

## **Test Monitoring Center**

@ Carnegie Mellon University 6555 Penn Avenue, Pittsburgh, PA 15206, USA http://astmtmc.cmu.edu 412-365-1000

ISM Information Letter 16-3 Sequence No. 12 November 7, 2016 CORRECTION

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 IAS Mass Loss Correction Factor

During the October 21, 2016 Cummins Surveillance Panel conference call it was agreed to change the Injector Adjusting Screw mass loss correction factor. The new correction factor of 0.410 will be used for all ISM tests on the newest hardware combination. This hardware consists of Batch C injector push rods, Batch D injector adjusting screws and Batch F crossheads. The first engine kit supplied by the CPD to include all of this hardware was kit #938. All tests using hardware kits #938 and above will use this new correction factor. Section 11.2.5 has been revised and is attached documenting the correction factor change.

Cliff Burbrink Chemical Technology & Lubricants Cummins

Frank m Farber

Frank M. Farber Director ASTM Test Monitoring Center

Attachment

c: ftp://astmtmc.cmu.edu/docs/diesel/cummins/procedure and ils/ISM/il16-03.pdf

Distribution: Email

## (Revises Test Method D7468-16)

## 11.2.5 Injector Adjusting Screw Correction Factor

11.2.5.1 For all tests that complete on or after June 28, 2007 on central parts distributor hardware kits numbered up to and including 672, add a correction factor of +19.1 mg to the injector adjusting screw mass loss average value adjusted to 3.9 % soot calculated in 11.2.4. Report this corrected value on Form 4 as the final result listed in Table A9.1.

11.2.5.2 For all tests that complete on hardware combinations consisting of Batch B injector push rods, Batch D injector adjusting screws and Batch E crossheads (central parts distributor hardware kits numbered 673 up to and including 937), take the natural log of the injector adjusting screw mass loss average value adjusted to 3.9 % soot calculated in 11.2.4 and reported on Form 12, add a correction factor of -0.200 to that value to get the transformed corrected IAS mass loss value and report on Form 4. Finally, back transform this value using the inverse natural log to get the final injector adjusting screw mass loss value in milligrams. Report this value on Form 4 as the final result listed in Table A9.1.

11.2.5.3 For all tests that complete on hardware combinations consisting of Batch C injector push rods, Batch D injector adjusting screws and Batch F crossheads (central parts distributor hardware kits numbered 938 or higher), take the natural log of the injector adjusting screw mass loss average value adjusted to 3.9 % soot calculated in 11.2.4 and reported on Form 12, add a correction factor of 0.410 to that value to get the transformed corrected IAS mass loss value and report on Form 4. Finally, back transform this value using the inverse natural log to get the final injector adjusting screw mass loss value in milligrams. Report this value on Form 4 as the final result listed in Table A9.1.