

KUBOTA CORPORATION

EXECUTIVE ORDER U-R-025-0249 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)			
2006	6KBXL02.4ECD	1.826, 2.434	Diesel	5000			
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION				
Direct	Diesel Injection, Electron	ic Control Module	Loader, 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			E	XHAUST (g/kW-l		OF	PACITY (%	a)	
POWER	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
19 ≤ kW < 37	Tier 2	\$TD	N/A	N/A	7.5	5.5	0.60	20	15	50
		CERT			6.5	2.2	0.40	3	4	4

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.

Raphael Surrovits

Executed at El Monte, California on this 2925 day of December 2005.

Allen Lyons, Chief

Mobile Source Operations Division

Engine Model Surmary Form

Atachuent U-2-025-0249

KUBOTA Corporation Manufacturer:

Engine category:

Nonroad CI 6KBXL02.4ECD EPA Engine Family.

Mfr Family Name: N/A

New Submission Process Code:

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9.Emis Device F	*** 004 200	₹	ANA	*	4 .	AIM	Electronic EC	AMA	
8.Fuel Rate: (lbs/hr)@peak torque	13.8	10.6	10.7	14.6	13.8	12.0	9.1	13.3	
7.Fuel Rate: mm/stroke@peak torque	36.3	39.6	. 37.5	38.4	36.3	35.8	34.0	37.1	
6.Torque @ RPM (SEA Gross)	117.7@1700	93.3@1600	91.8@1700	122.3@1700	117.7@1700	114.6@1500	108,3@1200	117.0@1600	
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	19,1	15.5	14.9	18.9	19.1	18.2	14.2	20.1	179
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	1.32.8	35.5	34.2	32.6	.32.8	33,9	32.5	33.3	
3.BHP@RPM (SAE Gross)	48.9@2600	39.2@2600	38.1@2600	48.8@2600	48.9@2600	46.8@2400	37,1@1950	48.9@2700	
2.Engine Model	4IRX3N2	D1803-M-DI-ES	D1803-M-DI-ES	V2403-M-DI-ES	V2403-M-DI-ES02 V2403-M-DI-ES	V2403-M-DI-ES	/2403-M-DI-ES04e V2403-M-DI-ES	V2403-M-DI-ES05 V2403-M-DI-ES	
1.Engine Code	4IRX3N2	D1803-M-DI-ES01	D1803-M-DI-ES02	V2403-M-DI-ES01	V2403-M-DI-ES02	V2403-M-DI-ES03	V2403-M-DI-ES046	V2403-M-DI-ES05	

Engine Model Summary Form

CONFIDENTIAL

Manufacturer: KUBOTA Corporation

Engine category: Nonroad Cl

EPA Engine Family. 6KBXL02.4ECD

Mfr Family Name: N/A

Process Code:

Attachment to #4-025-6249

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9.Emission Control Device Per SAE J1930	EM DOT	EM	EN	EN	EM	EM	Electronic EC	EM	EN EN
8.Fuel Rate: (lbs/hr)@peak torque	13.8	10.6	10.7	14.6	13.8	12.0	9.1	13.3	12.0
7.Fuel Rate: mm/stroke@peak torque	36.3	39.6	37.5	38.4	36.3	35.8	34.0	37.1	35.9
6.Torque @ RPM (SEA Gross)	117.7@1700	93.3@1600	91.8@1700	122.3@1700	117.7@1700	114.6@1500	108.3@1200	117.0@1600	115.0@1500
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	19.1	15.5	14.9	T8.9	19.1	18.2	14.2	20.1	17.8
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	32.8	35.5	34.2	all a maintent to the maintent of the second than the second t	.32.8	33.9	32.5	33.3	33.1
3.BHP@RPM (SAE Gross)	48.9@2600	39.2@2600	38.1@2600	48.8@2600	48.9@2600	46.8@2400	37.1@1950	48.9@2700	45.7@2400
2.Engine Model	4IRX3N2	D1803-M-DI-ES	D1803-M-DI-ES	V2403-M-DI-ES	V2403-M-DI-ES	V2403-M-DI-ES	V2403-M-DI-ES	V2403-M-DI-ES	V2403-M-DI-ES
1.Engine Code	4IRX3N2	D1803-M-DI-ES01	D1803-M-DI-ES02	V2403-M-DI-ES01	V2403-M-DI-ES02	V2403-M-DI-ES03	V2403-M-DI-ES04e	V2403-M-DI-ES05	V2403-M-DI-ES06