

ROLLS-ROYCE SOLUTIONS AMERICA INC.

EXECUTIVE ORDER U-R-052-0040

New Off-Road Compression-Ignition Engines Page 1 of 1

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	PMDDL76.3XTM	57.2, 76.3	Diesel	8000					
SPECIAL	FEATURES & EMISSION C	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION						
	etronic Direct Injection, e Air Cooler, Electronic Exhaust Gas Recirc	Control Module,	Crane, Loader, Tractor, Dozer, Pump, Compressor, Mine Haul Truck						

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			ı	EXHAUST (g/kw-l	OPACITY (%)					
POWER CLASS	STANDARD CATEGORY		NMHC NOx		NMHC+NOx	со	PM	ACCEL	LUG	PEAK	
ELSE > 560 kW	Tier 4 Final	STD	0.19	3.5	N/A	3.5	0.04	N/A	N/A	N/A	
		CERT	0.07	3.1		0.2	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).

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 7th day of April 2023.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

Holin U. Lang

Attachment: Engine Models EO #: U-R-052-0040 Family: PMDDL76.3XTM Attachment Last Revised: 2/8/2023

					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power - Fuel		Peak Torque -	Peak Torque -		Peak Torque - Fue	el .							
	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Units	Peak Torque	Units	Speed (rpm)	Peak Torque - Fuel Units		OBD	GHG	Special	Notes				
12V4000C 15	7268	90 degr.	V12	57.2	Liters	1150	kW	1800	445	mm3/stroke	7351	N-m	1494	515	mm3/stroke	N/A	N/A						
12V4000C 65	7266	90 degr.	V12	57.2	Liters	1864	kW	1800	697	mm3/stroke	10409	N-m	1710	726	mm3/stroke	N/A	N/A						
12V4000C 65	7267	90 degr.	V12	57.2	Liters	1864	kW	1900	673	mm3/stroke	9861	N-m	1805	695	mm3/stroke	N/A	N/A						
12V4000T 95R	7269	90 degr.	V12	57.2	Liters	1680	kW	1900	610	mm3/stroke	9035	N-m	1400	621	mm3/stroke	N/A	N/A						
12V4000T 95	7303	90 degr.	V12	57.2	Liters	1865	kW	1900	670	mm3/stroke	10030	N-m	1400	686	mm3/stroke	N/A	N/A						
12V4000T 95L	7302	90 degr.	V12	57.2	Liters	1939	kW	1900	701	mm3/stroke	10427	N-m	1400	713	mm3/stroke	N/A	N/A						
12V4000C 35	7304	90 degr.	V12	57.2	Liters	1500	kW	1800	561	mm3/stroke	9588	N-m	1494	655	mm3/stroke	N/A	N/A						
12V4000C 55	7305	90 degr.	V12	57.2	Liters	1750	kW	1900	632	mm3/stroke	9258	N-m	1805	633	mm3/stroke	N/A	N/A						
16V4000C 65	7312	90 degr.	V16	76.3	Liters	2400	kW	1800	676	mm3/stroke	13403	N-m	1710	708	mm3/stroke	N/A	N/A						
12V4000C 25	7330	90 degr.	V12	57.2	Liters	1250	kW	1800	474	mm3/stroke	7990	N-m	1494	549	mm3/stroke	N/A	N/A						
16V4000T 95	7331	90 degr.	V16	76.3	Liters	2400	kW	1900	693	mm3/stroke	13403	N-m	1710	708	mm3/stroke	N/A	N/A						
16V4000C 55	7342	90 degr.	V16	76.3	Liters	2400	kW	1800	676	mm3/stroke	13403	N-m	1710	708	mm3/stroke	N/A	N/A						
16V4000C 45		90 degr.	V16	76.3	Liters	2400	kW	1800	676	mm3/stroke	13403	N-m	1710	708	mm3/stroke	N/A	N/A						
12V4000T 25L	7357	90 degr.	V12	57.2	Liters	1500	kW	1800	561	mm3/stroke	9588	N-m	1494	655	mm3/stroke	N/A	N/A						