

Sequence VG Information Letter 08-3 Sequence No. 31

May 15, 2008

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 VG Mailing List

SUBJECT: Additional Ratings

At the May 7, 2008 Sequence VG Surveillance Panel meeting, the panel agreed to add follower pin wear and ring gap increase measurements to the test method. Section 13.7 has been added to Test Method D 6593.

The attached revisions to Test Method D 6593 are effective for tests starting after May 7, 2008.

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Attachment

c: <u>ftp://ftp.astmtmc.cmu.edu/docs/gas/sequencev/procedure_and_ils/vgil08-3-31.pdf</u>

Distribution: Email

13.7 Additional Measurements:

13.7.1 *Follower Pin Wear*—Measure the wear on the pins from the followers from cylinder No. 8, intake and exhaust, using the following procedure:

13.7.1.1 Label one end of each follower with the position in the engine; i.e., 8I, 8E.

13.7.1.2 Label the opposite end of the roller pin with an arrow indicating the top of the rocker and the position of the measurement.

13.7.1.3 Using a vice to hold the rockers, punch out the pins from the rockers with a 5 mm (3/16 in.) diameter punch.

13.7.1.4 Measure the wear steps on both follower pins using a surface finish analyzer.

13.7.1.5 Set the machine up following the manufacturer's instructions for measuring the depth of the wear.

13.7.1.6 Place the follower pin in a V-block with the arrow up (13.7.1.2).

13.7.1.7 Lower the stylus on to the follower pin and center the pin horizontally.

13.7.1.8 Set the travel points on the machine so the stylus will transverse the length of the worn surface, starting on an unworn surface at one end and completing its trace on the unworn surface at the opposite end. Position stylus to start and finish on an area between the worn surface and the area that was pressed into the rocker body.

13.7.1.9 Take a trace.

13.7.1.10 Position the evaluation length lines to bracket the displayed wear step so the measurement will only evaluate the wear step maximum depth.

13.7.2 *Ring Gap Increase*—Using the top rings from pistons in cylinders 1 and 8, clean the rings thoroughly and measure the ring gap after the rings have been installed in the master bore (7.5.5). Calculate the ring gap increase. Compensate for any ring gap adjustments made during the test. Average the results and record. Determine the maximum ring gap increase and record.