbag plus a lap and shoulder belt reduces the risk of death in frontal crashes by 61 percent, compared with a 50 percent reduction for belts alone and a 34 percent reduction for airbags alone.

NHTSA estimates that as of 2012, 2,252 lives have been saved by side airbags (*Kahane, 2015*).

Side airbags with head protection reduce a car driver's risk of death in driver-side crashes by 37 percent and an SUV driver's risk by 52 percent *(McCartt & Kyrychenko, 2007)*.

A study of crashes in Australia found that side airbags with head and torso protection reduce a car driver's risk of death or injury in driver-side crashes by 41 percent (*D'Elia et al., 2013*). Similar trends were found in a NHTSA study focusing on the fatality risk to drivers and right-front-seat passenger vehicles involved in nearside crashes. Curtain airbags and torso airbags together reduce the risk of death by 31 percent, and combination head/torso airbags reduce the risk by 25 percent (*Kahane, 2014*). The death reduction was lower in vehicles equipped only with a curtain airbag (16 percent) or only with a torso airbag (8 percent).

The crucial role played by head-protecting side airbags is illustrated by the results of IIHS side crash tests. Since the program began in 2003, all the vehicles earning good ratings have been equipped with side airbags that protect the head. However, airbags alone aren't enough. Vehicles also need side structures that resist major intrusion into the occupant compartment.

Airbag injuries

Occasionally, the energy required to quickly inflate airbags can cause injury to people sitting or thrown too close to the airbag before it deploys. This was a serious concern with the first generations of frontal airbags, which deployed with greater force.

NHTSA estimates that during 1990-2008, more than 290 deaths were caused by frontal airbag inflation in low-speed crashes (*National Center for Statistics and Analysis, 2017*). Nearly 90 percent of the deaths occurred in vehicles manufactured before 1998, and more than 80 percent of people killed were unbelted or improperly restrained. Most of the deaths were passengers, and more than 90 percent of those were children and infants, most of whom were unbelted or in rear-facing child safety seats that placed their heads close to the deploying airbag. Short and elderly drivers, who tend to sit close to the steering wheel, also were vulnerable to inflation injuries from frontal airbags.

Today, thanks to changes in government requirements, serious injuries from properly functioning airbags are rare.

The changes came in two phases. In the first, federal rules were modified to encourage automakers to reduce the energy in front airbags. Depowering began with 1998 models. Later, NHTSA issued a certified-advanced airbag rule that required more sophisticated airbags in all passenger vehicles by the 2007 model year.

Advanced airbags modify deployment patterns if weight sensors detect a small driver or front-seat passenger or a child safety seat. Manufacturers must pass a suite of tests using different-size dummies, belted and unbelted, in a variety of crash test speeds and configurations.

Side airbags also can deploy with enough energy to cause injury, although they typically are smaller and deploy with less energy than frontal airbags. Injuries from contact with side airbag inflations in crashes have been documented (*Kahane, 2015*), but there is no indication that such injuries are common. A field study of children in side crashes found no increased risk of injury to children age 15 and younger associated with side airbag deployment (*Arbogast & Kallan, 2007*).

Faulty airbags also can injure people. The government issues recalls for vehicles with faulty airbag systems that result in increased risk of injury in a crash. Reasons can include failure to deploy, incorrect timing or energy of deployments, and defective parts. Recalled airbags should be replaced to ensure that occupants receive the optimal level of protection in a crash.

Consumers can find information on recalls affecting their vehicles in the NHTSA recall database. The database also has information on service centers that are authorized to repair recalled vehicles free of charge.

The Takata airbag recall, which began in 2015, is the largest recall in U.S. history, with an estimated 70 million vehicles to be recalled by 2019. The problem that prompted the recall has been tied to 15 confirmed deaths in the U.S. and more than 250 reported injuries.

- IIHS-HLDI advisory: A look at the Takata airbag recalls

What can occupants do to prevent injuries from airbags?

- **Drivers and front-seat passengers should sit in the center of the seat upright against the seatback with feet on the floor.**
- **Arms and legs should never be resting against an airbag** because the forces of a deploying airbag and the hot gases exhausted by the airbag may cause injury.
- **Avoid aftermarket dash or seat covers**, which can block or redirect a deploying airbag.
- **Drivers should sit with their chests at least 10 inches away from the center of the steering wheel.** Shorter drivers who need the seat positioned further forward can often achieve this by slightly reclining the seatback. Many newer airbags take into account seat position and deploy with less force if an occupant is sitting close. For drivers of older vehicles who cannot get far enough away from the steering wheel, pedal extenders or an airbag on-off switch may be an option.
- **Young children should sit in the rear seat.** If a child does need to ride in the front seat, the seat should be as far back as possible and the child should be securely buckled in a lap/shoulder belt and sitting against the seatback.

Children shouldn't lean against the door area where the side airbag is stored because the initial deployment force may be harmful. With or without an airbag, children who lean against doors or lie down with their heads near the doors or sides of vehicles are at higher risk of injury in the event of a side impact.

For women in the late stages of pregnancy, a combination of properly positioned safety belts and airbags offers the best protection. Like other drivers, pregnant drivers should ensure their abdomens are at least 10 inches from the steering wheel. The lap belt should be positioned high on the thighs (ideally on pelvic bones), below the soft part of the abdomen.

Airbag innovations

As technology advances, manufacturers are finding new ways to integrate airbags into vehicles.

Inflatable seat belts

In 2011 Ford rolled out an inflatable seat belt aimed at reducing rear-seat injuries. The inflatable seat belt is intended to enhance protection for adults and for children using booster seats or seat belts alone. In a crash, the shoulder belt inflates, distributing crash forces across the torso and chest.

The inflatable belts are currently available as optional equipment in the outboard second-row seating positions of several Ford and Lincoln vehicles. The Mercedes-Benz S-Class comes with standard inflatable belts.

Ford inflatable seat belt *(Ford Motor Company)*

Far-side airbag

Also known as the front-center airbag, the far-side airbag is designed to prevent front passengers from colliding with each other during side-impact crashes and to maintain occupant position in far-side or rollover crashes. General Motors was the first to introduce the front-center airbag in 2013.

Toyota has developed a similar concept aimed at rear-seat passenger protection that deploys from the rear row's center console.

In 2020, EuroNCAP introduced a new side crash test to promote far-side airbags. A far-side airbag is currently available on the Chevrolet Traverse, GMC Acadia, Buick Enclave, Genesis G80 and Genesis GV80.

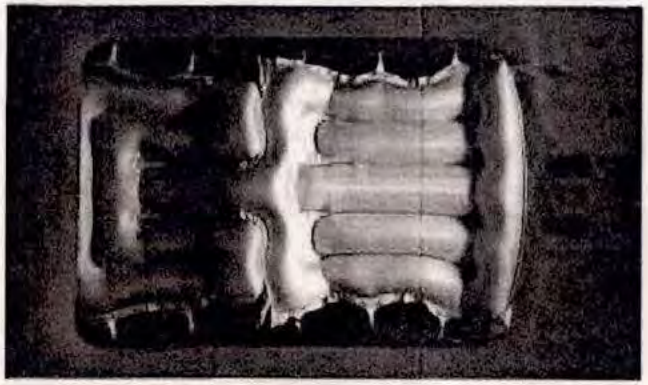
GM far-side airbag *(GM press release)*

Panoramic sunroof airbag

In 2017, Hyundai Mobis, an automotive supplier, introduced the first panoramic roof curtain airbag. It is intended to prevent ejection of occupants through the sunroof during rollovers.

NHTSA has identified 260 occupants ejected through sunroofs from 2000-2015 and the problem is expected to grow as panoramic sunroofs become more popular.

Many design challenges delayed the implementation of these kinds of airbags in vehicles. The airbag must properly deploy with the sunroof open or closed and be stored in the headliner without interfering with headroom or visibility.



Hyundai Mobis sunroof airbag *(Hyundai press release)*

Seat cushion airbag

Seat cushion airbags are designed to reduce forces on an occupant's chest and abdomen by controlling movement of the occupant's body. Currently, the Toyota Yaris comes equipped with a seat cushion airbag.

Seat cushion airbag *(Toyota press site)*

Rear seat airbag

Rear seat airbags are being developed to provide head protection for rear passengers. Rear seat airbags are located in the back of the front seat and deploy with less force than traditional airbags. They are only partially inflated, unlike normal, full-powered airbags, so even if the airbags contact objects or child seats, they deflect instead of striking them. Mercedes-Benz is planning to introduce this optional airbag on the next generation of S-Class.

Consent Letter for Inspection

Final Audit Report 2022-03-15

Created:	2022-03-15
By:	Toyota Brand Engagement Center (toyota_cec@toyota.com)
Status:	Signed
Transaction ID:	[redacted]

"Consent Letter for Inspection" History

Document created by Toyota Brand Engagement Center (toyota_cec@toyota.com)
2022-03-15 - 2:21:34 PM GMT- IP address: 13.110.14.8

Document emailed to [redacted]) for signature
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2022-03-15 - 2:21:53 PM GMT- IP address: 98.206.45.17

Document e-signed by [redacted]
Signature Date: 2022-03-15 - 2:24:54 PM GMT - Time Source: server- IP address: 98.206.45.17

Agreement completed.
2022-03-15 - 2:24:54 PM GMT

TOYOTA

TOYOTA

March 15, 2022

[redacted]
CHICAGO, IL [redacted]

Dear [redacted]:

Thank you for taking the time to share your experience with me. As we discussed, based on your concerns, Toyota would like the opportunity to inspect your SEQUOIA, Vehicle Identification Number (or "VIN") 5TDBT44A2[redacted]

To complete the inspection, we will need your written consent to download data from the vehicle's Event Data Recorder, as well as any other available computer memory associated with the vehicle. This data helps explain the dynamics of a crash and assists future efforts to improve vehicle safety. Please electronically sign the Toyota EDR consent form below.

After you electronically sign the Toyota EDR consent form, a representative will contact you within five (5) business days from receipt of the signed form to coordinate an inspection date.

The inspection will take place within 30 business days and expect a response in about 30 business days after the vehicle is inspected. As a reminder, to minimize the potential need to reschedule, we will not schedule the inspection until your completed consent form has been received.

Please note that due to the effects of the COVID-19 pandemic, the situation is changing daily, and any of these steps may be delayed. Specific restrictions from state and local governments and limited dealer operations may apply in your area, which could also affect the inspection timing and processing of results.

If you require further assistance, please contact us directly at 800-331-4331. Our hours of operation are Monday through Friday from 8:00 a.m. – 8:00 p.m. ET, and Saturday from 9:00 a.m. – 7:00 p.m. ET. Your contact has been documented at Toyota Headquarters under your name and case number [redacted]

Sincerely,

Miguel Ramirez
Toyota Brand Engagement Center

Note: All registered owners are required to sign the EDR consent form for customers residing in Oregon or Arkansas. A separate Adobe link will be sent to each registered owner

Toyota Motor Sales, U.S.A., Inc.
Brand Engagement Center
P.O. Box 259001
Plano, TX 75025-9001

TOYOTA

IMAGING AUTHORIZATION AND CONSENT
(Electronic Data)

I am the "owner" (a person having all the incidents of ownership, including legal title, of a motor vehicle, whether or not the person lends, rents, or creates a security interest in the motor vehicle; a person entitled to the possession of a motor vehicle as the purchaser under a security agreement; or a person entitled to possession of a motor vehicle as a lessee pursuant to a written lease agreement for a period of more than three months) of the 2006 Model Year Toyota / Lexus / Scion SEQUOIA, VIN 5TDBT44A26S[redacted] (the "Subject Vehicle").

I hereby authorize Toyota Personnel, Toyota's authorized representatives, and Toyota or Lexus Dealership employees, to obtain electronic data recorded by the Subject Vehicle (including, if equipped, recordings of images outside the vehicle) or computer memory related to the Subject Vehicle.* In doing so and to the extent permitted by law, I acknowledge and agree voluntarily to waive any privacy rights in the disclosure of information or data obtained from or relating to the Subject Vehicle.

[redacted] _____

Printed Name of Owner

[redacted] _____

Signature

* Please refer to your vehicle's Owner's Manual and to www.toyota.com/privacyvts/ for additional information and resources pertaining to your personal information and vehicle data that we collect, use, store, share and secure. California residents may also refer to https://www.toyota.com/support/california-privacy for additional information regarding their privacy rights.

Toyota Motor Sales, U.S.A., Inc.
Brand Engagement Center
P.O. Box 259001
Plano, TX 75025-9001

9:49

jim.klink@LIVE.COM

To: You [redacted]

Tuesday, March 29, 9:15 PM

EDR FAQ_2.0
PDF - 84 KB

5TDBT44A26S[redacted]
cdrx - 29 KB

3 attachments (242 KB)

To [redacted],

The inspection of your vehicle has been completed and data uploaded to Toyota.

Enclosed are the files we discussed that were downloaded from your vehicle. One file (*.CDRx) is the raw data but is unreadable without special software. The other file (*.PDF) is a duplicate of the first but in a format easily read with free software such as Adobe reader and one file is a short explanation file from Toyota.

Toyota will contact you directly regarding their determination once they analyze the data. If you have any questions, please contact your Toyota Case Manager at (800) 331-4331 and reference Case [redacted]

Reply to All

Mail Search Calendar

9:50

Enclosed are the files we discussed that were downloaded from your vehicle. One file (*.CDRx) is the raw data but is unreadable without special software. The other file (*.PDF) is a duplicate of the first but in a format easily read with free software such as Adobe reader and one file is a short explanation file from Toyota.

Toyota will contact you directly regarding their determination once they analyze the data. If you have any questions, please contact your Toyota Case Manager at (800) 331-4331 and reference Case [redacted]

Respectfully,

Jim Klink
Automotive Forensic and Fire Investigator
Engineering Analysis Associates

p 224.242.4667
e Jim.Klink@live.com

[redacted]

Mar 30

Reply to All

Mail Search Calendar

Event Data Recorder – Reference Document

An Event Data Recorder (EDR) is a part of the Supplemental Restraint System (SRS) control unit that records data for certain types of collision events. The EDR will record data (an 'event') when the vehicle experiences a rapid change in speed or acceleration that exceeds a specified threshold. This threshold to start recording is above changes in speeds or acceleration that are considered normal driving use. For example, hard braking would not cause a recording, but hitting a curb may cause a recording. Please note that an airbag deployment is <u>not</u> needed to record an event. EDRs were installed on Toyota/Lexus/Scion ('Toyota') vehicles because they can assist in vehicle development, quality control and safety research. In addition to providing factual information about vehicle performance, EDRs can also help to understand the circumstances surrounding a crash.

Toyota began installing EDRs into certain vehicle models beginning in 2000. Today all Toyota models sold in the U.S. are equipped with an EDR. (Passenger vehicles sold by all other major manufacturers also are equipped with EDRs as well.) The installation and advancement of Toyota's EDRs has been evolutionary over the years, with variations in its performance and design depending on the particular model. Initially, Toyota's EDR only captured front impact information, and it has since expanded to include rollover events and side impact events. The first few pages of the EDR report provide additional explanation relating to the capabilities and definitions of the EDR. Generally speaking, the various types of information that the EDR may include are:

- Type and number of events recorded by the EDR
- Directionality and magnitude of the events recorded
- Airbag deployment information
- Airbag diagnostic information
- Front seat belt condition (buckled or unbuckled)
- 'Pre-crash' data (explained further below)

Prior to 2010, only certain vehicles were equipped with 'pre-crash' data, but by 2010, all model's EDRs had pre-crash data. Pre-crash data is data that has been retained for approximately 5 seconds prior to the event. This can help understand the event in more detail, by providing information that led up to the event.

EDR - Frequently Asked Questions

Are EDRs required in cars? Although not required, there are federal regulations specifying that those which are in vehicles meet certain requirements. The purpose of the regulation is to help ensure that EDRs record, in a readily usable manner, data valuable for effective crash investigations and for analysis of safety equipment performance. These data will help provide a better understanding of the circumstances in which crashes and injuries occur and will lead to safer vehicle designs.

Is the EDR a 'black box'? No, the automobile 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 black box. The EDR is simply part of the Supplemental Restraint System (SRS) control unit that can only record certain vehicle sensor data for a short period of time before or during a collision.

Why were EDRs installed in Toyota/Lexus/Scion vehicles? EDRs serve several purposes, including assisting in vehicle development, quality control, and safety research. Airbag deployment occurs very rapidly and EDRs provide factual data relating to airbag deployment. Although other 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.

How accurate is the EDR data? Studies have shown that Toyota EDRs are reliable and accurate.

What has Toyota done to validate its EDRs? Toyota has been analyzing data from vehicles since EDRs were first introduced to help ensure the reliability of the EDR technology.

How does the EDR record information? During vehicle operation, the EDR continuously records certain vehicle sensor data. If an event is triggered, the data is then saved by the EDR.

How is an event stored in the EDR? The EDR is able to record multiple events. When the event records are full, the EDR can continue to record over prior events, retaining only data from the most recent events. However, if an airbag deploys, the EDR data is locked (frozen) and cannot be erased or overwritten.

Why is a signed consent form requested by Toyota before Toyota will read out the data? Toyota's practice is to obtain written consent prior to reading out the EDR. Certain states have privacy regulations that require consent before reading out the EDR data.

How is EDR data retrieved and does the retrieval process affect/change the data contained in the EDR? Depending on the vehicle's condition, typically the data can be imaged in one of two ways. The EDR tool is either connected through the vehicle's diagnostic port, or the EDR tool is connected directly to the SRS control unit. Neither method alters or erases EDR data during the process. In some rare circumstances, such as severe damage or fire to the vehicle, the EDR data may not be able to be imaged.

What is the difference between vehicle speed and delta V? Vehicle speed is obtained from the vehicle's wheel speed sensors. Delta V refers to the change in vehicle speed that is calculated from accelerometer data over a period of time, and is usually shown as longitudinal, lateral or total delta V.

Why can't the EDR tool operator interpret the EDR data for the customer? Crashes can be very complex events. The EDR report is just one piece of information; without knowing other information, the EDR data could be misinterpreted within the context of the overall crash.

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

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	5TDBT44A26S[redacted]
User	BOSCH EAA
Case Number	[redacted]
EDR Data Imaging Date	03/28/2022
Crash Date	03/12/2022
Filename	5TDBT44A26S[redacted]ACM.CDRX
Saved on	Monday, March 28 2022 at 10:03:09
Imaged with CDR version	Crash Data Retrieval Tool 21.4.1
Imaged with Software Licensed to (Company Name)	Engineering Analysis Associates
Reported with CDR version	Crash Data Retrieval Tool 21.4.1
Reported with Software Licensed to (Company Name)	Engineering Analysis Associates
EDR Device Type	Airbag Control Module
Event(s) recovered	Front/Rear (3), Rollover (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 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 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.
- 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 determing 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:

- 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_r028

System Status at Time of Retrieval

ECU Part Number	89170-0C142
ECU Generation	02EDR
Recording Status, All Pages	Complete
Diagnostic Trouble Codes Exist	No
Total Number of Front/Rear Crash Events	3
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 2)
1st Prior Frontal/Rear Event	2	Front/Rear Crash	-280	Complete (Front/Rear Page 1)
Prior Frontal/Rear Event	1	Front/Rear Crash	-580	Complete (Front/Rear Page 0)

Side/Rollover Event Record Summary at Retrieval

Events Recorded	Recording Status
Rollover	Complete

System Status at Front Airbag Deployment

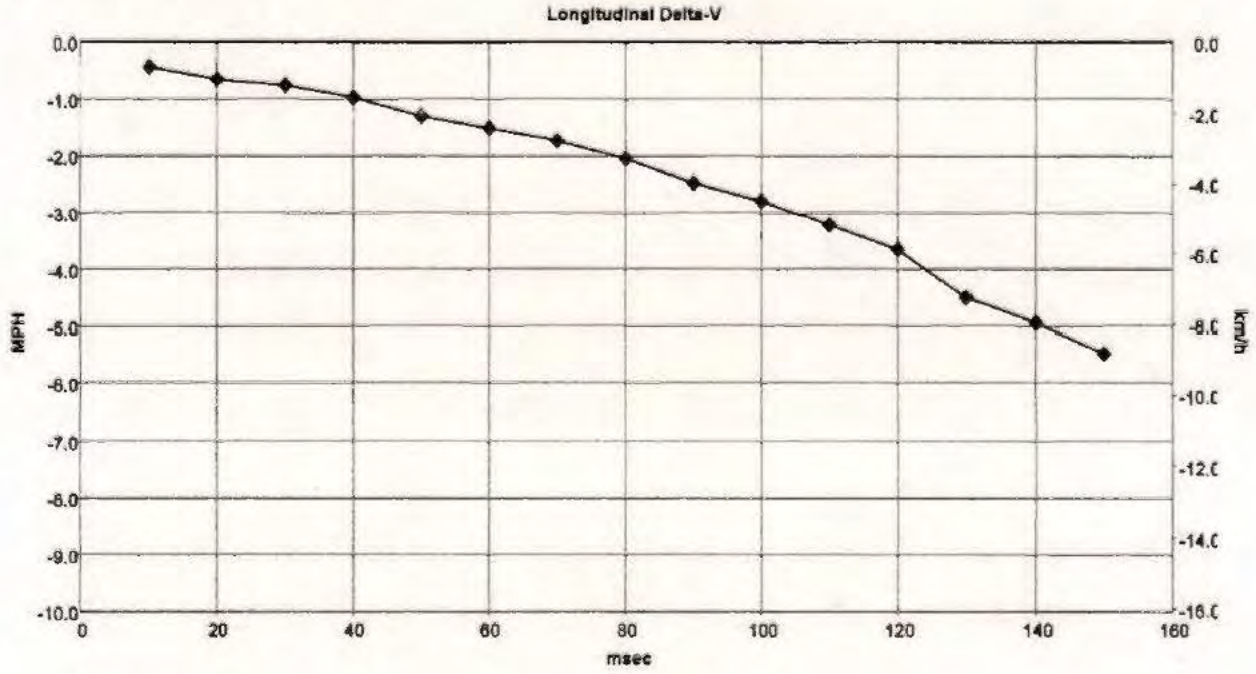
Time to Deployment Command, Front Airbag, Driver (msec)	Not Commanded
Time to Deployment Command, Front Airbag, Passenger (msec)	Not Commanded
Event Severity Status, Driver	N/A
Event Severity Status, Passenger	N/A

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)	280
Buckle Switch, Driver	Unbuckled
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])	-5.5 [-8.8]



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	-0.6 [-1.0]
30	-0.8 [-1.2]
40	-1.0 [-1.6]
50	-1.3 [-2.1]
60	-1.5 [-2.4]
70	-1.7 [-2.8]
80	-2.0 [-3.3]
90	-2.5 [-4.0]
100	-2.8 [-4.5]
110	-3.2 [-5.2]
120	-3.6 [-5.9]
130	-4.5 [-7.2]
140	-4.9 [-7.9]
150	-5.5 [-8.8]

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

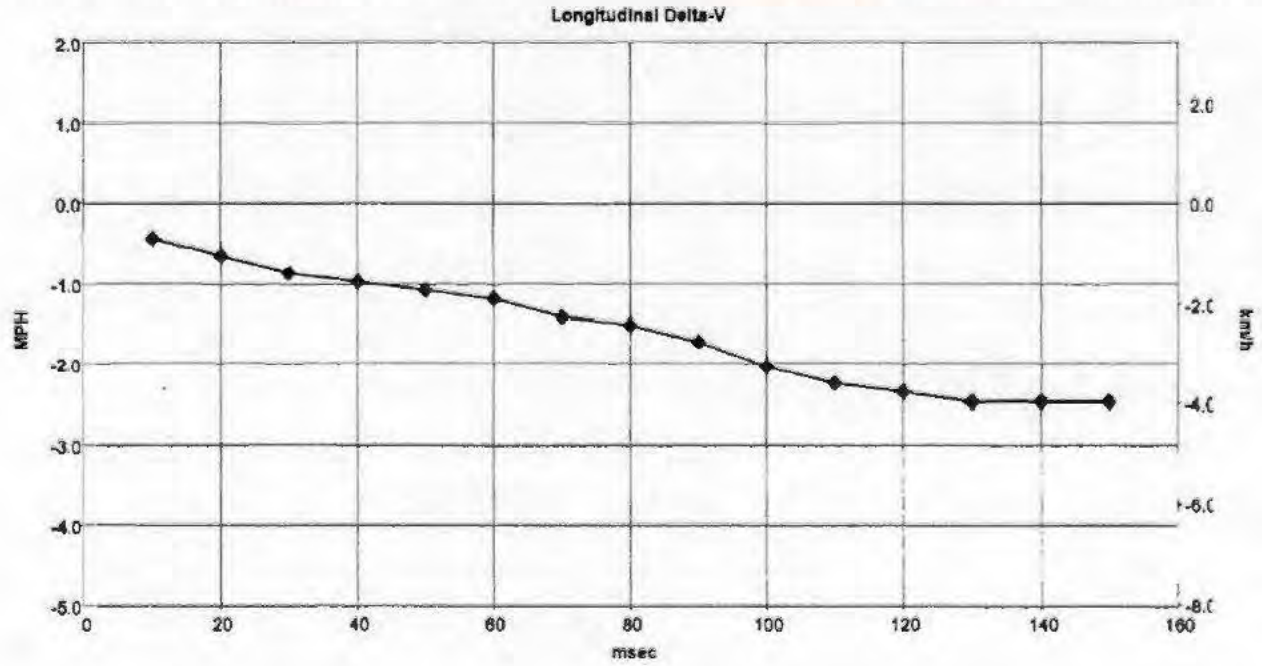
Ignition Cycle Since DTC was Set (times)	0
Airbag Warning Lamp ON Time Since DTC was Set (min)	0
Diagnostic Trouble Codes	None

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)	300
Buckle Switch, Driver	Unbuckled
Buckle Switch, Passenger	Unbuckled
Occupancy Status, Passenger	Not Occupied
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])	-2.5 [-4.0]



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	-0.6 [-1.0]
30	-0.9 [-1.4]
40	-1.0 [-1.6]
50	-1.1 [-1.7]
60	-1.2 [-1.9]
70	-1.4 [-2.2]
80	-1.5 [-2.4]
90	-1.7 [-2.8]
100	-2.0 [-3.3]
110	-2.2 [-3.6]
120	-2.4 [-3.8]
130	-2.5 [-4.0]
140	-2.5 [-4.0]
150	-2.5 [-4.0]

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

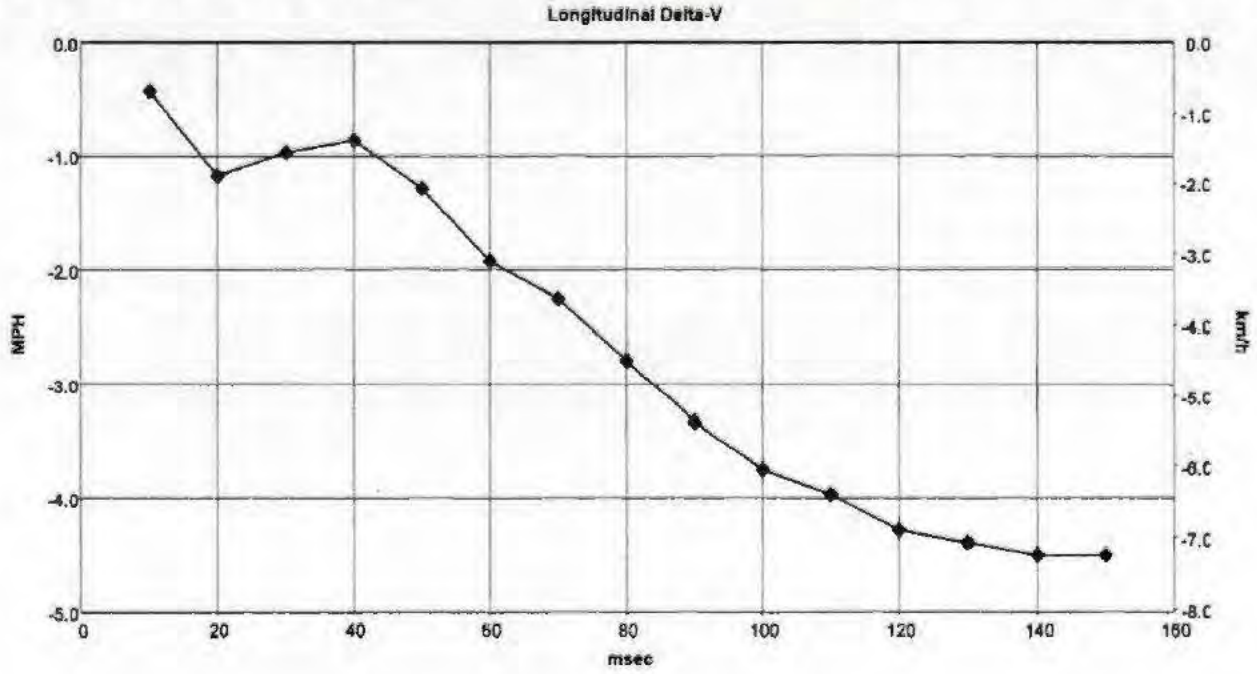
Ignition Cycle Since DTC was Set (times)	0
Airbag Warning Lamp ON Time Since DTC was Set (min)	0
Diagnostic Trouble Codes	None

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

Recording Status, Front/Rear Crash Info.	Complete
TRG Count	1
Time From Previous TRG (msec)	5000 or greater
Buckle Switch, Driver	Unbuckled
Buckle Switch, Passenger	Unbuckled
Occupancy Status, Passenger	Not Occupied
Seat Position, Driver	Rearward

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

Max Longitudinal Delta-V (MPH [km/h])	-4.5 [-7.2]



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

Time (msec)	Longitudinal Delta-V (MPH [km/h])
10	-0.4 [-0.7]
20	-1.2 [-1.9]
30	-1.0 [-1.6]
40	-0.9 [-1.4]
50	-1.3 [-2.1]
60	-1.9 [-3.1]
70	-2.2 [-3.6]
80	-2.8 [-4.5]
90	-3.3 [-5.3]
100	-3.7 [-6.0]
110	-4.0 [-6.4]
120	-4.3 [-6.9]
130	-4.4 [-7.1]
140	-4.5 [-7.2]
150	-4.5 [-7.2]

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

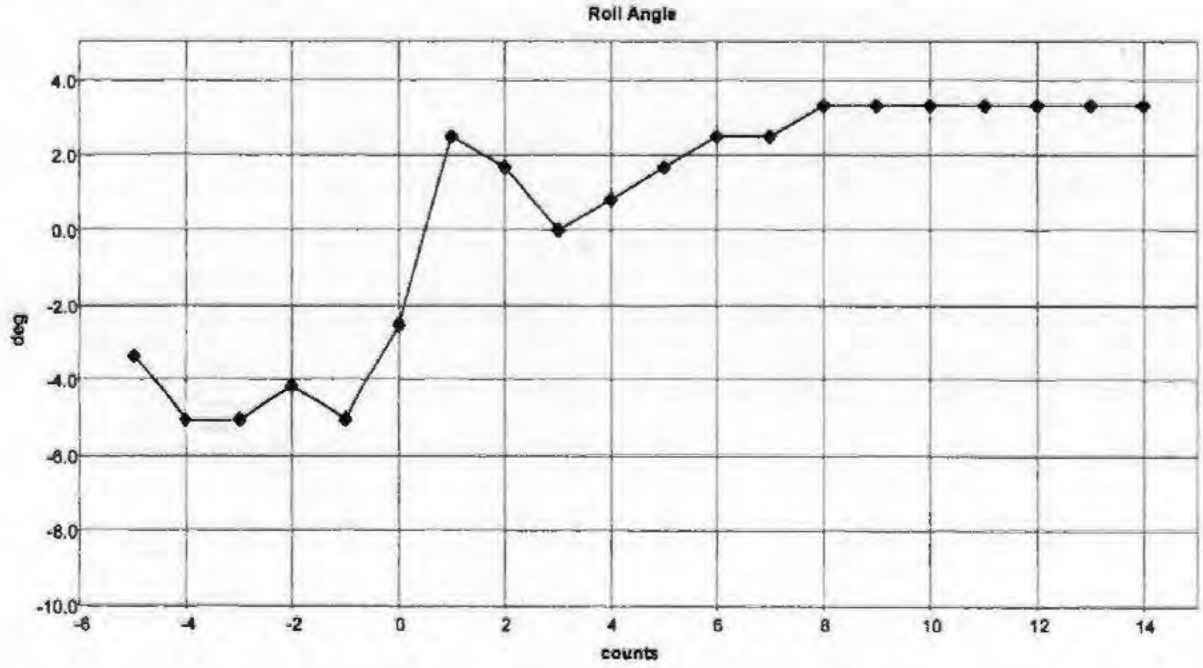
Ignition Cycle Since DTC was Set (times)	0
Airbag Warning Lamp ON Time Since DTC was Set (min)	0
Diagnostic Trouble Codes	None

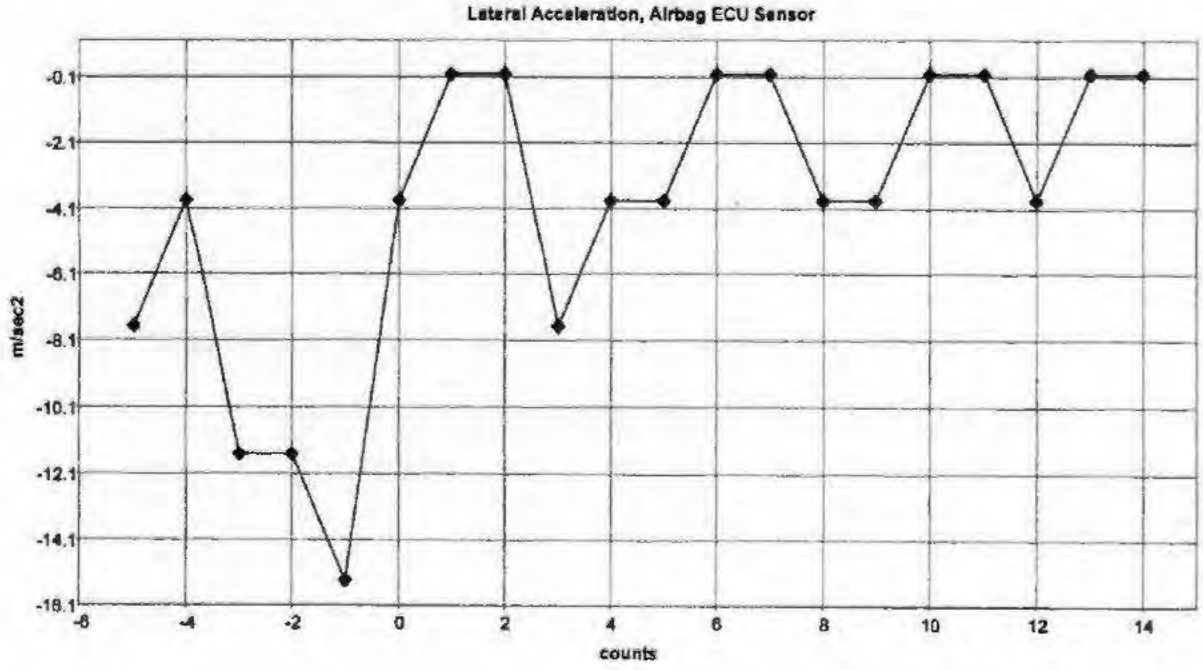
System Status at Rollover Event

Recording Status, Rollover Crash Info.	Complete
RSCA Disable Switch	OFF
Time to Deployment Command, Rollover Airbag (msec)	No

Rollover Crash Pulse for Rollover Event (table 1 of 2)

Roll Angle Peak (degrees)	4





Rollover Crash Pulse for Rollover Event (table 2 of 2)

Counts	Roll Angle (degrees)	Lateral Acceleration, Airbag ECU Sensor (m/sec^2)
-5	-3.3	-7.7
-4	-5.0	-3.8
-3	-5.0	-11.5
-2	-4.2	-11.5
-1	-5.0	-15.3
0	-2.5	-3.8
1	2.5	0.0
2	1.7	0.0
3	0.0	-7.7
4	0.8	-3.8
5	1.7	-3.8
6	2.5	0.0
7	2.5	0.0
8	3.3	-3.8
9	3.3	-3.8
10	3.3	0.0
11	3.3	0.0
12	3.3	-3.6
13	3.3	0.0
14	3.3	0.0

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	30 43 31 34 32 30 43 30 34 30 30 43 30 34 30 30 43 30 32 30 30 43 30 32 30 30 30 30 46 42 30 30 30 46 42
04	02 02 01 01
05	01
06	00
20	B0 00 00 01
21	00 04
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

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

Address	Data
0	-- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
10	-- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
20	-- -- -- -- -- -- -- -- -- -- -- -- -- -- 80 01
30	00 00 FF FF 00 10 80 01 00 00 00 00 00 00 FF FF
40	99 04 54 07 00 FE 00 FF 00 04 00 06 00 03 00 05
50	00 05 00 04 00 02 00 03 00 01 00 01 00 00 00 02
60	00 FA 00 01 00 00 00 00 00 00 00 00 00 00 00 00
70	00 00 00 00 00 00 00 00 99 04 54 02 00 02 00 01
80	00 01 00 01 00 02 00 01 00 02 00 03 00 02 00 01
90	00 01 00 00 00 00 00 01 00 0F 00 02 00 00 00 00
A0	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
B0	99 04 54 02 00 01 00 02 00 03 00 02 00 02 00 03
C0	00 04 00 03 00 04 00 04 00 08 00 04 00 05 00 03
D0	00 0E 00 03 00 00 00 00 00 00 00 00 00 00 00 00
E0	00 00 00 00 00 00 00 00 -- -- -- -- -- -- -- --
F0	-- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
100	FC FA FA FB FA FD 03 02 00 01 02 03 03 04 04 04
110	04 04 04 04 FE FF FD FD FC FF 00 00 FE FF FF 00
120	00 FF FF 00 00 FF 00 00 FF FF 05 37 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.

TOYOTA

Stephanie Kirk
Direct Phone (469)292-4017

Toyota Motor North America, Inc.
6565 Headquarters Drive
Plano, TX 75024

April 15, 2022

Via e-mail to [redacted]

[redacted]
Chicago, IL [redacted]

RE: Date of Loss : March 12, 2022
Vehicle : 2006 Toyota Sequoia
VIN : 5TDBT44A2[redacted]

Dear [redacted]:

Thank you for contacting Toyota's Brand Engagement Center regarding the above-referenced incident. You reported that while your daughter was operating your 2006 Toyota Sequoia, she was involved in an automobile accident. You stated that she was driving 40mph when she may have run over a slippery patch of ice on the road, causing her to lose control and hit a metal guardrail. You stated that the Supplemental Restraint System (SRS) front air bags did not deploy during the accident. You also stated that the side curtain airbags did not deploy.

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 Co-Part Facility on March 28, 2022. At the time of the inspection some of the vehicle's damaged parts were already removed, and your vehicle had 168,033 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 and the driver was unbuckled.

The inspection revealed that the impact was localized to the right front corner of the vehicle. There was damage to the right front fender, right front control arm, right front wheel/tire and the right end of the front bumper bar was bent inward. There was a lack of significant rearward deformation to the front of the vehicle. There was no damage observed to the front airbag sensors. 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.

There was no visible damage to the left or right side of the vehicle. The SRS side curtain shield airbags inflate when the passenger compartment area suffers a severe impact from the side. However, the SRS side curtain shield airbags do not generally inflate if the vehicle is involved in a frontal or rear collision, or if it is involved in a low-speed side collision. This collision did not meet the criteria for side curtain airbag deployment.

Please understand, 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. The airbags will deploy in response to abrupt deceleration in certain severe impacts to help reduce the likelihood of serious head and/or chest injuries, but they will not eliminate all injuries. Furthermore, the airbags will not deploy in all accidents but only in certain types of crashes. Based on the inspection of the vehicle and EDR readout, we did not find any evidence of a defect relating to your concern.

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

Sincerely,

Stephanie Kirk

Stephanie Kirk
Toyota Motor North America, Inc.

9:53

Inbox

TC Toyota Customer Response
Toyota.Customer.Response@toyota.c...

To: You[redacted]

Monday, April 18, 4:54 PM

[redacted] Toyota Customer Claims Response - [redacted]
PDF - 135 KB

Please do not attempt to respond to this message.
We cannot accept electronic replies to this e-mail.

Toyota Legal One Claims Group
6565 Headquarters Drive
Plano, TX 75024

[redacted] Apr 20

Toyota Customer Claims Response - Var...
PDF - 135 KB

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Mail Search Calendar

KWAME RAOUL
ILLINOIS ATTORNEY GENERAL
CONSUMER COMPLAINT
****

File # [redacted]

CONSUMER:
[redacted]

Chicago, Illinois [redacted]

COMPLAINT AGAINST:
Toyota Company North America
6565 Headquarters Drive
Plano, TX. 75024
4699-292-4017

DESCRIBE YOUR COMPLAINT:

On March 12, 2012, my daughter had an accident at [redacted] The impact was so extreme that the front part of the vehicle 2006 Toyota Sequoia plate [redacted] was crush and shattered. At 3:30 the air bags did not open, causing contusions to my daughter, we are wondering the reason why the air bags did not work. According to Toyota after reviewing the black box they determined all the accidents effects except the crash velocity and according to them the impact was light, but they do not know the velocity and they do not even know at what velocity the air bags should open.
The company underestimated the case and they stop the claim, maybe they are waiting to have deaths so they can pay attention. Attached is the information from Illinois institution website in regards to the velocity that the air bag have to be activated. Taking in consideration the lake shore drive speed limit 45mph. The institution is called IIFS, this is a vital information to avoid future accidents without protection. Toyota Company ignores this warnings and they do not have the basic knowledge at what velocity the airbags have to activate. Attached are pictures of the vehicle, the front of the car was a total loss and to but a vehicle with the same features it is too expensive. For these reason I am requesting compensation for my daughter for future trauma and secondary effects caused by the accident and a vehicle replacement with the same characteristics and security requirements for which we bought this vehicle. Thank you in advance for your attention. In addition this was single owner vehicle, it was mine and I gave it to my daughter, there was no other owner only our family.

Thanks,
Pictures attached.

RELIEF YOU ARE SEEKING:
Vehicle repair with the same features and with all the security warranties available and compensation for future accident effects caused to my daughter.

KWAME RAOUL
ILLINOIS ATTORNEY GENERAL
CONSUMER COMPLAINT
****

[redacted]

CONSUMER:
[redacted]

Chicago, Illinois [redacted]
[redacted]

COMPLAINT AGAINST:
Toyota Company North America
6565 Headquarters Drive
Plano, TX. 75024
4699-292-4017

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Pictures attached.

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AG