Californ	ia Environmental Protection /	gency
	in Environmental Protection / RESOURCES	BOARD

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	9YDXL1.11W3N	1.116	Diesel	3000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
	Indirect Diesel Inje	ection	Crane, Loader, Tractor Pump, Compressor, Re	r, Dozer, frigerator		

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, 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	со	PM	ACCEL	LUG	PEAK
8 ≤ kW < 19	Tier 4	STD	N/A	N/A	7.5	6.6	0.40	20	15	50
		FEL			7.0					
		CERT			5.5	1.6	0.17	4	4	5

BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

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 July 2008.

Annette Hebert, Chief Mobile Source Operations Division

6040	8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torqueDevice Per SAE J1930	EM IDI	EM IDI	EM IDI	
ATTACHMENT EO#U-R-028-0409	8.Fuel Rate: lbs/hr)@peak torq	7.9	7.7	7.7	
ATTA Eo#	7.Fuel Rate: mm/stroke@peak torque (25.3	24.5	24.5	
	6.Torque @ RPM (SEA Gross)	50.5/1900	49.2/1900	49.2/1900	
	5.Fuel Rate: (lbs/hr) @ peak HP (for dieseis only)	8.3	8.2	8.2	
	4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP (for diesel only) (for diesels only)	20.7	20.4	20.4	
	3.BHP@RPM (SAE Gross)	19.7/2425	19.6/2425	19.6/2425	
	2.Engine Model	3TNV76K-VM	TK376	TK376U	
	1.Engine Code	NIA	N/A	N/A	
	Engine Family	9YDXL1.11W3N	9YDXL1.11W3N	9YDXL1.11W3N	

Engine Model Summary Template