

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)
2011	BJDXL09.0202	9.0	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Charge Air Cooler, Diesel Oxidation Catalyst, Direct Diesel Injection, Electronic Control Module, Exhaust Gas Recirculation, Periodic Trap Oxidizer, Smoke Puff Limiter, Turbocharger			Tractor, Loaders, Dozer, 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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4/ Alternate NOx	STD	0.19	2.0	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.01	1.7	--	0.03	0.01	--	--	--

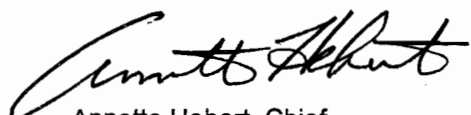
BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

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 supersedes Executive Order U-R-004-0407 dated June 22, 2010.

Executed at El Monte, California on this 11 day of January 2011.


 Annette Hebert, Chief
 Mobile Source Operations Division

EO#: U-R-004-0407-1

Engine Model Summary Form

Manufacturer: **John Deere Power Systems**
 Engine category: **Nonroad CI**
 EPA Engine Family: **BJDXL09.0202**
 Mfr Family Name: **450HBA**
 Process Code: **Running Change**

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
6090HTJ15	6090	312.5@2000	151.6@2000	102.30@2000	1054.6@1400	213.1@1400	100.5@1400	EM EGR EC
6090HPRNT1	6090	445.22@2200	216.60@2200	160.72@2200	1306.05@1600	258.6@1600	139.56@1600	EGR EM EC
6090HFC95A	6090	425.11@2200	203.50@2200	151.00@2200	1242.63@1600	242.2@1600	130.69@1600	EGR EM EC
6090HFC95F	6090	413.04@2200	177.70@2200	131.91@2200	1232.31@1600	239.8@1600	129.41@1600	EGR EM EC
6090HFC95B	6090	400.97@2200	190.60@2200	141.47@2200	1242.63@1600	242.2@1600	130.74@1600	EGR EM EC
6090HFC95G	6090	403.65@2000	192.20@2000	129.66@2000	1242.63@1600	242.3@1600	130.78@1600	EGR EM EC
6090HFC95H	6090	359.40@2200	166.10@2200	123.29@2200	1152.66@1600	222.9@1600	120.31@1600	EGR EM EC
6090HFC95I	6090	384.88@2200	166.10@2200	123.29@2200	1152.66@1600	223.0@1600	120.35@1600	EGR EM EC
6090HFC95J	6090	384.88@2000	178.70@2000	120.53@2000	1242.63@1600	242.4@1600	130.83@1600	EGR EM EC
6090HFC95K	6090	332.58@2200	153.10@2200	113.61@2200	1064.90@1600	242.6@1600	130.96@1600	EGR EM EC
6090HFC95L	6090	356.72@2200	153.10@2200	113.61@2200	1064.90@1600	202.7@1600	109.40@1600	EGR EM EC
6090HFC95M	6090	358.06@2000	163.80@2000	110.52@2000	1172.57@1600	226.9@1600	122.45@1600	EGR EM EC
6090RW410	6090	425.11@2100	211.70@2100	149.92@2100	1242.63@1575	242.9@1575	130.96@1575	EGR EM EC
6090RW412	6090	425.11@2100	211.70@2100	149.92@2100	1242.63@1575	242.9@1575	130.96@1575	EGR EM EC
6090RW414	6090	425.11@2100	211.70@2100	149.92@2100	1242.63@1575	242.9@1575	130.96@1575	EGR EM EC
6090RW416	6090	425.11@2100	211.70@2100	149.92@2100	1242.63@1575	242.9@1575	130.96@1575	EGR EM EC
6090RW418	6090	425.11@2100	211.70@2100	149.92@2100	1242.63@1575	242.9@1575	130.96@1575	EGR EM EC
6090RW420	6090	425.11@2100	211.70@2100	149.92@2100	1242.63@1575	242.9@1575	130.96@1575	EGR EM EC
6090RW411	6090	327.21@2100	161.80@2100	114.64@2100	1032.45@1575	202.1@1575	107.37@1575	EGR EM EC
6090RW413	6090	327.21@2100	161.80@2100	114.64@2100	1032.45@1575	202.1@1575	107.37@1575	EGR EM EC
6090RW415	6090	327.21@2100	161.80@2100	114.64@2100	1032.45@1575	202.1@1575	107.37@1575	EGR EM EC
6090RW417	6090	327.21@2100	161.80@2100	114.64@2100	1032.45@1575	202.1@1575	107.37@1575	EGR EM EC
6090RW419	6090	327.21@2100	161.80@2100	114.64@2100	1032.45@1575	202.1@1575	107.37@1575	EGR EM EC
6090RW421	6090	327.21@2100	161.80@2100	114.64@2100	1032.45@1575	202.1@1575	107.37@1575	EGR EM EC
6090HT010	6090	312.46@1900	164.20@1900	105.87@1900	1014.02@1400	201.3@1400	95.04@1400	EGR EM EC
6090RW401	6090	319.17@2100	152.90@2100	108.25@2100	962.39@1600	165.9@1600	101.64@1600	EM EGR EC
6090RW402	6090	319.17@2100	152.90@2100	108.25@2100	962.39@1600	165.9@1600	101.64@1600	EM EGR EC
6090HFC95C	6090	425.11@2200	190.60@2200	141.47@2200	1242.63@1600	242.2@1600	130.71@1600	EGR EM EC
6090HFC95D	6090	403.65@2000	205.60@2000	138.74@2000	1241.16@1500	242.2@1500	130.69@1500	EGR EM EC

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6090HFC95E	6090	384.88@2200	176.20@2200	131.91@2200	1232.31@1600	242.4@1600	129.41@1600	EGR EM EC
6090HDW12	6090	295.03@2000	150.40@2000	101.46@2000	1132.01@1400	220.7@1400	104.17@1400	EGR EM EC
6090HTJ15	6090	312.46@2000	151.60@2000	102.30@2000	1054.58@1400	213.1@1400	100.53@1400	EM EGR EC
6090HFG95A	6090	437.18@1800	255.50@1800	155.12@1800				EGR EM EC
6090HFG95B	6090	398.29@1800	225.10@1800	136.69@1800				EGR EM EC
6090HFG95C	6090	366.10@1800	202.00@1800	122.67@1800				EGR EM EC
6090HDW11	6090	425.11@2100	211.70@2100	149.92@2100	1242.63@1575	242.9@1575	130.96@1575	EGR EM EC
6090HDW16	6090	327.21@2100	161.80@2100	114.64@2100	1032.45@1575	202.1@1575	107.37@1575	EGR EM EC
6090HH015	6090	425.11@2200	202.80@2200	150.36@2200	1268.44@1600	249.8@1600	134.71@1600	EGR EM EC
6090HZ011	6090	425.11@2200	202.80@2200	150.36@2200	1268.44@1600	249.8@1600	134.71@1600	EGR EM EC
6090RW403	6090	425.11@2100	211.70@2100	149.92@2100	1242.63@1575	242.9@1575	130.96@1575	EGR EM EC
6090HN004	6090	425.11@2200	202.80@2200	150.36@2200	1268.44@1600	249.8@1600	134.71@1600	EGR EM EC
6090HFC94A	6090	304.42@2200	144.50@2200	107.15@2200	962.39@1600	165.9@1600	101.64@1600	EM EGR EC
6090HFC94B	6090	315.15@2200	144.50@2200	107.15@2200	962.39@1600	165.9@1600	101.64@1600	EM EGR EC
6090HFC94C	6090	315.15@2000	128.50@2000	102.03@2000	962.39@1600	160.0@1600	101.17@1600	EM EGR EC
6090HFC94D	6090	281.62@2200	132.90@2200	98.55@2200	902.66@1600	173.5@1600	93.48@1600	EM EGR EC
6090HFC94E	6090	303.08@2200	132.90@2200	98.55@2200	902.66@1600	173.5@1600	93.48@1600	EM EGR EC
6090HFC94F	6090	301.73@2000	140.60@2000	94.80@2000	962.39@1600	182.3@1600	92.18@1600	EM EGR EC
6090HFC94G	6090	257.48@2200	122.50@2200	90.83@2200	825.96@1600	161.8@1600	69.67@1600	EM EGR EC
6090HFG94A	6090	319.17@1800	181.00@1800	109.79@1800				EM EGR EC
6090HDW13	6090	319.17@2200	123.50@2200	107.81@2200	962.39@1600	165.9@1600	101.64@1600	EM EGR EC
6090HDW15	6090	288.32@2420	127.80@2420	104.28@2420	829.65@1600	151.6@1600	81.80@1600	EM EGR EC
6090HFC94H	6090	276.26@2200	122.50@2200	90.83@2200	825.96@1600	161.8@1600	69.67@1600	EM EGR EC
6090HFC94I	6090	277.60@2000	131.10@2000	88.41@2000	908.56@1600	176.2@1600	89.09@1600	EM EGR EC

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