

California Environmental Protection Agency Air Resources Board	MAN TRUCK & BUS AG	EXECUTIVE ORDER U-R-067-0004 New Off-Road Compression-Ignition Engines
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Pursuant to the authority vested in the 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)
2017	HMNBL24.2OR4	24.2	Diesel	8,000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst			Tractor, Harvester, Agricultural 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):

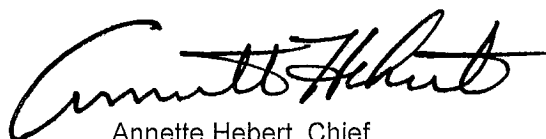
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
ELSE > 560 kW	Tier 4 Final	STD	0.19	3.5	N/A	3.5	0.04	N/A	N/A	N/A
		CERT	0.03	3.2	--	0.5	0.03	--	--	--

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 14 day of December 2016.



Annette Hebert, Chief
 Emissions Compliance, Automotive Regulations and Science Division

Engine Model Summary Template

U-R-067-0004

11-30-16

ATTACHMENT

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 diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque.	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
√BL24.2OR4	D2862	LE131	816 kW @ 1800 RPM	310	368	5000 NM @ 1350 RPM	345	308	ECM, DI, TC, CAC, SCR-U, AMOX
√BL24.2OR4	D2862	LE132	750 kW @ 1800 RPM	280	333	4790 NM @ 1300 RPM	320	275	ECM, DI, TC, CAC, SCR-U, AMOX
√BL24.2OR4	D2862	LE133	650 kW @ 1800 RPM	240	285	4151 NM @ 1300 RPM	280	240	ECM, DI, TC, CAC, SCR-U, AMOX
√BL24.2OR4	D2862	LE134	588 kW @ 1800 RPM	220	261	3754 NM @ 1300 RPM	250	215	ECM, DI, TC, CAC, SCR-U, AMOX