

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	RDZXL07.8047	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: RDZXL07.8047 EO Number: U-R-013-0734 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	mm3/stroke	lb-ft	rpm	mm3/stroke	-	-	-
TTC7.8L6	CFWT291U	N/A	L6	7.755	390.2	2100	199.1	1154	1500	221.3	1	N/A	
TTC7.8L6	CFWT269U	N/A	L6	7.755	360.7	2100	183.4	1117	1500	213.9	1	N/A	
TTC7.8L6	CFWT247U	N/A	L6	7.755	331.2	2100	169.1	1018	1500	192.9	1	N/A	
TTC7.8L6	CFWT224U	N/A	L6	7.755	300.3	2100	155.1	943	1500	177.9	1	N/A	
TTC7.8L6	CFWT202U	N/A	L6	7.755	270.8	2100	142.2	856	1500	160.1	1	N/A	
TTC7.8L6	CFWT232U	N/A	L6	7.755	311.1	2100	160.5	1012	1500	194.5	1	N/A	
TTC7.8L6	CFWT217U	N/A	L6	7.755	291.6	2100	152.5	951.4	1500	182.5	1	N/A	
TTC7.8L6	CFWT203U	N/A	L6	7.755	272.8	2100	143.5	888.7	1500	170	1	N/A	
TTC7.8L6	CFWT189U	N/A	L6	7.755	254.1	2100	135	826	1500	156.5	1	N/A	
TTC7.8L6	CFWT255U	N/A	L6	7.755	341.9	2100	175.5	1104.8	1500	213.5	1	N/A	
TTC7.8L6	CFWT201U	N/A	L6	7.755	270.8	2100	142.2	856	1500	160.1	1	N/A	
TTC7.8L6	CFWT223U	N/A	L6	7.755	300.3	2100	155.1	943	1500	177.9	1	N/A	
TTC7.8L6	CFWT246U	N/A	L6	7.755	331.2	2100	169.1	1018	1500	192.9	1	N/A	
TTC7.8L6	CFWT268U	N/A	L6	7.755	360.7	2100	183.4	1117	1500	213.9	1	N/A	
TTC7.8L6	CFWT290U	N/A	L6	7.755	390.2	2100	199.1	1154	1500	221.3	1	N/A	