

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	RPKXL07.0BN1	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems	Special Features
[1]: Electronic Direct Injection (DDI), Charged Air Cooler (CAC), Exhaust Gas Recirculation (EGR), Electronic Control Module (ECM), Turbocharger (TC), Diesel Oxidation Catalyst (DOC), Periodic Trap Oxidizer (PTOX), Selective Catalytic Reduction – Urea (SCR-U), Ammonia Oxidation Catalyst (AMOX)	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 hydrocarbons (NMHC), nitrogen oxides (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 130 ≤ kW ≤ 560	STD	0.19	0.40	3.5	0.02	*	*	*
	FEL	*	*	*	0.01	*	*	*
	NTE	0.28	0.60	4.4	0.02	*	*	*

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 75 ≤ kW ≤ 560 power categories into a single engine family. The listed engine models comply with the more stringent set of standards of the 130 ≤ kW ≤ 560 power category in accordance with Section 1039.230(e) of the applicable California test procedures.

BE IT FURTHER RESOLVED: That the manufacturer has elected to include engine models in this engine family which are identified for "emergency vehicle use only". These "emergency vehicle use only" engines are exempt from requirements imposed pursuant to California law and the regulations adopted pursuant thereto for motor vehicle pollution control devices per California Vehicle Code Section 27156.2. The manufacturer must clearly label these engines for "emergency vehicle use only" on the engines' emission control label.

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 12th day of October 2023.



Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RPKXL07.0BN1 EO Number: U-R-022-0378 Date Applicable: 09/08/2023

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	L	hp	rpm	lb/hr	lb-ft	rpm	lb/hr	-	-	-
3924/2200	Cert Test 1	N/A	I6	7.01	275	2200	104	927	1400	86	1	N/A	N/A
3960/2200	2	N/A	I6	7.01	269	2200	101	918	1400	85	1	N/A	N/A
3926/2200	3	N/A	I6	7.01	250	2200	93	895	1400	82	1	N/A	N/A
4038/2200	4	N/A	I6	7.01	250	2200	93	895	1400	82	1	N/A	N/A
3962/2200	5	N/A	I6	7.01	248	2200	92	908	1300	78	1	N/A	N/A
3976/1800	6	N/A	I6	7.01	239	1800	83	766	1400	70	1	N/A	N/A
3928/2200	7	N/A	I6	7.01	225	2200	83	805	1400	74	1	N/A	N/A
4036/2200	8	N/A	I6	7.01	225	2200	83	805	1400	74	1	N/A	N/A
3966/2200	9	N/A	I6	7.01	215	2200	79	735	1400	64	1	N/A	N/A
3930/2200	10	N/A	I6	7.01	202	2200	75	725	1400	64	1	N/A	N/A
4034/2200	11	N/A	I6	7.01	202	2200	75	725	1400	64	1	N/A	N/A
3978/1800	12	N/A	I6	7.01	204	1800	72	642	1400	57	1	N/A	N/A
3932/2200	13	N/A	I6	7.01	202	2200	75	642	1400	57	1	N/A	N/A
4052/1800	14	N/A	I6	7.01	188	1800	65	642	1400	57	1	N/A	N/A
4054/2000	15	N/A	I6	7.01	176	2000	62	637	1400	56	1	N/A	N/A
3934/2200	16	N/A	I6	7.01	174	2200	64	621	1400	55	1	N/A	N/A
4028/2200	17	N/A	I6	7.01	147	2200	64	621	1400	55	1	N/A	N/A
4032/2200	18	N/A	I6	7.01	173	2200	64	642	1400	57	1	N/A	N/A
4064/1800	19	N/A	I6	7.01	164	1800	57	586	1400	52	1	N/A	N/A
3990/1800	20	N/A	I6	7.01	164	1800	57	547	1400	49	1	N/A	N/A
3936/2200	21	N/A	I6	7.01	156	2200	59	557	1400	50	1	N/A	N/A
4050/2200	22	N/A	I6	7.01	156	2200	59	557	1400	50	1	N/A	N/A
4060/1800	23	N/A	I6	7.01	153	1800	53	532	1400	48	1	N/A	N/A
4354/2200	24	N/A	I6	7.01	273	2200	103	927	1400	86	1	N/A	N/A
4356/2200	25	N/A	I6	7.01	250	2200	93	895	1400	82	1	N/A	N/A
4358/2200	26	N/A	I6	7.01	225	2200	83	805	1400	74	1	N/A	N/A
4360/2200	27	N/A	I6	7.01	202	2200	75	725	1400	64	1	N/A	N/A
4346/2200	Cert Test 28	N/A	I6	7.01	302	2200	113	946	1400	86	1	N/A	N/A
4346/2200	28	N/A	I6	7.01	302	2200	113	946	1400	86	1	N/A	N/A
4348/2200	29	N/A	I6	7.01	302	2200	113	940	1400	82	1	N/A	N/A
4350/1800	Cert Test 30	N/A	I6	7.01	321	1800	117	935	1800	117	1	N/A	N/A
4350/1800	30	N/A	I6	7.01	321	1800	115	935	1800	115	1	N/A	N/A
4352/1800	31	N/A	I6	7.01	247	1800	83	720	1800	83	1	N/A	N/A
4460/2200	32	N/A	I6	7.01	227	2200	83	805	1400	75	1	N/A	N/A
4530/2200	33	N/A	I6	7.01	178	2200	67	642	1400	57	1	N/A	N/A
4530/2200	34	N/A	I6	7.01	178	2200	67	642	1400	57	1	N/A	Emergency
6264/1800	35	N/A	I6	7.01	163	1800	67	795	1400	52	1	N/A	N/A