EXECUTIVE ORDER U-R-052-0029 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 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)
2016	GMDDL57.2XTM	57.2	Diesel	8,000
	FEATURES & EMISSION O		TYPICAL EQUIPMENT APPLIC	
Ele Char	ectronic Direct Injection, T ge Air Cooler, Electronic Exhaust Gas Recirci	Control Module,	Crane, Loader, Tractor, Dozer, Pump Mine Haul Truck	o, Compressor,

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			E	EXHAUST (g/kW-	hr)		OF	ACITY (%)
POWER CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
ELOE - 500 1141	T! 4 F!!	STD	0.19	3.5	N/A	3.5	0.04	N/A	N/A	N/A
ELSE > 560 kW	Tier 4 Final	CERT	0.07	3.0		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 at El Monte, California on this

Annette Hebert, Chief

day of June 2016.

Emissions Compliance, Automotive Regulations and Science Division

Engine Model Summary Template

ly 1.Eng	ine Code	Engine Family 1.Engine Code 2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP 6.Torque @ RPM · (for diesel only) (for diesels only) (SEA Gross)	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: 9.Emission Control (lbs/hr)@peak torqueDevice Per SAE J1930
7266	40	12V4000C65 2500@1800	2500@1800	710		10409@1710	743	DFI, TC, CAC, ECM, EGR
7267	_	12V4000C65 2500@1900	2500@1900	687	рання падагня в при	9740@1720	969	DFI, TC, CAC, ECM, EGR
7268	~	12V4000C15 1542@1800	1542@1800	452		7351@1494	523	DFI, TC, CAC, ECM, EGR
7269	o o	12V4000T95R 2253@1900	2253@1900	620		9035@1400	634	DFI, TC, CAC, ECM, EGR
7303	3	12V4000T95 2501@1900	2501@1900	682		10030@1400	269	DFI, TC, CAC, ECM, EGR
7302	12	12V4000T95L	2600@1900	710		10427@1400	725	DFI, TC, CAC, ECM, EGR