

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	PCPXL12.5HTF	12.5	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	0.05	0.26	--	0.02	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 9th day of December 2022.



Robin U. Lang, Chief  
 Emissions Certification and Compliance Division

**Attachment: Engine Models**

**EO #:** U-R-001-0663

**Family:** PCPXL12.5HTF

**Attachment Last Revised:** 11/17/2022

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	Peak Torque - Fuel Units	OBD	GHG	Special	Notes
C13	Cert Test 1	N/A	16	12.5	Liters	519	horsepower	2100	186	lb/hr	1752	lb-ft	1400	159	lb/hr	N/A	N/A	N/A	N/A
C13	Cert Test 2	N/A	16	12.5	Liters	503	horsepower	1500	173.9	lb/hr	NA	lb-ft	NA	NA	lb/hr	N/A	N/A	N/A	N/A
C13	1	N/A	16	12.5	Liters	527	horsepower	1870	181.9	lb/hr	1750	lb-ft	1400	158	lb/hr	N/A	N/A	N/A	N/A
C13	2	N/A	16	12.5	Liters	479	horsepower	1870	162.5	lb/hr	1635	lb-ft	1400	148	lb/hr	N/A	N/A	N/A	N/A
C13	3	N/A	16	12.5	Liters	421	horsepower	1870	146	lb/hr	1434	lb-ft	1400	130.5	lb/hr	N/A	N/A	N/A	N/A
C13	4	N/A	16	12.5	Liters	375	horsepower	2000	132.5	lb/hr	1575	lb-ft	1300	132.2	lb/hr	N/A	N/A	N/A	N/A
C13	5	N/A	16	12.5	Liters	384	horsepower	2100	136.1	lb/hr	1297	lb-ft	1400	115.7	lb/hr	N/A	N/A	N/A	N/A
C13	6	N/A	16	12.5	Liters	414	horsepower	2100	146.5	lb/hr	1398	lb-ft	1400	126	lb/hr	N/A	N/A	N/A	N/A
C13	7	N/A	16	12.5	Liters	439	horsepower	2100	154.9	lb/hr	1482	lb-ft	1400	132.3	lb/hr	N/A	N/A	N/A	N/A
C13	7A	N/A	16	12.5	Liters	439	horsepower	2100	154.9	lb/hr	1482	lb-ft	1400	132.3	lb/hr	N/A	N/A	N/A	N/A
C13	8	N/A	16	12.5	Liters	473	horsepower	2100	168.9	lb/hr	1601	lb-ft	1400	145.3	lb/hr	N/A	N/A	N/A	N/A
C13	9	N/A	16	12.5	Liters	519	horsepower	2100	185.6	lb/hr	1752	lb-ft	1400	159.3	lb/hr	N/A	N/A	N/A	N/A
C13	10	N/A	16	12.5	Liters	355	horsepower	2050	127.2	lb/hr	1564	lb-ft	1200	121.9	lb/hr	N/A	N/A	N/A	N/A
C13	11	N/A	16	12.5	Liters	425	horsepower	1800	148.4	lb/hr	1338	lb-ft	1650	143.7	lb/hr	N/A	N/A	N/A	N/A
C13	11A	N/A	16	12.5	Liters	425	horsepower	1800	148.4	lb/hr	1338	lb-ft	1650	143.7	lb/hr	N/A	N/A	N/A	N/A
C13	12	N/A	16	12.5	Liters	416	horsepower	2100	152.9	lb/hr	1612	lb-ft	1200	125.2	lb/hr	N/A	N/A	N/A	N/A
C13	12A	N/A	16	12.5	Liters	416	horsepower	2100	152.9	lb/hr	1612	lb-ft	1200	125.2	lb/hr	N/A	N/A	N/A	N/A
C13	12B	N/A	16	12.5	Liters	416	horsepower	2100	152.9	lb/hr	1612	lb-ft	1200	125.2	lb/hr	N/A	N/A	N/A	N/A
C13	12C	N/A	16	12.5	Liters	416	horsepower	2100	152.9	lb/hr	1612	lb-ft	1200	125.2	lb/hr	N/A	N/A	N/A	N/A
C13	13	N/A	16	12.5	Liters	429	horsepower	2100	162.2	lb/hr	1612	lb-ft	1200	126.3	lb/hr	N/A	N/A	N/A	N/A
C13	13A	N/A	16	12.5	Liters	429	horsepower	2100	162.2	lb/hr	1612	lb-ft	1200	126.3	lb/hr	N/A	N/A	N/A	N/A
C13	13B	N/A	16	12.5	Liters	429	horsepower	2100	162.2	lb/hr	1612	lb-ft	1200	126.3	lb/hr	N/A	N/A	N/A	N/A
C13	14	N/A	16	12.5	Liters	527	horsepower	1870	181.9	lb/hr	1746	lb-ft	1400	157.6	lb/hr	N/A	N/A	N/A	N/A
C13	15	N/A	16	12.5	Liters	479	horsepower	1870	162.5	lb/hr	1635	lb-ft	1400	148	lb/hr	N/A	N/A	N/A	N/A
C13	16	N/A	16	12.5	Liters	421	horsepower	1870	146	lb/hr	1434	lb-ft	1400	130.5	lb/hr	N/A	N/A	N/A	N/A
C13	17	N/A	16	12.5	Liters	363	horsepower	2000	127.9	lb/hr	1351	lb-ft	1000	90.3	lb/hr	N/A	N/A	N/A	N/A
C13	18	N/A	16	12.5	Liters	307	horsepower	1850	108.5	lb/hr	1194	lb-ft	1200	94.4	lb/hr	N/A	N/A	N/A	N/A
2206	19	N/A	16	12.5	Liters	439	horsepower	2100	154.8	lb/hr	1482	lb-ft	1400	132.2	lb/hr	N/A	N/A	N/A	N/A
2206	20	N/A	16	12.5	Liters	473	horsepower	2100	168.8	lb/hr	1600	lb-ft	1400	145.3	lb/hr	N/A	N/A	N/A	N/A
2206	21	N/A	16	12.5	Liters	519	horsepower	2100	185.5	lb/hr	1752	lb-ft	1400	159.2	lb/hr	N/A	N/A	N/A	N/A
C13	22	N/A	16	12.5	Liters	503	horsepower	1500	173.9	lb/hr	NA	lb-ft	NA	NA	lb/hr	N/A	N/A	N/A	N/A
C13	23	N/A	16	12.5	Liters	567	horsepower	1800	201	lb/hr	NA	lb-ft	NA	NA	lb/hr	N/A	N/A	N/A	N/A
2206	24	N/A	16	12.5	Liters	384	horsepower	2100	136.1	lb/hr	1297	lb-ft	1400	115.7	lb/hr	N/A	N/A	N/A	N/A
2206	25	N/A	16	12.5	Liters	414	horsepower	2100	146.5	lb/hr	1398	lb-ft	1400	126	lb/hr	N/A	N/A	N/A	N/A
2206	26	N/A	16	12.5	Liters	439	horsepower	2100	154.9	lb/hr	1482	lb-ft	1400	132.3	lb/hr	N/A	N/A	N/A	N/A
C13	27	N/A	16	12.5	Liters	439	horsepower	2100	154.8	lb/hr	1482	lb-ft	1400	132.2	lb/hr	N/A	N/A	N/A	N/A
C13	28	N/A	16	12.5	Liters	473	horsepower	2100	168.8	lb/hr	1600	lb-ft	1400	145.3	lb/hr	N/A	N/A	N/A	N/A
C13	29	N/A	16	12.5	Liters	519	horsepower	2100	185.5	lb/hr	1752	lb-ft	1400	159.2	lb/hr	N/A	N/A	N/A	N/A
C13	30	N/A	16	12.5	Liters	355	horsepower	2050	127.2	lb/hr	1564	lb-ft	1200	121.9	lb/hr	N/A	N/A	N/A	N/A
C13	31	N/A	16	12.5	Liters	429	horsepower	2100	162.2	lb/hr	1612	lb-ft	1200	126.3	lb/hr	N/A	N/A	N/A	N/A
C13	32	N/A	16	12.5	Liters	425	horsepower	1800	148.4	lb/hr	1609	lb-ft	1200	126.2	lb/hr	N/A	N/A	N/A	N/A
C13	32A	N/A	16	12.5	Liters	425	horsepower	1800	148.4	lb/hr	1609	lb-ft	1200	126.2	lb/hr	N/A	N/A	N/A	N/A
2206	33	N/A	16	12.5	Liters	503	horsepower	1500	173.9	lb/hr	NA	lb-ft	NA	NA	lb/hr	N/A	N/A	N/A	N/A
2206	34	N/A	16	12.5	Liters	567	horsepower	1800	201	lb/hr	NA	lb-ft	NA	NA	lb/hr	N/A	N/A	N/A	N/A