EXECUTIVE ORDER U-R-004-0510 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)			
2016	GJDXL06.8204	6.8	Diesel	8000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Charge Ai Injection Recircu	r Cooler, Oxidation Cata n, Electronic Control Mo ılation, Periodic Trap Ox Limiter, Turbocha	lyst, Electronic Direct dule, Exhaust Gas idizer, Smoke Puff irger	Loaders, Tractor, Dozer, Pump, Compressor, Generator Se 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 non-methane hydrocarbon (NMHC), 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			NMHC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final / ALT 5% NOx	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		FEL		2.00	'					
		CERT	0.004	1.70		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

day of December 2015.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

## A Hachment: Pege 10f1 10-28-2015

Fo# > U-R-004\_0510

**Engine Model Summary Form** 

Manufacturer: Jo

John Deere Power Systems

Engine category: EPA Engine Family: Mfr Family Name: Nonroad CI GJDXL06.8204 350HBA

Running Change Process Code: 4. Fuel Rate: 5. Fuel Rate: 7, Fuel Rate 9. Emission Control 3. kW@RPM mm/stroke@peak kW (kg/hr)@peak kW @RPM 8. Fuel Rate mm/stroke@peak Device Per (SAE Gross) (SEA Gross) (kW/hr)@peak torque 2. Engine Model 1. Engine code 6068HDW85 6068HPRNT4 169@1900 208@2400 147.0@1425 EGR EM EC SPL DFI TC CAC OC PTOX 6068 123.4@1900 35.9@1900 1013@1425 32.1@1425 38.8@1600 EGR EM EC SPL DFI TC CAC OC PTOX 123.5@2400 45.1@2400 1105@1600 159.3@1600 EGR EM EC SPL DFITC CAC OC PTOX 6068HT084B 6068 190@1900 138,1@1900 40.1@1900 154.2@1500 945@1500 131.8@1500 34.8@1500 113.4@2000 41.5@2000 6068 160@2000 115.8@2000 34.2@2000 945@1500 31.2@1500 EGR EM EC SPL DFI TC CAC OC PTOX 6068HTJ91B 6068 160@2000 111.9@2000 34.2@2000 945@1500 135.5@1500 31.1@1500 EGR EM EC SPL DFI TC CAC OC PTOX