



Test Monitoring Center

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SEQUENCE VIII INFORMATION LETTER NO. 06-1

Sequence No. 8

October 24, 2006

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 VIII Mailing List

SUBJECT: Revision to Annex A9 to Improve Initial Bearing Cleanliness

This information letter implements action items approved by the Sequence VIII Surveillance Panel. This information letter addresses specific parts and procedures pertaining to quality, consistency, performance, and accountability of test parts as part of the ongoing effort by the panel to ensure continual process improvement of the Sequence VIII test. This information letter references the latest published version of the Sequence VIII procedure, Test Method D 6709-06.

Revision of Annex A9

During the October 19, 2006 conference call, the Sequence VIII Surveillance Panel agreed to enhance the cleaning procedure detailed in Annex A9. This enhanced cleaning procedure is needed to properly clean the 03-06 batch bearings, as there is additional residue on these bearings that must be removed to ensure accurate bearing weight loss measurements. These changes are effective October 19, 2006.

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Chairman
Sequence VIII Surveillance Panel

John L. Zalar
Administrator
ASTM Test Monitoring Center

Attachment

c: ftp://ftp.astmtmc.cmu.edu/docs/gas/sequenceviii/procedure_and_ils/il06-1.pdf

Distribution: Electronic mail

A9. CONNECTING ROD BEARING CLEANING PROCEDURE

Initial Cleaning

A9.1 Soak bearing halves in a container of mineral spirits³⁰ for a minimum of 5 min to remove all traces of oil from both the front and back of the bearing. During the soak period move the bearing halves back and forth in solvent using protective tongs. Exercise care when handling the bearings to prevent nicking or scratching the bearing surface. (Always use latex gloves and protective tongs when handling bearings.)

A9.2 Dip the bearing halves in pentane and allow to dry, do not place in vacuum desiccator.

A9.3 Wipe bearings with a soft paper towel soaked in pentane.

A9.4 Weigh and record to the nearest 0.1 mg, the initial weight of the whole test bearing and the separate weights of the top and bottom halves.

A9.5 Repeat steps A9.3 and A9.4 until no change in weight is noted.

A9.3 Place bearing halves into a vacuum desiccator for a maximum of 5 min.

A9.6 Coat the bearing halves with build-up oil.

A9.7 Store the bearing halves in a vacuum desiccator until ready for installation into the engine. Start the test break-in within 8 h of removal of the bearing halves from the vacuum desiccator. If the 8-h limit is exceeded, install a new set of bearings, repeating steps A9.1 through A9.7.

End of Test Cleaning

A9.8 Soak bearing halves in a container of mineral spirits³⁰ for a minimum of 5 min to remove all traces of oil from both the front and back of the bearing. During the soak period move the bearing halves back and forth in solvent using protective tongs. Exercise care when handling the bearings to prevent nicking or scratching the bearing surface. (Always use latex gloves and protective tongs when handling bearings.)

A9.9 Dip the bearing halves in pentane and allow to dry.

A9.10 Place bearing halves into a vacuum desiccator for a maximum of 5 min.

A9.11 Remove bearing halves from the vacuum desiccator and inspect for traces of residue. Repeat A9.9 – A9.10 if any residue is evident.

A9.12 Weigh and record to the nearest 0.1 mg, the final weight of the whole test bearing and the separate weights of the top and bottom halves.