

## **KUBOTA Corporation**

EXECUTIVE ORDER U-R-025-0527 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)							
2012	CKBXL01.1BCB	1.123	Diesel 300								
	FEATURES & EMISSION (	Marie	TYPICAL EQUIPMENT APPLICATION								
	Indirect Diesel Inje	ction	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			. 6	XHAUST (g/kw-l	OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		HC	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
8 ≤ kW < 19	Tier 4 Final	STD	N/A	N/A	7.5	6.6	0.40	20	15	50
		CERT			6.7	1.3	0.18	8	4	19

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 2011.

Annette Hebert, Chief

Mobile Source Operations Division-

## **Engine Model Summary Form**

Manufacturer: KUBOTA Corporation
Engine category: Nonroad CI
EPA Engine Family: CKBXL01.1BCB

Mfr Family Name: N/A

Process Code: New Submission

Attachment

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EO # U-K-0>5-05>7

11/8/2011

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7.Fuel Rate: mm/stroke@peak torque								-  :					7 (A)	•			i.									
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6.Torque @ RPM (SEA Gross)	52.9@1700	52.7@2200	52.7@2200	53.4@1900	50.5@1900	50.9@1900	52.6@1700	52.7@1600	52.5@1600	50.7@1500	52.7@1600	52.2@1600									4	:				
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5.Fuel Rate: s/hr) @ peak or diesels onl	9.5	11.6	11.2	10.8	6.6	9.8	9.2	8.9	8	8.	8	8.4		٠.			Nie							٠.		
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3.BHP@RPM (SAE Gross)	21.9@2600	1.8(	1.8(	24.3@2800	22.5@2700	22.3@2700	21.3@2500	20.9@2400	20.8@2400	19.0@2250	19.0@2200	19.8@2300	NA.	٠.	1000			٠.			- 1					
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