

## **AB VOLVO PENTA**

## **EXECUTIVE ORDER U-R-014-0194**

New Off-Road Compression-Ignition Engines Page 1 of 2

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	NVPXL16.1CJA	16.1	Diesel	8,000			
SPEC	IAL FEATURES & EMISSIO	N CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION				
Charge	Selective Catalytic Rec	er, Smoke Puff Limiter,	Crane, Loader, Pump, Compress	or, Generator Set			

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, 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			I	EXHAUST (g/kw-l		OPACITY (%)			
	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	СО	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
		FEL	N/A	N/A	N/A	N/A	0.03	N/A	N/A	N/A
		CERT	0.01	0.17		0.1	0.02			

**BE IT FURTHER RESOLVED:** That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

**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.



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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 January 2022.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Attachment 1 of 1: Engine Models EO #: U-R-014-0194				Family: NVPXL16.1CJA Attachment Revised: 12/23/2021															
					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power -		Peak Torque -	Peak Torque -	Peak Torque -	Peak Torque -				
Model	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Fuel Units	Peak Torque	Units	Speed (rpm)	Fuel	Fuel Units	OBD	GHG	Special	Notes
TAD1670 VE	1	N/A	16	16.1	Liters	543	horsepower	1900	186	lb/hr	2757	N-m	1260	155	lb/hr	N/A	N/A	None	None
TAD1671 VE	П	N/A	16	16.1	Liters	603	horsepower	1900	205	lb/hr	2897	N-m	1260	164	lb/hr	N/A	N/A	None	None
TAD1672 VE	III	N/A	16	16.1	Liters	690	horsepower	1800	234	lb/hr	3213	N-m	1260	182	lb/hr	N/A	N/A	None	None
TAD1672 VE	IV (Emergency)	N/A	16	16.1	Liters	690	horsepower	1800	234	lb/hr	3213	N-m	1260	182	lb/hr	N/A	N/A	None	None