## JOHN DEERE POWER SYSTEMS

EXECUTIVE ORDER U-R-004-0415 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			FUEL TYPE	USEFUL LIFE (hours)			
2010	AJDXL09.0901	6.8, 9.0	Diesel	8000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Electronic Control Module, Direct Diesel Injection, Charge Air Cooler, Smoke Puff Limiter, Turbocharger			Loaders, Pump, Compressor, Generator Set, Other Industrial Equipment				

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 STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER CLASS			нс	NOx	NMHC+NOx	co	PM .	ACCEL	LUG	PEAK
130 ≤ kW < 560	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	N/A	N/A	N/A
		CERT			3.7	0.9	0.16			

**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 December 2010

Annette Hebert, Chief

Mobile Source Operations Division

EO#: 4-R-004-0415

## **Engine Model Summary Form**

Manufacturer:

John Deere Power Systems

Engine category:

Nonroad CI EPA Engine Family: AJDXL09.0901

Mfr Family Name: 901FLX

Process Code:

**New Submission** 

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1.Engine Code	2.Engine Model	3.8HP@RPM (SAE Gross)	4,Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) (2 peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930		
6068HF285K	6068H	237,37@1800	138,20@1800	83.87@1800				EM EC SPL	DOI	TC.CA
6068HF285L	6068H	197.14@1800	115.90@1800	70.33@1800				EM EC SPL		
6090HF484A	6090H	422.43@1800	230.00@1800	139.56@1800				EM EC SPL	1 1	
6090HF484B	6090H	384.88@1800	211.00@1800	127.87@1800				EM EC SPL	4 1	
6090HF484C	6090H	345.99@1800	192.00@1800	116.63@1800				EM EC SPL	1 1	
6090HF484D	6090H	307.10@1800	179.00@1800	108.47@1800				EM EC SPL	] [	
5068HFG82F	6068H	284.30@1800	160.40@1800	97.23@1800			AMESTY.	EM EC SPL		
6090HPFLX1	6090H	422.43@1760	235.00@1760	139.78@1760				EM EC SPL	1 (	_
6068HF285A	6068H	214.57@2400	103.10@2400	83.40@2400	622.13@1500	126.6@1500	64,05@1500	EM EC SPL	1 1	