

EXECUTIVE ORDER: U-R-013-0728 New Off-Road Compression-Ignition Engines Page 1 of 1

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	RDZXL05.7053	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.

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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 (*).

		Crit	eria	Smoke Opacity				
Applicable Standard	NMHC	NOx	СО	PM	ACL	LUG	PEAK	
	STD	0.19	0.40	5.0	0.02	*	*	*
Tier 4 Final 75 ≤ kW < 130	FEL	*	*	*	*	*	*	*
70 = KW - 100	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: 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).

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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: RDZXL05.7053 EO Number: U-R-013-0728 Date Applicable: 8/7/2023

		Trim			Peak Power			Peak Torque					
Model	Code		Config	Displacement	Power	Speed Fueling	Torque	Speed	Fueling	ECS Num	GHG	Notes	
-	-	-	-	Liters	horsepower	rpm	lb/hr	N-m	rpm	lb/hr	-	-	-
D6J	CFVI129A		I-6	5.702	172.9	1800	60.5	850	1350	55.3	1	N/A	
D6J	CFVI129B		I-6	5.702	172.9	1800	60.5	850	1350	55.3	1	N/A	
D6J	CFVI129C		I-6	5.702	172.9	2000	63.9	850	1350	55.3	1	N/A	
D6J	CFVI115A		I-6	5.702	154.2	1900	62.6	716	1400	47.8	1	N/A	
D6J	CFVI129E		I-6	5.702	172.9	2000	63.9	850	1350	55.3	1	N/A	
)6J	CFVI129F		I-6	5.702	172.9	2000	63.9	850	1350	55.3	1	N/A	
)6J	CFVI129G		I-6	5.702	172.9	2000	63.9	850	1350	55.3	1	N/A	
D6J	CFVI129H		I-6	5.702	172.9	2000	63.9	850	1350	55.3	1	N/A	
D6J	CFVI98		I-6	5.702	131.4	2200	52.4	820	1400	54.8	1	N/A	
D6J	CFVI115		I-6	5.702	154.2	2200	59.7	850	1400	56.2	1	N/A	
SD60F	CFVI115S		I-6	5.702	154.2	2200	59.7	850	1400	56.2	1	N/A	
SD60F	CFVI98S		I-6	5.702	131.4	2200	52.4	820	1400	54.8	1	N/A	