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	RKBXL.719KCB	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems	Special Features
[1]: Indirect Fuel Injection (IFI)	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 kilowatt-hour (g/kWh-hr) and percent opacity (%opacity), respectively, except as noted, or designated as not applicable (*).

Applicable Standard		Criteria			Smoke Opacity		
		NMHC+NOx	CO	PM	ACL	LUG	PEAK
Tier 4 Final 8 ≤ kW < 19	STD	7.5	6.6	0.40	20	15	50
	FEL	*	*	*	*	*	*
	NTE	9.4	8.2	0.50	*	*	*

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: That the manufacturer has elected to combine engines from the kW < 19 power categories into a single engine family. The listed engine models comply with the more stringent set of standards of the 8 ≤ kW < 19 power category in accordance with Section 1039.230(e) of 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 6th day of October 2023.

Robin U. Lang

Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RKBXL.719KCB EO Number: U-R-025-1116 Date Applicable: 9/28/2023

					Peak Power			Peak Torque					
Model	Code	Trim	Config	Displacement	Power	Speed	Fueling	Torque	Speed	Fueling	ECS Num	GHG	Notes
-	-	-	-	L	kW	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-	-
D722-EF	D722-EF01	N/A	I3	0.719	14.7	3600	15	45.1	2600	16.3	1	N/A	N/A
D722-EF	D722-EF01e	N/A	I3	0.719	14.7	3600	15	45.1	2600	16.3	1	N/A	N/A
D722-EF	D722-EF02	N/A	I3	0.719	13.8	3400	14.5	43	2600	15.3	1	N/A	N/A
D722-EF	D722-EF03	N/A	I3	0.719	13	3200	14.3	41.8	2600	14.9	1	N/A	N/A
D722-EF	D722-EF04	N/A	I3	0.719	12.2	3200	13.7	44.2	2200	15.8	1	N/A	N/A
D722-EF	D722-EF05	N/A	I3	0.719	12.2	3000	14.1	45.2	2200	16.1	1	N/A	N/A
D722-EF	D722-EF06	N/A	I3	0.719	11.3	2950	13.3	42.7	2200	15	1	N/A	N/A
D722-EF	D722-EF07	N/A	I3	0.719	11.1	2900	13.3	41.2	2400	15.2	1	N/A	N/A
D722-EF	D722-EF08	N/A	I3	0.719	11.3	2800	13.9	42.9	2200	15.1	1	N/A	N/A
D722-EF	D722-EF09	N/A	I3	0.719	11.1	2700	14	39.3	2400	14	1	N/A	N/A
D722-EF	D722-EF10	N/A	I3	0.719	10.6	2600	13.8	40.4	2000	14.2	1	N/A	N/A
D722-EF	D722-EF11	N/A	I3	0.719	10.2	2500	14.2	42.9	2000	15.8	1	N/A	N/A
D722-EF	D722-EF12	N/A	I3	0.719	9.5	2400	13.7	38.5	2100	14	1	N/A	N/A
D722-EF	D722-EF13	N/A	I3	0.719	8.8	2200	13.4	36.4	1900	13.6	1	N/A	N/A
D722-EF	D722-EF14	N/A	I3	0.719	7.6	2050	12.5	39.5	1600	14.2	1	N/A	N/A
D722-EF	D722-EF15	N/A	I3	0.719	7.5	2000	12.5	39.5	1600	14.2	1	N/A	N/A
Z482-EF	Z482-EF01	N/A	I2	0.479	9.9	3600	15.4	30.5	2600	16.7	1	N/A	N/A
Z482-EF	Z482-EF02	N/A	I2	0.479	9.8	3600	15.2	29.3	2600	16.2	1	N/A	N/A
Z482-EF	Z482-EF03	N/A	I2	0.479	8.2	3200	14.1	28.3	2300	15.3	1	N/A	N/A
Z482-EF	Z482-EF04	N/A	I2	0.479	8.2	3000	14.6	28	2600	15.2	1	N/A	N/A
Z482-EF	Z482-EF05	N/A	I2	0.479	7.1	2600	14.3	26.9	2200	14.3	1	N/A	N/A
Z482-EF	Z482-EF06	N/A	I2	0.479	6.5	2400	14	25.7	1900	13.6	1	N/A	N/A
Z482-EF	Z482-EF07	N/A	I2	0.479	5.9	2200	13.8	25.6	1900	13.5	1	N/A	N/A
Z482-EF	Z482-EF05e	N/A	I2	0.479	7.1	2600	14.3	26.9	2200	14.3	1	N/A	N/A
Z482-EF	Z482-EF09	N/A	I2	0.479	9.8	3600	15.2	29.3	2600	16.2	1	N/A	N/A