EXECUTIVE ORDER U-R-027-0111 New Off-Road Compression-Ignition Engines

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)		
2010	ALBDL.95412L	0.954	Diesel	3000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Mechanical Direct Injection			Tractor, Pump, Compressor, Generator Set, Other 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	EMISSION		EXHAUST (g/kw-hr)			OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
8 ≤ kW< 19	Tier 4	STD	N/A	N/A	7.5	6.6	0.40	20	15	50
		CERT			6.3	5.5	0.30	4	3	6

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

Annette Hebert, Chief

Mobile Source Operations Division

day of December 2009.

Attachment 1 ab 1

Engine Model Summary Template

		-		
	ontrol J1930	EM DD (*	
))) 0	9.Emission Control Device Per SAE J193	EM	EM	
1101+1014	8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torqueDevice Per SAE J1930	6.22	6.22	
<u>(</u>)	7.Fuel Rate: mm/stroke@peak torque	28.0	28.0	
	6.Torque @ RPM (SEA Gross)	36.9@2000	36.9@2000	
	5.Fuel Rate: (lbs/hr) @ peak HP 6.Torque @ RP (for diesels only) (SEA Gross)	7.03	7.03	
	4.Fuel Rate: 5.Fuel Rate: 7.Fuel Rate: 3.BHP@RPM mm/stroke@peak HP (lbs/hr) @ peak HP 6.Torque @ RPM mm/stroke@peak (SAE Gross) (for diesel only) (SEA Gross) torque	23.5	23.5	
	3.BHP@RPM (SAE Gross)	17.2@2700	17.2@2700	
	з.внр@RPM Engine Family 1.Engine Code 2.Engine Model (SAE Gross)	12LD477	KD 477-2	
500	1.Engine Code	e de la companya de l	e et falleste e en	
12-2-2009	Engine Family	ALBDL.95412L	ALBDL.95412L	