T-9 INFORMATION LETTER 02-1 Sequence No. 4

September 27, 2002

ASTM consensus has not been obtained on this information letter. An appropriate ASTM ballot will be issued in order to achieve such consensus.

TO: Mack Mailing List

SUBJECT: 1. Liner Wear Step Measurements

2. Report Forms and Data Dictionary

3. Precision and Bias

4. Safety Precautions

The Mack Surveillance Panel approved the following changes to test method D 6483:

- 1. The procedure for measuring liner wear step has been updated and has been removed from the test procedure. Section 10.2.2.3 and Annex A4 have been revised accordingly and are attached. This change went into effect March 6, 2002.
- 2. The T-9 Report Forms and Data Dictionary have been removed from Test Method D 6483. The TMC will continue to maintain and revise the T-9 Report Forms and Data Dictionary as done in the past. The current report forms and data dictionary may be downloaded from the ASTM Test Monitoring Center Web Page at http://www.astmtmc.cmu.edu/ or can be obtained in hardcopy format from the TMC. Section 12.1, Annex A1, and Annex A6 have been modified accordingly and are attached. Additionally, throughout the text, all references to Annex A1 Forms and Figures have been replaced with 'See Annex A1'. A list of all affected sections is attached.
- 3. Section 13, Precision and Bias has been updated to reflect current ASTM practice with intermediate precision. Sections 13.1.1.1 and 13.1.1.2 have been modified and sections 13.1.1.3 and 13.1.1.4 have been added. These sections are attached.
- 4. A statement regarding the reporting and treatment of injuries in Section A5.1.3 in Annex A5, Safety Precautions has been removed. The modified Section A5.1.3 is attached.

Greg Shank

Senior Project Engineer

Mack Trucks, Inc.

John L. Zalar Administrator

ASTM Test Monitoring Center

John L. Jalar

Attachment

c: ftp://ftp.astmtmc.cmu.edu/docs/diesel/mack/procedure_and_ils/t9.il02-1.pdf

Distribution: Email

In the following sections, replace all references to Annex A1 Forms and Figures with 'See Annex A1':

8.6.6, 9.3.1, 9.9.1, 9.11, 10.3, 10.4, 11.6.2.1, 11.6.2.2, 11.6.3.1, 11.6.3.2, 11.6.4.1, 11.8, 12.1.1.1, 12.1.1.2, 12.1.2, A9.1.5, A9.2, and A9.4.3

- 10.2.2.3 Measure the top ring turnaround wear step in accordance with Annex A4.
- 12.1 Reporting Test Results For reference oil tests, the standardized report form and data dictionary for reporting the test results and for summarizing the operational data are required. The report forms and data dictionary are available on the ASTM Test Monitoring Center Web Page at http://www.astmtmc.cmu.edu/ or can be obtained in hardcopy format from the TMC.
- 13.1.1.1 *Intermediate Precision (formerly called repeatability) Conditions*—Conditions where test results are obtained with the same test method using the same test oil, with changing conditions such as operators, measuring equipment, test stands, test engines, and time.
- 13.1.1.2 *Intermediate Precision Limit* (*i.p.*)—The difference between two results obtained under intermediate precision conditions that would in the long run, in the normal and correct conduct of the test method, exceed the values shown in Table 10 in only one case in twenty.
- 13.1.1.3 *Reproducibility Conditions*—Conditions where test results are obtained with the same test method using the same test oil in different laboratories with different operators using different equipment.
- 13.1.1.4 *Reproducibility Limit* (*R*)—The difference between two results obtained under reproducibility conditions that would, in the long run, in the normal and correct conduct of the test method, exceed the values in Table 10 in only one case in twenty.

In Table 6, replace "Intermediate Precision, (r)" with "Intermediate Precision, (i.p.)".

A1. REPORT FORMS

The required report forms are available on the ASTM Test Monitoring Center Web Page at http://www.astmtmc.cmu.edu/ or can be obtained in hardcopy format from the TMC.

Fig. A1.1 (Form 0)	Cover Sheet
Fig. A1.2 (Form 1)	Non-Reference Oil Test Result Summary
Fig A1.3 (Form 1a)	Reference Oil Test Summary
Fig. A1.4 (Form 2)	Operational Summary
Fig. A1.5 (Form 3)	Rod Bearing Weight Loss
Fig. A1.6 (Form 4)	Ring Weight Loss
Fig. A1.7 (Form 5)	Oil Analysis Summary
Fig. A1.8 (Form 6)	Liner Surface Roughness & Bore Diameter
Fig. A1.9 (Form 7)	Liner Wear Summary
Fig. A1.10 (Form 8)	Unscheduled Downtime & Maintenance Summary
Fig. A1.11 (Form 9)	Test Fuel Analysis
Fig. A1.12 (Form 10)	Characteristics of the Data Acquisition System
Fig. A1.13 (Form 11)	Build-up and Hardware Information

Delete Figures A1.1 through A1.13

A4. INSTRUCTIONS FOR MEASURING T-9 CYLINDER SLEEVES

Measure cylinder liner wear step according to Instructions For Measuring Cylinder Sleeves, which is available from the ASTM Test Monitoring Center Web Page at http://www.astmtmc.cmu.edu/ or can be obtained in hardcopy format from the TMC.

Delete Figures A4.1 and A4.2

A5.1.3 The external parts of the engines and the floor area around the engines should be kept clean and free of oil and fuel spills. In addition, all working areas should be free of tripping hazards. Personnel should be alert for leaking fuel or exhaust gas. Leaking fuel represents a fire hazard and exhaust gas fumes are noxious. Containers of oil or fuel cannot be permitted to accumulate in the testing area.

A6. DATA DICTIONARY

The required data dictionary is available on the ASTM Test Monitoring Center Web Page at http://www.astmtmc.cmu.edu/ or can be obtained in hardcopy format from the TMC.

Delete Figures A6.1 and A6.2