



Test Monitoring Center

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T-10 INFORMATION LETTER 04-5
Sequence No. 10

December 9, 2004

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

TO: Mack Mailing List

SUBJECT: Implementation of New Connecting Rod Bearing Batch and Correction Equations

On the December 2, 2004 Mack Surveillance Panel teleconference, the use of revised correction equations that adjust the lead results back to the original severity was approved. Accordingly, Sections 11.6.4.4 and 11.6.5.2 have been modified and are attached. The use of the new correction equations is effective December 3, 2004.

A handwritten signature in black ink that reads "Greg Shank".

Greg Shank
Senior Staff Engineer
Mack Division
Volvo Powertrain

A handwritten signature in black ink that reads "John L. Zalar".

John L. Zalar
Administrator
ASTM Test Monitoring Center

Attachment

c: ftp://ftp.astmtmc.cmu.edu/docs/diesel/mack/procedure_and_ils/T-10/il04-5.pdf

Distribution: Email

(Revises D 6987-03 as amended by Information Letters 04-1, 04-2, 04-3, and 04-4)

11.6.4.4 For connecting rod bearing batch code J, calculate Δlead according to the following:

if $OABWLU \leq 245 \text{ mg}$

$$\Delta\text{lead} = e^{(0.603 + 0.024 OABWLU - 0.000043(OABWLU)^2)} \quad (3)$$

if $OABWLU > 245 \text{ mg}$

$$\Delta\text{lead} = 58 \quad (4)$$

where:

$OABWLU$ = outlier screened upper rod bearing weight loss, mg.

11.6.5.2 For connecting rod bearing batch code J, calculate the ΔLead 250 to 300 h according to the following:

$$\Delta\text{Lead 250 to 300 h} = -5.9 + 0.044(ir_{300} - ir_{250}) + 0.070 OABWLU \quad (5)$$

where:

Ir_{300} = oxidation value of the 300 h oil sample

Ir_{250} = oxidation value of the 250 h oil sample

$OABWLU$ = outlier screened upper rod bearing weight loss, mg.