



Test Monitoring Center

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T-13 Information Letter 20-1
Sequence No. 7
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ASTM consensus has not been obtained on this information letter. An appropriate ASTM ballot will be issued in order to achieve such consensus.

TO: Mack Surveillance Panel Mailing List
SUBJECT: T-13 Quality Index Calculation Constant Update - Humidity

During the June 1, 2016 Surveillance Panel meeting the panel agreed to quality index limits for inlet air humidity ratio for T-13 tests. These constants were never added to Table A7.1 of D8048. In addition, Footnote A for Table A7.1 has been deleted since it did not apply to the T-13 test. This information letter serves to update that table with the correct values.

The updates to Table A7.1 are attached. This change is effective immediately.

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Attachment

c: http://www.astmtmc.cmu.edu/ftp/docs/diesel/mack/procedure_and_ils/T-13/il20-01-T13.pdf

Distribution: Email

(Revises 8048-19a)

TABLE A7.1 Quality Index and Average Calculation Values^A

Control Parameter	Units	Quality Index Threshold	Quality Index		U & L Values		Over & Under Range Values	
			U	L	Low	High		
Speed	r/min	0.000	1502.5	1497.5	1350	1650		
Fuel Flow	kg/h	0.000	69.0	67.0	8.0	128.0		
Coolant Out Temp	°C	0.000	110.7	109.3	68.0	152.0		
Oil Gallery Temp	°C	0.000	130.3	129.7	112.0	148.0		
Intake Air Temp	°C	0.000	30.6	29.4	-6.0	66.0		
Inlet Manifold Temp	°C	0.000	78.8	77.2	30.0	126.0		
EGR Gas Out Temp	°C	0.000	121.0	119.0	60.0	180.0		
Fuel In Temp	°C	0.000	35.5	34.5	5.0	65.0		
Inlet Air Pressure	kPa (abs)	0.000	94.5	93.5	64.0	124.0		
Exhaust Back Pressure	kPa (abs)	0.000	115.7	114.9	91.3	139.3		
Inlet Air Humidity Ratio	g/kg	0.000	12.4	10.4	-18.1	41.9		
Ranged Parameter	Units	Range			Over & Under Range Values			
Inlet Manifold Pressure	kPa (gauge)	232 ± 5			0.0	532.0		
Intake CO ₂	%	2.01 to 2.11			1.7	2.4		
Engine Coolant Blanket Pressure	kPa (gauge)	99 to 107			0	343.0		
EGR Coolant Blanket Pressure	kPa (gauge)	99 to 140			0	1349.5		
Crankcase Pressure	kPa (abs)	-0.3 to 0.3			-18.0	18.0		

^AU and L values for speed, fuel flow, inlet manifold temperature, coolant out temperature, and oil gallery temperature are split by test phase.