

ASTM Update
to the
LRI Gear Oil Review Committee

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Status of the ASTM D 7038 (L-33-1) Test

- Test availability and operation
 - Test stands available at multiple labs
- Test severity has returned to historic levels
 - No specific cause for previous severity trend (severe) was identified
- Hardware
 - Adequate supplies of hardware available

Status of the ASTM D 6121 (L-37) Test

- Test availability and operation
 - Test stands available at multiple labs
 - No known test stand-related problems
 - Test severity (with approved hardware) at historic levels
- Hardware
 - Lubrited hardware continues to be in short supply
 - Evaluation of new batches of lubrited and non-lubrited hardware is underway
 - Initial results on a pilot batch were encouraging, although Pitting/Spalling was more severe than desired
 - Adjustment of the contact pattern may address the Pitting/Spalling issue
 - Preliminary data looks encouraging
 - Additional testing in progress
 - Second pilot batch will be evaluated in September
 - Hope to have hardware approved and available before the end of the year

Status of the ASTM D 7452 (L-42) Test

- Test availability and operation
 - Test stands available at multiple labs
 - No known test stand-related problems
 - Test severity at historic levels
- Hardware
 - Adequate supplies of hardware available

Status of the ASTM D 5704 (L-60-1) Test

- Test availability and operation
 - Test stands available at multiple labs
 - No known test stand-related problems
- Test continues to be in a slight severity trend (severe) for Carbon/Varnish. May also be seeing the beginning of a slight severity trend (severe) for Sludge
 - Neither of sufficient magnitude to inhibit use of test
- Hardware
 - Adequate supplies of hardware available
- Work to improve the consistency of Carbon/Varnish ratings continues
 - Will evaluate the use of a rating box

Status of the ASTM D 5579 (Cyclic Durability) Test

- Test availability and operation
 - Routinely have one calibrated test stand available at each of two independent labs
 - Currently have only one calibrated test stand available within the industry
 - Test stand at one laboratory encountering difficulty calibrating
 - Obtaining severe results on the good reference oil
 - Both test labs and the Test Monitoring Center are working together to identify and address the cause of the problem
 - Exchanging test hardware, comparing stand operation, etc.
 - May form a Task Force to conduct visit of participating labs
- Hardware
 - Adequate supplies of hardware available

Status of the ASTM D 5662 (Oil Seal Compatibility) Test

- Test availability and operation
 - Baths available at two labs
 - No known “stand” (bath) related problems
 - Test severity at historic levels
- Hardware
 - Adequate supplies of elastomer available

Status of the Storage Solubility and Compatibility (SS&C) Test

- Procedure has been written in the form of an ASTM Standard Test Method
 - In the final stages of review by Task Force
 - Anticipate balloting within ASTM before the end of the year

Other Activities

- Work Group has been formed within SAE to better define the need for a standardized test to evaluate the efficiency of axle lubricants
 - Group will be meeting to review results of industry survey to identify possible test methods, possible reference oils, etc.
 - Will also determine next steps in development process
- Task Force continuing work to develop a new performance category for synchronized manual transmissions in commercial vehicles
 - Proposed Category PM-2