

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 December 15, 1998 Settlement Agreement between the Air Resources Board and the manufacturer, and any modifications thereof to the Settlement Agreement;

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 engine and emission control system 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	9CPXL32.0ESP	32.0	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler and Engine Control Module			Industrial Equipment	

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	STD	EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
KW > 560	Tier 2	N/A	N/A	N/A	6.4	3.5	0.20	20	15	50
		CERT	--	--	5.7	0.9	0.06	8	2	14

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 15 day of January 2009.


 Annette Hebert, Chief
 Mobile Source Operations Division

Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate:		5.Fuel Rate:		6.Torque @ RPM (SEA Gross)		7.Fuel Rate:		8.Fuel Rate:		9.Emission Control Device Per SAE J1930
				mm/stroke @ peak HP (for diesel only)	mm/stroke @ peak HP (for diesels only)	(lbs/hr) @ peak HP	(for diesels only)	(SEA Gross)	mm/stroke@peak torque	(lbs/hr)@peak torque	Per SAE J1930			
9CPXL32.0ESP	Cert Test	C32	1350@1800	399	482.8	4551@1400	436	410.4	EM, DI, TC,					
9CPXL32.0ESP	1	C32	800@2100	207	292.9	2447@1350	239	217.1	EM, DI, TC,					
9CPXL32.0ESP	2	C32	1000@2100	262	370	3047@1400	310	292	EM, DI, TC,					
9CPXL32.0ESP	3	C32	1000@2100	262	370	3047@1400	310	292	EM, DI, TC,					
9CPXL32.0ESP	4	C32	800@2100	209	296	2447@1350	249	227	EM, DI, TC,					
9CPXL32.0ESP	5	C32	861@2100	216	306	2607@1400	264	249	EM, DI, TC,					
9CPXL32.0ESP	6	C32	920@2100	244	345	3023@1400	312	294	EM, DI, TC,					
9CPXL32.0ESP	7	C32	800@2100	209	295	2473@1350	249	227	EM, DI, TC,					
9CPXL32.0ESP	8	C32	920@2100	239	338	3023@1400	312	294	EM, DI, TC,					
9CPXL32.0ESP	9	C32	860@2100	221	313	2599@1400	263	248	EM, DI, TC,					