## California Environmental Protection Agency Air Resources Board

## JOHN DEERE POWER SYSTEMS

EXECUTIVE ORDER U-R-004-0491 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-14-012;

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)		
2014	EJDXL02.9303	2.9	Diesel	8000		
SPECIAL	SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		TYPICAL EQUIPMENT APPLICATION			
Electronic Control Module, Electronic Direct Injection, Periodic Trap Oxidizer, Turbocharger, Charge Air Cooler, Oxidation Catalyst			Loaders, Tractor, Dozer, Pump, Compressor, Generator Set Other Industrial Equipment			

The engine models and codes are attached.

The following are the exhaust certification standards (STD) 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	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
CLASS			НС	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
37 ≤ kW < 56	Tier 4 Final	STD	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A
		CERT	-		4.2	0.1	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

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Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

6/27/2014

EO#: U-R-004-0491

**Engine Model Summary Form** 

Attachment: Page lof 1

Manufacturer: Engine category: John Deere Power Systems

EPA Engine Family: EJDXL02.9303

Nonroad CI

Mfr Family Name:

320HCA

Process Code:

Running Change

I. 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	
3029HPRNT1 3029HPY61	3029 3029	55.0@2200	93@2200	15.7@2200	320@1600	113.5@1600	13.9@1600	OC PTOX EM EC TC DFI CAC
3029HPY61 3029HPY62	3029	55.0@2100	89.1@2100	14.3@2100	304@1550	102.9@1550	12.2@1550	OC PTOX EM EC TC DFI CAC
3029HPY63	3029	55.0@2100 55.0@2100	89.1@2100 89.1@2100	14.3@2100	304@1550	102.9@1550		OC PTOX EM EC TC DFI CAC
3029HPY64	3029	55.0@2100		14.3@2100 14.3@2100	304@1550	102.9@1550		OC PTOX EM EC TC DFI CAC
3029HPY65	3029	55.0@2100	89.1@2100 84.7@2200	14.2@2200	304@1550 304@1600	102.9@1550 102.4@1600	12.2@1550 12.1@1600	OC PTOX EM EC TC DFI CAC
	0020	50.5@2200	04.1@2200	14.2@2200	304@1000	102.4@1000	12.1@1000	OC FIGALINI EC TO DFICAC
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