

KUBOTA CORPORATION

EXECUTIVE ORDER U-R-025-0149

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)				
2004	4KBXL03.3ACD	3.318	Diesel	8000				
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION					
	Direct Diesel Injec	etion	Pump, Compressor, Other Industrial Equipment					

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 37 ≤ kW < 75	EMISSION STANDARD			E	XHAUST (g/kw-l		OPACITY (%)			
	CATEGORY	STD	HC N/A	NOx N/A	NMHC+Nox	co	PM	ACCEL	LUG	PEAK
	Tier 2				7.5	5.0	0.40	20	15	50
		CERT			6.6	2.6	0.34	2	2	3

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 September 2003.

Allen Lyons, Chief

Mobile Source Operations Division

Attachusent 1 of 1

Engine Model St. mary Form

KUBOTA Corporation Manufacturer:

Engine category: Nonroad CI
EPA Engine Family. 4KBXL03.3ACD

Mfr Family Name: N/A

New Submission Process Code:

W-R-025-0149

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9.Emission Control Device Per SAE J1930	₹	₽	₹	NA.				-									· 一
8.Fuel Rate: (lbs/hr)@peak torque	17.1	19.0	16.4	15.2													
mm/stroke@peak torque	54.5	50.0	52.5	48.5													
6.Torque @ RPM (SEA Gross)	180.0@1400	171.0@1700	176.7@1400	166.3@1400							***************************************				A		
(lbs/hr) @ peak HP (for diesels only)	28.5	25.7	24.7	22.1													
mm/stroke @ peak HP (for diesel only)	49.0	46.0	46.0	45.0							THE PROPERTY OF A REPORT OF A STREET OF THE PROPERTY OF THE PR						
3.BHP@RPM (SAE Gross)	73.6@2600	67.9@2500	68.8@2400	61.4@2200											**		
2.Engine Model	V3300-DI-ES	V3300-DI-ES	V3300-DI-ES	V3300-DI-ES													
1.Engine Code	V3300-DI-ES01	V3300-DI-ES02	V3300-DI-ES03	V3300-DI-ES04		100 mg											