



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

Memorandum

Subject: Extended Length EA19-001

Date: June 11, 2020

From: Brian E. Smith, Safety Defects Engineer

Reply to: NEF102bes
Attn. of:

To: To: File EA19-001
Thru: Scott Yon

The Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) opened EA19-001 to investigate allegations of loss of air bag function during crash events caused by Electrical Overstress (EOS) of certain ASIC chips in the air bag control unit (ACU). The ACU designs in question were manufactured by ZF and were supplied to multiple vehicle manufacturers.

Currently, the investigation has resulted in recalls by several of the involved manufacturers which cover all known field incidents believed to be caused by this defect. Both vehicle design and the ACU design play a role in the likelihood and the frequency of occurrence. The agency has screened all complaint and EWR data, monitored major salvage auction sites for new incidents on a weekly basis, and attended all manufacturer tests performed to evaluate this issue. While the known cases have been addressed by the recall actions, the investigation has been held open to allow more time to understand the factors that affect occurrence of this failure and to allow surveillance of real world crashes for new occurrences. The surveillance over an extended period will allow the agency to evaluate the risk present with the remaining vehicles utilizing the unrecalled ACU designs.

The disposition of EA19-001 is dependent on collecting data for an extended period to reliably make a determination for the remaining ACU designs.