

## **KUBOTA Corporation**

EXECUTIVE ORDER U-R-025-0473 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			FUEL TYPE	USEFUL LIFE (hours)		
2011	BKBXL01.0BCC	1.001	Diesel	3000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		TYPICAL EQUIPMENT APPLICATION				
Indirect Diesel Injection			Generator Set, Refrigeration Unit			

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
8 <u>≤</u> kW < 19	Tier 4	STD	N/A	N/A	7.5	6.6	0.40	N/A	N/A	N/A
		CERT			5.2	0.9	0.20			

**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 2010

Annette Hebert, Chief

Mobile Source Operations Division

## **Engine Model Summary Form**

Manufacturer: KUBOTA Corporation  Engine category: Nonroad CI  EPA Engine Family BKBXL01.0BCC  Mfr Family Name: N/A  Process Code: New Submission	Λ *	4	なつ	Ç	٩
Manufacturer: KUBOTA Corporation Engine category: Nonroad Cl EPA Engine Family: BKBXL01.0BCC Mfr Family Name: N/A Process Code: New Submission	د - -	Attachment			- to ) xbod
Manufacturer: Engine category: EPA Engine Famty: Mfr Family Name: Process Code:	KUBOTA Corporation	Nonroad CI	BKBXL01.0BCC	N/A	New Submission
		Engine category:	EPA Engine Family.	Mfr Family Name:	Process Code:

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ý	ntrol J1930	EM IDI		<b>→</b>
,te: 1	9.Emission Cor Device Per SAE	EM	EM	EM
8) dma)	8.Fuel Rate: 9.Emission Control (bs/ht)@peak torque Device Per SAE J1930	N/A	N/A	N/A
- of b	7.Fuel Rate: mm/stroke@peak torque	A/A	A/A	A/N
page 1 of	6.Torque @ RPM (SEA Gross)	N/A	N/A	A/N
	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.5	6.2	5.1
	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	21.7	20.6	20.1

14.5@1800 11.8@1500

15.7@1800

3.BHP@RPM (SAE Gross)

2.Engine Model D1005-BG-ET D1005-BG-ET D1005-BG-ET

1.Engine Code

D1005-BG-ET02 D1005-BG-ET01

D1005-BG-ET03