

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	RDZXL04.1054	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 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:** That the manufacturer has elected to combine engines from the 56 ≤ kW < 130 power categories into a single engine family. The listed engine models comply with the more stringent set of standards of the 75 ≤ kW < 130 power category in accordance with Section 1039.230(e) of 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 13th day of October 2023.



Robin U. Lang, Chief  
Emissions Certification and Compliance Division

**ATTACHMENT: ENGINE MODELS**

Family: RDZXL04.1054 EO Number: U-R-013-0725 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	-	-	-
D4J	CFVI85		I4	4.038	113.9	2000	40.4	476	1500	34.3	1	N/A	
D4J	CFVI80		I4	4.038	107.2	2000	38.2	476	1500	34.3	1	N/A	
D4J	CFVI110		I4	4.038	147.5	2000	53.3	609	1600	48.7	1	N/A	
D4J	CFVI80A		I4	4.038	107.2	2000	38.2	476	1500	34.3	1	N/A	
D4J	CFVI90		I4	4.038	120.6	2000	42.2	566	1500	40.9	1	N/A	
D4J	CFVI110A		I4	4.038	147.5	2000	53.3	609	1600	48.7	1	N/A	
D4J	CFVI105		I4	4.038	140.8	2000	47.5	609	1600	48.7	1	N/A	
D4J	CFVI98		I4	4.038	131.4	2200	48.3	568	1650	45.8	1	N/A	
D4J	CFVI110B		I4	4.038	147.5	2200	53.2	609	1600	48.7	1	N/A	
D4J	CFVI110C		I4	4.038	147.5	2200	53.2	609	1600	48.7	1	N/A	
D4J	CFVI98A		I4	4.038	131.4	2200	48.3	568	1650	45.8	1	N/A	
D4J	CFVI98B		I4	4.038	131.4	2200	48.3	568	1650	45.8	1	N/A	
D4J	CFVI98C		I4	4.038	131.4	2200	48.3	568	1650	45.8	1	N/A	
D4J	CFVI75		I4	4.038	100.5	2200	37.6	425	1450	30.2	1	N/A	
D4J	CFVI87		I4	4.038	116.6	2200	42.5	490	1450	34.7	1	N/A	
D4J	CFVI110D		I4	4.038	147.5	2000	53.3	609	1600	48.7	1	N/A	
D4J	CFVI115		I4	4.038	154.2	2000	55.9	618	1700	52.1	1	N/A	