

JOHN DEERE POWER SYSTEMS

EXECUTIVE ORDER U-R-004-0601

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	MJDXL02.9303	2.9	Diesel	8000			
SPECIAL	FEATURES & EMISSION O	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION				
Injection	ronic Control Module, E n, Periodic Trap Oxidizo narge Air Cooler, Oxida	er, Turbocharger,	Loaders, Tractor, Dozer, 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 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	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)				OPACITY (%)			
POWER CLASS			NMHC	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
19 <u><</u> 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).

BE IT FURTHER RESOLVED: That for the listed engine models which include engines from different power categories in the same engine family, the manufacturer is complying with the more stringent set of standards from the 37 ≤ kW < 56 power category in conformance with the incorporated Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for New 2011 and Later Tier 4 Off-Road Compression Ignition Engines, Part 1-D" adopted October 20, 2005 and last amended October 25, 2012.

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 24th day of November 2020.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Attachment: Engine Models EO #: U-R-004-0601 Family: MJDXL02.9303 Attachment Last Revised: 11/11/2020 Peak Torque -Displacement -Peak Power -Peak Power -Peak Power -Peak Power -Peak Torque -Peak Torque -Peak Torque -Fueling Model Code Trim Config Displacement Units **Peak Power** Units Speed (rpm) **Fuel Units** Peak Torque Units Speed (rpm) Fuel **Fuel Units** OBD GHG Special Notes 3029 3029HFC03A N/A L3 2.9 55 kilowatt 2400 84 mm3/stroke 292 1550 103.6 mm3/stroke N/A N/A N/A N/A Liters N-m 3029 3029HFC03B N/A L3 55 2200 88.3 1550 109.4 N/A 2.9 Liters kilowatt mm3/stroke 304 N-m mm3/stroke N/A N/A N/A 3029 3029HFC03C 2.9 48 2400 75.7 254 1550 92.3 N/A L3 Liters kilowatt mm3/stroke N-m mm3/stroke N/A N/A N/A N/A 3029 3029HFC03D N/A L3 2.9 Liters 48 kilowatt 2200 79.7 mm3/stroke 280 N-m 1550 99.8 mm3/stroke N/A N/A N/A N/A 3029 3029HFC03E N/A L3 2.9 Liters 36 kilowatt 2400 63.2 mm3/stroke 192 N-m 1550 73.1 mm3/stroke N/A N/A N/A N/A 3029 3029HFC03F N/A L3 2.9 36 kilowatt 2200 68 mm3/stroke 209 N-m 1550 78.6 mm3/stroke N/A N/A N/A N/A 3029 3029HFG03A N/A L3 2.9 Liters 55 kilowatt 1800 104.8 mm3/stroke 292 N-m 1800 104.8 mm3/stroke N/A N/A N/A N/A 3029 3029HFG03B N/A L3 2.9 48 kilowatt 1800 92.8 mm3/stroke 255 N-m 1800 92.8 mm3/stroke N/A N/A N/A N/A 3029 3029HFG03C N/A L3 2.9 Liters 36 kilowatt 1800 80.2 mm3/stroke 191 N-m 1800 80.2 mm3/stroke N/A N/A N/A N/A 3029 3029HFG03D N/A L3 2.9 Liters 48 kilowatt 1500 103.5 mm3/stroke 305 N-m 1500 103.5 mm3/stroke N/A N/A N/A N/A 3029 3029HFG03E 2.9 36 1500 N-m 1500 N/A L3 Liters kilowatt 81.6 mm3/stroke 229 81.6 mm3/stroke N/A N/A N/A N/A 3029 3029HPRNT1 N/A L3 2.9 Liters 55 kilowatt 2200 93 mm3/stroke 320 N-m 1600 113.5 mm3/stroke N/A N/A N/A N/A