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) 5000						
2004	4CEXL2.28A42	2.286	Diesel							
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION							
	Indirect Diesel Inje	ction	Crane, Loader, Tractor, Dozer, Pum Industrial Equip	p, Compressor and Other ment						

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	EMISSION STANDARD			. !	EXHAUST (g/kw-ł		OPACITY (%)					
CLASS	CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK		
19 <u><</u> kW < 37	Tier 2	STD	N/A	N/A	7.5	5.5	0.60	20	15	50		
		CERT			4.6	1.6	0.20	10	11	12		

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 _______ day of February 2004.

Allen Lyons, Chief

Mobile Source Operations Division

Engine Model Summary Form AMACAMEAN PG 1061

U-R-002-0227

CUMMINS Inc. Manufacturer:

Engine category: · Nonroad Cl EPA Engine Family: 4CEXL2.28A42

Mfr Family Name: A2300

New Submission Process Code:

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9.Emission Control Device Per SAE J1930	IDI, EM	IDI, EM	IDI, EM	-	41 - 617 (800) 41 - 610 (800) 41 - 610 (800)				 to the last of the second seco					Taxan I - Mar 1970 or to four a total specimental advance account offi					
8.Fuel Rate: (lbs/hr)@peak torque	13.9	12.2	12.6	The second secon		AND AND THE PROPERTY OF THE PR												And the state of t	
r.Fuer kate. mm/stroke@peak torque	38.5	34.0	35.0	a managara a managara a a a 112 - 1 Damana a Managara managara a managara managara a managara managara a managara managara Managara managara managa				t entre and the second of the								The second secon			
6.Torque @ RPM (SEA Gross)	111.4@1600	110.6@1600	109.2@1600	entre constituente de la Martin Constituente del Martin Constituente de la Martin Constituente d					The second secon							The second secon			
5.Fuel Kate: (lbs/hr) @ peak HP (for diesels only)	21.4	18.1	15.7	g w ton the west of the promise measurement of the following section of the secti			\$ 1 mm 1 mm	to the section and back to the section consideration of the section of		man commandate promotes control to the control management				ter (Property and Comment of the Com	and the second s		The state of the common probability of the common control of the co	A	
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	34.0	31.0	29.0				A CATALOGUE COME COME COME COME COME COME COME COM			A REPORT OF THE PARTY AND ADDRESS OF THE PARTY				manus and the second se	The second secon	The same of the sa	managama dika di kacamatan managa kacamata di managama kacamata di managama di managama di managama di managam		
3.BHP@RPM (SAE Gross)	50@2800	47@2600	44@2400																
2.Engine Model	A2300	A2300	A2300			:									And the second s				
1.Engine Code	ER35002	FR35006	FR35007																_