

AB VOLVO PENTA

EXECUTIVE ORDER U-R-014-0175 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			FUEL TYPE	USEFUL LIFE (hours)		
2020	LVPXL07.7CJA	7.7	Diesel	8000		
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION			
Electronic Direct Injection, Electronic Control Module, Charge Air Cooler, Turbocharger, Smoke Puff Limiter, Selective Catalytic Reduction-Urea, Exhaust Gas Recirculation, Ammonia Oxidation Catalyst			Crane, Loaders, Pump, Compressor, 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, Califomia Code of Regulations, (13 CCR) Section 2423):

RATED POWER	EMISSION		EXHAUST (g/kW-hr)					OPACITY (%)		
CLASS	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	0.19	-	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).



AB VOLVO PENTA

EXECUTIVE ORDER U-R-014-0175

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

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 at El Monte, California on this

_ day of November 2019.

Allen Lyons, Chief

Emissions Certification and Compliance Division

ATTACHMENT 1071 E0# U-R-014-0175 Date 10/25/2019

Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: nm/stroke@peakHP (for diesel only)	5.Fuel Rate: (lbs/hr)@peakHi (for diesels only		7.Fuel Rate: mm/stroke@peak torque	8.Fuel R	peak	9.Emission Control Device Per SAE J1930
LVPXL07.7CJA	ı	TAD870 VE	214@2200		78	1060Nm@1200				CAC, TC, SPL, SCR-U, EGR, AMO
LVPXL07.7CJA	11	TAD871 VE	248@2200	120	89	1160Nm@1200	156	63	DDI,EM, ECM,	CAC, TC, SPL, SCR-U,EGR, AMO
LVPXL07.7CJA	111	TAD872 VE	281@2200	136	101	1237Nm@1350	165	75	DDI,EM, ECM,	CAC, TC, SPL, SCR-U,EGR, AMO
LVPXL07.7CJA	* IV	TAD873 VE	315@2200	152	113	1310Nm@1450	178	87	DDI,EM, ECM,	CAC, TC, SPL, SCR-U,EGR, AMO

* TESTED ENGINE MODEL