

## **Test Monitoring Center**

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Sequence IIIH Information Letter 17-1 Sequence No. 1 March 22, 2017

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 III Mailing List

SUBJECT: 1) Use of Fans on Exhaust Manifolds

2) Correction to Figure A3.1 Blowby Canister Mounting

3) Insulating of Blowby System

- 1. During March 10, 2017 Sequence III Conference call, the panel agreed to mandate the use of fans on the exhaust system. Existing section 6.2.2 has been deleted and Section 6.2.2.2 has been revised to require a small fan be installed parallel to the exhaust and renumbered as 6.2.2. Section 6.2.2.1 has been renumbered as section 6.2.3. Existing Section 6.1.1.4 has been modified to make an exception for exhaust fans. This change is to be accomplished with a successful reference, for stands which do not already have fans installed, by May 1, 2017
- 2. During the March 10, 2017 conference call the panel agreed that the blowby canister in Figure A3.1 be shown as mounted horizontally. A note has been added to Figure A3.1 to show that the canister is to be mounted in a horizontal plane. This change is effective with the issuance of this letter.
- 3. Finally, during the March 10, 2017 conference call, the panel agreed that insulation is not to be installed on components in the blowby system. Section 6.12.1 has been revised to prohibit insulating of the blowby system. This change is effective with the issuance of this letter.

Revisions to the draft test method are attached.

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Head of Materials, Fasteners & Engrg Standards

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Director

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Attachments

c: ftp://ftp.astmtmc.cmu.edu/docs/gas/sequenceiii/procedure\_and\_ils/IIIH/IL17-1\_IIIH.pdf

Distribution: Electronic Mail

## **Modifies Draft Sequence IIIH Procedure Dated October 3, 2016**

- 6.1.1.4 A fan is required to be installed to direct air flow on or near the electronic components in the exhaust system; but air (hot or cold) is not permitted to be directed onto other engine surfaces during test operation.
- 6.2.2 To minimize the temperature effects on electronic components near the exhaust system, place a fan with an output less than 140 L/s at the front of the engine with the air flow directed toward the exhaust pipes, parallel to the driveshaft. Place fan at a minimum of 35 cm from the centerline of the harmonic balancer.
- 6.2.3 For operator safety and the protection of test components, the use of shielding and insulation on the exhaust system may be incorporated downstream of the oxygen sensor elbow.
- 6.12.1 Ventilate blowby gasses from the test cell through a scavenger fan. Do not allow the fan to create a vacuum on the crankcase. Do not insulate any components in the blowby system. An Air Ecology Evacuation System<sup>17</sup> has been found to be suitable. The crankcase ventilation configuration is shown in Annex A3.

Figure A3.1

