

## **KUBOTA Corporation**

EXECUTIVE ORDER U-R-025-0385 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)						
2009	9KBXL02.0FCD	1.499, 1.999	Diesel 5000							
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION							
	Indirect Diesel Inje	ection	Tractor, 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		OPACITY (%)						
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK			
8 ≤ kW < 37	Tier 4 Interim	OPTIONAL STD	N/A	N/A	7.5	5.5	0.30	. 20	15	50			
		CERT			5.8	1.0	0.13	2	3	3			

**BE IT FURTHER RESOLVED:** That for the listed engine models, the manufacturer has complied with the more stringent set of standards from the various power categories in conformance with Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for 2008 and Later Tier 4 Off-Road Compression-Ignition Engines, Part I-C" adopted October 20, 2005.

**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 2008.

Annette Hebert, Chief

Mobile Source Operations Division

Rephael Susmowitz

## **Engine Model Summary Form**

KUBOTA Corporation Manufacturer:

Nonroad CI Engine category:

EPA Engine Family: 9KBXL02.0FCD

Mfr Family Name: N/A

**New Submission** Process Code:

U-R-025-0385

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9.Emission Control evice Per SAE J1930	EM IDI	EM	M	EM	E	EM	Z	EM	EM EM	EM	S III	EΜ	M M M	E E	EM	EM	EM						and the same of th		
9.Emis Je Device F									777	enderdel zieladikkonrede za silankizatzak		ed and became the company of the property of		and the state of t											
8. Fuel Rate: 9. Emission Control (lbs/hr)@peak torque Device Per SAE J1930	<i>L</i> '8	8.5	8.7	8.7	8.7	8.5	8.5	8.1	11.9	11.8	2 H 3 2 2 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3	11.8	11.8	11.8	211		10.8	management of the state of the			entriniska i san i kanalinananna serentriniska enderski fran en de om en en en en engry pok				
7.Fuel Rate: mm/stroke@peak torque	32.4	31.8	32.4	32.4	32.4	31.8	31.8	32.4	33.3	32.9	32.7	32.9	32.9	32.9	32.7	32.7	32.1				confidencement or continuous cont		يتوالي بالمحافظ في المحافظ والمحافظ والم والمحافظ والمحافظ والمحافظ والمحافظ والمحافظ والمحافظ والمحاف		
6.Torque @ RPM (SEA Gross)	70.0@1600	68.8@1600	70.0@1600	70.0@1600	70.0@1600	68.8@1600	68.8@1600	70.0@1500	97.3@1600	96.1@1600	94.5@1600	96.1@1600	96.1@1600	96.1@1600	94.5@1600	94.5@1600	93.7@1500	And the second s		- 10 (A)	dalem irrakirentadda da temper, meda meda da medir en den en tempera da keine senseteisisisis	5-24 5-34 5-34 5-34 5-34 5-34 5-34 5-34 5-3	en skilanski krimina i semina		management of the state of the
5.Fuel Kate: (lbs/hr) @ peak HP (for diesels only)	13.8	10.1	13.2	12.6	12.1	11.3	10.7	13.0	18.5	18.5	13.7	17.6	16.7	15.9	15.2	noti-zin-tantorizinin ininistriinin kalintariinin kuntuutuutuutuutuutuutuutuutuutuutuutuutu	16.8				er percenya ndereferendareken idisia beskikiri sa serfa sefeksen adirektra filosofi. A		and the state of t		
4.Fuel Kate: mm/stroke @ peak HP (for diesel only)	29.4	27.5	29.2	29.0	28.8	28.0	27.7	27.7	29.6	29.6	27.8	29.2	28.7	28.5	28.3	28.1	27.8	adentineminantingstyleiden mannen dem film fra styleiden mannen dem film fra styleiden men en dem film fra styleiden men en dem film film film film fra styleiden men en dem film film film film film film film fil			rikes tekste men allemanna alemina sakarinakanikanikanikenikengengengengen demikiri		And the second s	and the state of t	The same of the sa
3.BHP@RPM (SAE Gross)	31.9@2800	25.1@2200	30.7@2700	29.6@2600	28.4@2500	27.4@2400	26.1@2300	30.0@2800	43.7@2800	43.7@2800	34.5@2200	42.2@2700	40.6@2600	39.2@2500	37.5@2400	35.9@2300	40.2@2700				THE STATE OF THE S				
2.Engine Model	D1503-M-ET	D1503-M-ET18-7	D1503-M-ET	D1503-M-ET	D1503-M-ET	D1503-M-ET	D1503-M-ET	D1503-M-ET	V2003-M-ET 3> 6 43.7@2800	V2003-M-ET ₹₩	V2003-M-ET	V2003-M-ET	V2003-M-ET	V2003-M-ET	V2003-M-ET	V2003-M-ET	V2003-M-ET	***************************************			MARTINI APPRILATION PRINCIPLES CONTRACTOR CO				
1.Engine Code	D1503-M-ET01	D1503-M-ET02	D1503-M-ET03	D1503-M-ET04	D1503-M-ET05	D1503-M-ET06	D1503-M-ET07	D1503-M-ET08	V2003-M-ET01	V2003-M-ET02	V2003-M-ET03	V2003-M-ET04	V2003-M-ET05	V2003-M-ET06	V2003-M-ET07	V2003-M-ET08	V2003-M-ET09	(1811)   111,1811   111,181			1000 de la companya del companya de la companya del companya de la	and the second section of the second section of the second		Transferment televisions	