

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)
2013	DJDXL13.5201	13.5	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Charge Air Cooler, Diesel Oxidation Catalyst, Electronic Direct 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 interim/ ALT NOx	STD	0.19	2.0	N/A	3.5	0.02	N/A	N/A	N/A
		FEL	--	--	--	--	0.01	--	--	--
		CERT	0.04	1.4	--	0.03	0.01	--	--	--

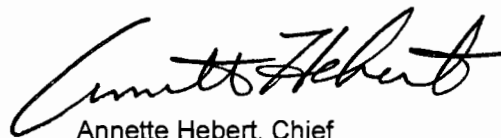
BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

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 31 day of October 2012.


 Annette Hebert, Chief
 Mobile Source Operations Division

Engine Model Summary Form

Manufacturer: John Deere Power Systems
 Engine category: Nonroad CI
 EPA Engine Family: DJDXL13.6201
 Mfr Family Name: 650HBA
 Process Code: New Submission

EO# : U-R-004-0467

Date: 9/28/12

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1. Engine code	2. Engine Model	3. kW@RPM (SAE Gross)	4. Fuel Rate: mm/stroke@peak kW (for diesel only)	5. Fuel Rate: (kg/hr)@peak kW (for diesels only)	6. Torque (Nm) @RPM (SEA Gross)	7. Fuel Rate: mm/stroke@peak torque	8. Fuel Rate: (kW/hr)@peak torque	9. Emission Control Device Per SAE J1930
6135HPRNT1	6135	483.0@2100	342.5@2100	110.05@2100	2793@1575	405.5@1575	97.72@1575	CKP ECT Fuel
6135RW401	6135	460.0@2100	312.4@2100	100.38@2100	2660@1450	380.9@1450	84.5@1450	CKP ECT Fuel
6135HH003	6135	460.0@2100	312.4@2100	100.38@2100	2660@1450	380.9@1450	84.5@1450	CKP ECT Fuel
6135HFG95A	6135	473.0@1800	357.6@1800	98.48@1800				CKP ECT Fuel
6135HFG95B	6135	411.0@1800	311.9@1800	85.9@1800				CKP ECT Fuel
6135HFG95C	6135	356.0@1800	270.8@1800	74.58@1800				CKP ECT Fuel
6135HDW05	6135	374.0@2100	265.9@2100	82.22@2100	2550@1500	368.5@1500	84.57@1500	CKP ECT Fuel
6135HN002	6135	460.0@2100	299.1@2100	96.1@2100	2660@1450	369.7@1450	82.02@1450	CKP ECT Fuel
6135HZ011	6135	460.0@2100	299.1@2100	96.1@2100	2660@1450	369.7@1450	82.02@1450	CKP ECT Fuel
6135HDW08	6135	405.0@1800	305.3@1800	84.08@1800				CKP ECT Fuel
6135HDW02	6135	320.0@2000	231@2000	70.69@2000	2150@1500	310.1@1500	71.17@1500	CKP ECT Fuel
6135HFC95B	6135	410.0@2100	280.3@2100	90.06@2100	2635@1500	381.8@1500	87.62@1500	CKP ECT Fuel
6135HFC95A	6135	448.0@2100	306.3@2100	96.42@2100	2660@1500	387.4@1500	88.91@1500	CKP ECT Fuel
6135HFC95C	6135	410.0@2100	280.7@2100	90.19@2100	2635@1500	382.3@1500	87.74@1500	CKP ECT Fuel
6135HFC95E	6135	392.0@2100	269.6@2100	86.62@2100	2520@1500	365.7@1500	83.93@1500	CKP ECT Fuel
6135HFC95F	6135	392.0@2100	270.1@2100	86.78@2100	2520@1500	365.6@1500	83.91@1500	CKP ECT Fuel
6135HFC95H	6135	373.0@2100	257.6@2100	82.77@2100	2394@1500	347.9@1500	79.84@1500	CKP ECT Fuel
6135HFC95I	6135	373.0@2100	257.8@2100	82.83@2100	2394@1500	347.8@1500	79.82@1500	CKP ECT Fuel
6135HFC95K	6135	336.0@2100	233.2@2100	74.93@2100	2155@1500	318@1500	72.98@1500	CKP ECT Fuel
6135HFC95L	6135	336.0@2100	233.6@2100	75.06@2100	2155@1500	318.3@1500	73.05@1500	CKP ECT Fuel
6135HFC95N	6135	317.0@2100	221.9@2100	71.3@2100	2035@1500	302.2@1500	69.36@1500	CKP ECT Fuel
6135HFC95O	6135	317.0@2100	222.4@2100	71.46@2100	2035@1500	302.4@1500	69.4@1500	CKP ECT Fuel
6135HFC95Q	6135	298.0@2100	212.4@2100	68.24@2100	1915@1500	284.9@1500	65.39@1500	CKP ECT Fuel
6135HFC95R	6135	298.0@2100	211.8@2100	68.05@2100	1915@1500	284.9@1500	65.39@1500	CKP ECT Fuel
6135HFC95D	6135	410.0@1900	298@1900	86.63@1900	2660@1500	378.4@1500	86.84@1500	CKP ECT Fuel
6135HFC95G	6135	392.0@1900	286.6@1900	83.32@1900	2660@1500	378.4@1500	86.84@1500	CKP ECT Fuel
6135HFC95J	6135	373.0@1900	273.9@1900	79.62@1900	2644@1500	375.5@1500	86.18@1500	CKP ECT Fuel
6135HFC95M	6135	336.0@1900	248.9@1900	72.36@1900	2381@1500	342.1@1500	78.51@1500	CKP ECT Fuel
6135HFC95P	6135	317.0@1900	237.3@1900	68.98@1900	2246@1500	324@1500	74.36@1500	CKP ECT Fuel
6135HFC95S	6135	298.0@1900	225.5@1900	65.55@1900	2112@1500	304.8@1500	69.95@1500	CKP ECT Fuel

ECM, SPL, P10x, EGR, DOC, DFI,
CAC, TC

