

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	RCEXL03.8AAF	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems	Special Features
[1]: Electronic Direct Injection (DDI), Electronic Control Module (ECM), Turbocharger (TC), Charged Air Cooler (CAC), 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 75 ≤ kW < 130	STD	0.19	0.40	5.0	0.02	*	*	*
	FEL	*	*	*	*	*	*	*
	NTE	0.28	0.60	6.2	0.03	*	*	*

**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 27<sup>th</sup> day of July 2023.

*Kim Jacobian* for

Robin U. Lang, Chief  
Emissions Certification and Compliance Division

**ATTACHMENT: ENGINE MODELS**

Family: RCEXL03.8AAF EO Number: U-R-002-0875 Date Applicable: 7/21/2023

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	L	hp	rpm	mm3/stroke	lb-ft	rpm	mm3/stroke	-	-	-
F3.8	OF1		I4	3.8	173	2500	116	457	1500	133.5	1	N/A	
F3.8	OF2		I4	3.8	154	2500	102	457	1500	133.5	1	N/A	
F3.8	OF3		I4	3.8	148	2500	97.7	443	1500	126.9	1	N/A	
F3.8	OF4		I4	3.8	134	2500	89.5	406	1500	117.5	1	N/A	
F3.8	OF5		I4	3.8	121	2500	81.4	369	1500	106.2	1	N/A	
F3.8	OF6		I4	3.8	101	2500	70.1	369	1500	106.2	1	N/A	
F3.8	OF7		I4	3.8	154	2200	112	457	1500	133.5	1	N/A	
F3.8	OF8		I4	3.8	148	2200	107.6	443	1500	126.9	1	N/A	
F3.8	OF9		I4	3.8	134	2200	98.6	406	1500	117.5	1	N/A	
F3.8	OF10		I4	3.8	121	2200	88.8	369	1500	106.2	1	N/A	
F3.9	OF11		I4	3.8	101	2200	74.7	368	1500	106.2	1	N/A	