

## **KUBOTA CORPORATION**

EXECUTIVE ORDER U-R-025-0227 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			FUEL TYPE	USEFUL LIFE (hours)					
2006	6KBXL01.0BCB	0.898, 1.001	Diesel 3000						
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION						
	Indirect Diesel Inje	ction	Pump, Other Industrial Equipment						

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			Е	XHAUST (g/kW-l	OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
8 <u>&lt;</u> kW < 19	Tier 2	STD	N/A	N/A	7.5	6.6	0.80	20	15	50
		CERT			6.3	1.6	0.19	6	3	14

**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 2005.

Allen Lyons, Chief

Rochael Summert

Mobile Source Operations Division

CONFILEINTIAL

Manufacturer: KUBOTA Corporation

Engine category: Nonroad CI

EPA Engine Family: 6KBXL01.0BCB

Mfr Family Name: N/A

Process Code: Running Change

Attachment FOTAU-R-025-0227

0.	# 0 #		4								1
9.Emission Control Device Per SAE J1930	EM 1	ЕМ	EW	EM	EW	EM	¥	EM	EM	EM	EM
8.Fuel Rate: (lbs/hr)@peak torque	<b>C</b>	8.2	1.1	6.3	9.9	0.6	77	8.0	9.9	6.3	8.4
mm/stroke@peak torque	22.6	22.3	22.2	22.1	19.8	22.4	20.1	19.8	19.7	19.9	19.3
6.Torque @ RPM (SEA Gross)	46.3@2200	44.0@2200	44.5@1900	45.6@1700	40.8@2000	45.9@2400	41.2@2200	39.7@2400	39.8@1700	40.5@1900	40.3@2600
(lbs/hr) @ peak HP (for diesels only)	10.3	6.6	8.6	8.2	8.3	11.2	9.2	1.6	2.3	8.1	0
mm/stroke @ peak HP (for diesel only)	20.5	21.0	19.1	18.7	8,6	20.8	18.3	16.9	16.7	17.9	18.3
3.BHP@RPM (SAE Gross)	23.5@3000	21.6@2800	19.8@2700	19.4@2600	19.0@2500	24.8@3200	20.8@3000	20.7@3200	16.9@2600	18.8@2700	24.8@3600
2.Engine Model	D1005-ES	D1005-ES	D1005-ES	D1005-ES	D1005-ES	D1005-ES	D905-ES	D905-ES	D905-ES	D905-ES	D905-ES
1.Engine Code	D1005-ES01	D1005-ES02	D1005-ES03	D1005-ES04	D1005-ES05	D1005-ES06	D905-ES01	D905-ES02	D905-ES03	D905-ES04	D905-ES05