

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

**IT IS ORDERED AND RESOLVED:** That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2009	9HMXL07.7JTM	7.684	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Exhaust Gas Recirculation, Electronic Control Module			Crane, Excavator	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kW-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 3	STD	N/A	N/A	4.0	5.0	0.30	20	15	50
130 ≤ kW < 225	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT	--	--	3.5	0.8	0.09	2	4	4

**BE IT FURTHER RESOLVED:** That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

**This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.**

Executed at El Monte, California on this 12<sup>th</sup> day of December 2008.

*J. Lawrence*  
 Annette Hebert, Chief  
 Mobile Source Operations Division

**Engine Model Summary Template**

U.R. 020-0044

ATTACHMENT

Engine Family	1 Engine Code	2 Engine Model	3 BHP@RPM (SEA Gross)	4 Fuel Rate: mmstroke @ peak HP (for diesel only)	5 Fuel Rate: (bchrt) @ peak HP (for diesel only)	6 Torque @ RPM (SEA Gross)	7 Fuel Rate: mmstroke@peak stroke	8 Fuel Rate: (bchrt)@peak torque stroke	9 Emission Control Depend Par. 305, 310
9HMXL07.7JTM	AA-J08E-TB	AA-J05E-TB	183@2100	143+-4.5	65.1+-2.1	482@1600	145+-4.5	49.6+-1.6	EMECMEGR DDI, TAA
9HMXL07.7JTM	AB-J08E-UM	AB-J08E-UM	168@2300	81+-4.0	61.4+-3.0	406@1600	79+-4.0	41.6+-2.1	EMECMEGR DDI, TAA
9HMXL07.7JTM	AA-J08E-UM	AA-J08E-UM	172@2300	83+-4.0	62.9+-3.0	471@1600	90+-4.0	47.4+-2.1	EMECMEGR DDI, TAA
9HMXL07.7JTM	AC-J08E-TM	AC-J08E-TM	213@2300	102+-4.0	77.3+-3.0	553@1600	106+-4.0	55.9+-2.1	EMECMEGR DDI, TAA
9HMXL07.7JTM	AA-J08E-TM	AA-J08E-TM	213@2000	110+-4.0	71.6+-2.6	588@1600	113+-4.0	57.3+-2.1	EMECMEGR DDI, TAA
9HMXL07.7JTM	AB-J08E-TM	AB-J08E-TM	280@2100	144+-4.5	98.4+-3.1	736@1600	146+-4.5	75.0+-2.3	EMECMEGR DDI, TAA