

## **KUBOTA Corporation**

EXECUTIVE ORDER U-R-025-0828 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	KKBXL01.8EMD	1.826	Diesel	5000	
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION	
Electroni Coolei Re	ic Direct Injection, Turbo r, Electronic Control Mod ecirculation, Diesel Oxida	charger, Charge Air ule, Exhaust Gas ation Catalyst	Loader, Tractor, Pump, Compr Equipmer	essor, Other Industrial	

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-srnoke 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 CATEGORY		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			3.9	0.5	0.02	-	-	

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 November 2018.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

## **Engine Model Summary Form**

E0# U-R-025-0828 Date: 10/16/2018

**KUBOTA Corporation** Manufacturer:

Nonroad CI Engine category: EPA Engine Family: KKBXL01.8EMD

N/A

Attachment

Mfr Family Name:

Process Code: **New Submission** 

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
D1803-CR-TI-EF01	D1803-CR-TI-EF	48.9@2700	43.0	19.5	118.0@1600	48.0	12.9	EM, DFI, TC, EGR, CAC, ECM, DOC
D1803-CR-TI-EF02	D1803-CR-TI-EF	48.9@2700	44.5	20.1	109.4@1600	45.4	12.2	EM, DFI, TC, EGR, CAC, ECM, DO
D1803-CR-TI-EF03	D1803-CR-TI-EF	43.3@2400	43.6	17.5	109.4@1500	45.3	11.4	EM, DFI, TC, EGR, CAC, ECM, DOC
D1803-CR-TI-EF04	D1803-CR-TI-EF	39.8@2200	42.3	15.6	109.4@1500	45.3	11.4	EM, DFI, TC, EGR, CAC, ECM, DO
D1803-CR-TI-EF05	D1803-CR-TI-EF	46.9@2600	44.2	19.3	109.4@1600	45.4	12.2	EM, DFI, TC, EGR, CAC, ECM, DO
D1803-CR-TI-EF06	D1803-CR-TI-EF	37.0@2700	34.5	15.6	84.2@1600	34.7	9.3	EM, DFI, TC, EGR, CAC, ECM, DOO
	William Design	A CONTRACTOR						