CALIFORNIA AIR RESOURCES BOARD	KUBOTA Corporation	EXECUTIVE ORDER U-R-025-0883 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)
2020	LKBXL01.8E1D	1.826	Diesel	5000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Electronic Direct Injection, Turbocharger, Exhaust Gas Recirculation, Electronic Control Module, Periodic Trap Oxidizer, Diesel Oxidation Catalyst	Loader, Tractor, Pump, Compressor, Asphalt Finisher, Carrier, Construction Machinery, Forklift, Garden Tractor, Mini Backhoe, Mower, Roller, Skid Steer Loader, Nonroad Sweeper, 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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			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	--	--	3.1	0.04	0.000	--	--	--

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 30th day of Auguts 2019.

Allen Lyons, Chief
Emissions Certification and Compliance Division

EO# U-R-025-0883

Date: 1/9/2020

Engine Model Summary Form

Manufacturer: **KUBOTA Corporation**
Engine category: **Nonroad CI**
EPA Engine Family: **LKBXL01.8E1D**
Mfr Family Name: **N/A**
Process Code: **Running Change**

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1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
* D1.8H-CR-T-EW03	D1.8H-CR-T-EW	39.8@2200	41.0	15.1	109.4@1500	47.0	11.8	EM, DFI, TC, EGR, ECM, PTOX, DOC
D1803-CR-T-EW01	D1803-CR-T-EW	48.3@2700	42.5	19.2	114.8@1600	48.4	13.0	EM, DFI, TC, EGR, ECM, PTOX, DOC
D1803-CR-T-EW02	D1803-CR-T-EW	43.3@2400	41.4	16.7	109.4@1500	47.0	11.8	EM, DFI, TC, EGR, ECM, PTOX, DOC
D1803-CR-T-EW02L	D1803-CR-T-EW	43.3@2400	41.4	16.7	109.4@1500	47.0	11.8	EM, DFI, TC, EGR, ECM, PTOX, DOC
D1803-CR-T-EW03	D1803-CR-T-EW	39.8@2200	41.0	15.1	109.4@1500	47.0	11.8	EM, DFI, TC, EGR, ECM, PTOX, DOC
* D1803-CR-T-EW04	D1803-CR-T-EW	39.8@2200	42.5	15.7	109.4@1500	47.5	11.9	EM, DFI, TC, EGR, ECM, PTOX, DOC

* new engine codes