

KUBOTA CORPORATION

EXECUTIVE ORDER U-R-025-0082 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-45-9;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engine and emission control system 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) 8000				
2002	2KBXL03.3BAD	3.318	Diesel					
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION					
In	direct Diesel Injection, T	urbocharged	Loader, 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	EMISSION			E	XHAUST (g/kw-l	OPACITY (%)				
POWER CLASS	STANDARD CATEGORY	:	НС	NOx	NMHC+Nox	со	PM	ACCEL	LUG	PEAK
37 <u><</u> KW < 75	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT		7.3				8	4	18

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

R. B. Summerfield, Chief

Mobile Source Operations Division

day of November 2001.

Engine Model ? nmary Form

Manufacturer: KUBOTA Corporation

Engine category: Nonroad Cl

EPA Engine Family. 2KBXL03.3BAD

Mfr Family Name: N/A

Process Code: New Submission

were Attachment

M-R-25-87-

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9.Emission Control Device Per SAE J1930	101,70 N#A	¥	TAM /	- V/V					entrantal delates transfer to the transfer to			
8.Fuel Rate: (lbs/hr)@peak torque	22.2			22.0					The state of the s			
7.Fuel Rate: mm/stroke@peak torque	71.0	65.0	0.69	70.3								
6.Torque @ RPM (SEA Gross)	216.3@1400	209.8@1400	209.7@1400	214.8@1400						me management and a series of the series of		
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	35.5	33.1	35.5	35.5				1				
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	61.0	57.0	61.0	61.0								
3.BHP@RPM (SAE Gross)		85.3@2600	87.4@2600	87.0@2600								
2.Engine Model	V3300-T-E	V3300-T-E	V3300-T-E	V3300-T-E								
1.Engine Code	V3300-T-E1	V3300-T-E2	V3300-T-E3	V3300-T-E4								