

## **KUBOTA CORPORATION**

## **EXECUTIVE ORDER U-R-025-0996**

New Off-Road Compression-Ignition Engines Page 1 of 1

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-19-095;

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)					
2022	NKBXL01.5BPD	1.498	Diesel	5000					
SPECIAL	FEATURES & EMISSION (	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION						
	Diesel Injection, Turboo lodule, Diesel Oxidation Trap Oxidizer	n Catalyst, Periodic	Loader, Tractor, Pump, Compressor, Asphalt Finisher, Carrier, Construction Machinery, Forklift, Garden Tractor Mini Backhoe, Mower, Roller, Nonroad Sweeper, Utility Vehicle, Wood Chipper						

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-l		OPACITY (%)			
POWER CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	СО	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			3.3	0.2	0.01			

**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 on this **2nd** day of October 2021.

Allen Lyons, Chief

**Emissions Certification and Compliance Division** 

Attachment: Engine Models EO #: U-R-025-0996 Family: NKBXL01.5BPD Attachment Last Revised: 8/24/2021

					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power - Fuel		Peak Torque -		Peak Torque -					
Model		Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Units	Peak Torque			Fuel	Fuel Units	OBD	GHG	Special	Notes
	V1505-T-EF01		14	1.498	Liters	33.0	kilowatt	3000	29.4	mm3/stroke	118.6	N-m	2000	30.0		N/A	N/A	N/A	N/A
	V1505-T-EF02		14	1.498	Liters	30.3	kilowatt	2800	29.1	mm3/stroke	116.8	N-m	2000	29.7	mm3/stroke		N/A	N/A	N/A
V1505-T-EF	V1505-T-EF03		14	1.498	Liters	27.1	kilowatt	2500	27.8	mm3/stroke	116.8	N-m	1800	29.7	mm3/stroke	N/A	N/A	N/A	N/A
V1505-T-EF	V1505-T-EF04		14	1.498	Liters	22.7	kilowatt	2500	23.4	mm3/stroke	103.8	N-m	1600	26.2	mm3/stroke	N/A	N/A	N/A	N/A
V1505-T-EF	V1505-T-EF05		14	1.498	Liters	32.5	kilowatt	3000	29.1	mm3/stroke	116.8	N-m	2000	29.7	mm3/stroke	N/A	N/A	N/A	N/A
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