

## **KUBOTA CORPORATION**

EXECUTIVE ORDER U-R-025-0338 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)
2008	8KBXL02.2FCC	1.647, 2.197	Diesel	5000
	FEATURES & EMISSION		TYPICAL EQUIPMENT A	APPLICATION
E	Indirect Diesel Inje ngine Control Module (se		Generator S	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	· · · · · · · · · · · · · · · · · · ·		E	XHAUST (g/kW-	hr)		OF	PACITY (%	.)
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
19 ≤ kW < 37	Tier 4 Interim	STD	N/A	N/A	7.5	5.5	0.30	N/A	N/A	N/A
		CERT			5.7	1.0	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<sup>24</sup>\_\_\_\_ day of June 2007.

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Mobile Source Operations Division

## **Engine Model Summary Form**

**KUBOTA Corporation** Manufacturer:

Nonroad CI Engine category:

8KBXL02.2FCC EPA Engine Family.

Attachment Eothu-R-025-0338

Process Code:

Mfr Family Name: N/A

**New Submission** 

	J4:		14.1
8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	EM, Electronic TPT	EM	EM.Electronic
8.Fuel Rate: (lbs/hr)@peak torque	N/A SERVICE	- 1	NA
7.Fuel Rate: mm/stroke@peak torque (it	N/A	N/A	N/A
6.Torque @ RPM (SEA Gross)	NA	NA	N/A
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	+	15.5	15.3
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	36.7	38.6	37.9
3.BHP@RPM (SAE Gross)	27.1@1800	37.1@1800	36.1@1800
2.Engine Model	D1703-M-BG-ET	V2203-M-BG-ET	V2203-M-BG-ET
1.Engine Code 2.Engine Model	D1703-M-BG-ET01e D1703-M-BG-ET 27.1@1800	V2203-M-BG-ET01 V2203-M-BG-ET	V2203-M-BG-ET02e V2203-M-BG-ET

## **Engine Model Summary Form**

EO# 4-K-025-0338

Manufacturer: KUBOTA Corporation

Engine category: Nonroad CI

EPA Engine Family: 8KBXL02.2FCC

Mfr Family Name: N/A

Process Code: Running Change

1.Engine Code 2.Engine Model	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	4.Fuel Rate: 5.Fuel Rate: Vstroke @ peak HP (lbs/hr) @ peak HP (for diesel only) (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque (lb	8.Fuel Rate: (lbs/hr)@peak torque	8.Fuel Rate: 9.Emission Control (lbs/h)@peak torque Device Per SAE J1930	_
D1703-M-BG-ET01	D1703-M-BG-ET	27.1@1800	36.7		NA	WA	NA	8	1
D1703-M-BG-ET01e	D1703-M-BG-ET	27.1@1800	36.7	11.1	N/A	N/A	N/A	EM, Electronic	
V2203-M-BG-ET01	V2203-M-BG-ET01 V2203-M-BG-ET	37.1@1800	38.6	15.5	NA	N.A.	NA	EN	
V2203-M-BG-ET02	V2203-M-BG-ET	36.1@1800	37.9	15.3	NA	NA	NA	EM	
V2203-M-BG-ET02e	V2203-M-BG-ET02e V2203-M-BG-ET	36.1@1800	37.9	15.3	NA	AN AN	NA	EM, Electronic	yake waa ya
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