John Deere Power Systems

EXECUTIVE ORDER U-R-004-0348
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	8JDXL09.0114	9.0	Diesel	8000
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION
Direct Dies Electr	sel Injection, Turbocharg ronic Control Module, Sr	er, Charge Air Cooler, noke Puff Limiter	Pump, Generat Other Industrial E	or Set, quipment

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):

POWER CLASS	EMISSION		EXHAUST (g/kw-hr)					OPACITY (%)		
	STANDARD CATEGORY		НС	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
225 < kW < 450	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 June 2008.

Annette Hebert, Chief

Mobile Source Operations Division

Engine Model Summary Form

U-R-004-0348

Manufacturer:

John Deere Power Systems

Engine category:

Nonroad CI

EPA Engine Family: 8JDXL09.0114

Mfr Family Name: 450HAB

Attachment P. I of I

Process Code: **New Submission**

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	
6090HFC47A	6090H 315	422.43@1760	235.00@1760	139.78@1760			The state of the s	EM EC SPL DE	I.TC.
6090HFC47B	6090H	399.63@2100	197.00@2100	139.33@2100				EM EC SPL	-,. ,
6090HF484A	6090H	422.43@1800	230.00@1800	139.56@1800				EM EC SPL	1
6090HF484B	6090H	384.88@1800	211.00@1800	127.87@1800				EM EC SPL	1
6090HF484C	6090H	345.99@1800	192.00@1800	116.63@1800				EM EC SPL	
6090HF484D	6090H 229	307.10@1800	179.00@1800	108.47@1800				EM EC SPL	1