

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	RDZXL06.1049	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems	Special Features
[1]: Direct Diesel Injection (DDI), Turbocharger (TC), Charge Air Cooler (CAC), Electronic Control Module (ECM), Exhaust Gas Recirculation (EGR), Continuous Trap Oxidizer (CTOX), 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	*	*	*	*	*	*	*
	NTE	0.28	0.60	4.4	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 24th day of August 2023.



Robin U. Lang, Chief
 Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RDZXL06.1049 EO Number: U-R-013-0730 Date Applicable: 8/7/2023

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	Liters	horsepower	rpm	lb/hr	lb-ft	rpm	lb/hr	-	-	-
TCD6.1L6	CFWT174U	N/A	L6	6.057	233.8	2100	87	790.6	1500	81.4	1	N/A	
TCD6.1L6	CFWT162U	N/A	L6	6.057	218.1	2100	78.8	739	1500	73.1	1	N/A	
TCD6.1L6	CFWT148U	N/A	L6	6.057	198.7	2100	73.6	671.9	1500	66.5	1	N/A	
TCD6.1L6	CFWT133U	N/A	L6	6.057	178.3	2100	66.4	603.3	1500	59.5	1	N/A	
TCD6.1L6	CFWT159U	N/A	L6	6.057	213.4	2200	79.9	668.2	1500	65.4	1	N/A	
TCD6.1L6	CFWT141U	N/A	L6	6.057	189.7	2200	71.2	615.8	1500	60.2	1	N/A	
TCD6.1L6	CFWT157U	N/A	L6	6.057	217.9	2100	76.5	655.6	1500	63.9	1	N/A	
TCD6.1L6	CFWT144U	N/A	L6	6.057	193.7	2100	70.3	671.9	1500	52.6	1	N/A	
TCD6.1L6	CFWT134U	N/A	L6	6.057	178.3	2100	66.1	603.3	1500	59.2	1	N/A	
TCD6.1L6	CFWT132U	N/A	L6	6.057	178.3	2100	66.4	603.3	1500	59.5	1	N/A	
TCD6.1L6	CFWT147U	N/A	L6	6.057	198.7	2100	73.6	671.9	1500	66.5	1	N/A	
TCD6.1L6	CFWT161U	N/A	L6	6.057	218.1	2100	78.8	739	1500	73.1	1	N/A	
TCD6.1L6	CFWT173U	N/A	L6	6.057	233.8	2100	87	790.6	1500	81.4	1	N/A	
TCD6.1L6	CFWT175U	N/A	L6	6.057	233.3	2100	86.7	655.7	1500	63.9	1	N/A	
TCD6.1L6	CFWT165U	N/A	L6	6.057	221.3	2100	80.9	715.4	1500	71.9	1	N/A	
TCD6.1L6	CFWT140U	N/A	L6	6.057	188.6	2100	69.4	605.5	1500	59.4	1	N/A	