

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 (NO<sub>x</sub>), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO<sub>x</sub>), 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	NO <sub>x</sub>	NMHC+NO <sub>x</sub>	CO	PM	ACCEL	LUG	PEAK
225 ≤ kW < 450	Alternate NO <sub>x</sub>	STD	0.19	2.0	N/A	3.5	0.02	20	15	50
		CERT	0.01	1.7	--	0.0	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.**

Executed at El Monte, California on this 22<sup>nd</sup> day of June 2010.

  
 Annette Hebert, Chief  
 Mobile Source Operations Division

Engine Model Summary Form

EO#: U-R-004-0407

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R/C Date: 08/05/2010

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
6090HPRNT1	6090H	445@2200	217@2200	161@2200	1306@1600	259@1600	140@1600	EGR EC SPL
6090HFC95A	6090H	425.11@2200	200.50@2200	148.79@2200	1242.63@1600	243.2@1600	131.24@1600	EM EGR EC
6090HFC95B	6090H	400.97@2200	188.30@2200	139.73@2200	1242.63@1600	243.1@1600	131.18@1600	EM EGR EC
6090HFC95C	6090H	425.11@2200	188.30@2200	139.73@2200	1242.63@1600	243.1@1600	131.18@1600	EM EGR EC
6090HFC95E	6090H	384.88@2200	176.20@2200	130.74@2200	1232.31@1600	242.4@1600	130.85@1600	EM EGR EC
6090HFC95F	6090H	413.04@2200	176.20@2200	130.74@2200	1232.31@1600	242.4@1600	130.85@1600	EM EGR EC
6090HFC95H	6090H	359.40@2200	164.90@2200	122.40@2200	1152.66@1600	226.5@1600	122.25@1600	EM EGR EC
6090HFC95I	6090H	384.88@2200	164.90@2200	122.40@2200	1152.66@1600	226.5@1600	122.25@1600	EM EGR EC
6090HFC95K	6090H	332.58@2200	154.30@2200	114.53@2200	1064.90@1600	208.2@1600	112.37@1600	EM EGR EC
6090HFC95L	6090H	356.72@2200	154.30@2200	114.53@2200	1064.90@1600	208.2@1600	112.37@1600	EM EGR EC
6090RW410	6090H	425.11@2100	211.70@2100	149.92@2100	1242.63@1600	242.9@1600	130.96@1600	EGR EM EC
6090RW412	6090H	425.11@2100	211.70@2100	149.92@2100	1242.63@1600	242.9@1600	130.96@1600	EGR EM EC
6090RW414	6090H	425.11@2100	211.70@2100	149.92@2100	1242.63@1600	242.9@1600	130.96@1600	EGR EM EC
6090RW416	6090H	425.11@2100	211.70@2100	149.92@2100	1242.63@1600	242.9@1600	130.96@1600	EGR EM EC
6090RW418	6090H	425.11@2100	211.70@2100	149.92@2100	1242.63@1600	242.9@1600	130.96@1600	EGR EM EC
6090RW420	6090H	425.11@2100	211.70@2100	149.92@2100	1242.63@1600	242.9@1600	130.96@1600	EGR EM EC
6090RW411	6090H	327.21@2100	161.80@2100	114.64@2100	1032.45@1600	202.1@1600	107.37@1600	EM EGR EC
6090RW413	6090H	327.21@2100	161.80@2100	114.64@2100	1032.45@1600	202.1@1600	107.37@1600	EM EGR EC
6090RW415	6090H	327.21@2100	161.80@2100	114.64@2100	1032.45@1600	202.1@1600	107.37@1600	EM EGR EC
6090RW417	6090H	327.21@2100	161.80@2100	114.64@2100	1032.45@1600	202.1@1600	107.37@1600	EM EGR EC
6090RW419	6090H	327.21@2100	161.80@2100	114.64@2100	1032.45@1600	202.1@1600	107.37@1600	EM EGR EC
6090RW421	6090H	327.21@2100	161.80@2100	114.64@2100	1032.45@1600	202.1@1600	107.37@1600	EM EGR EC
6090HDW12	6090H	323.19@2000	150.40@2000	101.46@2000	1132.01@1500	219.3@1500	110.94@1500	EM EGR EC
6090HDW11	6090H	425.11@2100	211.70@2100	149.92@2100	1242.63@1575	242.9@1575	130.96@1575	EM EGR EC
6090HDW16	6090H	327.21@2100	161.80@2100	114.64@2100	1032.45@1575	202.1@1575	107.37@1575	EM EGR EC
6090HH015	6090H	425.11@2200	202.80@2200	150.36@2200	1242.63@1600	241.0@1600	130.08@1600	EM EGR EC
6090HZ011	6090H	425.11@2200	202.80@2200	150.36@2200	1242.63@1600	241.0@1600	130.08@1600	EM EGR EC
6090RW403	6090H	425.11@2100	212.90@2100	149.92@2100	1242.63@1575	242.9@1575	130.96@1575	EM EGR EC
6090HN004	6090H	425.11@2200	202.80@2200	150.36@2200	1242.63@1600	241.0@1600	130.08@1600	EM EGR EC

DDI, TC, CAC, PTOX, DOC



6090HFG95A	6090H	437.18@1800	255.50@1800	155.12@1800	<del>EM EGR EC</del>
6090HFG95B	6090H	398.29@1800	225.10@1800	136.69@1800	<del>EM EGR EC</del>
6090HFG95C	6090H	366.10@1800	200.50@1800	122.67@1800	<del>EM EGR EC</del>

DOI, TC, CAC, PTOX, DOC



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