## John Deere Power Systems

EXECUTIVE ORDER U-R-004-0312-1 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)		
2008	8JDXL06.8104	4.5, 6.8	Diesel	8000		
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION			
Direct Dies Electr	el Injection, Turbocharg onic Control Module, Sm	er, Charge Air Cooler, noke Puff Limiter	Loader, Tractor, Pump, Compress Industrial Equip	sor, Generator Set, Other pment		

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		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
130 <u>&lt;</u> kW < 225	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
-	·	CERT			3.6	1.3	0.18	14	3	30

**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.

This Executive Order hereby cancels and replaces Executive Order U-R-004-0312 dated December 14, 2007.

Executed at El Monte, California on this day of February 2008.

Annette Hebert, Chief

Mobile Source Operations Division

nufacturer.

John Deere Power Systems

jine category: Nonroad CI

Engine Family: 8JDXL06.8104

Family Name:

350HAB

icess Code:

**New Submission** 

Attachment p. 1 of 4

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Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ 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
68HF285A	6068H	214.57@2400	103.10@2400	83.40@2400	622.13@1500	126.6@1500	64.05@1500	EM EC SPL DOLTC
68HF285B	6068H	199.82@2400	92.60@2400	74.94@2400	578.91@1500	119.33@1500	60.39@1500	EM EC SPL
68HF285C	6068H <b>138</b>	185.07@2400	86.70@2400	70.18@2400	527.29@1500	107.56@1500	54.44@1500	EM EC SPL
68HF285D	6068H	185.07@2200	92.90@2200	68.94@2200	578.91@1500	120.2@1500	60.81@1500	EM EC SPL
68HF285K	6068H 17F	237.37@1800	138.10@1800	83.87@1800				EM EC SPL
)68HF285L	6068H .	197.14@1800	115.70@1800	70.22@1800				EM EC SPL
)68HCQ82	6068H	209.20@2400	101.10@2400	81.88@2400	557.53@1700	118.5@1700	68.08@1700	EM EC SPL
068HFS82	6068H	197.14@1800	115.70@1800	70.22@1800				EM EC SPL
D68HFS83	6068H	237.37@1800	138.10@1800	83.87@1800				EM EC SPL

**Engine Model Summary Form** 

nufacturer:

John Deere Power Systems

3.BHP@RPM (SAE Gross)

jine category:

Nonroad CI

350HAB

Engine Family: Family Name:

8JDXL06.8104

cess Code:

Running Change

2.Engine Model

Attachment p. 2 of 4

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4.Fuel Rate: mm/stroke @ peak HP (for diesel only)

5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)

6.Torque @ RPM (SEA Gross)

7.Fuel Rate: mm/stroke@peak torque

8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930

ngine Code

EMEC SPL DDI TC 4045H 197.14@1800 173.80@1800 45HF285K 70.35@1800

**Engine Model Summary Form** 

U-R-004-0312-1

Manufacturer:

John Deere Power Systems

Engine category:

Nonroad CI

EPA Engine Family.

8JDXL06.8104

Family Name: Jess Code:

350HAB Running Change Attachment P. 3 of 4

1.Engine Code : :: Engine	3.BHP@RPM (SAE Gross)	mm/stroke @ peak HP (lbs			Fuel Rate: stroke@peak 8.Fuel Ra torque (lbs/hr)@peak	le: 9.Emission Control torque Device Per SAE J1930	
6068HN055 606	8H 189.09@2300	80.00@2300	73.08@2300	548.68@1500	97.4@1500 57.79@	1500 EM EC SPL	DI, TC, CAC
6068HF285K 606	8H 237.37@1800	138.20@1800	83.87@1800				
6068HF285L 606	8H <b>197.14@1800</b>	115.90@1800	70.33@1800				

**Engine Model Summary Form** 

U-R-004-0312-1

Manufacturer:

John Deere Power Systems

Engine category: EPA Engine Family: 8JDXL06.8104

Nonroad Cl

cess Code:

Family Name: 350HAB

Running Change

Attachment P. 4 of 4

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ 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
6068HFC28E	6068H	199.82@2400	94.90@2400	76.88@2400	578.91@1500	120.9@1500	61.18@1500	EMECSPL DDI, TO
6068HFC28A	6068H	237.37@1760	140.80@1760	83.60@1760	NA	NA	NA	EM EC SPL
6068HFC28B	6068H	199.82@2400	95.60@2400	77.45@2400	NA	NA	NA	EM EC SPL
6068HFC28C	6068H	199.82@2350	96.60@2350	76.64@2350	NA	NA	NA	EM EC SPL
6068HFC28D	6068H	197.14@2100	106.20@2100	75.27@2100	NA	NA	NA	EM EC SPL