

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
 - No known test stand-related problems
- Hardware
 - Adequate supplies of hardware available
- General Comments
 - Developed new rating aids to improve accuracy of ratings in Area 2
 - Will be placed in use upon receipt from ASTM

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: Non-lubrited
 - Adequate supplies of hardware available
- Hardware: Lubrited
 - Shortage of hardware continues to be a problem
 - Manufacturer has produced a new pilot batch of hardware with optimized geometry, heat-treating, lapping, etc. for evaluation
 - Results of initial evaluation should be available in late February or early March
 - If results look encouraging, will proceed with manufacture of large batch
 - Should be available in mid CY 2011

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

- General Comments
 - Surveillance Panel starting work on development of next-generation test
 - Will use electric motor rather than gasoline engine as power source
 - Will form Task Force to identify options for hardware type, etc.
 - Goal is to have a procedural outline finalized during CY 2011
 - Would welcome input/guidance from all interested parties (such as the Original Equipment Manufacturers, the LRI Gear Oil Review Committee, etc.)

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
 - Labs have sufficient hardware to last through mid to late CY 2011 (possibly somewhat longer)
 - Labs have placed order for new batch
 - New batch should be available and approved by 3rd quarter of CY 2011

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 severity
 - ASTM Test Monitoring Center visited labs to determine cause behind severity alarms (severe) for Insolubles
 - Identified several areas for improvement in ASTM D893 Test Method
 - Will incorporate into L-60-1 test procedure and/or ASTM D893 Test Method
 - Alarms have cleared, but work to improve procedure will continue
 - Periodically triggering severity alarms (severe) for Carbon/Varnish
 - Work to identify source of severity issue ongoing
- Hardware
 - Adequate supplies of hardware available

Status of the ASTM D 5579 (Cyclic Durability) Test

- Test availability and operation
 - Currently only one test stand available within the industry
 - Test stand at second lab being relocated
 - No known stand-related problems
 - Test severity at historic levels
- Hardware
 - Adequate supplies of hardware available
 - Industry recently received new batch of hardware
 - Hardware being introduced as stands are due for calibration
 - Initial results on both good and poor reference oil fell within current reference oil acceptance bands

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 (generally) available
- Reference Oils
 - Two reference oils (TMC 161 and TMC 168) are not able to be reblended
 - Replacement for TMC 161 has been identified
 - Identified as TMC 169
 - Currently developing database of results in combination with reference tests on TMC 161
 - Surveillance Panel has identified possible replacements for TMC 168
 - Will introduce at a later date

Update on Proposed Category PM-2

- New performance category to define lubricants for commercial vehicle synchromesh manual transmissions and transaxles
 - Service fill applications
- Task Force has found it difficult to finalize development of this category
 - Have not been able to identify a standardized pitting test which will be universally accepted
 - Have not been able to identify oils with known acceptable and unacceptable performance in the field
 - Both of above essential to develop performance category and identify meaningful acceptance criteria
 - Intense competition for limited industry resources has inhibited progress

Update on Proposed Category PM-2

- Task Force questioned if interest in and/or need for category still exists
 - Response to industry requests for support/assistance has been minimal
 - Sought input from SAE, ASTM, CEC, JAMA, and others
 - Suspect that needs of industry may have changed since request was initiated (in 1998)
- SAE Technical Committee 3 was asked to revalidate industry's interest in and/or need for this performance category
 - Indications are that the need for this category no longer exists
 - Will probably disband this Task Force following the April, 2011 SAE Technical Committee 3 meeting