



## Test Monitoring Center

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1P Information Letter No. 14-1  
Sequence No. 10  
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*ASTM consensus has not yet been obtained on this information letter. An appropriate ASTM ballot will be issued in order to achieve such consensus.*

TO: Single Cylinder Diesel Mailing List

SUBJECT: Revision to 1P Oil Weigh Bucket Pump and Motor Requirements  
Removal of Procedure for Verification of Oil Scale Pump Flows

As approved during the August 22<sup>nd</sup> 2014 Caterpillar Surveillance Panel conference call, the 1P procedure has been modified to remove the specification of the Viking C 90 and Viking C 92 pumps for the oil weigh system and allow for equivalent pumps to be used. All references to the method for verification of oil scale pump flows has also been removed. Section 6.2.4 has been modified and is attached. Sections 6.1, 6.2 and 6.3 of Annex A.6 have been removed and Note 1 has been modified. The revised pages are attached.

The attached changes to Test Method D6681 are effective with the issue date of this letter.

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Attachment

c: [ftp://ftp.astmtmc.cmu.edu/docs/diesel/scote/procedure\\_and\\_ils/1p/il14-01.pdf](http://ftp.astmtmc.cmu.edu/docs/diesel/scote/procedure_and_ils/1p/il14-01.pdf)

Distribution: Email

**(Revises Test Method D6681-14)**

6.2.4 *Oil Consumption System*—Use an oil scale system to accurately measure oil consumption (see Fig. A6.2 and Fig. A6.3). The oil scale system shall have a resolution as listed in Annex A2. Use flexible hoses similar to Aeroquip flexible hose, FC352-08, to-and-from the oil scale reservoir to eliminate measurement errors.<sup>11,16</sup> Use No.5 TFE-fluorocarbon, steel-braided hoses to-and-from the oil scale pumps. The hose length to-and-from the oil scale cart shall not exceed 2.7 m. Use the special oil pan adapter described in Fig. A6.4.

***Remove sections A6.1, A6.2 and A6.3 from Annex A6 and renumber remaining sections accordingly.***

FIG. A6.3, NOTE 1—

- (1) Suction Hose (or equivalent): TFE-fluorocarbon steel-braided, ID 6.4 mm, maximum length, 2.74 m
- (2) Return Hose (or equivalent): TFE-fluorocarbon steel-braided, ID 6.4 mm, maximum length 2.74 m
- (3) Pump - Use appropriate pump(s) to achieve 23.6 kg/h to 24.9 kg/h suction and 16.3 kg/h to 17.7 kg/h return flow. (Viking Model SG-041825-EO has been found to be suitable.)
- (4) Pump Motor (or equivalent) Type: 56 Nema Grainger 6K949 Speed: 1140 r/min Power: 0.56 kW
- (5) Vent Line: hose ID 6.35 mm
- (6) Oil in Reservoir: 1000 g (approximately)
- (7) Scale Precision: See Procedure
- (8) Flexible Hose: (to-and-from fixed external sump support) (or equivalent): Aeroquip FC352-08