



Pursuant to the authority vested in the 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-45-9;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engine and emission control system 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)
2002	2CPXL07.0MRB	7.0	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler and Smoke Puff Limiter			Generator and Industrial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), 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 (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75≤KW <130	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
130≤KW <225	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	20	15	50
		CERT	0.2	8.0	--	2.3	0.23	14	5	22

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 at El Monte, California on this 10th day of December 2001.


R. B. Summerfield, Chief
Mobile Source Operations Division



U-R-001-0182

Manufacturer: CATERPILLAR INC.
 Engine category: Nonroad Over 50 Hp
 EPA Engine Family: 2CPXL07.0MRB
 Mfr Family Name: N/A
 Process Code: New Submission

1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross)	4. Fuel Rate: mm/stroke @ peak HP (for diesel only)	5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SEA Gross)	7. Fuel Rate: mm/stroke@peak torque	8. Fuel Rate: (lbs/hr)@peak torque	9. Emission Control Device Per SAE J1930
Note: Peak Hp and Peak torque nominal values. Due to production avgs. these fuel rates may change.								
1 - Cert Engine	3304	205 @ 1800	179	72.2	688 @ 1200	222	59.7	EM, DI, TC, SPL,
2	3304	179 @ 2200	143	70.6	590 @ 1400	181	56.9	EM, DI, TC, SPL,
3	3304	166 @ 2200	129	51.9	557 @ 1400	165	51.9	EM, DI, TC, SPL,
4	3304	155 @ 2000	125	56.0	495 @ 1400	147	46.0	EM, DI, TC, SPL,
5	3304	165 @ 2200	128	63.0	525 @ 1400	156	49.0	EM, DI, TC, SPL,
6	3304	185 @ 2200	144	71.0	593 @ 1400	175	55.0	EM, DI, TC, SPL,
7	3304	200 @ 2200	156	77.0	639 @ 1400	191	60.0	EM, DI, TC, SPL,
8	3304	174 @ 1800	151	61.0	658 @ 1200	182	49.0	EM, DI, TC, SPL,
9	3304	174 @ 1800	175	70.8	657 @ 1200	220	59.3	EM, DI, TC, SPL,
10	3304	192 @ 1800	171	68.9	657 @ 1200	202	54.5	EM, DI, TC, SPL,
11	3304	174 @ 1800	171	68.9	657 @ 1200	204	54.8	EM, DI, TC, SPL,
12	3304	192 @ 1800	175	70.8	657 @ 1200	202	54.5	EM, DI, TC, SPL,