

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	PCPXL09.3HTF	9.3	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Diesel Oxidation Catalyst, Engine Control Module, Exhaust Gas Recirculation, Periodic Trap Oxidizer, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst			Loader, Tractor, Agricultural Combine, Scraper, Excavator, Motor Grader, Commercial Equipment	

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 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
		FEL	--	--		--	0.01	--	--	--
		CERT	0.02	0.12	--	0.1	0.01	--	--	--

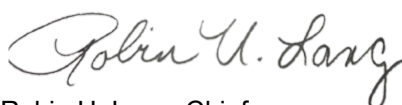
BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any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

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 13th day of September 2022.



Robin U. Lang, Chief
 Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: U-R-001-0661

Family: PCPXL09.3HTF

Attachment Last Revised: 8/26/2022

Model	Code	Trim	Config	Displacement	Displacement -		Peak Power -		Peak Power -	Peak Power -	Peak Torque -		Peak Torque -		Peak Torque - Fuel				
					Units	Liters	Units	horsepower	Speed (rpm)	Fueling	Units	Peak Torque	Units	Speed (rpm)	Peak Torque - Fuel	Units	OBD	GHG	Special
C9.3	Cert Test 1	NA	I6	9.28	Liters	325	horsepower	1800	116.3	lb/hr	1260	lb-ft	1200	98.1	lb/hr	N/A	N/A	N/A	N/A
C9.3	1	NA	I6	9.28	Liters	268	horsepower	2150	100	lb/hr	881	lb-ft	1400	81.2	lb/hr	N/A	N/A	N/A	N/A
C9.3	2	NA	I6	9.28	Liters	299	horsepower	2200	109.9	lb/hr	1006	lb-ft	1400	88.4	lb/hr	N/A	N/A	N/A	N/A
C9.3	3	NA	I6	9.28	Liters	325	horsepower	2200	119.7	lb/hr	1090	lb-ft	1400	97.3	lb/hr	N/A	N/A	N/A	N/A
C9.3	4	NA	I6	9.28	Liters	349	horsepower	2200	129.9	lb/hr	1174	lb-ft	1400	105.4	lb/hr	N/A	N/A	N/A	N/A
C9.3	5	NA	I6	9.28	Liters	388	horsepower	2200	142.5	lb/hr	1269	lb-ft	1400	113.1	lb/hr	N/A	N/A	N/A	N/A
C9.3	6	NA	I6	9.28	Liters	232	horsepower	2000	87	lb/hr	850	lb-ft	1000	55.8	lb/hr	N/A	N/A	N/A	N/A
C9.3	6A	NA	I6	9.28	Liters	232	horsepower	2000	87	lb/hr	850	lb-ft	1000	55.8	lb/hr	N/A	N/A	N/A	N/A
C9.3	6B	NA	I6	9.28	Liters	232	horsepower	2000	87	lb/hr	850	lb-ft	1400	55.8	lb/hr	N/A	N/A	N/A	N/A
C9.3	7	NA	I6	9.28	Liters	253	horsepower	2000	93.3	lb/hr	930	lb-ft	1000	61.6	lb/hr	N/A	N/A	N/A	N/A
C9.3	7A	NA	I6	9.28	Liters	253	horsepower	2000	93.3	lb/hr	930	lb-ft	1000	61.6	lb/hr	N/A	N/A	N/A	N/A
C9.3	7B	NA	I6	9.28	Liters	253	horsepower	2000	93.3	lb/hr	930	lb-ft	1000	61.6	lb/hr	N/A	N/A	N/A	N/A
C9.3	7C	NA	I6	9.28	Liters	253	horsepower	2000	93.3	lb/hr	930	lb-ft	1000	61.6	lb/hr	N/A	N/A	N/A	N/A
C9.3	8	NA	I6	9.28	Liters	274	horsepower	2000	98.4	lb/hr	1010	lb-ft	1000	66.2	lb/hr	N/A	N/A	N/A	N/A
C9.3	8A	NA	I6	9.28	Liters	274	horsepower	2000	98.4	lb/hr	1010	lb-ft	1000	66.2	lb/hr	N/A	N/A	N/A	N/A
C9.3	8B	NA	I6	9.28	Liters	274	horsepower	2000	98.4	lb/hr	1010	lb-ft	1000	66.2	lb/hr	N/A	N/A	N/A	N/A
C9.3	9	NA	I6	9.28	Liters	295	horsepower	2000	104.9	lb/hr	1090	lb-ft	1000	71.2	lb/hr	N/A	N/A	N/A	N/A
C9.3	10	NA	I6	9.28	Liters	296	horsepower	2200	114.2	lb/hr	1166	lb-ft	1200	88.7	lb/hr	N/A	N/A	N/A	N/A
C9.3	11	NA	I6	9.28	Liters	299	horsepower	2200	115.8	lb/hr	1261	lb-ft	1200	96.4	lb/hr	N/A	N/A	N/A	N/A
C9.3	12	NA	I6	9.28	Liters	303	horsepower	2050	109.4	lb/hr	1263	lb-ft	1200	97.1	lb/hr	N/A	N/A	N/A	N/A
C9.3	13	NA	I6	9.28	Liters	314	horsepower	1800	111	lb/hr	1154	lb-ft	1300	96.6	lb/hr	N/A	N/A	N/A	N/A
C9.3	14	NA	I6	9.28	Liters	221	horsepower	2000	83.2	lb/hr	1022	lb-ft	1100	74.4	lb/hr	N/A	N/A	N/A	N/A
C9.3	14A	NA	I6	9.28	Liters	221	horsepower	2000	83.2	lb/hr	1022	lb-ft	1100	74.4	lb/hr	N/A	N/A	N/A	N/A
C9.3	15	NA	I6	9.28	Liters	311	horsepower	1800	110	lb/hr	1029	lb-ft	1400	93.9	lb/hr	N/A	N/A	N/A	N/A
C9.3	15A	NA	I6	9.28	Liters	311	horsepower	1800	110	lb/hr	1029	lb-ft	1400	93.9	lb/hr	N/A	N/A	N/A	N/A
C9.3	16	NA	I6	9.28	Liters	325	horsepower	1800	115.6	lb/hr	1262	lb-ft	1200	97.4	lb/hr	N/A	N/A	N/A	N/A
C9.3	17	NA	I6	9.28	Liters	325	horsepower	1800	115.6	lb/hr	1262	lb-ft	1200	97.4	lb/hr	N/A	N/A	N/A	N/A
C9.3	18	NA	I6	9.28	Liters	221	horsepower	2000	83.2	lb/hr	1022	lb-ft	1100	74.4	lb/hr	N/A	N/A	N/A	N/A
C9.3	19	NA	I6	9.28	Liters	224	horsepower	2200	82.6	lb/hr	1103	lb-ft	1200	85.4	lb/hr	N/A	N/A	N/A	N/A
C9.3	20	NA	I6	9.28	Liters	325	horsepower	2000	113.3	lb/hr	1094	lb-ft	1400	98	lb/hr	N/A	N/A	N/A	N/A
C9.3	21	NA	I6	9.28	Liters	311	horsepower	1800	110	lb/hr	1029	lb-ft	1400	93.9	lb/hr	N/A	N/A	N/A	N/A
C9.3	22	NA	I6	9.28	Liters	307	horsepower	2050	114.8	lb/hr	1712	lb-ft	1200	97.3	lb/hr	N/A	N/A	N/A	N/A
C9.3	23	NA	I6	9.28	Liters	299	horsepower	2200	115.8	lb/hr	1710	lb-ft	1200	96.4	lb/hr	N/A	N/A	N/A	N/A