MAN TRUCK & BUS AG

EXECUTIVE ORDER U-R-067-0009 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-14-012;

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)		
2019	KMNBL15.3OR4	15.3	Diesel	8,000		
	FEATURES & EMISSION		TYPICAL EQUIPMENT	APPLICATION		
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust Gas Recirculation, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst			Loader, Tractor, Harvester, Agricultural Equipment, Construction 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 oxidnes 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		EXHAUST (g/kW-hr)					OPACITY (%)		
POWER	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
420 - 1144 - 500	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
130 ≤ kW ≤ 560		CERT	0.10	0.22		0.1	0.01			

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 at El Monte, California on this

day of February 2019.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Attachment !

Engine Model Summary Template

U-R-067-0009 1-18-2019

Engine Family	1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross)	4. Fuel Rate mm/stroke@peak HP (for diesel only)	5. Fuel Rate (lbs/hr)@peak HP (for diesel only)	6. Torque @ RPM (SAE Gross)	7. Fuel Rate mm/stroke @ peak torque	8. Fuel Rate (lbs/hr) @ peak torque	9. Emission Control Device Per SAE J1930
KMNBL15.3OR4	D3876	LE123	485 kW @	327	194	3000 Nm @	400	178	ECM, DI, TC, CAC
			1800 RPM			1350 RPM			EGR, SCR-U, AMOX
KMNBL15.3OR4	D3876	LE127	450 kW @	269	160	2900 Nm @	330	142	ECM, DI, TC, CAC
			1800 RPM			1300 RPM			EGR, SCR-U, AMOX
	,								
KMNBL15.3OR4	D3876	LE131	415kW @	251	149	2700 Nm @	306	131	ECM, DI, TC, CAC
			1800 RPM `			1300 RPM			EGR, SCR-U, AMOX