

JOHN DEERE POWER SYSTEMS

EXECUTIVE ORDER U-R-004-0422 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)			
2011	BJDXL04.5107	4.5	Diesel	8000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Electro	nic Control Module, Dire Turbocharger, Smoke P	ct Diesel Injection, ruff Limiter	Loaders, Tractor, Pump, Compressor, Generator Set and 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	EMISSION		EXHAUST (g/kw-hr)				OPACITY (%)			
POWER CLASS	STANDARD CATEGORY		НС	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
56 ≤ kW < 75	Tier 3	STD	N/A	N/A	4.7	5.0	0.40	20	15	50
		CERT			4.1	2.3	0.19	1	2	2

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 December 2010.

Annette Hebert, Chief

Mobile Source Operations Division

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Date: 11/10/2010 EO#: U-R-004_0422

Engine Model Summary Form

EPA Engine Family: BJDXL04.5107 Mfr Family Name: 350TAA

.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroks @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SEA Grose)	7.Fuel Rate: mm/etroke@peak torque	6.Fuel Rete: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
4045TF285A	4045T	99.24@2400	75.40@2400	40.72@2400	278.03@1600	89.7@1600	32,35@1600	EM EC SPL
4045TF285C	4045T	84,49@2400	64.90@2400	35.04@2400	231.57@1600	· 76.1@1600	27.39@1600	EM EC SPL
4045TF285D	4045T	84,49@2200	80.60@2200	34.46@2200	261.80@1600	85.1@1600	30.65@1600	EM EC SPL
4045TF285E	4045T	99.24@1800	92.70@1800	37.53@1800				EM EC SPL
4045TF285B	4045T	99.24@2400	77.10@2400	41,58@2400	261.80@1600	86.8@1600	31.24@1600	EM EC SPL
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