

Lubricants Review Institute
Gear Oil Review Committee Update
to
SAE Technical Committee 3

April 17, 2007

Lubricants Review Institute Update

- From 1943 to 1977, the U.S. Army qualified automotive gear lubricants under the MIL-2105 Specification based upon recommendations from an advisory board under its direct sponsorship
- In 1977, the U.S. Army contracted the SAE to perform the review activity and make recommendations on lubricant acceptance
- The SAE Board of Directors established the Lubricants Review Institute (LRI), which in turn formed the Gear Lubricants Review Committee, to perform this function
 - Operation and control of the LRI was transferred from the SAE to the Performance Review Institute (PRI) in 1998
 - The PRI is a wholly-owned affiliate company of the SAE

Lubricants Review Institute Update

- The process used by the Gear Lubricants Review Committee to evaluate the performance of automotive gear lubricants versus the requirements of the MIL-2105 Specification, and more recently the SAE J2360 Standard, is described in the “Procedures Manual”
- The Procedures Manual is currently being reviewed and updated
 - Overall intent is to improve the process while making it more “user friendly”

Lubricants Review Institute Update

- The updated Procedures Manual will incorporate numerous changes and improvements:
 - Includes updated affidavits designed to streamline the paperwork process
 - Allows for additional methods by which to demonstrate the ability to properly manufacture high-quality lubricants
 - Permits the use of ISO certification (ISO 9000 or ISO/TS 16949) in place of the historic “Manufacturing Facility Approval”
 - Expands the list of lubricants which can be approved to include the new viscosity grades as defined in the most recent revision of SAE J306
 - SAE 70W-xx
 - SAE xxW-110
 - SAE xxW-190

Note: Only multi-grade lubricants are being reviewed/approved at this time

Lubricants Review Institute Update

- Changes and improvements, continued:
 - Specifies Channel Point and Flash Point requirements for SAE 70W-xx grade lubricants
 - Updates field test requirements
 - Less frequent oil sampling in light-duty test
 - Allowance for increased pre-test “destination mileage” in heavy-duty test
 - Refers to current/updated stationary test procedures
 - L-33-1 in place of L-33
 - Production tolerances validated and modified as appropriate
 - Tolerance for viscosity at 100 degrees C widened

Lubricants Review Institute Update

- Changes and improvements, continued:
 - Clarifies process for obtaining Original, Reblend, and Rebrand approvals
 - Replaces identification of crude source for base stocks with identification of base stock type
 - Mineral oil, polyalphaolefin, re-refined, etc.
 - Outlines requirements for a quorum at meetings, voting guidelines (for acceptance of tests/requests), balloting (of procedural changes), etc.
 - Updated Procedures Manual and all related forms and affidavits will be available on the Internet
 - Under the heading “Lubricant Qualification” at www.pri-network.com