California Environmental Protection Agency Air Resources Board

JOHN DEERE POWER SYSTEMS

EXECUTIVE ORDER U-R-004-0478 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)		
2014	EJDXL09.0301	9.0	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Direct Inject Recircula	Cooler, Diesel Oxidatio ction, Electronic Control ation, Periodic Trap Oxid Catalytic Reduction-Urea Catalyst	Module, Exhaust Gas lizer, Turbocharger,	Tractor, Loaders, Dozer, Pump, Co Other Industrial E	ompressor, Generator Set, quipment		

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, 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						PACITY (%	%)
POWER	STANDARD		NMHC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.003	0.14	_	0.04	0.004			

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 June 2013.

Erik White, Chief

Mobile Source Operations Division

6-3-2013 E0#: U-R-004-0478 A Hawhment: Page 10F1

Engine Model Summary Form

Manufacturer. Engine category: John Deere Power Systems

Nonroad Cl EPA Engine Family: Mfr Family Name:

EJDXL09.0301 450HCA

Process Code:	New Submission							
1. Engine code	2. Engine Model	3. kW@RPM (SAE Gross)	4. Fuel Rate: mm/stroke@peak kW (for diesel only)	5. Fuel Rate: (kg/hr)@peak kW (for diesels only)	6. Torque (Nm) @RPM (SEA Gross)	7. Fuel Rate; mm/stroke@peak torque	8. Fuel Rate: (kW/hr)@peak torque	9. Emission Control Device Per SAE J1930
6090HPRNT4	6090	345@2200	215.6@2200	72.5@2200	1843@1600	266.7@1600	65.2@1600	SAE J1930 SORC PTOX DOC EGR EC CAC
	4.5.	Y-1			- 2			
***************************************		A - 5-	A Company of the Comp	4 4				
	7.7						2.27	
						7		3-3
	W. Land		-1					
		- 2		1.65				
	V - 1 V - 1		J. Mark				14. /	
	· · · · · · · · · · · · · · · · · · ·							
			1225					
	V 34	Ţ.	7.52		, the second second			
	10 K 1		2 . 2			•		
-2.7.			1.3.1		ón en			
	* 2		3	,				