



Test Monitoring Center

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1K/1N Information Letter No. 13-1
Sequence No. 33
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ASTM consensus has not yet been obtained on this information letter. An appropriate ASTM ballot will be issued in order to achieve such consensus.

TO: Single Cylinder Diesel Mailing List
SUBJECT: Corrected References for Rating Manuals and Workshop

As approved by the unanimous email ballot, the references to rating manuals and workshops have been updated to reflect the current nomenclature. Section 2.4 has been added and Sections 3.2, 6.1.3, 9.3.3.3, 12.3.1, 12.3.1.4, 12.3.1.7, 12.3.1.8, 12.3.4, 12.3.4.4, A11.1 and A11.3.3.1 have been updated to reference the ASTM Deposit Rating Manual 20 and ASTM Heavy Duty Rating Workshop and are attached.

The attached changes to Test Method D6750 are effective with the issue date of this letter.

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Attachment

c: ftp://ftp.astmtmc.cmu.edu/docs/diesel/scote/procedure_and_ils/1k-1n/il13-01.pdf

Distribution: Email

(Revises Test Method D6750-10b as amended by Information Letter 12-01)

*2.4 Other ASTM Documents*⁴

ASTM Deposit Rating Manual 20 (Formerly CRC Manual 20)

3.2.1 *heavy land carbon, n*—see ASTM Deposit Rating Manual 20⁸

3.2.3 *liner bore polishing, n*—see ASTM Deposit Rating Manual 20.

3.2.6 *scratching, n*—see ASTM Deposit Rating Manual 20.

3.2.7 *scuffing, n—in lubrication*, see ASTM Deposit Rating Manual 20.

3.2.9 *varnish, n—in internal combustion engines*, see ASTM Deposit Rating Manual 20.

6.1.3 *Parts Rating Area*—Maintain as specified in ASTM Deposit Rating Manual 20.

9.3.3.3 Measure minimum side clearance in accordance with directions in ASTM Deposit Rating Manual 20. Measurement may also be made using taper gages.

12.3.1 *Deposit Ratings, Photographs, Measurements*—Remove the piston and ring assembly from the engine. Examine the assembly and measure the components in accordance with the ASTM Deposit Rating Manual 20 that uses the varnish scale (see A11.1). Photograph the pistons and rings, and perform deposit ratings as follows:

12.3.1.4 Use a piston deposit demerit rating as specified in ASTM Deposit Rating Manual 20.⁸

12.3.1.7 *Training of Piston Deposit Rating Specialist (Rater)*— The ASTM Heavy Duty Rating Workshop trains piston deposit raters. They shall maintain rating expertise by attending rating seminars or workshops annually. The rater shall attend the ASTM Heavy Duty Rating Workshop held each autumn, or both. The rater shall rate a minimum of six diesel pistons at the seminar or workshop. If the rater is unable to attend either session, the rater shall make alternative arrangements at the earliest opportunity. In applying these seminar attendance requirements to a laboratory having more than one rater, the laboratory shall send at least one heavy duty diesel piston rater annually.

12.3.1.8 *Referee Ratings*—To detect quickly and correct any shifts in rater severity, obtain referee ratings for all operationally valid calibration tests. Referee ratings are also required for tests reviewed by the test procedure developer. Provide the rating breakdown for land 1 to the referee laboratory so that the referee rater can use those figures in computing weighted piston deposits (WD). Do not provide any other rating information to the referee laboratory. For shipping to the referee laboratory, wrap pistons in paper and seal them in a plastic bag along with desiccant chips. Report referee results to the TMC within ten working days of test completion.

12.3.4 *Liner Wear/Bore Polishing Measurements and Photographs*—Carry out liner preparation and measurements in accordance with the liner rating procedure (see A11.3).

12.3.4.4 Section the cylinder liner for measurement of the amount of bore polishing and for photographing. Photograph the sectioned liner so as to show the thrust and anti-thrust sides (see Annex A11 and Fig. X3.2). Use the liner rating procedure (see A11.3).

A11.1 *Manual for Rating Piston and Liner*—Rate piston and liner in accordance with ASTM Deposit Rating Manual 20. This includes rating the varnish deposit and using the varnish scale described in the manual. Carbon deposit factors range from 1.000 to 0.250 and varnish deposits range from 9.0 to 0.0. Convert varnish scale values to demerit values as described in ASTM Deposit Rating Manual 20.

(Revises Test Method D6750-10b as amended by Information Letter 12-01)

A11.3.3.1 *Rating Environment*—Rate the liners in the existing rating booth using the same light as specified for piston rating or a two-bulb fluorescent desk lamp.

Replace current Footnote 8 with the following:

⁸ For STOCK# TCMN20, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org.