PERKINS ENGINES COMPANY LTD.

EXECUTIVE ORDER: U-R-022-0383 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	RPKXL04.4SU1	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 (*).

		Crit	eria	Smoke Opacity				
Applicable Standard	Applicable Standard				PM	ACL	LUG	PEAK
	STD	0.19	0.40	3.5	0.02	*	*	*
Tier 4 Final 130 ≤ kW ≤ 560	FEL	*	*	*	0.01	*	*	*
100 = KVV = 000	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 $75 \le kW \le 560$ power categories into a single engine family. The listed engine models comply with the more stringent set of standards of the $130 \le kW \le 560$ 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 /2th day of October 2023.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

Robin U. Lang

ATTACHMENT: ENGINE MODELS

Family: RPKXL04.4SU1 EO Number: U-R-022-0383 Date Applicable: 09/11/2023

				Peak Power				Peak Torque					
Model	Code	Trim	Config	Displacement	Power	Speed	Fueling	Torque	Speed	Fueling	ECS Num	GHG	Notes
-	-	-	-	L	hp	rpm	lb/hr	lb-ft	rpm	lb/hr	-	-	-
1204J-E44TTA/C4.4	5094/2200	N/A	16	4.4	200	2200	72.2	608	1400	54.9	1	N/A	N/A
1204J-E44TA/C4.4	4938/2200	N/A	16	4.4	110	2200	39.8	332	1400	29.9	1	N/A	N/A
1204J-E44TA/C4.4	4940/2200	N/A	16	4.4	131	2200	46.6	391	1400	35	1	N/A	N/A
1204J-E44TA/C4.4	4942/2200	N/A	16	4.4	122	2200	43.7	369	1400	33.2	1	N/A	N/A
1204J-E44TA/C4.4	4922/2200	N/A	16	4.4	114	2200	41.5	369	1400	33.1	1	N/A	N/A
1204J-E44TA/C4.4	4946/2200	N/A	16	4.4	148	2200	52.9	413	1400	37.3	1	N/A	N/A
1204J-E44TA/C4.4	4948/2200	N/A	16	4.4	124	2200	44.4	391	1400	35.1	1	N/A	N/A
1204J-E44TA/C4.4	4950/2200	N/A	16	4.4	137	2200	48.6	413	1400	37.1	1	N/A	N/A
1204J-E44TA/C4.4	4952/2200	N/A	16	4.4	142	2200	50.7	413	1400	37.1	1	N/A	N/A
1204J-E44TTA/C4.4	4954/2200	N/A	16	4.4	157	2200	56.9	524	1400	46.9	1	N/A	N/A
1204J-E44TTA/C4.4	4956/2200	N/A	16	4.4	174	2200	61.8	553	1400	49.2	1	N/A	N/A
1204J-E44TTA/C4.4	4958/2200	N/A	16	4.4	150	2200	54.7	479	1400	42.9	1	N/A	N/A
1204J-E44TTA/C4.4	4960/2200	N/A	16	4.4	141	2200	50.7	465	1400	41.3	1	N/A	N/A
1204J-E44TTA/C4.4	4964/2200	N/A	16	4.4	186	2200	65.8	608	1400	53.5	1	N/A	N/A
1204J-E44TTA/C4.4	6260/2200	N/A	16	4.4	174	2200	61.6	601	1400	53.2	1	N/A	N/A
1204J-E44TTA/C4.4	6262/2200	N/A	16	4.4	157	2100	54	589	1400	53	1	N/A	N/A
1204J-E44TTA/C4.4	6320/1800	N/A	16	4.4	173	1800	57.4	505	1800	57.4	1	N/A	N/A
1204J-E44TTA/C4.4	6324/1500	N/A	16	4.4	168	1500	55.4	587	1500	55.4	1	N/A	N/A