

KUBOTA Corporation

EXECUTIVE ORDER U-R-025-0443 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)
2010	AKBXL02.4FCD	1.826, 2.434	Diesel	5000
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT A	
Ele	Indirect Diesel Injectronic Control Module (ction, Some Models)	Tractor, Compressor, G Other Industrial Eq	enerator Set, uipment

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	hr)		OPACITY (%)		
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
19 <u><</u> kW < 37	Tier 4 Interim	STD	N/A	N/A	7.5	5.5	0.30	20	15	50
		CERT			6.3	0.9	0.18	2	3	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 December 2009.

Annette Hebert, Chief Mobile Source Operations Division

Engine Model Summary Form

KUBOTA Corporation Manufacturer:

Nonroad Cl Engine category:

AKBXL02.4FCD EPA Engine Family.

Mfr Family Name: N/A

Process Code:

New Submission

Attachment

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(for diesel only)	-	(ror diesels only)	(SEA Gross)	torque	(lbs/hr)@peak torque Device Per SAE J1930	Device Per SAE J193
		15.9	85.3@1600	37.8	10.1	EM INT
		12.3	83.8@1600	37.5	10.1	EM
		15.2	85.3@1600	37.8	10.1	EM
		14.5	85.3@1600	37.8	10.1	EM
	í	13.6	83.8@1600	37.5	10.1	EM
	ĺ	12.9	83.8@1600	37.5	10.1	EM
	'	15.2	85.3@1500	37.8	9.5	EM
	_	15.6	85.3@1500	37.8	9.5	EM
2	~	20.8	117.6@1500	39.1	13.1	EM
2	0	20.8	117.0@1600	39.0	13.9	EM
	=	16.9	115.0@1600	38.9	13.9	N H
26	≈	20.8	117.0@1600	39.0	13.9	EM
	_	19.9	117.0@1600	39.0	13.9	EM
1	-	18.8	115.0@1600	38.9	13.9	EM
1	_	17.8	115.0@1600	38.9	13.9	EM
_	_	15.0	103.0@1600	35.5	12.7	EM, Electronic
2	7	20.8	116.5@1500	38.9	13.0	EM
2	0	20.6	116.3@1500	38.7	13.0	EM