

## **DEERE & COMPANY**

EXECUTIVE ORDER U-R-004-0650 New Off-Road

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)			
2023	PJDXL13.5320	13.5	Diesel	8000			
SPECIAL	FEATURES & EMISSION (	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION				
Injection Recircu	Air Cooler, Oxidation Ca , Electronic Control Mo , lation, Turbocharger, S tion-Urea, Ammonia Ox Periodic Trap Oxi	dule, Exhaust Gas Selective Catalyst kidation Catalyst,	Loader, Tractor, Dozer, 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 STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER CLASS			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	0.18		0.03	0.001			

**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 <u>/8th</u> day of October 2022.

Robin U. Lang, Chief

**Emissions Certification and Compliance Division** 

Jolin U. Lang

Attachment: Engine Models EO #: U-R-004-0650 Family: PJDXL13.5320 Attachment Last Revised: 10/5/2022

Peak Torque -Peak Torque -Peak Torque -Peak Torque -Displacement -Peak Power -Peak Power -Peak Power -Peak Power -Fueling Model Config Displacement Peak Power Peak Torque OBD GHG Special Notes Code Trim Units Units Speed (rpm) Fuel Units Units Speed (rpm) Fuel Fuel Units 6136 6136CG550A 1-6 13.5 505 kilowatt 1800 376.5 mm3/stroke 2679 1800 376.5 mm3/stroke N/A N/A A/T Orientation can be either Horizontal or Vertical Liters N-m 6136 6136CG550B 1-6 13.5 Liters 505 kilowatt 1500 443.2 mm3/stroke 3215 N-m 1500 443.2 mm3/stroke N/A N/A A/T Orientation can be either Horizontal or Vertical 6136CI550A kilowatt mm3/stroke N/A N/A 6136 1-6 13.5 Liters 421 1900 288.5 mm3/stroke 2495 N-m 1550 330.3 A/T Orientation can be either Horizontal or Vertical 6136 6136CI550B 1-6 13.5 Liters 446 kilowatt 1800 318.9 mm3/stroke 2745 1550 368.9 mm3/stroke N/A N/A A/T Orientation can be either Horizontal or Vertical 6136 3050 6136CI550C 1-6 13.5 Liters 495 kilowatt 1800 360.2 mm3/stroke N-m 1550 419 2 mm3/stroke N/A N/A A/T Orientation can be either Horizontal or Vertical 6136 6136CI550D 1-6 13.5 Liters 510 kilowatt 2100 318.5 mm3/stroke 3050 N-m 1550 408.6 mm3/stroke N/A N/A A/T Orientation can be either Horizontal or Vertical 6136 6136HI550A I-6 13.5 Liters 324 kilowatt 1900 227.4 mm3/stroke 1986 N-m 1550 267.4 mm3/stroke N/A N/A A/T Orientation can be either Horizontal or Vertical 6136 6136HI550B 1-6 13.5 363 kilowatt 1900 252.4 2192 1550 294.7 mm3/stroke N/A N/A A/T Orientation can be either Horizontal or Vertical Liters mm3/stroke N-m 6136 6136HI550C 1-6 13.5 Liters 403 kilowatt 1900 278.7 mm3/stroke 2397 N-m 1550 320.3 mm3/stroke N/A N/A A/T Orientation can be either Horizontal or Vertical 6136 6136HI550D 415 1800 2510 1550 334.2 1-6 13.5 Liters kilowatt 300.4 mm3/stroke N-m mm3/stroke N/A N/A A/T Orientation can be either Horizontal or Vertical 6136 6136HPRNT1A 1-6 13.5 Liters 552 kilowatt 1900 377 mm3/stroke 3307 N-m 1550 446 mm3/stroke N/A N/A A/T Orientation is Vertical