



Test Monitoring Center

@ Carnegie Mellon University
6555 Penn Avenue, Pittsburgh, PA 15206, USA

<http://astmtmc.cmu.edu>
412-365-1000

C13 Information Letter 14-1
Sequence No. 5
May 20, 2014

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

TO: C13 Mailing List

SUBJECT: Change to Piston Second Ring Cleaning Procedure

During the Caterpillar Surveillance Panel meeting on May 14, 2014, it was decided to remove the previously approved procedure for cleaning C-13 second rings. It was also decided to add a note that using EnSolv and following with a pentane rinse has been shown to work in cleaning the rings. Sections 7.4 and 8.2.7 of Test Method D 7549 have been updated and are attached. Sections 7.4.1, 7.4.2 and 7.4.3 have been added and are attached.

All changes are effective May 14, 2013.

Hind Abi-Akar

Hind Abi-Akar
Project Engineer
Caterpillar, Inc

Frank M. Farber
Director
ASTM Test Monitoring Center

Attachment

c: ftp://ftp.astmtmc.cmu.edu/docs/diesel/cat_c13/procedure_and_ils/il14-01.pdf

Distribution: Email

(Revises Test Method D7549-13 as amended by IL 13-01 and IL 13-02)

7.4 *Solvents and Cleaners Required*—(**Warning**—Use adequate safety precautions with all solvents and cleaners.)

7.4.1 *Solvent*—Use mineral spirits meeting Specification **D235**, Type II, Class C requirements for aromatic content (0 to 2 % vol), flash point (61 °C), and color (not darker than +25 on Saybolt Scale or 25 on Pt-Co Scale). Obtain a Certificate of Analysis for each batch of solvent from the supplier. (**Warning**—Combustible. Health hazard.)

7.4.2 *Pentane*—Used for rinsing and cleaning components before measurement. (**Warning**—Flammable. Health hazard.)

7.4.3 *Degreasing Solvent*—EnSolv¹⁰, a proprietary *n*-propyl bromide based solvent used for cleaning the second rings. (**Warning**—Health hazard.)

New footnote 10:

¹⁰ EnSolv is a registered trademark of, and is available from, Enviro Tech International, Inc., 2525 West LeMoyne Ave., Melrose Park, IL 60160. www.ensolv.com.

Renumber existing footnotes 10 – 12 as footnotes 11 - 13, respectively.

8.2.7 *New Parts*—The following new parts are included in the Engine Build Parts List. They are not reusable, except as noted in 10.3.3. Clean the parts prior to use. For piston second rings cleaning with a solvent such as EnSolv and following with a pentane rinse has been shown to be effective. During a test, replacement of any of the new parts listed below will invalidate the test.