

KUBOTA Corporation

EXECUTIVE ORDER U-R-025-0476 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)	
2011	BKBXL01.3DCC	1.261	Diesel		
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	EMISSION		EXHAUST (g/kw-hr)			OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
8 ≤ kW < 19	Tier 4	STD	N/A	N/A	7.5	6.6	0.40	N/A	N/A1	N/A
		CERT	1		5.7	1.0	0.21			

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

KUBOTA Corporation	Nonroad CI	EPA Engine Family: BKBXL01.3DCC	N/A
Manufacturer:	Engine category:	EPA Engine Family.	Mfr Family Name: N/A

0476	Hrol HDA
12/21	9.Emission Control Device Per SAE J193 EM
EO# U-R-025-0496 Date: 12/2/2010 Complete: 11/29/2010	8.Fuel Rate: 9.Emission Control (Ibs/hr)@peak torque Device Per SAE J1930 N/A EM TM N/A EM N/A EM
	7 Fuel Rate: mm/stroke@peak torque N/A N/A
4	6.Torque @ RPM (SEA Gross) N/A N/A
ttachment Page (5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only) 8.2 7.8 6.4
Attacl	4.Fuel Rate: mm/stroke @ peak HP (for diesel only) 27.2 25.9 25.4
n	3.BHP@RPM (SAE Gross) 19.8@1800 19.0@1800 15.6@1500
Manufacturer: KUBOTA Corporation Engine category: Nonroad CI EPA Engine Family: BKBXL01.3DCC Mfr Family Name: N/A Process Code: New Submission	2.Engine Model D1305-BG-ET D1305-BG-ET D1305-BG-ET
Manufacturer: KUE Engine category: Non EPA Engine Family: BKE Mfr Family Name: N/A Process Code: New	1. Engine Code D1305-BG-ET01 D1305-BG-ET02 D1305-BG-ET03