ATTACHMENT 5

30 April 2019

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Subject:Jeep Liberty Crash Test Results - Report and Background ReviewReference:White / Campbell versus FCA, et al.

Content: 10 Pages

Fuel Tank Encapsulation Prototype (FTEP) Mock-up Development and Construction - A Contextual Pictorial Review

Fuel Tank Encapsulation Prototype (FTEP) Mock-up Development and Construction - A Contextual Pictorial Review

On September 19, 2018 I negotiated, in behalf of plaintiff's counsel, a crash test regimen that was designed to provide real-world assessment of a Fuel Tank Encapsulation Prototype. The FTEP is designed to execute well-known crashworthiness principles that are robust due to generality. **Specifically, FTEP development was designed to avoid the restrictions imposed by the following three items:**

- 1. Mere compliance with the Federal safety standards . . . which are frequently the result of monetary and political banter, and are therefore demonstrably/notoriously inadequate in the real world. As just one example, it is well-known that the Federal standard for fuel system crashworthiness, FMVSS-301, does not and cannot address the real world accident mode called underride.
- 2. The NHTSA/DOT "reconstruction testing" as reported in July 2014 (cover of report shows Jeep Liberty):



The blatant inadequacy of these "reconstruction tests" is at least two-fold (A and B next):

(A) These were oriented, not at the generalities required by the principles of crashworthiness, but were focused on face-saving of the premature closure of EA12-005; an investigation that was closed **PRIOR** to **ANY** tests. That such was the result of much 'monetary and political banter' is confirmed in the recorded meeting with NHTSA Administrator David Strickland on July 1, 2013:

http://pvsheridan.com/NHTSA-Jeep-Victims-Meeting-Audio-1Jul2013.WMA http://pvsheridan.com/NHTSA_Jeep-Defect_Meeting-Transcript-1July2013.pdf

(B) This will come as repulsive . . . Nothing in these tests approximate ANY of the fire-death or fireinjury cases that were on file, covering decades of destroyed lives. The "reconstruction tests" by NHTSA/DOT actively avoided real-world accidents wherein injury or death actually occurred! Indeed, there was a conscious deliberate <u>avoidance</u> of those horrific events . . . the only tests that NHTSA/DOT conducted were those wherein injury or death did <u>NOT</u> occur! 3. Relating to Item 2-B above . . . Nothing in the "reconstruction tests" addressed **ANY** aspect of the accident of November 11, 2014, which took the lives of Kayla White and her unborn son Braedon.

However, in development of the FTEP, I avoided restriction of its design to the refined details of November 11, 2014, and instead sought a general approach that adheres to well-known engineering practices and concepts. Although that accident was a guide to the FTEP, my testing was not intended/offered, as a replica of that event.

The FTEP was designed to demonstrate (1) construction feasibility with use of common hand and power tools (2) installation ease (3) impact deflection especially versus an underride crash mode (4) crash force management through structural enhancement, and (5) protection from both on-board and off-board unfriendly impact surfaces through the deployment of **fuel tank encapsulation**.

As presented in Attachment 1 above, the development, construction, and testing of the FTEP took place at Applus IDIADA KARCO Engineering, LLC in Adelanto, California. The final contract and funding was provided by plaintiff's counsel (Law Office of Courtney Morgan PLC). The crash test took place on Monday, December 3, 2018.

The mechanical basis of the FTEP was an aftermarket skid plate offered by SFK Manufacturing for the 2002 through 2007 KJ Jeep Liberty fuel tank, part JP-4002:



To this JP-4002 base was added 3/16" plate steel. The cost-of-materials related to this work:

JP-4002 retail price (cost TBD)	\$ 329 . 99
Additional 3/16" low-carbon plate steel (approximate)	55.00
Foam Board (used for mock-up)	15 . 45

Summary: What follows is a brief pictorial presentation/review of the mock-up, fabrication/construction, and installation process of the FTEP onto a 2003 Jeep Liberty KJ, in preparation for a rear-end crash test with a 2002 Cadillac Seville, which impacted the test KJ at 73.4 miles per hour.

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