California Environmental Protection Agency Air Resources Board

DAIMLER AG

EXECUTIVE ORDER U-R-016-0118 New Off-Road Compression-Ignition Engines

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 engine and emission control system 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)		
2016	GMBXL15.6RJA	15.6	Diesel	8000		
	FEATURES & EMISSION		TYPICAL EQUIPMENT A			
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Engine Control Module, Oxidation Catalyst, Exhaust Gas Recirculation, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst			Loader, Tractor, Pump			

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), 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 STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER CLASS			NMHC	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
130 <u><</u> KW <u><</u> 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.01	0.29		0.5	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 at El Monte, California on this

_ day of December 2015.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

ATTACHMENT 10F1

W-R-016-0118 12/15/2015

Engine Model Summary Template									
Engine Family	1. Engine Code	2. Engine Model	3. BHP@RPM	4. Fuel Rate:	5. Fuel Rate:	6. Torque@RPM	7. Fuel Rate:	8. Fuel Rate:	9. Emission Control
			(SAE Gross)	mm/stroke@peak HP	(lbs/hr)@peak HP	(SAE Gross)	(lbs/hr)@peak	mm/stroke@peak	Device per SAE J1930
				(for diesel only)	(for diesel only)		torque	torque	
GMBXL15.6RJA	473LA.E4-1	OM473LA	460KW@1700	357.0	89.8 Kg/hr	2900Nm@1300	384.0	73.9 Kg/hr	DDI,TC, ECM, CAC, SCR, OC, EGR, AMOX
GMBXL15.6RJA	473LA.E4-2	OM473LA	430KW@1700	332.8	83.7 Kg/hr	2750Nm@1300	363.4	69.9 Kg/hr	DDI,TC, ECM, CAC, SCR, OC, EGR, AMOX
GMBXL15.6RJA	473LA.E4-3	OM473LA	400KW@1700	313.4	78.8 Kg/hr	2600Nm@1300	344.9	66.3 Kg/hr	DDI,TC, ECM, CAC, SCR, OC, EGR, AMOX