

ASTM Update
to the
LRI Gear Oil Review Committee

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Chairman, ASTM Section D02.B0.03

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
 - Panel starting discussion on next hardware order
 - Will determine cost and availability of new batch from current supplier
 - Will identify alternate axle and/or supplier if necessary

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
 - Supplies of hardware adequate, but diminishing
 - New batch being manufactured in combination with new batch of lubrited hardware
 - Hope to have hardware approved and available for candidate oil testing in 2nd quarter of CY 2012

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

- Hardware: Lubrited
 - Shortage of hardware continues to be an issue
 - Manufacture of a new batch is in progress
 - Hope to have hardware approved and available for candidate oil testing in 2nd quarter of CY 2012
 - As previously reported, test length may be adjusted slightly to maintain historic level of test severity
 - Pilot batch produced severe results
 - Reducing test length to twenty hours yielded acceptable results

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

- Next-generation Test
 - Work on development of next-generation test is underway
 - Will use an electric motor as the power source, will eliminate the use of a transmission, etc.
 - Will use production hardware from American Axle
 - Labs currently in process of standardizing test stands
 - Manufacture of an initial batch of hardware is in progress
 - Will use to fine-tune test procedure, identify pass/fail criteria, etc.
 - Intent is to have procedure finalized and approved test hardware available within one year
 - Introduction of replacement test will be timed to coincide with depletion of existing (Dana) axle inventory

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
 - Most labs have sufficient hardware to last until the next batch is available
 - One lab has depleted their inventory
 - Manufacturer currently making a pilot batch for evaluation

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
- Hardware
 - Adequate supplies of hardware available
 - New batch of hardware has been received
 - Surveillance Panel will conduct test matrix to verify performance

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
 - Timing for availability of second stand uncertain
 - The available stand has been able to meet the industry's needs
 - No known stand-related problems
 - Test severity at historic levels
- 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
- Reference Oils
 - Adequate supplies of reference oils are available
 - Surveillance Panel in process of introducing new reference oil (TMC 169) to replace TMC 161, which is in limited supply (and can not be reblended)