

North Dakota Century Code pertaining to EDR data

51-07-28. Recording devices on motor vehicles - Disclosure - Removal.

1. A manufacturer of a new motor vehicle sold or leased in this state which is equipped with a recording device commonly referred to as an event data recorder shall disclose by model year 2007 the presence, capacity, and capabilities of the event data recorder in the owner's manual for the vehicle. A motor vehicle dealer shall include within the purchase contract in a clear and conspicuous manner information on the possibility of a recording device. As used in this section, an event data recorder means a feature that is installed by the manufacturer of the vehicle and does any of the following for the purpose of retrieving data:

- a. Records the speed of the vehicle and the direction the motor vehicle is traveling.
- b. Records vehicle location data.
- c. Records steering performance.
- d. Records brake performance, including whether brakes were applied before an accident.
- e. Records the driver's safety belt status.
- f. Has the ability to transmit information concerning an accident in which the vehicle has been involved to a central communications system when an accident occurs.

2. Data recorded on an event data recorder may not be downloaded or otherwise retrieved by a person other than the owner of the motor vehicle at the time the data is recorded, or through consent by the owner's agent or legal representative, except under any of the following circumstances:

- a. The data is retrieved for the purpose of improving motor vehicle safety, including for medical research of the human body's reaction to motor vehicle accidents, and the identity of the registered owner or driver is not disclosed in connection with that retrieved data. The disclosure of the vehicle identification number, with the last four digits deleted, for the purpose of improving vehicle safety, including for medical research of the human body's reaction to motor vehicle accidents, does not constitute the disclosure of the identity of the registered owner or driver. A person authorized to download or otherwise retrieve data from a recording device under this subdivision may not release that data, except to share the data among the motor vehicle safety and medical research communities to advance motor vehicle safety, and only if the identity of the registered owner or driver is not disclosed.
- b. The data is retrieved by a licensed motor vehicle dealer or by an automotive technician for the purpose of diagnosing, servicing, or repairing the motor vehicle.
- c. By stipulation of the parties to the proceeding or by order of the court.

3. "Owner" means a person having all the incidents of ownership, including the legal title of a vehicle regardless of whether the person lends, rents, or creates a security interest in the vehicle; a person entitled to the possession of a vehicle as the purchaser under a security agreement; or the person entitled to possession of the vehicle as lessee pursuant to a written lease agreement, if the agreement at inception is for a period in excess of three months.

4. A person, including a service or data processor operating on behalf of the person, authorized to download or otherwise retrieve data from an event data recorder pursuant to subdivision a of subsection 2 may not release that data except for the purposes of motor vehicle safety and medical communities to advance motor vehicle safety, security, or traffic management; or to a data processor solely for the purposes permitted by this subsection and only if the identity of the owner or driver of the vehicle is not disclosed.

5. If a motor vehicle is equipped with a recording device that is capable of recording or transmitting information relating to vehicle location data or concerning an accident to a central communications system and that capability is part of a subscription service, the fact that the information may be recorded or transmitted must be disclosed in the terms and conditions of the subscription service. Subsection 2 does not apply to a subscription service that meets the requirements of this subsection.

6. An insurer may not require as a condition of insurability consent of the owner for access to data that may be stored within an event data recorder and may not use data retrieved with the owner's consent before or after an accident for the purpose of rate assessment.

Federal Regulation pertaining to EDR data

H.R.22 - Surface Transportation Reauthorization and Reform Act of 2015

PART I—DRIVER PRIVACY ACT OF 2015

Sec. 24301. Short title.

Sec. 24302. Limitations on data retrieval from vehicle event data recorders.

Sec. 24303. Vehicle event data recorder study.

Subtitle C—Miscellaneous Provisions

PART I—DRIVER PRIVACY ACT OF 2015

SEC. 24301. Short title.

This part may be cited as the “Driver Privacy Act of 2015”.

SEC. 24302. Limitations on data retrieval from vehicle event data recorders.

(a) Ownership of data.—Any data retained by an event data recorder (as defined in section 563.5 of title 49, Code of Federal Regulations), regardless of when the motor vehicle in which it is installed was manufactured, is the property of the owner, or, in the case of a leased vehicle, the lessee of the motor vehicle in which the event data recorder is installed.

(b) Privacy.—Data recorded or transmitted by an event data recorder described in subsection (a) may not be accessed by a person other than an owner or a lessee of the motor vehicle in which the event data recorder is installed unless—

- (1) a court or other judicial or administrative authority having jurisdiction—
 - (A) authorizes the retrieval of the data; and
 - (B) to the extent that there is retrieved data, the data is subject to the standards for admission into evidence required by that court or other administrative authority;
- (2) an owner or a lessee of the motor vehicle provides written, electronic, or recorded audio consent to the retrieval of the data for any purpose, including the purpose of diagnosing, servicing, or repairing the motor vehicle, or by agreeing to a subscription that describes how data will be retrieved and used;
- (3) the data is retrieved pursuant to an investigation or inspection authorized under section 1131(a) or 30166 of title 49, United States Code, and the personally identifiable information of an owner or a lessee of the vehicle and the vehicle identification number is not disclosed in connection with the retrieved data, except that the vehicle identification number may be disclosed to the certifying manufacturer;
- (4) the data is retrieved for the purpose of determining the need for, or facilitating, emergency medical response in response to a motor vehicle crash; or
- (5) the data is retrieved for traffic safety research, and the personally identifiable information of an owner or a lessee of the vehicle and the vehicle identification number is not disclosed in connection with the retrieved data.

SEC. 24303. Vehicle event data recorder study.

(a) In general.—Not later than 1 year after the date of enactment of this Act, the Administrator of the National Highway Traffic Safety Administration shall submit to Congress a report that contains the results of a study conducted by the Administrator to determine the amount of time event data recorders installed in passenger motor vehicles should capture and record for retrieval vehicle-related data in conjunction with an event in order to provide sufficient information to investigate the cause of motor vehicle crashes.

(b) Rulemaking.—Not later than 2 years after submitting the report required under subsection (a), the Administrator of the National Highway Traffic Safety Administration shall promulgate regulations to establish the appropriate period during which event data recorders installed in passenger motor vehicles may capture and record for retrieval vehicle-related data to the time necessary to provide accident investigators with vehicle-related information pertinent to crashes involving such motor vehicles.

49 CFR 563.5 Definitions.

(a) *Motor vehicle safety standard definitions.* Unless otherwise indicated, all terms that are used in this part and are defined in the Motor Vehicle Safety Standards, [part 571](#) of this subchapter, are used as defined therein.

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(b) Other definitions.

ABS activity means the anti-lock brake system (ABS) is actively controlling the vehicle's brakes.

Air bag warning lamp status means whether the warning lamp required by FMVSS No. 208 is on or off.

Capture means the process of buffering EDR data in a temporary, volatile storage medium where it is continuously updated at regular time intervals.

Delta-V, lateral means the cumulative change in velocity, as recorded by the EDR of the vehicle, along the lateral axis, starting from crash time zero and ending at 0.25 seconds, recorded every 0.01 seconds.

Delta-V, longitudinal means the cumulative change in velocity, as recorded by the EDR of the vehicle, along the longitudinal axis, starting from crash time zero and ending at 0.25 seconds, recorded every 0.01 seconds.

Deployment time, frontal air bag means (for both driver and right front passenger) the elapsed time from crash time zero to the deployment command, or for multi-staged air bag systems, the deployment command for the first stage.

Disposal means the deployment command of the second (or higher, if present) stage of a frontal air bag for the purpose of disposing the propellant from the air bag device.

End of event time means the moment at which the resultant cumulative delta-V within a 20 ms time period becomes 0.8 km/h (0.5 mph) or less, or the moment at which the crash detection algorithm of the air bag control unit resets.

Engine RPM means

(1) For vehicles powered by internal combustion engines, the number of revolutions per minute of the main crankshaft of the vehicle's engine; and

(2) For vehicles not entirely powered by internal combustion engines, the number of revolutions per minute of the motor shaft at the point at which it enters the vehicle transmission gearbox.

Engine throttle, percent full means the driver-requested acceleration as measured by the throttle position sensor on the accelerator pedal compared to the fully-depressed position.

Event means a crash or other physical occurrence that causes the trigger threshold to be met or exceeded, or any non-reversible deployable restraint to be deployed, whichever occurs first.

Event data recorder (EDR) means a device or function in a vehicle that records the vehicle's dynamic time-series data during the time period just prior to a crash event (e.g., vehicle speed vs. time) or during a crash event (e.g., delta-V vs. time), intended for retrieval after the crash event. For the purposes of this definition, the event data do not include audio and video data.

Frontal air bag means an inflatable restraint system that requires no action by vehicle occupants and is used to meet the applicable frontal crash protection requirements of FMVSS No. 208.

Ignition cycle, crash means the number (count) of power cycles applied to the recording device at the time when the crash event occurred since the first use of the EDR.

Ignition cycle download means the number (count) of power cycles applied to the recording device at the time when the data was downloaded since the first use of the EDR.

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Lateral acceleration means the component of the vector acceleration of a point in the vehicle in the **y-direction**. The **lateral acceleration** is positive from left to right, from the perspective of the driver when seated in the vehicle facing the direction of forward vehicle travel.

Longitudinal acceleration means the component of the vector acceleration of a point in the vehicle in the **x-direction**. The **longitudinal acceleration** is positive in the direction of forward vehicle travel.

Maximum delta-V, lateral means the maximum value of the cumulative change in velocity, as **recorded** by the **EDR**, of the vehicle along the lateral axis, starting from crash **time zero** and ending at 0.3 seconds.

Maximum delta-V, longitudinal means the maximum value of the cumulative change in velocity, as **recorded** by the **EDR**, of the vehicle along the longitudinal axis, starting from crash **time zero** and ending at 0.3 seconds.

Maximum delta-V, resultant means the time-correlated maximum value of the cumulative change in velocity, as **recorded** by the **EDR** or processed during data download, along the vector-added longitudinal and lateral axes.

Multi-event crash means the occurrence of 2 events, the first and last of which begin not more than 5 seconds apart.

Non-volatile memory means the memory reserved for maintaining recorded **EDR** data in a semi-permanent fashion. Data **recorded** in **non-volatile memory** is retained after loss of power and can be retrieved with **EDR** data extraction tools and methods.

Normal acceleration means the component of the vector acceleration of a point in the vehicle in the **z-direction**. The **normal acceleration** is positive in a downward direction and is zero when the accelerometer is at rest.

Occupant position classification means the classification indicating that the seating posture of a front outboard occupant (both driver and right front passenger) is determined as being out-of-position.

Occupant size classification means, for the right front passenger, the classification of the occupant as a child (as defined in **49 CFR part 572**, subpart N or smaller) or not as an adult (as defined in **49 CFR part 572**, subpart O), and for the driver, the classification of the driver as being a 5th percentile female (as defined in **49 CFR Part 572**, subpart O) or larger.

Pretensioner means a device that is activated by a vehicle's crash sensing system and removes slack from a vehicle safety belt system.

Record means the process of saving **captured EDR** data into a non-volatile device for subsequent retrieval.

Safety belt status means the feedback from the safety system that is used to determine that an occupant's safety belt (for both driver and right front passenger) is fastened or unfastened.

Seat track position switch, foremost, status means the status of the switch that is installed to detect whether the seat is moved to a forward position.

Service brake, on or off means the status of the device that is installed in or connected to the brake pedal system to detect whether the pedal was pressed. The device can include the brake pedal switch or other driver-operated service brake control.

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Side air bag means any inflatable occupant restraint device that is mounted to the seat or side structure of the vehicle interior, and that is designed to deploy in a side impact crash to help mitigate occupant injury and/or ejection.

Side curtain/tube air bag means any inflatable occupant restraint device that is mounted to the side structure of the vehicle interior, and that is designed to deploy in a side impact crash or rollover and to help mitigate occupant injury and/or ejection.

Speed, vehicle indicated means the vehicle speed indicated by a manufacturer-designated subsystem designed to indicate the vehicle's ground travel speed during vehicle operation.

Stability control means any device that complies with FMVSS No. 126, "Electronic [stability control](#) systems."

Steering input means the angular displacement of the steering wheel measured from the straight-ahead position (position corresponding to zero average steer angle of a pair of steered wheels).

Suppression switch status means the status of the switch indicating whether an air bag suppression system is on or off.

Time from event 1 to 2 means the elapsed time from [time zero](#) of the first [event](#) to [time zero](#) of the second [event](#).

Time, maximum delta-V, lateral means the time from crash [time zero](#) to the point where the maximum value of the cumulative change in velocity is found, as [recorded](#) by the [EDR](#), along the lateral axis.

Time, maximum delta-V, longitudinal means the time from crash [time zero](#) to the point where the maximum value of the cumulative change in velocity is found, as [recorded](#) by the [EDR](#), along the longitudinal axis.

Time, maximum delta-V, resultant means the time from crash [time zero](#) to the point where the maximum delta-V resultant occurs, as [recorded](#) by the [EDR](#) or processed during data download.

Time to deploy, pretensioner means the elapsed time from crash [time zero](#) to the deployment command for the safety belt [pretensioner](#) (for both driver and right front passenger).

Time to deploy, side air bag/curtain means the elapsed time from crash [time zero](#) to the deployment command for a [side air bag](#) or a [side curtain/tube air bag](#) (for both driver and right front passenger).

Time to first stage means the elapsed time between [time zero](#) and the time when the first stage of a [frontal air bag](#) is commanded to fire.

Time to n th stage means the elapsed time from crash [time zero](#) to the deployment command for the nth stage of a [frontal air bag](#) (for both driver and right front passenger).

Time zero means whichever of the following occurs first:

- (1) For systems with "wake-up" air bag control systems, the time at which the occupant restraint control algorithm is activated; or
- (2) For continuously running algorithms,
 - (i) The first point in the interval where a longitudinal cumulative delta-V of over 0.8 km/h (0.5 mph) is reached within a 20 ms time period; or

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(ii) For vehicles that **record** “delta-V, lateral,” the first point in the interval where a lateral cumulative delta-V of over 0.8 km/h (0.5 mph) is reached within a 5 ms time period; or

(3) Deployment of a non-reversible deployable restraint.

Trigger threshold means a change in vehicle velocity, in the longitudinal direction, that equals or exceeds 8 km/h within a 150 ms interval. For vehicles that **record** “delta-V, lateral,” **trigger threshold** means a change in vehicle velocity in either the longitudinal or lateral direction that equals or exceeds 8 km/h within a 150 ms interval.

Vehicle roll angle means the angle between the vehicle's y-axis and the ground plane.

Volatile memory means the memory reserved for buffering of **captured EDR** data. The memory is not capable of retaining data in a semi-permanent fashion. Data **captured** in **volatile memory** is continuously overwritten and is not retained in the **event** of a power loss or retrievable with **EDR** data extraction tools.

X-direction means in the direction of the vehicle's X-axis, which is parallel to the vehicle's longitudinal centerline. The **X-direction** is positive in the direction of forward vehicle travel.

Y-direction means in the direction of the vehicle's Y-axis, which is perpendicular to its X-axis and in the same horizontal plane as that axis. The **Y-direction** is positive from left to right, from the perspective of the driver when seated in the vehicle facing the direction of forward vehicle travel.

Z-direction means in the direction of the vehicle's Z-axis, which is perpendicular to the X- and Y-axes. The **Z-direction** is positive in a downward direction.

[73 FR 2180, Jan. 14, 2008, as amended at 76 FR 47486, Aug. 5, 2011]