

JOHN DEERE POWER SYSTEMS

EXECUTIVE ORDER U-R-004-0636 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)				
2022	NJDXL02.9339	2.9	Diesel	8000				
SPECIAL	FEATURES & EMISSION (CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION					
Inject	ronic Control Module, E tion, Turbocharger, Cha ion Catalyst, Exhaust G	arge Air Cooler,	Tractor, 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 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			I	EXHAUST (g/kw-l	OPACITY (%)					
POWER CLASS	STANDARD CATEGORY		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			3.5	1.1	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).

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 2/st day of December 2021.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Attachment: Engine Models EO #: U-R-004-0636 Family: NJDXL02.9339 Attachment La

Attachment Last Revised: 11/18/2021

Model	Code	Trim	Config	Displacement	Displacement - Units	Peak Power	Peak Power - Units	Peak Power - Speed (rpm)	Peak Power - Fueling	Peak Power - Fuel Units	Peak Torque	Peak Torque - Units	Peak Torque - Speed (rpm)	Peak Torque - Fuel	Peak Torque - Fuel Units	OBD	GHG	Special	Notes
	3029HPRNT5A	111111	I-3							mm3/stroke					mm3/stroke	N/A	N/A	Special	Notes
3029 3029	3029HPY110A	-	I-3	2.9	Liters	55 55	kilowatt	2000	85 80	mm3/stroke	318 305	N-m N-m	1500 1500	93.9	mm3/stroke	N/A	N/A	+	+
3029	3029HPY110A	-	I-3	2.9	Liters	50	kilowatt	2100	74.1	mm3/stroke	280	N-m	1500	85.7	mm3/stroke	N/A	N/A	+	+
		-														_	_	+	+
3029	3029HPY110C	-	1-3	2.9	Liters	45	kilowatt	2100	67	mm3/stroke	251	N-m N-m	1500	76.3	mm3/stroke	N/A	N/A	+	+
3029	3029HPY110D	-	1-3	2.9	Liters	37	kilowatt	2100	57	mm3/stroke	209		1500	63.5	mm3/stroke	N/A	N/A	+	+
3029	3029HPY110E	-	1-3	2.9	Liters	41	kilowatt	2100	41	mm3/stroke	228	N-m	1500	68.6	mm3/stroke	N/A	N/A	+	+
3029	3029HPY110F	-	I-3	2.9	Liters	35	kilowatt	2100	62.2	mm3/stroke	196	N-m	1500	60.5	mm3/stroke	N/A	N/A		+
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