CALIFORNIA AIR RESOURCES BOARD	**YANMAR POWER TECHNOLOGY CO., LTD**	**EXECUTIVE ORDER U-R-028-1004** New Off-Road Compression-Ignition Engines

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	NYDXL.993NPA	0.993	Diesel	3,000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Indirect Diesel Injection	Crane, Dozer, Loader, Tractor, Pump, Compressor, Excavator

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
8 ≤ kW < 19	Tier 4 Final	**STD**	N/A	N/A	7.5	6.6	0.40	20	15	50
		CERT	--	--	6.1	2.2	0.16	1	1	1

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 16th day of November 2021.

Allen Lyons, Chief
Emissions Certification and Compliance Division

Attachment: Engine Models **EO #:** U-R-028-1004 **Family:** NYDXL.993NPA **Attachment Last Revised:** 10/12/2021

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	Peak Torque - Fuel Units	OBD	GHG	Special	Notes
5ENBPM	N/A	N/A	I3	0.993	Liters	23.7	horsepower	3400	19.9	mm3/stroke	41.1	lb-ft	2400	20.2	mm3/stroke	N/A	N/A	None	None
5ENAAM	N/A	N/A	I3	0.993	Liters	23.9	horsepower	3600	18.4	mm3/stroke	38.4	lb-ft	2400	18.4	mm3/stroke	N/A	N/A	None	None
5ENBAM	N/A	N/A	I3	0.993	Liters	22.8	horsepower	3400	18.8	mm3/stroke	39.6	lb-ft	2400	19.2	mm3/stroke	N/A	N/A	None	None
5ENCAM	N/A	N/A	I3	0.993	Liters	21.5	horsepower	3200	18.1	mm3/stroke	39.5	lb-ft	2300	19.1	mm3/stroke	N/A	N/A	None	None
4PNDAM	N/A	N/A	I3	0.993	Liters	19	horsepower	3000	17.1	mm3/stroke	36.9	lb-ft	1900	17.7	mm3/stroke	N/A	N/A	None	None
4PNNAM	N/A	N/A	I3	0.993	Liters	15.6	horsepower	2500	16.2	mm3/stroke	37.0	lb-ft	1800	17.7	mm3/stroke	N/A	N/A	None	None
4PNPAM	N/A	N/A	I3	0.993	Liters	15	horsepower	2400	16.2	mm3/stroke	37	lb-ft	1800	17.8	mm3/stroke	N/A	N/A	None	None