CUMMINS INC.

EXECUTIVE ORDER U-R-002-0552 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 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)		
2010	ACEXL03.3ACE	3.3	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		TYPICAL EQUIPMENT APPLICATION				
Indirect Diesel Injection			Crane, Loader, Tractor, Dozer, Pump, Compressor, 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 (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	EMISSION		EXHAUST (g/kw-hr)				OPACITY (%)			
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
37 ≤ kW < 56	Tier 4 Interim	STD	N/A	N/A	4.7	5.0	0.30	20	15	50
		CERT			4.1	2.0	0.20	2	4	6

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 January 2010

Annette Hebert, Chief

Mobile Source Operations Division

4-16-042-0552 Affrehmune 111 Prop-111

Engine Model Summary Template

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8. Fuel Rate: 9. Emission Control (lbs/hr)@peak torqueDevice Per SAE J1930	< EMJDI	CY ENAL, TDI	(DI , MAT
8.Fuel Rate: (lbs/hr)@peak torqu	21	20	
7.Fuel Rate: mm/stroke@peak torque	58	99	
6.Torque @ RPM (SEA Gross)	158@1600	155@1600	
5.Fuel Rate: HP (lbs/hr) @ peak HP 6.Torque @ RPI (for diesels only) (SEA Gross)	27	25	
4. Fuel Rate: 5. Fuel Rate: 3. BHP@RPM mm/stroke @ peak HP (lbs/hr) @ peak HP 6. Torque @ RPM (SAE Gross) (for diesels only) (SEA Gross)	47	51	
3.BHP@RPM (SAE Gross)	65@2600	60@2200	
3.BHP@RPM Engine Family 1.Engine Code 2.Engine Model (SAE Gross)	B3.3	B3.3	²
1.Engine Code	FR92198	FR92197	
Engine Family	ACEXL03.3ACE	ACEXL03.3ACE	