



Test Monitoring Center

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M11EGR INFORMATION LETTER 03-1
Sequence No. 2

October 3, 2003

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

TO: M11 Mailing List
SUBJECT: M11EGR Top Ring Weight Loss

The Cummins Surveillance Panel has changed top ring weight loss from a critical parameter (primary test result) to a reported parameter (secondary test result). Revised sections 1.1, 4.5, 9.9.1, and Table 6 of the test procedure are attached. The updated version of the test procedure, Draft 8, is available in its entirety from the TMC web site. The web address for this site is: www.astmtmc.cmu.edu/docs/diesel/cummins/procedure_and_ils/m11egr. You may obtain a hardcopy by contacting the TMC.

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Attachments

c: ftp://astmtmc.cmu.edu/docs/diesel/cummins/procedure_and_ils/m11egr/il03-1.pdf

Distribution: Email

1.1 This test method is commonly referred to as the Cummins M11 Exhaust Gas Recirculation Test (EGR)². The test method defines a heavy-duty diesel engine test procedure conducted under high soot conditions to evaluate oil performance with regard to valve train wear, sludge deposits, and oil filter plugging³ in an EGR environment.

4.5 Oil performance is determined by assessing crosshead wear at 8.5 mass % soot, sludge deposits and oil filter plugging.

9.9.1 This test method incorporates the use of a Severity Adjustment (SA) for non-reference oil test results. A control chart technique described in the LTMS is used to determine if a significant bias exists for crosshead mass loss, average sludge, or oil filter plugging, or combination thereof. When calibration results indicate a significant bias, an SA is determined according to the LTMS and applied to the non-reference oil test result. The SA will remain in effect until a new SA is determined from subsequent calibration tests.

Table 6 Test Precision

Parameter ^Δ	Intermediate Precision (i.p.)	Reproducibility (R)
Average Sludge	0.73	1.54
Crosshead Mass Loss	8.46	8.46
Oil Filter Plugging Delta P (transformed units)	2.4685	2.6936

^Δ Precision data are periodically updated and are available from the TMC.