

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	RDZXL07.8046	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), Diesel Oxidation Catalyst (DOC), 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: RDZXL07.8046 EO Number: U-R-013-0733 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	N-m	rpm	lb/hr	-	-	-
D8J	CFVI160		I6	7.755	214.5	1800	74.3	1110	1350	70.6	1	N/A	
D8J	CFVI210		I6	7.755	281.5	1800	95.9	1360	1350	86.4	1	N/A	
D8J	CFVI180		I6	7.755	241.3	1800	81.5	1238	1350	77.8	1	N/A	
D8J	CFVI180A		I6	7.755	241.3	1800	81.5	1238	1350	77.8	1	N/A	
D8J	CFVI175		I6	7.755	234.6	1800	79.7	1230	1500	86	1	N/A	
D8J	CFVI175A		I6	7.755	234.6	1800	79.7	1230	1500	86	1	N/A	
D8J	CFVI200		I6	7.755	268.1	2000	93.3	1273	1500	90	1	N/A	
D8J	CFVI187		I6	7.755	250.7	2100	88.8	1096	1500	77.5	1	N/A	
D8J	CFVI209		I6	7.755	280.2	2100	97.9	1236	1500	87	1	N/A	
D8J	CFVI176		I6	7.755	236	2100	82.5	1250	1450	86	1	N/A	
D8J	CFVI180B		I6	7.755	241.3	2100	85.3	1330	1450	90.4	1	N/A	
D8J	CFVI165		I6	7.755	221.2	2100	76.9	1076	1500	83.5	1	N/A	
SD80F	CFVI176A		I6	7.755	236	2100	82.5	1250	1450	86	1	N/A	
SD80F	CFVI180S		I6	7.755	241.3	2100	85.3	1330	1450	90.4	1	N/A	