EXECUTIVE ORDER: U-R-005-0552-1 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	RKLXL23.2FDD	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems							
[1, 2]: Turbocharger (TC), Charge Air Cooler (CAC), Exhaust Gas Recirculation (EGR), Electronic Control Module (ECM), Periodic Trap Oxidizer (PTOX), Oxidation Catalyst (OC), Electronic Direct Injection (DFI)	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/kW-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	3.5	3.5	0.04	*	*	*
Tier 4 Final ELSE > 560 kW	FEL	*	*	*	*	*	*	*
LEGE : 000 KW	NTE	0.24	4.4	4.4	0.06	*	*	*

**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.

This Executive Order hereby supersedes Executive Order U-R-005-0522 dated September 26, 2023.

Executed on this \_\_\_\_\_ day of January 2024.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

## ATTACHMENT: ENGINE MODELS

Family: RKLXL23.2FDD EO Number: U-R-005-0552-1 Date Applicable: 01/12/2024

Model		Trim			Peak Power			Peak Torque Torque		Fueling	ECS Num	GHG	
	Code		Config	Displacement	Power	Speed	ed Fueling		Speed				Notes
-	-	-	-	L	hp	rpm	lb/hr	lb-ft	rpm	lb/hr	-	-	=
SAA6D170E-7-B	5C01	N/A	16	23.15	775	2000	424	2749	1400	546	1	N/A	N/A
SAA6D170E-7-B	5C03	N/A	16	23.15	775	1800	476	2506	1400	515	1	N/A	N/A
SAA6D170E-7-B	5C02	N/A	16	23.15	775	1800	459	2506	1400	501	1	N/A	N/A
SAA6D170E-7-B	5C04	N/A	16	23.15	775	1800	459	2506	1400	501	1	N/A	N/A
SAA6D170E-7-B	6C01	N/A	16	23.15	775	2000	424	2749	1400	546	1	N/A	N/A
SAA6D170E-7-B	6C02	N/A	16	23.15	775	1800	459	2506	1400	501	1	N/A	N/A
SAA6D170E-7-B	5C05	N/A	16	23.15	818	2000	442	3011	1400	579	2	N/A	New Model Added
SAA6D170E-7-B	6C05	N/A	16	23.15	818	2000	442	3011	1400	579	2	N/A	New Model Added
SAA6D170E-7-B	5C06	N/A	16	23.15	775	2000	440	2513	1400	531	1	N/A	New Model Added
SAA6D170E-7-B	6C06	N/A	16	23.15	775	2000	440	2513	1400	531	1	N/A	New Model Added