EXECUTIVE ORDER U-R-025-0597 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)						
2014	EKBXL.416KCB	0.417	Diesel	3000						
SPECIAL	FEATURES & EMISSION O	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION							
	Indirect Diesel Inje	ction	Pump, Generator Set, and Other Indus	strial Equipment						

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			E	EXHAUST (g/kw-l	OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		ИМНС	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
kW < 8	Tier 4 Final	STD	N/A	N/A	7.5	8.0	0.40	N/A	N/A	N/A
		CERT			5.8	4.8	0.19			

**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 2013.

Erik White, Chief

Mobile Source Operations Division

## **Engine Model Summary Form**

KUBOTA Corporation Manufacturer:

Nonroad Cl Engine category:

EKBXL.416KCB EPA Engine Family:

Mfr Family Name: Process Code:

New Submission

Attachment page 1 of

EO# U-R-025-0597 Date: 8/26/2013

9.Emission Control Device Per SAE J1930	EM, IFI	EM, IFI													
8.Fuel Rate: (lbs/hr)@peak torque	3.4	3.4													
7.Fuel Rate: mm/stroke@peak torque	27.5	27.5													
6.Torque @ RPM (SEA Gross)	17.8@2200	17.7@2200													
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	4.8	4.8													
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	24.0	24.0													
3.BHP@RPM (SAE Gross)	9.7@3600	9.4@3600					9	10 12						8 E	
1.Engine Code 2.Engine Model	OC95-EF	OC95-EF													x = 1 = 1 = 1 = 1
1.Engine Code	OC95-EF01	OC95-EF02							,						A.: