

## Test Monitoring Center

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1K/1N Information Letter No. 10-1 Sequence No. 31 March 25, 2010

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: Note Regarding Oil Pressure Limits for Oils other than 15W-40.

During the March 9, 2010 SCOTE Surveillance Panel Conference Call, the panel agreed to allow tests run on viscosity grade oils other than 15W-40 to deviate from the oil pressure limits given in the test method. Test facilities are to make every effort to maintain these pressures for oils with viscosities other than 15W-40, but when these limits cannot be achieved, these deviations are to be reported in the comments section of the test report. Table A10.1 contained in Annex A10 has been revised to include Footnote A, which describes these situations.

The attached changes to Test Method D6750 are effective March 9, 2010.

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Caterpillar, Inc.

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**ASTM Test Monitoring Center** 

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Attachment

c: ftp://ftp.astmtmc.cmu.edu/docs/diesel/scote/procedure\_and\_ils/1k-1n/il10-01.pdf

Distribution: Email

## (Revises Test Method D6750-09, as amended by Information Letters 08-01, 09-01 and 09-2)

TABLE A10.1 Engine Run-in, Warm-up, Cool-down, and Test Conditions

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Step No.	Range	Unit	1	2	3	4	5
Test Time		min	5	5	10	20	20
Engine speed	± 10	r/min	1000	1000	1800	2100	2100
Engine power		kW	idle	12	26	38	52
BMEP		kPa		586	690	855	1240
Fuel Rate	± 53	kJ/min		2160	4250	6250	8430
Fuel flow		g/min		48	94	137	185
B.S.F.C.		kg/kW-h				0.222	0.213
Humidity	± 1.7	g/kg				17.8	17.8
•		Temperat	ures				
Coolant out	± 2.5	°C			84	90	93
Coolant in		°C				86	88
Coolant ∆T	± 1	°C				4	5
Oil to bearing	± 2.5	°C			76	93	107
Oil cooler in		°C				96	110
Inlet air	± 2.5	°C °C			93	93	127
Exhaust	± 30	°C				405	550
Fuel injector housing	± 3	°C				57	57
		Pressur	es				
Oil to bearing <sup>A</sup>		Max. kPa				440	482
Oil to jet A	± 13	kPa			410	370	360
Inlet air (ABS)	± 1	kPa	120	120	160	220	240
Exhaust (ABS)	±1	kPa		104	140	180	216
Fuel filter housing	± 20	kPa				210	210
Crankcase vacuum	± 0.1	kPa					0.7
Coolant jug		kPa					50
		Flows					
Blowby		L/min					23
Coolant flow	± 2.0	L/min					65
Air/Fuel ratio							29

<sup>&</sup>lt;sup>A</sup> Oil pressure operating specifications apply only to 15W-40 oils. Attempt to maintain these limits for all oils. When oils other that 15W-40 oils fall outside these limits, explain these deviations from the limits in the comments section of the test report.