

Facilitator Report to ASTM Section D02.B0.10 Standards Acceleration

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Report period: Jan 2012 to June 2012

1. E85 Emulsion Retention Test

L-37 Load-Carrying Capacity of Lubricants Used for Final Hypoid Drive Axles

This test is under the jurisdiction of the L-38 Surveillance Panel. The aim is to replace the gasoline engine by an electric motor.

As you may be aware, Galen is the Chairman of the L-37 Surveillance Panel, as well as the Chairman of the Task Force which is working on development of the test which will replace the L-37. The driving force behind this activity is a need to update this test, which will include:

- 1) Use of an electric motor rather than a gasoline engine as the power source.
- 2) Elimination of the manual transmission which is required when a gasoline engine is used as the power source.
- 3) Use of current production hardware from American Axle in place of (somewhat dated) hardware from Dana.

All of these changes are intended to improve the repeatability and reproducibility of the test, and address some of the issues we have encountered which relate to the use of test hardware which is not representative of current production hardware. We are hoping to have this activity complete within approximately one year.

The test procedure we will be replacing is the ASTM D 6121 Standard Test Method. You may wish to take a look at this document/procedure in order to get a feel for the type of test which is being conducted. While the test stand configuration, operating conditions, etc. will obviously need to be changed, the basic intent of the test procedure will remain the same.