PERKINS ENGINES COMPANY LTD.

EXECUTIVE ORDER U-R-022-0114 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 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)		
2008	8PKXL04.4NM1	4.4	. Diesel	8000		
	SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		TYPICAL EQUIPMENT APPLICATION			
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Smoke Puff Limiter			Cranes, Loaders, Tractor, Dozer, 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 POWER CLASS	EMISSION		EXHAUST (g/kw-hr)				OPACITY (%)			
	STANDARD CATEGORY		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
		CERT			3.9	1.0	0.29	10	9	15

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

_ day of December 2007.

Annette Hebert, Chief

Mobile Source Operations Division

Engine Model Summary Template

Attachment 1 of 1

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8.Fuel Rate: 9.Emission Control (tbs/hr)@peak torqueDevice Per SAE J1930	DDITANTC CAC SPL	DDI TAA	DDI TAA	DOI TAN U	
8.Fuel Rate: (lbs/hr)@peak torqu	30.1	30.1	30.1	30.1	
7.Fuel Rate: mm/stroke@peak torque	98.2	98.2	98.2	98.2	
6.Torque @ RPM (SEA Gross)	308@1400	308@1400	302@1400	302@1400	
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	44.2	45.2	45.4	44,2	
4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP 6.Torque @ RPM (for diesel only) (SEA Gross)	91.6	90.1	90.1	91.6	
3.BHP@RPM (SAE Gross)	111.3@2200	111.3@2300	108.6@2300	108.6@2200	
2.Engine Model	3058/2200	3058/2300	3059/2300	3059/2200	
Engine Family 1.Engine Code 2.Engine Model	And an interest to the second of the second	7	æ	4	
Engine Family	8PKXL04.4NM1	8PKXL04.4NM1	8PKXL04.4NM1	8PKXL04.4NM1	