California Environmental Protection Agency AIR 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	9SZXL03.0IXA	3.0	Diesel	8000
	FEATURES & EMISSION		TYPICAL EQUIPMENT	
Direct Dies Electroni	sel Injection, Turbocharg c Control Module, Exhau	er, Charge Air Cooler, st Gas Recirculation	Excavator, Vibrating Roller Other Industrial Ec	, Asphalt Finisher, quipment

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			E	XHAUST (g/kW-l	hr)		OF	PACITY (%	6)
POWER CLASS	STANDARD CATEGORY		НС	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 3	STD	N/A	N/A	4.0	5.0	0.30	20	15	50
		CERT			3.7	0.6	0.13	15	2	32

**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 September 2008.

H Hole

Annette Hebert, Chief Mobile Source Operations Division

## **Engine Model Summary Template**

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ATTACHMENT

U-R-006-0300

Engine Family	Engine Family 1.Engine Code 2.Engine Model	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP (for diesel only) (for diesels only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torqueDevice Per SAE J193
9SZXL03.0IXA	4JJ1XDIAA-01	AI-4JJ1X	127.4@2200	89.0@2200	43.5@2200	309.8@1800	95.0@1800	38.0@1800 C	ECM, TC, CA <b>C</b> DPI, EGR
9SZXL03.0IXA	4JJ1XDIAA-02	AI-4JJ1X	123.4@2200	86.7 <b>°</b> @2200	42.4@2200	309.8@1800	95.0@1800	38.0@1800	ECM, TC, CAC EGR
9SZXL03.01XA	4JJ1XDIAA-03	AI-4JJ1X	127.4@2500	79.3@2500	44.1@2500	301@2000	93.9 <b>@</b> 2000	41.8@2000	ECM, TC, CAC EGR
9SZXL03.0IXA	4JJ1XDIAA-04 AI-4JJ1X	AI-4JJ1X	103.3@2200	72.8@2200	35.6@2200	284@1600	85.9@1600	30.6@1600	ECM, TC, CAC / EGR