

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)
2023	PY9XL16.4DAA	16.4	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Engine Control Module, Smoke Puff Limiter, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst, Exhaust Gas Recirculation			Crane, Loader, Tractor, Dozer, Pump, Compressor, Generator	

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	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.15	0.36	--	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).

BE IT FURTHER RESOLVED: That the manufacturer has elected to include engine models in this engine family which are identified for "emergency vehicle use only". These "emergency vehicle use only" engines are exempt from requirements imposed pursuant to California law and the regulations adopted pursuant thereto for motor vehicle pollution control devices per California Vehicle Code Section 27156.2. The manufacturer must clearly label these engines for "emergency vehicle use only" on the engines' emission control label.

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 19th day of December 2022.



Robin U. Lang, Chief
 Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: U-R-024-0055

Family: PY9XL16.4DAA

Attachment Last Revised: 11/28/2022

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	
2722734	DC16 084A		V8	16.4	Liters	405	kilowatt	2100	202	mm3/stroke	2944	N-m	1200	294	mm3/stroke	N/A	N/A	N/A	N/A
2668179	DC16 084A		V8	16.4	Liters	441	kilowatt	2100	220	mm3/stroke	3070	N-m	1300	306	mm3/stroke	N/A	N/A	N/A	N/A
2722755	DC16 084A		V8	16.4	Liters	478	kilowatt	2100	239	mm3/stroke	3138	N-m	1400	314	mm3/stroke	N/A	N/A	N/A	N/A
2722756	DC16 084A		V8	16.4	Liters	493	kilowatt	2100	247	mm3/stroke	3192	N-m	1400	320	mm3/stroke	N/A	N/A	N/A	N/A
2722758	DC16 091A		V8	16.4	Liters	405	kilowatt	2100	202	mm3/stroke	2944	N-m	1200	394	mm3/stroke	N/A	N/A	Emergency	N/A
2722759	DC16 091A		V8	16.4	Liters	493	kilowatt	2100	247	mm3/stroke	3192	N-m	1400	320	mm3/stroke	N/A	N/A	Emergency	N/A