

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	NCEXL60.0AAF	60.0	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Control Module, Electronic Direct Injection, Turbocharger, Selective Catalytic Reduction - Urea, Charge Air Cooler, Ammonia Oxidation Catalyst			Loaders, Pump, Compressor, General Agricultural Equipment, Combine, General Under Ground Mining, Crawler - Excavator, General Construction, General Mining	

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
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	3.0	--	0.2	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 20th day of October 2021.



Allen Lyons, Chief
 Emissions Certification and Compliance Division

Attachment: Engine ModelsEO #: **U-R-002-0804**Family: **NCEXL60.0AAF**Attachment Last Revised: **9/17/2021**

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	
QSK60	OK1		16	60	Liters	1864	kilowatt	1900	498	mm3/stroke	10049	N-m	1700	521	mm3/stroke				
QSK60	OK2		16	60	Liters	1398	kilowatt	1800	394	mm3/stroke	8364	N-m	1500	428	mm3/stroke				
QSK60	OK3		16	60	Liters	1715	kilowatt	1800	477	mm3/stroke	9309	N-m	1600	475	mm3/stroke				
QSK60	OK4		16	60	Liters	1491	kilowatt	1800	419	mm3/stroke	8908	N-m	1500	454	mm3/stroke				
QSK60	OK5		16	60	Liters	1450	kilowatt	1800	407	mm3/stroke	8364	N-m	1500	428	mm3/stroke				
QSK60	OK6		16	60	Liters	2125	kilowatt	1900	570	mm3/stroke	11831	N-m	1500	596	mm3/stroke				
QSK60	OK7		16	60	Liters	2013	kilowatt	1900	540	mm3/stroke	11209	N-m	1500	566	mm3/stroke				
QSK60	OK8		16	60	Liters	2013	kilowatt	1900	550	mm3/stroke	10814	N-m	1700	567	mm3/stroke				
QSK60	OK9		16	60	Liters	1411	kilowatt	1800	401	mm3/stroke	8506	N-m	1800	438	mm3/stroke				