California Environmental Protection Agency Air Resources Board

KUBOTA Corporation

EXECUTIVE ORDER U-R-025-0580-1 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)	
2013	DKBXL01.5FCC	1.500	Diesel	3000	
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION	
	Indirect Diesel Inje	ection	Generator Set, Light T	ower, Welder	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), 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			I	EXHAUST (g/kw-h	nr)		OI	PACITY (%	6)
POWER	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
8 ≤ kW < 19	Tier 4 Final	STD	N/A	N/A	7.5	6.6	0.40	N/A	N/A	N/A
		CERT			6.0	1.1	0.11			

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.

This Executive Order hereby supersedes Executive Order U-R-025-0580 dated October 19, 2012.

Executed at El Monte, California on this ______ day of April 2013.

Annette Hebert, Chief

Mobile Source Operations Division

Engine Model Summary Form

KUBOTA Corporation facturer:

DKBXL01.5FCC Nonroad CI Engine Family: ne category:

amily Name:

Running Change ss Code:

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EO# U-R-0>5-0580-1

Date: 3/28/2013

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9.Emission Control evice Per SAE J1930	101		
9.Emission Control Device Per SAE J1930	EM,	EM,	EΜ
8.Fuel Rate: (lbs/hr)@peak torque	10.2	10.2	10.2
7.Fuel Rate: mm/stroke@peak torque	33.8	33.7	33.8
6.Torque @ RPM (SEA Gross)	72.4@1800	71.6@1800	72 4@1800
5.Fuel Kate: (lbs/hr) @ peak HP (for diesels only)	10.2	10.2	10.2
4.Fuel Kate: mm/stroke @ peak HP (for diesel only)	33.8	33.7	33.8
3.BHP@RPM (SAE Gross)	24.8@1800	24.5@1800	24.8@1800
2.Engine Model	D1503-M-BG-EF	D1503-M-BG-EF	3-M-BG-EF01e D1503-M-BG-EF
ingine Code	03-M-BG-EF01)3-M-BG-EF02e	3-M-BG-EF01e