

## **KUBOTA Corporation**

EXECUTIVE ORDER U-R-025-0412 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	AKBXL01.9FCB	1.857	Diesel	3000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Indirect	Diesel Injection, Electron (Some Models)	nic Control Module	Truck Refrigeration Units				

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 STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER CLASS			НС	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
8 ≤ kW < 19	Tier 4	STD	N/A	N/A	7.5	6.6	0.40	20	15	50
		CERT	-		5.5	1.5	0.19	. 1	1	2

**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 February 2009.

Annette Hebert, Chief

Mobile Source Operations Division

## **Engine Model Summary Form**

**KUBOTA Corporation** Manufacturer:

Nonroad Cl Engine category:

EPA Engine Family:

Mfr Family Name:

五日 U-R-025-0412 8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930 EM, Electronic Σ 10.1 10.1 7.Fuel Rate: mm/stroke@peak torque 26.5 26.5 P. ( cf 1. 6.Torque @ RPM (SEA Gross) 76.6@1700 76.6@1700 5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only) Attachment 10.1 10.1 4.Fuel Rate: mm/stroke @ peak HP (for diesel only) 26.5 26.5 3.BHP@RPM (SAE Gross) 24.8@1700 24.8@1700 V1903-M-ET (W V1903-M-ET (8.5 **New Submission** AKBXL01.9FCB 2.Engine Model ۷ X 1.Engine Code V1903-M-ET01e V1903-M-ET01 Process Code: