

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	NKLXL60.0AAI	60.0	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Selective Catalyst Reduction-Urea, Electronic Direct Injection, Turbocharger, Electronic Control Module, Charge Air Cooler, Ammonia Oxidation Catalyst			Loader, Pump, Compressor, Crawler Excavator, General Mining Equipment, General Agricultural Equipment	

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 (NO_x), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO_x), 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	NO _x	NMHC+NO _x	CO	PM	ACCEL	LUG	PEAK
ELSE > 560 kW	Tier 4 Final	STD	0.19	3.5	N/A	3.5	0.04	N/A	N/A	N/A
		CERT	0.02	2.6	--	0.1	0.02	--	--	--

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 30th day of October 2021.



Allen Lyons, Chief
 Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: U-R-005-0511

Family: NKLXL60.0AAI

Attachment Last Revised: 9/23/2021

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	
SDA16V16 OE-3	OK1	N/A	V16	60	Liters	2500	horsepower	1900	498	mm3/stroke	7412	lb-ft	1700	520	mm3/stroke	N/A	N/A	N/A	SCR, DDI, TC, ECM, CAC, AMOX
SDA16V16 OE-3	OK2	N/A	V16	60	Liters	1875	horsepower	1800	434	mm3/stroke	6169	lb-ft	1500	433	mm3/stroke	N/A	N/A	N/A	SCR, DDI, TC, ECM, CAC, AMOX
SDA16V16 OE-3	OK3	N/A	V16	60	Liters	2300	horsepower	1800	477	mm3/stroke	6866	lb-ft	1600	475	mm3/stroke	N/A	N/A	N/A	SCR, DDI, TC, ECM, CAC, AMOX
SDA16V16 OE-3	OK4	N/A	V16	60	Liters	2000	horsepower	1800	462	mm3/stroke	6570	lb-ft	1500	454	mm3/stroke	N/A	N/A	N/A	SCR, DDI, TC, ECM, CAC, AMOX
SDA16V16 OE-3	OK5	N/A	V16	60	Liters	1944	horsepower	1800	407	mm3/stroke	6169	lb-ft	1500	428	mm3/stroke	N/A	N/A	N/A	SCR, DDI, TC, ECM, CAC, AMOX
SDDA16V1 60E-3	OK6	N/A	V16	60	Liters	2850	horsepower	1900	594	mm3/stroke	8726	lb-ft	1500	596	mm3/stroke	N/A	N/A	N/A	SCR, DDI, TC, ECM, CAC, AMOX
SDDA16V1 60E-3	OK7	N/A	V16	60	Liters	2700	horsepower	1900	562	mm3/stroke	8267	lb-ft	1500	566	mm3/stroke	N/A	N/A	N/A	SCR, DDI, TC, ECM, CAC, AMOX
SDA16V16 OE-3	OK8	N/A	V16	60	Liters	2700	horsepower	1900	574	mm3/stroke	7976	lb-ft	1700	567	mm3/stroke	N/A	N/A	N/A	SCR, DDI, TC, ECM, CAC, AMOX
SDDA16V1 60E-3	OK9	N/A	V16	60	Liters	2850	horsepower	1900	594	mm3/stroke	8726	lb-ft	1500	596	mm3/stroke	N/A	N/A	N/A	SCR, DDI, TC, ECM, CAC, AMOX