



Test Monitoring Center

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L-60-1 Information Letter 03-2
Sequence Number 23
February 27, 2003

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

TO: L-60-1 Mailing List

SUBJECT: 1. Revised End of Test Oil Drain Procedure
2. Heater Blower Air Output

1. At the January 29, 2003 L-60-1 Surveillance Panel meeting, the panel approved a motion to revise the E.O.T oil drain procedure. Revised Sections 10.8, 10.9, 11.2 and a new Section 10.10 of Test Method D 5704 are attached. This change is effective for all tests starting on or after February 5, 2003.

2. At the January 29, 2003 L-60-1 Surveillance Panel meeting, the panel approved a motion to change the heater blower air output specification and specified a measuring device to confirm the output. A revised Section 6.1.8 and new Section 6.1.8.1 of Test Method D 5704 are attached. This change is effective with the next reference oil test on or after April 30, 2003.

Chris Schenkenberger
Chairman
L-60-1 Surveillance Panel

John L. Zalar
Administrator
ASTM Test Monitoring Center

Attachment

c: ftp://ftp.astmtmc.cmu.edu/docs/gears/l601/procedure_and_ils/il03-2.pdf

Distribution: Email

6.1.8 *Heater Blower*—The heater blower system shall supply to the insulated oven assembly $37.5 \pm 5 \text{ ft}^3/\text{min}$ ($1062 \pm 142 \text{ L}/\text{min}$) of air (at free air conditions) through the 2 1/8-in. (54-mm) diameter blower opening as shown in the engineering drawings. The heater blower may be a cage type blower wheel powered by an electric motor or powered by way of a toothed belt from the main drive shaft. In all cases, meet the specified air flow while maintaining other test parameters at their specified value.

6.1.8.1 Confirm the heater blower system air flow with a Preso Low Loss Venturi Meter¹⁷ (2-in. model LPL-200NF-38) with carbon steel body, 1/4-in. NPT instrument connections and 2-in. 150 lb. raised face process connections.

10.8 At the completion of the test, immediately shut down the equipment, remove the air line and drain the test lubricant into a clean weighed container. The gear case cover plate may be loosened to facilitate draining but do not remove it. Drain the test stand for $30 \pm 5 \text{ min}$. Weigh the container of drain oil and determine the drain oil weight by subtraction. Calculate the oil loss in weight percent using Eq 1. Tests exceeding 20 % weight loss are not representative of an operationally valid test and, therefore, cannot be properly interpreted for non-reference oil evaluation.

$$\text{Oil loss in weight \%} = \frac{\text{initial weight} - \text{final weight}}{\text{initial weight}} \times 100 \quad (1)$$

where :

initial weight = initial oil charge weight, and

final weight = drain oil weight.

10.9 At the completion of the oil weight loss calculation transfer the entire oil drain, including solids, using a flat bladed stainless steel tool from the weighed container into a single sample bottle for kinematic viscosity, pentane insolubles, toluene insolubles, and total acid number evaluation as outlined in Section 13. The single sample bottle contents shall be homogenous prior to kinematic viscosity, pentane insolubles, toluene insolubles and total acid number evaluation.

10.10 Remove the gear case cover plate and tests gears within $60 \pm 5 \text{ min}$ of test completion without disturbing the deposits on the various test gears.

11.2 After gear case disassembly, as specified in Section 10.10, immediately place test parts side-by-side in a draining position (A draining position is a position within 15° of vertical.) at room temperature for a minimum of 1 h before rating. Rate the test parts within 64 h of test completion.

¹⁷ SW Controls Inc.
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Renumber Footnotes 17 through 26 to 18 through 27