

KUBOTA CORPORATION

EXECUTIVE ORDER U-R-025-0949

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-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)					
2021	MKBXL02.4EMD	2.435	Diesel	8000					
SPECIAL	FEATURES & EMISSION (CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION						
Cooler,	Direct Injection, Turbo Electronic Control Mod circulation, Diesel Oxida	ule, Exhaust Gas	Loader, Tractor, Pump, Compressor, Asphalt Finisher, Carrier, Construction Machinery, Forklift, Garden Tractor, Mini Backhoe, Mower, Roller, Skid Steer Loader, Nonroad Sweeper, Wood Chipper, Lift, 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			I	EXHAUST (g/kw-l	OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
37 ≤ kW < 56	Tier 4 Final	STD	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A
		CERT		1	3.7	0.6	0.02	1	-	

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 15th day of December 2020.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: U-R-025-0949

Family: MKBXL02.4EMD

Attachment Last Revised: 11/18/2020

					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power -			Peak Torque -						
		Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling		Peak Torque		Speed (rpm)	Fuel		OBD	GHG	Special	Notes
	V2403-CR-TI-EF01		I-4	2.435	Liters	50.3	kilowatt	2700	44.7	mm3/stroke	205.3	N-m	1600	46.6	mm3/stroke		N/A	N/A	N/A
	V2403-CR-TI-EF02		I-4	2.435	Liters	47.9	kilowatt	2700	42.9	mm3/stroke	195.6	N-m	1600	44.1	mm3/stroke	_	N/A	N/A	N/A
V2403-CR-TI-EF	V2403-CR-TI-EF03		I-4	2.435	Liters	42.6	kilowatt	2400	41.7	mm3/stroke	195.6	N-m	1500	44.1	mm3/stroke	N/A	N/A	N/A	N/A
V2403-CR-TI-EF	V2403-CR-TI-EF04		I-4	2.435	Liters	39	kilowatt	2200	40.5	mm3/stroke	195.6	N-m	1500	44.1	mm3/stroke	N/A	N/A	N/A	N/A