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	PDTAL07.7RJD	5.1, 7.7	Diesel	8000					
SPECIAL	FEATURES & EMISSION (CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION						
Injection Recircu	Air Cooler, Oxidation Ca , Electronic Control Mo Ilation, Turbocharger, S tion-Urea, Ammonia Ox Periodic Trap Oxi	dule, Exhaust Gas Selective Catalyst kidation Catalyst,	Crane, Loader, Tractor, Dozer, Pum Generator Set	p, Compressor,					

The engine models and codes are attached.

CALIFORNIA AIR RESOURCES BOARD

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	
75 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A	
		CERT	0.01	0.09		0.1	0.002				

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 $130 \le kW \le 560$ 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 <u>25th</u> day of January 2023.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

Attachment: Engine Models	EO #: U-R-016-0154	Family: PDTAL07.7RJD	Attachment Last Revised:	12/27/2022
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					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power -		Peak Torque -	Peak Torque -	Peak Torque -	Peak Torque -				
Model	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Fuel Units	Peak Torque	Units	Speed (rpm)	Fuel	Fuel Units	OBD	GHG	Special	Notes
OM936	OM936LA.E5-1		L6	7.7	Liters	280	kilowatt	1800	128.7	lb/hr	1550	N-m	1400	101.3	lb/hr	N/A	N/A		ECM,TC,CAC,EGR,DPF,DDI,DOC,AMOX,SCR
OM936	OM936LA.E5-2		L6	7.7	Liters	260	kilowatt	1800	117.3	lb/hr	1450	N-m	1400	94.7	lb/hr	N/A	N/A		ECM,TC,CAC,EGR,DPF,DDI,DOC,AMOX,SCR
OM936	OM936LA.E5-3		L6	7.7	Liters	230	kilowatt	1800	102.2	lb/hr	1300	N-m	1400	83	lb/hr	N/A	N/A		ECM,TC,CAC,EGR,DPF,DDI,DOC,AMOX,SCR
OM936	OM936LA.E5-4		L6	7.7	Liters	210	kilowatt	1800	92.4	lb/hr	1200	N-m	1400	76.4	lb/hr	N/A	N/A		ECM,TC,CAC,EGR,DPF,DDI,DOC,AMOX,SCR
OM936	OM936LA.E5-5		L6	7.7	Liters	195	kilowatt	1800	85.2	lb/hr	1100	N-m	1400	69.2	lb/hr	N/A	N/A		ECM,TC,CAC,EGR,DPF,DDI,DOC,AMOX,SCR
OM936	OM936LA.E5-6		L6	7.7	Liters	180	kilowatt	1800	78.1	lb/hr	1000	N-m	1400	63.2	lb/hr	N/A	N/A		ECM,TC,CAC,EGR,DPF,DDI,DOC,AMOX,SCR
OM934	OM934LA.E5-1		L4	5.1	Liters	170	kilowatt	1800	73.1	lb/hr	950	N-m	1400	59.9	lb/hr	N/A	N/A		ECM,TC,CAC,EGR,DPF,DDI,DOC,AMOX,SCR
OM934	OM934LA.E5-2		L4	5.1	Liters	150	kilowatt	1800	63.8	lb/hr	850	N-m	1400	52.4	lb/hr	N/A	N/A		ECM,TC,CAC,EGR,DPF,DDI,DOC,AMOX,SCR
OM934	OM934LA.E5-3		L4	5.1	Liters	129	kilowatt	1800	56.7	lb/hr	750	N-m	1400	47	lb/hr	N/A	N/A		ECM,TC,CAC,EGR,DPF,DDI,DOC,AMOX,SCR
OM934	OM934LA.E5-4		L4	5.1	Liters	115	kilowatt	1800	50.7	lb/hr	675	N-m	1400	42.5	lb/hr	N/A	N/A		ECM,TC,CAC,EGR,DPF,DDI,DOC,AMOX,SCR