

KUBOTA CORPORATION

EXECUTIVE ORDER: U-R-025-1113

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

Pursuant to the authority vested in the California Air Resources Board by Health and Safety Code Division 26, Part 5, Chapters 1 and 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

IT IS ORDERED AND RESOLVED: The engines and emission control systems produced by the manufacturer as described below are certified 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	Combustion Cycle	Fuel Operation	Fuel Type(s)	Engine Operation
2024	RKBXL01.8E1D	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems						
[1]: Electronic Direct Injection (DDI), Exhaust Gas Recirculation (EGR), Electronic Control Module (ECM), Turbocharger (TC), Diesel Oxidation Catalyst (DOC), Periodic Trap Oxidizer (PTOX)	None					

The certified engine models are attached.

The listed engine models comply with the following: 1) emission standard limits (STD) and Not-To-Exceed (NTE) limits, as applicable, for criteria pollutants non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM), and for smoke opacity as demonstrated during the Acceleration (ACL) and Lugging (LUG) modes, and the peak value (PEAK) in either mode of the Smoke Opacity cycle, as set forth in 13 CCR 2423 and the applicable California test procedures for off-road compression-ignition engines, and 2) family emission limits (FEL) declared by the manufacturer as allowed by the applicable California test procedures, stated in units of gram per kilowatthour (g/kWh-hr) and percent opacity (%opacity), respectively, except as noted, or designated as not applicable (*).

	Crit	Smoke Opacity					
Applicable Standard	NMHC+NOx	СО	PM	ACL	LUG	PEAK	
	STD	4.7	5.5	0.03	*	*	*
Tier 4 Final 19 ≤ kW < 37	FEL	*	*	*	*	*	*
10 = KVV × 07	NTE	5.9	6.9	0.04	*	*	*

BE IT FURTHER RESOLVED: Any declared FEL is the emission limit to which all engines must comply in lieu of the standard limit for certification purposes, subject to the restrictions of averaging, banking, or trading (ABT) programs allowed by the applicable California test procedures.

BE IT FURTHER RESOLVED: For the listed engine models, the manufacturer has submitted materials to demonstrate certification compliance with 13 CCR 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control warranty).

BE IT FURTHER RESOLVED: The listed engine models may only be installed in or on equipment such that engine operation is consistent with off-road compression-ignition engines as defined in 13 CCR 2421(a)(39).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed on this 5th day of December 2023.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

olin U. Lar

ATTACHMENT: ENGINE MODELS

Family: RKBXL01.8E1D EO Number: U-R-025-1113 Date Applicable: 11/29/2023

	Code	Trim Con			Peak Power		Peak Torque						
Model			Config	Displacement	Power	Speed	Speed Fueling	Torque	Speed	Fueling	ECS Num	GHG	Notes
-	-	-	-	L	kW	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-	-
D1.8H-CR-T-EW	D1.8H-CR-T-EW03	N/A	13	1.826	29.7	2200	41.0	148.3	1500	47.0	1	N/A	
01803-CR-T-EW	D1803-CR-T-EW01	N/A	13	1.826	36.0	2700	42.5	155.7	1600	48.4	1	N/A	
1803-CR-T-EW	D1803-CR-T-EW02	N/A	13	1.826	32.3	2400	41.4	148.3	1500	47.0	1	N/A	
1803-CR-T-EW	D1803-CR-T-EW02L	N/A	13	1.826	32.3	2400	41.4	148.3	1500	47.0	1	N/A	
1803-CR-T-EW	D1803-CR-T-EW03	N/A	13	1.826	29.7	2200	41.0	148.3	1500	47.0	1	N/A	
D1803-CR-T-EW	D1803-CR-T-EW04	N/A	13	1.826	29.7	2200	42.5	148.3	1500	47.5	1	N/A	