



Test Monitoring Center

Carnegie Mellon University
6555 Penn Avenue, Pittsburgh, PA 15206, USA

<http://astmtmc.cmu.edu>
412-365-1000

SEQUENCE VID INFORMATION LETTER 09-2
SEQUENCE NUMBER 2
December 14, 2009

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

TO: Sequence VI Mailing List

SUBJECT: 1. Revision to Stand/Engine Calibration Requirements
2. Changes to Control Valves
3. Identification of Correct Fuel Batch

1. During the November 18, 2009 Sequence VI Surveillance Panel Meeting, the panel agreed to revise the calibration periods for stand/engine calibrations. Sections 10.1.1.2 through 10.1.1.4 have been revised to reflect the revised number of tests and engine hours. This change is effective November 18, 2009.
2. At the November 18, 2009 Sequence VI Surveillance Panel Meeting, the panel addressed a discrepancy in section 6.6.5.3. Section 6.6.5.3 (2) did not include solenoid actuator 312 with a model 2000 valve for FCV-150A. Section 6.6.5.3 (2) has been revised to include this solenoid. The panel also elected not to specify the model of valve used for TCV-101. Section 6.5.12 has been revised to no longer require one of two valves for this application. The panel also agreed to correct a discrepancy between Section 6.6.4.4 and other sections of the procedure. Specifically, Section 6.6.4.4 stated that the oil heating system have the capability of maintaining the oil at $107 \pm 2.8^\circ\text{C}$, while other sections say to introduce the oil during flushing operations at 93 to 107°C . Section 6.6.4.4 has been revised to reflect 93 to 107°C .
3. Finally, at the November 18, 2009 Sequence VI Surveillance Panel meeting, the panel agreed to allow more than one fuel batch to be used for a given test. In the past, only one fuel batch was allowed for a test. Because of tank availability and test length, this requirement proved to be extremely difficult from a logistics stand point. Section 7.2.2 has been revised to allow more than one fuel batch and how to describe which fuel batch was used for a given test.

The attached changes to Test Method D 7589 are effective November 18, 2009.

Bruce Matthews
Engine Oil Test Development and Support
GM Powertrain Materials Engineering

Frank M. Farber
Administrator
ASTM Test Monitoring Center

Attachment

c: ftp://ftp.astmtmc.cmu.edu/docs/gas/sequencevi/vid/procedure_and_ils/il09-2.pdf
Distribution: Email

(Revises Test Method D7589)

6.5.12 Use a control valve (TCV-101 in Fig. A2.2 and Fig. A2.3) for controlling the process water flow rate through the heat exchanger HX-1. A Badger Meter Inc. Model 9001GCW36SV3Axxx36 (air-to-close) or Model 9001GCW36SV1Axxx36 (air-to-open), 2-way globe, 1-in. valve have been found to be suitable for this application (see X1.10).

6.6.4.4 An oil heating system (with appropriate controls) for each oil reservoir with the capability of heating the oil in the reservoir to (93 to 107) °C.

6.6.5.3 Use solenoid valves (FCV-150A, FCV-150C, FCV-150D, and FCV-150E, in Figs. A2.6) (see X1.16).

(1) FCV-150F and its related lines/piping are optional.

(2) FCV-150A is a Burkert Type 251 piston-operated valve used with a Type 312 solenoid valve (or a Burkert Type 2000 piston-operated valve used with a Type 311, 312 or 330 solenoid valve) for actuation of air supply to the piston valve, solenoid valve direct-coupled to piston valve, normally closed, explosion proof (left to the discretion of the laboratory), and watertight, 3/4 in., 2-way, stainless steel NPT fitting.

7.7.2 Approved HF 003 fuel can be added to run tanks as needed. If a new batch of fuel is introduced to the laboratory fuel supply system, the batch number for that tank will change when 51% of the fuel in the tank is the new batch. In cases where the run tank contains more than one fuel batch, document the majority fuel batch in the report.

10.1.1.2 The first three calibration periods on a given stand/engine combination are ten full length non-reference oil tests or 1750 engine hours or 100 days, whichever occurs first.

10.1.1.3 Subsequent calibration periods on a given stand/engine combination are seven full-length non-reference oil tests or 1225 engine hours or 100 days, whichever occurs first.