



Test Monitoring Center

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Sequence IIIG Information Letter 10-2
Sequence No. 27
May 21, 2010

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

TO: Sequence III Mailing List

SUBJECT: 1) Additional Oil Filter Change Criteria
2) AFR Measurement Real Time Verification Allowance
3) Oil Consumption Limit for Interpretability of Non-Reference Oil Tests

The following changes were approved by the Surveillance Panel during the May 12, 2010 Surveillance Panel meeting.

- 1) The Panel agreed to allow the replacement of the oil filter when a suspected medium breach occurs. Section 6.10.5 has been revised to describe this situation and allow replacement of the filter when encountered.
- 2) The panel agreed to allow the use of real time systems to verify Air-to-Fuel Ratio (AFR) sensors as an alternative to gas analysis. Section 11.10 has been revised to allow the use real time systems. If a laboratory elects to move to a real time system, the laboratory may switch to a real time system across the lab, once an acceptable reference oil test has been obtained using a real time system for AFR sensor verification.
- 3) The panel agreed to increase the non-interpretability limit for oil consumption. Section 12.9.7 has been revised to increase this limit to 4.89.

The attached changes to Test Method D 7320 are effective May 12, 2010.

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Engine Oil Test Development and Support
GM Powertrain Materials Engineering

Frank M. Farber
Administrator
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Attachments

c: ftp://ftp.astmtmc.cmu.edu/docs/gas/sequenceiii/procedure_and_ils/IIIG/IL10-2.pdf

Distribution: Electronic Mail

Modifies Test Method D7320-09a

as amended by Information Letters 09-2, 09-3, 09-4, 09-5, 09-6 and 10-1

6.10.5 The oil cooler or oil filter, or both can be replaced once each test if the oil filter pressure differential during test operations is greater than 100 kPa, if bypass operation is detected or if the oil pressure delta slowly climbs as test hours are accumulated and decreases by more than 10 kPa in less than 1 min.

11.10 *Air-to-Fuel Ratio Verification*—air-to-fuel ratio measurements made by the lambda sensors may be verified using exhaust gas analysis or real-time feedback systems, or both. Calibrate real time sensors per the manufacturer's recommendation at least every 6 months. If a real time system allows for percent O₂ compensation, the calculation shall be performed. When using gas analysis, verify according to the following:

12.9.7 For non-reference oils, the test results are considered non-interpretable for the purpose of Multiple Test Acceptance Criteria (MTAC) if the oil consumption at the end of test exceeds 4.89 L.