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	RDZXL02.9118	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems	Special Features
[1]: Direct Diesel Injection (DDI), Turbocharger (TC), Electronic Control Module (ECM), Exhaust Gas Recirculation (EGR), Diesel Oxidation Catalyst (DOC), Continuous Trap Oxidizer (CTOX)	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 37 ≤ kW < 56	STD	4.7	5.0	0.03	*	*	*
	FEL	*	*	*	*	*	*
	NTE	5.9	6.2	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 ___16th___ day of August 2023.

Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RDZXL02.9118   EO Number: U-R-013-0716   Date Applicable: 7/24/2023

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	Liters	horsepower	rpm	lb/hr	N-m	rpm	lb/hr	-	-	-
TD2.9L4	C5EI55E		L4	2.925	74.3	2200	29.8	260	1600	22	1	N/A	
TD2.9L4	C5EI45E		L4	2.925	60.3	2200	23.9	215	1600	17.7	1	N/A	
TD2.9L4	C5EI45D		L4	2.925	60.3	2300	24.5	215	1600	17.7	1	N/A	
TD2.9L4	C5EI45A		L4	2.925	60.3	2600	26.5	215	1600	17.7	1	N/A	
TD2.9L4	C5EI50E		L4	2.925	67.1	2200	26.3	235	1600	19.5	1	N/A	
TD2.9L4	C5EI50D		L4	2.925	67.1	2300	27	235	1600	19.5	1	N/A	
TD2.9L4	C5EI50A		L4	2.925	67.1	2600	29.4	235	1600	19.5	1	N/A	
TD2.9L4	C5EI55D		L4	2.925	74.3	2300	29.6	260	1600	22	1	N/A	
TD2.9L4	C5EI55A		L4	2.925	74.3	2600	32.9	260	1600	22	1	N/A	
TD2.9L4	C5EI55AG		L4	2.925	74.3	2600	32.9	260	1600	22	1	N/A	
TD2.9L4	C5EI55EH		L4	2.925	74.3	2200	29.8	320	1601	28	1	N/A	
TD2.9L4	C5EI55DH		L4	2.925	74.3	2300	29.6	320	1602	28	1	N/A	
TD2.9L4	C5EI55CH		L4	2.925	74.3	2400	30.6	320	1603	28	1	N/A	
TD2.9L4	C5EI55AH		L4	2.925	74.3	2600	32.9	320	1604	28	1	N/A	