

KUBOTA Corporation

EXECUTIVE ORDER U-R-025-0805 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in California 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-14-012;

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)			
2019	KKBXL01.5DPD 1.498		Diesel	5000		
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	TYPICAL EQUIPMENT APPLICATION		
Indirect Co	Diesel Injection, Turboo ontrol Module, Periodic T Diesel Oxidation Ca	rap Oxidizer,	Loader, Tractor, Pump, Compressor, Other Industrial Equipment			

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-hr)				OPACITY (%)			
POWER	STANDARD		NMHC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
19 ≤ kW < 37	Tier 4 Final	STD	N/A	N/A	4.7	5.5	0.03	N/A	N/A	N/A
		CERT		4	3.3	0.2	0.01		046	144

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 August 2018.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Engine Model Summary Form

Attachment

EO# U-R-025-0805 Date: 7/27/2018

Nonroad CI KKBXL01.5DPD

Engine Family:

ne category: ufacturer:

KUBOTA Corporation

New Submission amily Name:

ess Code:

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IFI = Indirect Flue Injection	TITI							
EM, IFI, TC, ECM, PTOX, DOC	13.3	29.7	86.1@2000	19.5	29.1	43.6@3000	V1505-T-EF	1505-T-EF05
EM, IFI, TC, ECM, PTOX, DOC	9.4	26.2	76.6@1600	13.1	23.4	30.4@2500	V1505-T-EF	1505-T-EF04
EM, IFI, TC, ECM, PTOX, DOC	12.0	29.7	86.1@1800	15.5	27.8	36.3@2500	V1505-T-EF	1505-T-EF03
EM, IFI, TC, ECM, PTOX, DOC	13.3	29.7	86.1@2000	18.2	29.1	40.6@2800	V1505-T-EF	1505-T-EF02
EM, IFI, TC, ECM, PTOX, DOC	13.4	30.0	87.5@2000	19.7	29.4	44.3@3000	V1505-T-EF	1505-T-EF01
9.Emission Control Device Per SAE J1930	8.Fuel Rate: (lbs/hr)@peak torque	7.Fuel Rate: mm/stroke@peak torque	6.Torque @ RPM (SEA Gross)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	3.BHP@RPM (SAE Gross)	Engine Code 2.Engine Model	Engine Code