EXECUTIVE ORDER U-R-004-0558 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) 8000			
2018	JJDXL06.8312	6.8	Diesel				
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Injection	Cooler, Oxidation Cata n, Electronic Control Mo ulation, Turbocharger, S ction-Urea, Ammonia O	dule, Exhaust Gas Selective Catalytic	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	EMISSION		EXHAUST (g/kw-hr)				OPACITY (%)			
POWER	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.02	0.06		0.01	0.02			

**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 September 2017.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

**Engine Model Summary Form** 

Manufacturer:

John Deere Power Systems

Engine category:

Nonroad CI

EPA Engine Family: Mfr Family Name:

1. Engine code

6068HFG05A

6068HFG05B

6068HFG05C

6068HFG05D

6068HFG06A

6068HFG06B

**6068HPRNT7** 

6068HFG06C

350HCF

Process Code:

**New Submission** 

2. Engine Model

6068

6068

6068

6068

6068

6068

6068

6068

160@1800

165@1500

160@1500

216@1800

197@1500

248@1800

JJDXL06.8312

9/12/2017

AHaehment: Page 10f1
E0H: U-R-004-0558

mm/stroke@peak torque

8. Fuel Rate:

(kW/hr)@peak torque

Device Per **SAE J1930** 

EGR OC SCRC NH3OC DFI TC CAC ECM EGR OC SCRC NH3OC DFI TC CAC ECM

EGR OC SCRC NH3OC DFI TC CAC ECM EGR OC SCRC NH3OC DFI TC CAC ECM

EGR OC SCRC NH3OC DFI TC CAC ECM EGR OC SCRC NH3OC DFI TC CAC ECM

EGR OC SCRC NH3OC DFI TO CAC ECM

EGR OC SCRC NH3OC DFI TC CAC ECM

4. Fuel Rate: 5. Fuel Rate: mm/stroke@peak kW 3. kW@RPM (kg/hr)@peak kW (SAE Gross) (for diesel only) (for diesels only) 192@1800 143.5@1800 39,5@1800 32.9@1800 119.4@1800 145.4@1500 33,4@1500 142.3@1500 32.6@1500 241@1800 180.4@1800 49.7@1800 159.8@1800 44@1800 176.6@1500 40.5@1500 184.6@1800 50.8@1800

6. Torque (Nm)

(SEA Gross)

@RPM