

## **JOHN DEERE POWER SYSTEMS**

EXECUTIVE ORDER U-R-004-0610 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in California 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-19-095;

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)			
2021	MJDXL09.0313	9.0	Diesel	8000			
SPECIAL	FEATURES & EMISSION (	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION				
Direct Inje Gas Reci	Air Cooler, Oxidation C ection, Electronic Contr rculation, Turbocharger tion-Urea, Ammonia Ox	ol Module, Exhaust , Selective Catalyst	Pump, Compressor, Generator Set, Other Steady State Industrial Equipment				

The engine models and codes are attached.

The following are the exhaust certification standards (STD) 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	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.004	0.10		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 on this 8th day of December 2020.

Allen Lyons, Chief

**Emissions Certification and Compliance Division** 

Family: MJDXL09.0313 **Attachment: Engine Models** EO #: U-R-004-0610 Attachment Last Revised: 11/11/2020 Displacement -Peak Power -Peak Power -Peak Power -Peak Power -Peak Torque -Peak Torque -Peak Torque -Peak Torque -**Fuel Units** Model Code Trim Config Displacement Units Peak Power Units Speed (rpm) Fueling Peak Torque Units Speed (rpm) Fuel **Fuel Units** OBD GHG Special Notes 6090 6090HFG06A N/A L6 9.0 Liters 345 kilowatt 1800 263.2 mm3/stroke 1830 N-m 1800 263.2 mm3/stroke N/A N/A N/A N/A 6090 6090HFG06B N/A L6 9.0 Liters 300 kilowatt 1500 269.8 mm3/stroke 1910 N-m 1500 269.8 mm3/stroke N/A N/A N/A N/A 6090 6090HFG06C N/A 9.0 Liters 326 kilowatt 1800 247.5 mm3/stroke 1731 N-m 1800 247.5 N/A N/A N/A L6 mm3/stroke N/A 6090 300 1500 269.5 1910 1500 269.5 6090HFG06D N/A L6 9.0 Liters kilowatt mm3/stroke N-m mm3/stroke N/A N/A N/A N/A 6090 6090HFG06E N/A L6 9.0 Liters 273 kilowatt 1800 201.3 mm3/stroke 1448 N-m 1800 201.3 mm3/stroke N/A N/A N/A N/A 6090 6090HFG06F N/A L6 9.0 Liters 273 kilowatt 1500 243 mm3/stroke 1737 N-m 1500 243 mm3/stroke N/A N/A N/A N/A 6090 6090HPRNT7 N/A L6 9.0 Liters 364 kilowatt 1800 277.6 mm3/stroke 1934 N-m 1800 277.6 mm3/stroke N/A N/A N/A N/A