## California Environmental Protection Agency Air Resources Board

## **KUBOTA Corporation**

EXECUTIVE ORDER U-R-025-0615 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	EKBXL03.8AKD	3.77	Diesel 8000								
SPECIAL	FEATURES & EMISSION (	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION								
Electronic	ectronic Direct Injection, T c Control Module, Exhaus xidation Catalyst, and Pe	t Gas Recirculation,	Agricultural Tractor and Skid Ste	er Loader							

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				EXHAUST (g/kw-	OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		НС	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
56 ≤ kW < 75	Interim Tier 4 / ALT NOx	STD	0.19	3.4	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.002	2.6		0.1	0.01			

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 2013.

Erik White, Chief

Mobile Source Operations Division

## **Engine Model Summary Form**

KUBOTA Corporation Manufacturer:

Nonroad CI EKBXL03.8AKD Engine category:

EPA Engine Family:

N/A Mfr Family Name:

**New Submission** Process Code:

Attachment page 1 of

E0# U-R-025-0615

Date: 11/22/2013

	1	1-			T	T		1.	T	1		I	T		- 1	T	T	T	T	Т	Г
9.Emission Control Device Per SAE J1930	EM, DFI, TC, EGR, ECM, PTOX, DO	EM, DFI, TC, EGR, ECM, PTOX,	1 1 1 1 1 1 1	Jirect Make Infect																	
8.Fuel Rate: (lbs/hr)@peak torque	26.8	25.8	25.8	25.8	24.1	23.3	23.3	23.9	25.8	24.3	25.8	25.8	25.8		747						
7.Fuel Rate: mm/stroke@peak torque	80.0	77.0	77.0	77.0	71.9	9.69	9.69	71.3	77.0	72.4	77.0	77.0	77.0								
6.Torque @ RPM (SEA Gross)	247.1@1500	245.6@1500	243.4@1500	243.4@1500	226.4@1500	219.1@1500	219.1@1500	225.3@1500	243.4@1500	228.9@1500	243.4@1500	243.4@1500	243.4@1500								
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	40.1	39.1	38.3	36.1	37.2	36.5	35.1	34.9	35.7	33.0	38.3	36.1	39.1								
4. Fuel Rate: mm/stroke @ peak HP (for diesel only)	0.69	67.3	71.3	73.5	64.0	62.8	65.4	65.1	9.99	61.5	71.3	73.5	67.3								
3.BHP@RPM (SAE Gross)	99.2@2600	98.4@2600	96.7@2400	92.8@2200	92.3@2600	90.0@2600	88.5@2400	88.6@2400	90.7@2400	83.8@2400	96.7@2400	92.8@2200	98.4@2600								The state of the s
2.Engine Model	V3800-CR-T-EF	V3800-CR-T-EF	V3800-CR-T-EF	V3800-CR-T-EF	V3800-CR-T-EF	V3800-CR-T-EF	V3800-CR-T-EF	V3800-CR-T-EF	V3800-CR-T-EF	V3800-CR-T-EF	C3.8-CR-T-EF	C3.8-CR-T-EF	D3.8H-CR-T-EF				を対するとはなるというない				
1.Engine Code	V3800-CR-T-EF01	V3800-CR-T-EF02	V3800-CR-T-EF03	V3800-CR-T-EF04	V3800-CR-T-EF05	V3800-CR-T-EF06	V3800-CR-T-EF07	V3800-CR-T-EF08	V3800-CR-T-EF09	V3800-CR-T-EF10	C3.8-CR-T-EF03	C3.8-CR-T-EF04	D3.8H-CR-T-EF02								