Cummins Inc.

EXECUTIVE ORDER U-R-002-0185 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)		
2003	3CEXL015.AAB	15.0	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Engine Control Module, Direct Diesel Injection, Turbocharger, Charge Air Cooler			Generator			

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 (Accei), 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		EXHAUST (g/kw-hr)					OPACITY (%)			
CLASS	STANDARD CATEGORY		HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
225 ≤ KW ≤ 560	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	N/A	N/A	N/A
		CERT			6.3	0.6	0.10		*-	

**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 November 2002.

Allen Lyons, Chief

Mobile Source Operations Division

## Engine Model Summary Form ATACAMENT Pg ( o.t. )

11-2-002-0(85

Cummins Inc. Manufacturer:

Engine category: Nonroad CI
EPA Engine Family: 3CEXL015.AAB

Mfr Family Name: D103

New Submission Process Code:

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9.Emission Control Device Per SAE J1930	ပ္ ပ္	DY.	OV:	AC.	SAC	.AC	9	
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9.Emission Control evice Per SAE J193	hor, EOM, TC.CAC	30	¥ U	ECM	ECM	Š	EC €	
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8.Fuel Rate: hr)@peak tor	A A	N/A	//Y	μA	ľA	۸,A	47	
8.Fuel Rate: lbs/hr)@peak torque	ZZ	_	4	4	4	4	4	
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7.Fuel Rate: mm/stroke@peak torque	4 4	ΝΆ	¥	٧	∢.	¥	4	
7.Fuel Rate: n/stroke@pe torque	A'N A'A	Ž	Ž	Ž	2	Ž	Ν̈́	
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6.Torque @ RPM (SEA Gross)	K K	N/A	NA	Ϋ́	N/A	ď Ž	Ϋ́	
6.Ton (SE								
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5,Fuel Rate: bs/hr) @ peak Hf (for diesels only)	231.0 227.0	202.0	178.0	168.0	255.0	224.0	220.0	000000000000000000000000000000000000000
5.Fuel Rate: lbs/hr) @ peak HP (for diesels only)	NN	C)	-	-	eu	CL	C	2000800000
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4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	£57 449	999	352	828	83	369	330	
4.Fuel Rate: stroke @ pea or diesel only	4:4	38	88	8	4	8	8	
, mm/8 (#)								
Md. 98)	88	8	8	00	8	00	8	No.000000000000000000000000000000000000
3.BHP@RPM (SAE Gross)	890@1500 670@1500	515@1500	545@1500	505@1500	750@1800	885@1800	310@1800	
3.8 (S.	69	6	22	8	75	68	91	
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1.Engine Code 2.Engine Model			_			_		
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