

Pursuant to the authority vested in California Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-19-095;

**IT IS ORDERED AND RESOLVED:** That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below 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	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2022	NKLXL11.0DDC	11.0	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Turbocharger, Charge Air Cooler, Exhaust Gas Recirculation, Electronic Direct Injection, Electronic Control Module, Selective Catalyst Reduction-Urea, Ammonia Oxidation Catalyst, Periodic Trap Oxidizer, Oxidation Catalyst			Loader, Dozer, Off-Road Dump Truck	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final	<b>STD</b>	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		<b>CERT</b>	0.01	0.25	--	0.04	0.001	--	--	--

**BE IT FURTHER RESOLVED:** That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

**This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.**

Executed on this 22nd day of December 2021.



Allen Lyons, Chief  
 Emissions Certification and Compliance Division

**Attachment: Engine Models**

**EO #:** U-R-005-0521

**Family:** NKLXL11.0DDC

**Attachment Last Revised:** 11/29/2021

Model	Code	Trim	Config	Displacement	Displacement - Units	Peak Power	Peak Power - Units	Peak Power - Speed (rpm)	Peak Power - Fueling	Peak Power - Fuel Units	Peak Torque	Peak Torque - Units	Peak Torque - Speed (rpm)	Peak Torque - Fuel Units	OBD	GHG	Special	Notes	
SAA6D125 E-7	5C01	N/A	I6	11.0	Liters	333	horsepower	2000	176	mm3/stroke	1237	lb-ft	1400	239	mm3/stroke	N/A	N/A	N/A	EM, TC, CAC, EGR, DFI, ECM, SCR-U, AMOX, PTOX, OC
SAA6D125 E-7	5C02	N/A	I6	11.0	Liters	362	horsepower	1900	201	mm3/stroke	1114	lb-ft	1400	217	mm3/stroke	N/A	N/A	N/A	EM, TC, CAC, EGR, DFI, ECM, SCR-U, AMOX, PTOX, OC
SAA6D125 E-7	5C03	N/A	I6	11.0	Liters	267	horsepower	1900	152	mm3/stroke	938	lb-ft	1400	186	mm3/stroke	N/A	N/A	N/A	EM, TC, CAC, EGR, DFI, ECM, SCR-U, AMOX, PTOX, OC
SAA6D125 E-7	5C04	N/A	I6	11.0	Liters	274	horsepower	2000	149	mm3/stroke	964	lb-ft	1450	187	mm3/stroke	N/A	N/A	N/A	EM, TC, CAC, EGR, DFI, ECM, SCR-U, AMOX, PTOX, OC
SAA6D125 E-7	5C05	N/A	I6	11.0	Liters	405	horsepower	2000	216	mm3/stroke	1259	lb-ft	1400	244	mm3/stroke	N/A	N/A	N/A	EM, TC, CAC, EGR, DFI, ECM, SCR-U, AMOX, PTOX, OC
SAA6D125 E-7	5C06	N/A	I6	11.0	Liters	301	horsepower	2000	162	mm3/stroke	1003	lb-ft	1400	197	mm3/stroke	N/A	N/A	N/A	EM, TC, CAC, EGR, DFI, ECM, SCR-U, AMOX, PTOX, OC
SAA6D125 E-7	5C07	N/A	I6	11.0	Liters	291	horsepower	1600	187	mm3/stroke	1127	lb-ft	1330	217	mm3/stroke	N/A	N/A	N/A	EM, TC, CAC, EGR, DFI, ECM, SCR-U, AMOX, PTOX, OC