EXECUTIVE ORDER: U-R-013-0709

New Off-Road Compression-Ignition Engines

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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	RDZXL02.2111	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems	Special Features
[1]: Direct Diesel Injection (DDI), Turbocharger (TC), Electronic Control Module (ECM), Exhaust Gas Recirculation (EGR), Diesel Oxidation Catalyst (DOC)	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 hydrocarbon plus oxides of nitrogen (NMHC+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 kilowatthour (g/kWh-hr) and percent opacity (%opacity), respectively, except as noted, or designated as not applicable (*).

					Smoke Opacity			
Applicable Standard	NMHC+NOx	СО	PM	ACL	LUG	PEAK		
	STD	4.7	5.0	0.03	*	*	*	
Tier 4 Final 37 ≤ kW < 56	FEL	*	*	*	*	*	*	
07 = RVV × 00	NTE	5.9	6.2	0.04	*	*	*	

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 3rd day of August 2023.

Robin U. Lang, Chief

Golma Shi for

Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RDZXL02.2111 EO Number: U-R-013-0709 Date Applicable: 04/08/2024

Model	Code	Trim	Config		Peak Power		Speed Fueling	Peak Torque Torque		Fueling	ECS Num	GHG	Notes
				Displacement	Power	Speed			Speed				
-	-	-	-	L	hp	rpm	lb/hr	lb-ft	rpm	lb/hr	-	-	-
TD2.2L3	CFDI44B		13	2.193	59.6	2200	22.9	151.2	1600	17.2	1	N/A	
TD2.2L3	CFDI37A		13	2.193	48.8	2300	19.1	132.7	1600	14.9	1	N/A	
TD2.2L3	CFDI30B		13	2.193	40.2	2200	15.5	110.6	1600	12.3	1	N/A	
TD2.2L3	CFDI37		13	2.193	48.8	2600	20.6	132.7	1600	14.9	1	N/A	
TD2.2L3	CFDI26B		13	2.193	34.8	2200	13.6	95.8	1600	10.7	1	N/A	
TD2.2L3	CFDI30A		13	2.193	40.2	2300	15.9	110.6	1600	12.3	1	N/A	
TD2.2L3	CFDI44		13	2.193	59.6	2600	25.1	151.2	1600	17.2	1	N/A	
TD2.2L3	CFDI26		13	2.193	34.8	2600	15.8	95.8	1600	10.7	1	N/A	
TD2.2L3	CFDI30BL		13	2.193	40.2	2200	15.5	96.6	1600	10.8	1	N/A	
TD2.2L3	CFDI26A		13	2.193	34.8	2300	14	95.8	1600	10.7	1	N/A	
TD2.2L3	CFDI44A		13	2.193	59.6	2300	23.3	151.2	1600	17.2	1	N/A	
TD2.2L3	CFDI30		13	2.193	40.2	2600	17.7	110.6	1600	12.3	1	N/A	
TD2.2L3	CFDI37B		13	2.193	48.8	2200	18.6	132.7	1600	14.9	1	N/A	