## JOHN DEERE POWER SYSTEMS

EXECUTIVE ORDER U-R-004-0412 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)		DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)		
2011	BJDXL02.4074	2.4	Diesel	5000		
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION			
Mechanica	al Diesel Injection, Turbo Limiter	ocharger, Smoke Puff	Loaders, Tractor, Pump, Compress Industrial Equip	sor, Generator Set, Other oment		

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):

	EMISSION		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER CLASS	STANDARD CATEGORY		НС	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
19 <u>&lt;</u> kW < 37	Tier 4 Interim	STD	N/A	N/A	7.5	5.5	0.30	20	15	50
		CERT			6.6	2.7	0.30	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 November 2010.

Annette Hebert, Chief

Mobile Source Operations Division

Date: 10/12/2010 page of 1 E0#: UR-004-0412

**Engine Model Summary Form** 

Engine category: Nonroad Cl

EPA Engine Family: BJDXL02.4074

Mfr Family Name: 250TB

New Submission

.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4,Fuel Rate; mm/stroke @ peak HP (for dissal only)	5. Fuel Rate: (lbs/hr) @ peak HP (for diesele only)	6.Torque @ RPM (SEA Gross)	7,Fuel Rete: mm/stroke@psak torque	8.Fuel Rate: (lbs/hr)@peek torque	9.Emiesion Control Device Per SAE J1930	į
4024TF270E	4024T	48.28@2400	37.60@2400	20.29@2400	146.39@1440	47.7@1440	15.44@1440	EM SPL DFI	
4024TT012	4024T	48.28@2400	34.20@2400	18.48@2400	134.96@1440	43.2@1440	14.00@1440	EM SPL DFI	]
4024TF281A	4024T	48.28@2800	33.80@2800	21.26@2800	127.59@1680	40.5@1680	15.33@1680	EM SPL DFI	_
4024TF281B	_4024T	48.28@1800	48.90@1800	19.82@1800				EM SPL DFI	
4024TLV09	4024T	46.94@2400	34.20@2400	18.48@2400	134.96@1440	43.2@1440	14.00@1440	EM SPL DFI	╛
4024TLV10	4024T	48.28@2400	34.20@2400	18.48@2400	134.96@1440	43.2@1440	14.00@1440	EM SPL DFI	4
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