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	PJDXL09.0333	9.0	Diesel	8000					
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION						
Direc Exha Select	Air Cooler, Oxidation C et Injection, Electronic C aust Gas Recirculation, ive Catalyst Reduction- ation Catalyst, Periodic	Control Module, Turbocharger, Urea, Ammonia	Loader, Tractor, Dozer, Pump, Compi Set, Other Industrial Equip						

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							OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	со	РМ	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	0.34		0.05	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  $\underline{/8th}$  day of October 2022.

Jolin U. Lang

Robin U. Lang, Chief *O* Emissions Certification and Compliance Division

Attachment: Engine Models	EO #: U-R-004-0648	Family: PJDXL09.0333	Attachment Last Revised:	2/2/2023

					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power - Fue	2	Peak Torque -	Peak Torque -	Peak Torque -	Peak Torque -				
Model	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Units	Peak Torque	Units	Speed (rpm)	Fuel	Fuel Units	OBD	GHG	Special	Notes
6090	6090HDW48		1-6	9	Liters	344	kilowatt	2000	222.9	mm3/stroke	1888	N-m	1550	250.8	mm3/stroke	N/A	N/A		A/T Orientation is Horizontal
6090	6090HPRNT12		I-6	9	Liters	361	kilowatt	2000	233	mm3/stroke	1982	N-m	1550	259	mm3/stroke	N/A	N/A		A/T Orientation is Vertical
6090	6090HT027		1-6	9	Liters	291	kilowatt	1900	194.3	mm3/stroke	1667	N-m	1550	221	mm3/stroke	N/A	N/A		A/T Orientation is Horizontal
6090	6090RX501		1-6	9	Liters	344	kilowatt	2000	222.9	mm3/stroke	1888	N-m	1550	250.8	mm3/stroke	N/A	N/A		A/T Orientation is Vertical
6090	6090RX502		1-6	9	Liters	291	kilowatt	1900	194.3	mm3/stroke	1667	N-m	1550	221	mm3/stroke	N/A	N/A		A/T Orientation is Vertical
6090	6090RX513		1-6	9	Liters	291	kilowatt	1900	194.3	mm3/stroke	1667	N-m	1550	221	mm3/stroke	N/A	N/A		A/T Orientation is Vertical
6090	6090WG501		1-6	9	Liters	265	kilowatt	1950	172.8	mm3/stroke	1602	N-m	1500	213.7	mm3/stroke	N/A	N/A		A/T Orientation is Horizontal
6090	6090WG502		1-6	9	Liters	315	kilowatt	1800	223.2	mm3/stroke	1887	N-m	1500	254.2	mm3/stroke	N/A	N/A		A/T Orientation is Vertical
6090	6090HN024		1-6	9	Liters	291	kilowatt	1900	194.3	mm3/stroke	1667	N-m	1550	221	mm3/stroke	N/A	N/A		A/T Orientation is Vertical; New Model