



## Test Monitoring Center

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L-42 Information Letter No. 04-1  
Sequence No. 19  
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***ASTM consensus has not yet been obtained on this information letter. An appropriate ASTM ballot will be issued in order to achieve such consensus.***

TO: L-42 Mailing List

SUBJECT: 1. Revised Drive Shaft Specifications  
2. Surveillance Panel Use of Donated Reference Oil Test Programs  
3. Guidelines for Shortening or Lengthening Reference Oil Calibration Periods

1. At the November 3, 2004 L-42 Surveillance Panel meeting, the panel approved a motion revising the drive shaft specifications for the L-42 Test Procedure. Section 3.7 of the L-42 test procedure (STP 512A) has been revised.

2. On November 8, 2004, ASTM Subcommittee D02.B approved a recommendation from the Test Monitoring Board to revise test methods monitored by the Test Monitoring Center regarding surveillance panels use of donated reference oil test programs. This revision provides consistent language for the procedures and clarification to the end users. A new Section 6.3 has been added to the L-42 test procedure (STP 512A).

3. On November 8, 2004, ASTM Subcommittee D02.B approved a recommendation from the Test Monitoring Board to revise test methods monitored by the Test Monitoring Center regarding the shortening or lengthening of reference oil calibration periods. This revision provides consistent language for the procedures and clarification to the end users. New Sections 6.4, 6.4.1, 6.4.2, 6.4.3, and 6.4.4 have been added to the L-42 test procedure (STP 512A).

These items are effective the date of this information letter.

The updated version of the L-42 test procedure is available in its entirety from the TMC web site ([ftp://ftp.astmtmc.cmu.edu/doc/gear/l42/procedure\\_and\\_ils](ftp://ftp.astmtmc.cmu.edu/doc/gear/l42/procedure_and_ils)) or by contacting the TMC for a hard copy. The revised sections of the L-42 test procedure are attached.

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Chairman  
L-42 Surveillance Panel

John L. Zalar  
Administrator  
ASTM Test Monitoring Center

Attachment

c: [ftp://ftp.astmtmc.cmu.edu/docs/gear/l42/procedure\\_and\\_ils/il04-1.pdf](ftp://ftp.astmtmc.cmu.edu/docs/gear/l42/procedure_and_ils/il04-1.pdf)

Distribution: Email

3.7 *Drive Shaft*: - Welded steel tubing,  $3.5 \pm 0.2$  in, ( $88.9 \pm 0.51$ mm) OD,  $0.095 \pm 0.005$  in. ( $2.41 \pm 0.13$  mm) wall thickness, 58.5 in. (1486 mm) long from end of spline to eye of U-joint. The drive shaft shall be dynamically (spin) balanced.

6.3 *Donated Reference Oil Test Programs* - The surveillance panel is charged with maintaining effective reference oil test severity and precision monitoring. During times of new parts introductions, new or re-blended reference oil additions, and procedural revisions, it may be necessary to evaluate the possible effects on severity and precision levels. The surveillance panel may choose to conduct a program of donated reference oil tests in those laboratories participating in the monitoring system, in order to quantify the effect of a particular change on severity and precision. Typically, the surveillance panel requests its panel members to volunteer enough reference oil test results to create a robust data set. Broad laboratory participation is needed to provide a representative sampling of the industry. To ensure the quality of the data obtained, donated tests are conducted on calibrated test stands. The surveillance panel shall arrange an appropriate number of donated tests and ensure completion of the test program in a timely manner.

#### 6.4 Adjustments to Reference Oil Calibration Periods

6.4.1 *Procedural Deviations* – On occasions when a laboratory becomes aware of a significant deviation from the test method, such as might arise during an in-house review or a TMC inspection, the laboratory and the TMC shall agree on an appropriate course of action to remedy the deviation. This action may include the shortening of existing reference oil calibration periods.

6.4.2 *Parts and Fuel Shortages* - Under special circumstances, such as industry-wide parts or fuel shortages, the surveillance panel may direct the TMC to extend the time intervals between reference oil tests. These extensions shall not exceed one regular calibration period.

6.4.3 *Reference Oil Test Data Flow* - To ensure continuous severity and precision monitoring, calibration tests are conducted periodically throughout the year. There may be occasions when laboratories conduct a large portion of calibration tests in a short period of time. This could result in an unacceptably large time frame when very few calibration tests are conducted. The TMC can shorten or extend calibration periods as needed to provide a consistent flow of reference oil test data. Adjustments to calibration periods are made such that laboratories incur no net loss (or gain) in calibration status.

6.4.4 *Special Use of the Reference Oil Calibration System* - The surveillance panel has the option to use the reference oil system to evaluate changes that have potential impact on test severity and precision. This option is only taken when a program of donated tests is not feasible. The surveillance panel and the TMC shall develop a detailed plan for the test program. This plan requires all reference oil tests in the program to be completed as close to the same time as possible, so that no laboratory/stand calibration is left in an excessively long pending status. In order to maintain the integrity of the reference oil monitoring system, each reference oil test is conducted so as to be interpretable for stand calibration. To facilitate the required test scheduling, the surveillance panel may direct the TMC to lengthen and shorten reference oil calibration periods within laboratories such that the laboratories incur no net loss (or gain) in calibration status.