

KUBOTA CORPORATION

EXECUTIVE ORDER U-R-025-0336 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) 5000	
2008	8KBXL02.4FCC	2.434	Diesel		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION		
Indirect Diësel Injection, Engine Control Module			Compressor, Generator Set		

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 STANDARD CATEGORY		EXHAUST (g/kW-hr)				OPACITY (%)			
POWER CLASS			нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
19 <u><</u> kW < 37	Tier 4 Interim	STD	N/A	N/A	7.5	5.5	0.30	N/A	N/A	N/A
		CERT			6.4	0.7	0.24			

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 _____/8^{7th} day of June 2007.

Annette Hebert, Chief

Mobile Source Operations Division

Engine Model Summary Form

KUBOTA Corporation Manufacturer:

Engine category:

Nonroad CI 8KBXL02.4FCC EPA Engine Family:

Mfr Family Name: N/A

New Submission Process Code:

		_1	
8.Fuel Rate: 9.Emission Control (bs/hr)@peak torque Device Per SAE J1930	EM Z6Z	EM, Electronic	
8.Fuel Rate: (ibs/hr)@peak torque	N/A	N/A	
7.Fuel Rate: mm/stroke@peak torque	W	NA	
6.Torque @ RPM (SEA Gross)	NA	N/A	
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	16.5	16.3	
4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP (for diesel only) (for diesels only)	40.9	40.5	
3.BHP@RPM (SAE Gross)	41.2@1800	40.0@1800	
2.Engine Model	V2403-M-BG-ET	V2403-M-BG-ET	
1.Engine Code 2.Engine Model	V2403-M-BG-ET01 V2403-M-BG-ET 41.2@1800	V2403-M-BG-ET02e V2403-M-BG-ET 40.0@1800	

Engine Model Summary Form

Manufacturer: KUBOTA Corporation

Engine category: Nonroad CI

EPA Engine Family: 8KBXL02.4FCC

Mfr Family Name: N/A

Process Code: Running Change

	4		# 5. # 5.
n Control SAE J1930		5	ctronic
8.Fuel Rate: 9.Emission Control (bs/hr)@peak torque Device Per SAE J1930	6	ú	EM, Electronic
tate:		-	
8.Fuel F bs/hr)@pea	N	N/A	2
_	4	4	
7.Fuel Rate: mm/stroke@peak torque	Ŋ	NA	Ž
RPM SS)			
6.Torque @ RPM (SEA Gross)	₩.	N/A	₹
ite: sak HP only)			
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	16.5	16.3	16.3
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	40.9	40.5	40.5
	2	00	
3.BHP@RPM (SAE Gross)	41.2@1800	40.0@1800	40.0@1800
ngine Mo	403-M-BG	V2403-M-BG-ET	403-M-BC
te 2.E	101 V2	T02 V2	702e V2
1.Engine Code 2.Engine Model	V2403-M-BG-ET01	V2403-M-BG-ET02	V2403-M-BG-ET02e V2403-M-BG-ET 4
<u>т</u>	V24	V24	V240