Cummins Inc.

EXECUTIVE ORDER U-R-002-0210

New Off-Road

Compression-Ignition Engines

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-02-003;

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)			
2004	4CEXL060.ABA	45.0, 60.0	Diesel	8000			
	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION				
Direct Dies	el Injection, Turbocharge Engine Control Mo	er, Charge Air Cooler, odule	Generator Set				

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):

POWER CLASS kW > 560	EMISSION STANDARD			[OPACITY (%)					
	CATEGORY		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	N/A	N/A	N/A
·	<u> </u>	CERT	0.3	7.5		1.0	0.18			

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.

Allen Lyons, Chief

Mobile Source Operations Division

Engine Model Summary Form ATTACHMENT Pg 1.04 1

U-R-002-0210

Manufacturer: Cummins Inc.

Engine category: Nonroad CI
EPA Engine Family: 4CEXL060.ABA

Mfr Family Name: B593

in railing rading.

Process Code: New Submission

8.Fuel Rate: 9.Emission Control (bs/hr)@peak torque Device Per SAE J1930	FOTO DAD		FOTCCAC	FGTOCAG	EOTCCAG	FOTCOAC	FOTODAR	FOTOGAG	FOTOCAC	FGTGGAG	FO TO CAG	EC,TC,CAC
8.Fuel Rate: (lbs/hr)@peak torque	NA DY		N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	NA	N/A
7.Fuel Rate: mm/stroke@peak torque	N/A	N/A	N/A	NIA	N/A	NA	NA	NA	N/A	NA	N/A	NA
6.Torque @ RPM (SEA Gross)	N/A	NA	N/A	N/A	N/A	AN						
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	1035	975	1015	827	868	719	684 .	585	611	765.1	775.9	976.1
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	623	602	627	511	536	592	563	678	503	473	575	603
3.BHP@RPM (SAE Gross)	3067@1800	2922@1800	2922@1800	2547@1800	2547@1800	2205@1800	1991@1800	1823@1500	1850@1800	2400@1800	2399@1500	2922@1800
2.Engine Model	OSK60-G6	QSK60-G6	GSK6D-G6	OSK60-G5	GSK60-G5	OSK45-G8	QSK45-G7	QSK45-G4	QSK45-G4	QSK60-G3	GSK60-G	OSK60-G
1.Engine Code	2920;FR6358	2920:FR6364	2920:FR6371	2920/FR6346	2920.FR6347	2935.FR6316	2935 FR6330	2655/FR6317	2655FR6317	8294FR6428	8336.FR6439	8336:FH6439