



Test Monitoring Center

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SEQUENCE VIB INFORMATION LETTER 04-4

SEQUENCE NUMBER 20

November 15, 2004

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 VIB Mailing List

SUBJECT: Alternate Coolant Flush

As a result of a recent email ballot, the Sequence VIB Surveillance Panel agreed to allow an alternative to the coolant flush procedure described in Test Method D6837. The current method requires that the engine be run to maintain the temperature of the chemicals during the coolant flush. The alternative allows an external apparatus to be used to maintain the specified temperatures during the flush. The design of the apparatus is left up to the laboratory and is not specified. Revised Sections 11.3.2, 11.3.3, and new Section 11.3.1.1 of Test Method D6837 are attached.

These changes are effective October 21, 2004.

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Attachment

c: ftp://ftp.astmtmc.cmu.edu/docs/gas/sequencevi/procedure_and_ils/il04-4.pdf

Distribution: Email

Revises Test Method D 6837-04, as amended by Information Letters 04-1, 04-2 and 04-3

11.3.1.1 *Alternate Coolant Flush*—Use a flush cart apparatus with an external heat source capable of maintaining a temperature of $65\text{ }^{\circ}\text{C}$. The design of the flushing apparatus is left up to the laboratory. Circulate the coolant system cleanser (see 11.1.5.1) for 40 min while maintaining a coolant temperature of $65 \pm 5\text{ }^{\circ}\text{C}$ ($150 \pm 10\text{ }^{\circ}\text{F}$). Then open the heat exchanger drain valve and the engine block petcock, where installed, or both. Add fresh tap water to the system until the drains run clear. Continue adding fresh tap water to the system for 5 min after the drains begin running clear. Close the block and heat exchanger drains and add the cooling system neutralizer (sodium carbonate) (see 7.4.3) which has previously been mixed at the ratio of 3.8g/L (0.50 oz/gal) of hot water.

11.3.2 After the neutralizer has been circulated in the engine for 45 min, while maintaining a temperature of $65 \pm 5\text{ }^{\circ}\text{C}$ ($150 \pm 10\text{ }^{\circ}\text{F}$), open the drain valves and add fresh water until the drains run clear. (The pH of the incoming and outgoing water shall be the same at this point). Stop adding fresh water, close drain valves, and circulate the water for 20 min under coolant flushing operating conditions.

11.3.3 Shut down the engine using the procedure given in 11.5.8. If an external flushing apparatus is used, stop and disconnect the apparatus. Disconnect the intake air supply duct as soon as the engine is shut down.