

Toyota Clarifies the Facts About Event Data Recorders

March 12, 2010

Recent media reports have mischaracterized how Toyota uses and discloses information from event data recorders (EDRs) in Toyota and Lexus vehicles. The following points are intended to address any misconceptions or misunderstandings about this developing technology.

There are a variety of EDRs installed on Toyota and Lexus vehicles in the U.S. today. The data that is recorded and that can be read out and analyzed differs depending on the type of EDR that is installed in a particular vehicle and when the vehicle was manufactured.

In general, EDRs were first introduced to record post-crash data, primarily on airbag deployment. In the U.S., Toyota started phasing in EDRs into its vehicles in 2001 and has had EDRs in all vehicles from the 2007 model year forward. However, the timing in which the EDRs were introduced into specific Toyota and Lexus vehicles varies from model to model.

Although there are a variety of EDRs installed on Toyota and Lexus vehicles in the U.S. today, EDRs can generally be split into two groups: those that record only post-crash data, and those that record pre- and post-crash data. In both cases, the EDRs record data only for collisions that meet certain criteria that are based on the severity of the collision.

In the post-crash EDRs, data based on longitudinal g-force (frontal or rear collision), lateral g-force (side collision), and roll angle/lateral g-force (rollovers) is recorded. In the pre- and post-crash EDRs, data such as vehicle speed, engine speed (rpm), accelerator angle and brake application (whether the brake pedal was applied or not) is also recorded.

While the large majority of Toyota and Lexus vehicles have EDRs equipped to record both pre- and post-crash data, several models have EDRs that do not record pre-crash data. Therefore, data regarding vehicle speed, engine speed, accelerator angle and brake application is not available in every make and model. However, by the end of 2010, all newly-manufactured Toyota and Lexus vehicles will have EDRs that can record both pre- and post-crash data.

Toyota has always provided all data recorded by the EDRs to the National Highway Traffic Safety Administration (NHTSA), law enforcement authorities, and courts when requested or ordered to do so.

We provide the authorities with both the raw readout data and a printout of the readout. Contrary to some media reports, Toyota does not deliberately provide printouts of data with key columns left blank. In some cases, data columns have been blank because data for the column did not exist. This is not an omission, but is due to the specifications of the EDR installed in the vehicle concerned.

The software used to read out the EDR data, in some cases, is still in a testing phase and is not yet compatible with all electronic control units (ECUs) in use in Toyota and Lexus vehicles. Until very recently, Toyota only had one prototype tool to extract the EDR data in the U.S., which is why the company has had to limit readout requests to only those from authorities, including law enforcement,

NHTSA and courts.

Toyota is currently working on upgrading the "read out" software so it will be compatible with all vehicles, and plans to complete this effort by the end of April 2010.

Concerning the specialized computers used to extract the EDR data, Toyota delivered one unit to NHTSA on March 3, 2010 and another three will be delivered to NHTSA in April. One will also be delivered to Transport Canada in the very near future. One hundred fifty units will be available in North America by the end of April. As for the new software mentioned above, this will also be provided to NHTSA as it is completed. Once the additional read-out units are available and appropriate procedures are in place, Toyota will provide vehicle owners with access to EDR data from their vehicles upon request.

#