

Sequence VG Information Letter 02-4 Sequence No. 13

July 8, 2002

## 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: 1. Use of Power Supply for EEC Power

- 2. Replacement of Rocker Cover Varnish Rating with Cam Baffle Varnish
- 3. Changes in Calibration Frequency for Lambda Measurement Device
- 4. Deletion of Requirement to Measure Bore Wear
- 1. At the May 15, 2002 meeting of the Sequence V Surveillance Panel, the panel agreed to allow the use of a power supply to power the EEC module and lambda sensors. Revised Section 7.10.4.2 of Test Method D6593 is attached. This change is effective May 15, 2002.
- 2. The panel also agreed to discontinue rating the Rocker Arm Covers for varnish and, instead, rate the varnish on the Cam Baffles. Revised Section 13.3.1 and Figures A11.11 and A11.12 of Test Method D6593 are attached. This change is effective August 1, 2002.
- 3. The panel also agreed to change the calibration requirement for the lambda measurement device from prior to each test to prior to conducting a reference oil test. Revised Section 9.6.1.2 of Test Method D6593 is attached. This change is effective May 15, 2002.
- 4. Finally, the panel agreed to drop bore wear measurements. Additional evaluations will be done on surface finish measurements as a possible replacement for bore wear by June 15, 2003. Section 13.7.3 of Test Method D6593 has been deleted. This change is effective May 15, 2002.

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Attachments

c: ftp://ftp.astmtmc.cmu.edu/documents/gas/sequencev/procedures and ils/vgil02-4-13.pdf

Distribution: Email

(Revises Test Method D6593-01, as amended by Information Letters 01-3, 02-1, 02-2 and 02-3)

7.10.4.2 *Electronic Engine Control (EEC) System*—The fuel injector operation, cylinder firing, pulse width, ignition timing, and so forth are controlled by the specified EEC. The EEC module is available from the supplier listed in Annex A9.2

(1) The EEC power shall come from a battery  $(13.5 \pm 1.5V)$  or a power supply that does not interrupt/interfere with proper EEC operation. Connect the EEC battery/power supply to the engine wiring harness with an appropriate gage wire of the shortest practical length so as to maintain 12 to 15 V DC on the STAR test and minimize EEC electrical noise problems. Ground the EEC ground wire to the engine. From the same ground point, run a minimum two gage wire back to the battery negative to prevent interruption/interference of the EEC operation. The power supply can also be used for the lambda measuring devices.

9.6.1.2 Calibrate the lambda measurement device by introducing the sensor to air prior to a reference oil test.

13.3.1 *Preparation of Parts*—Rate the following parts for varnish deposits—piston skirts (8, thrust side only) and left and right camshaft baffles. Perform the varnish ratings after the sludge ratings are completed. The rating locations and dimensions shall conform with the locations and dimensions detailed on the ratings worksheets (see Annex A11). Avoid disturbing adjacent sludge deposits when the parts are being prepared for varnish ratings. Heavy sludge can be removed from a varnish rating area with a 25mm rubber spatula prior to wiping. Wipe all parts firmly with wiping materials specified in CRC Manual 20. Firmly rub all wiping areas in the same direction until the surface is dry and free of all sludge (until no more deposit is present on the wiping material after wiping).

13.7.3 Deleted



FIG. A11.11 Varnish Rating Of Left Camshaft Baffle



FIG. A11.12 Varnish Rating Of Right Camshaft Baffle