A Program of ASTM International

Test Monitoring Center

203 Armstrong Drive, Freeport, PA 16229, USA

www.astmtmc.org
412-365-1000

ISB Information Letter 25-1
Sequence No. 19
March 24, 2025

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

TO: Cummins Mailing List

SUBJECT: New Average Tappet Mass Loss and Average Camshaft Wear Correction Factors

During the February 19th, 2025 Surveillance Panel teleconference the panel voted to new correction factors and transformations on average tappet mass loss and average camshaft wear results on batch F tappets. These changes apply to all reference oil tests that have been run on batch F tappets and all non-reference oil tests that completed on or after February 19th, 2025.

Sections 11.2.6.3 and 11.3.6 have been revised and are attached. These changes are effective with the release of this information letter.

Ryan Denton
Corporate Chemical Technology Manager
Cummins Inc.

Jeffrey A. Clark
Executive Director
ASTM Test Monitoring Center

Attachment

c: https://www.astmtmc.org/ftp/docs/diesel/cummins/procedure_and_ils/ISB/il25-1.pdf

Distribution: Email

(Revises Test Method D7484-23a)

Revise section 11.2.6.3:

(6) For all tests that complete on hardware batch combinations of batch M camshafts, batch F crossheads, and batch F tappets and subsequent hardware batch combinations before July 1st, 2024, multiply the average tappet mass loss from 11.2.6.2 by 0.92 to get the final average tappet mass loss result.
(7) For all reference tests run on batch F tappets and subsequent hardware batch combinations and all non-reference tests run on batch F tappets and subsequent hardware combinations that complete on or after February 19th, 2025, add -0.741 to the square root of the average tappet mass loss from 11.2.6.2 to get the final transformed average tappet mass loss result.
(~~7~~8) If after applying the appropriate correction factor from 11.2.6.3, the final average tappet-mass loss value is less than 0, report the average tappet-mass loss as 0 in 11.2.6.2.
(~~8~~9) Report the data on the appropriate form.

Revise section 11.3.6:

(7) For all tests that complete on or after September 4th, 2020 and before July 1st, 2024 on Batch E tappets and Batch L camshafts and subsequent hardware batches, adjust average camshaft wear from 11.3.5 by multiplying by 0.77 to get the final average camshaft wear result.
(8) For all reference tests run on batch F tappets and subsequent hardware batch combinations and all non-reference tests run on batch F tappets and subsequent hardware combinations that complete on or after February 19th, 2025, add -0.4552 to the natural log of the average camshaft wear from 11.3.5 to get the final transformed average camshaft wear result.
(~~8~~9) If after applying the appropriate correction factor from 11.3.6, the final average camshaft wear value is less than 0, report the average camshaft wear as 0 in 11.3.5.
(~~9~~10) Report the data on the appropriate form.