

KUBOTA CORPORATION

EXECUTIVE ORDER U-R-025-0137 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.

		DISPLACEMENT	FUEL TYPE	(hours)		
MODEL YEAR	ENGINE FAMILY	(liters) 3.318		8000		
			Diesel			
2004	4KBXL03.3BCD	Elithopia (Company Company Com	TYPICAL EQUIPMENT A	PPLICATION		
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS				
		- stiem	Mower			
	Indirect Diesel Inju	ection				

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):

either mode (Pe	ak) for this er	ngine fam	ily (Title	13, Call	IOITIIA OOGO J.			OP	ACITY (%)
RATED	EMISSION				XHAUST (g/kw-h	CO	PM	ACCEL	LUG	PEAK
POWER	STANDARD CATEGORY		HC	NOx	7.5	5.0	0.40	20	15	50
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	6.5	1.0	0.24	5	4	9
		CERT	<u> </u>	1				- ubmittad	the infor	mation and

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.

day of August 2003. Executed at El Monte, California on this

Aller Lyons, Chief

Mobile Source Operations Division

Engine Model Sr mary Form

W-K-025-0137

KUBOTA Corporation

4KBXL03.3BCD EPA Engine Family.

Nonroad Cl

Engine category:

Manufacturer:

Mfr Family Name: N/A

Running Change Process Code:

ol 930	₹TQ.	-			-			f
9.Emission Control Device Per SAE J1930	₩ (III)	WA.	¥*	**	*/*	W/A	N/A	N/A
8.Fuel Rate: (lbs/hr)@peak torque	18.5	18.0	18.0	17.1	18.0	16.9	19.6	17.9
7.Fuel Rate: mm/stroke@peak torque	59.0	57.5	57.5	54.5	57.5	54.0	58.5	57.1
6.Torque @ RPM (SEA Gross)	175.3@1400	172.9@1400	167.1@1400	163.9@1400	172.9@1400	158.1@1400	172.9@1500	166.0@1400
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	30.2	30.2	28.8	27.4	27.4	26.5	25.3	28.7
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	52.0	52.0	51.5	51.0	51.0	51.5	51.5	51.3
3.BHP@RPM (SAE Gross)	71.1@2600	72.3@2600	69.2@2500	68.1@2400	68.0@2400	64.5@2300	62.6@2200	66.9@2500
2.Engine Model	V3300-ES	V3300-ES	V3300-ES	V3300-ES	V3300-ES	V3300-ES	V3300-ES	V3300-ES
1.Engine Code	V3300-ES01	/ V3300-ES02	V3300-ES03	V3300-ES04	V3300-ES05	V3300-ES06	V3300-ES07	V3300-ES08
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