

## **KUBOTA** Corporation

EXECUTIVE ORDER U-R-025-0400 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)				
2009	9KBXL03.6BCD	3.620	Diesel	8000				
SPECIAL	FEATURES & EMISSION C		TYPICAL EQUIPMENT APPLICATION					
	Indirect Diesel Injec	ction	Tractor, Compressor, Generator Set, 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 STANDARD CATEGORY			. E	XHAUST (g/kW-l	OI	OPACITY (%)			
POWER			НС	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
37 ≤ kW < 56	Tier 4 Interim	STD	N/A	N/A	4.7	5.0	0.30	20	15	50
		CERT			3.9	1.1	0.22	3	2	7

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 24<sup>th</sup> day of December 2008.

Annette Hebert, Chief

Mobile Source Operations Division

## **Engine Model Summary Form**

KUBOTA Corporation Manufacturer:

Nonroad Cl Engine category:

9KBXL03.6BCD EPA Engine Family.

Mfr Family Name: N/A

**New Submission** Process Code:

Attachment

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U-R-625-0400

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9.Emission Control Device Per SAE J1930	EM IDI									<b>&gt;</b>			
9.Emission Control evice Per SAE J193	<u> </u>	ς.	_	=	_	_	Ų	~	~	~			
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3.Em													
8.Fuel Rate: (lbs/hr)@peak torque													
8.Fuel Rate: hr)@peak tor	21.5	0.0	0.0	4.	20.0	4.	20.7	19.7	19.7	21.7			
Fuel @p	'n	7	7	7	7	7	7	÷	Ť	'n			
8. bs/hr													
•													
7.Fuel Rate: mm/stroke@peak torque													
uel Rat rroke@ torque	60.0	56.0	56.0	57.0	9	57.0	58.0	55.0	55.0	57.0			
7.Fuel Rate: n/stroke@pe torque	Ĭ	٠,		٠,		~,		٠,		٠,			
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6.Torque @ RPM (SEA Gross)	173.3@1600	163.0@1600	163.0@1600	163.0@1600	163.0@1600	163.0@1600	163.0@1600	154.7@1600	154.7@1600	160.6@1700			
Torque @ RPI (SEA Gross)	(9)	<b>@</b>	<u>(</u>	<u>(</u>	<u>(</u>	<b>ø</b>	<u>@</u>	<u>(</u>	<u>@</u>	<u>(</u>			
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5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)													
5.Fuel Rate: s/hr) @ peak or diesels onl	30.8	30.2	<u>8</u>	29.1	29.0	28.3	27.5	28.4	28.4	28.3			
5.Fu s/hr) or die										•			
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ate: peak onfy)		_	_	0				_	_	_			
4.Fuel Rate: stroke @ peak for diesel only)	53.0	52.0	52.0	52.0	54.0	55.	56.0	53.0	53.0	55.0			
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)													
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_		_	0	0			_						
RPN ross)	560	260	2500	250	240(	2300	220	2400	240(	330			
3.BHP@RPM (SAE Gross)	<b>6</b>	66.8@2600	66.0@2500	66.0@2500	65.2@2400	64.5@2300	9	62.9@2400	62.9@2400	64.5@2300			
3.B (S/	69.	.99	.99	.99	65.	64.	62.4@2200	62.	62.	64			
ç	V3600-ET 5 € 69.7@2600		-					3					
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gine	/360	√3600-ET	V3600-ET	V3600-ET	V3600-ET	V3600-ET	/360	/360	√3600-ET	/3600-ET			
2.Engine Model	_					_			_	_			
.Engine Code	-	22	33	7	55	9(	)7	86	<u>6</u>	<u></u>			
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ngin	V3600-ET01	V3600-ET02	V3600-ET03	V3600-ET04	V3600-ET05	V3600-ET06	V3600-ET07	V3600-ET08	V3600-ET09	V3600-ET10	:		
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