EXECUTIVE ORDER U-R-024-0027-1 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	GY9XL16.4DBA	16.4	Diesel	8000		
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION			
Electronic Cooler, E Selective C	c Direct Injection, Turbo Engine Control Module, S Catalytic Reduction-Urea Catalyst	charger, Charge Air Smoke Puff Limiter, , Ammonia Oxidation	Crane, Loader, Tractor, Dozer, Pump, 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		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER	STANDARD		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	0.11	3.2		0.2	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).

BE IT FURTHER RESOLVED: That the manufacturer has elected to include engine models in this engine family which are identified for "emergency vehicle use only". These "emergency vehicle use only" engines are exempt from requirements imposed pursuant to California law and the regulations adopted pursuant thereto for motor vehicle pollution control devices per California Vehicle Code Section 27156.2. The manufacturer must clearly label these engines for "emergency vehicle use only" on the engines' emission control label.

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.

This Executive Order hereby supersedes Executive Order U-R-024-0027 dated January 22, 2016

Executed at El Monte, California on this

day of August 2016.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

## ATTACHMENT 10F1

## **Engine ModelsEZ**

u-R-024-0027-1

RIC 8/01/2016

Engine Family	1.Engine Code	2.Engine Model	3.Dis- placement	4.Power kW @RPM	5.Fuel Rate: mm/stroke @ peak HP	6.Fuel Rate: (lbs/hr) @ peak HP	7.Torque Nm @ RPM	8.Fuel Rate: mm/stroke@ peak torque	9.Fuel Rate: (lbs/hr)@ peak torque	10.Emission Control Device
GY9XL16.4DBA	DC16 085A	2257387	16.4	566@2000	251	225	3183 @ 1500	323	217	DDI, ECM, TC, CAC, SPL, SCR, AMOX
Emergency	for the first of the second of	and a second and the		@	maken ngahanga dari bilindiga, semerar arangmar ngawanga kebulah di ang bilih arang m	mangamen ni akan mangaman ni mangang angang mini akan akan dan minibadi. Ai inangan	@	The ambient of agent give a supplied that he had been a supplied to the suppli		
GY9XL16.4DBA	DC16 092A	2553596	16.4	566@2000	251	225	3183 @ 1500	323	217	DDI, ECM, TC, CAC, SPL, SCR, AMOX