California Environmental Protection Agency	GLOBAL COMPONENT	EXECUTIVE ORDER U-R-066-0002
Ø■ Air Resources Board	TECHNOLOGIES CORPORATION	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	GNFXL03.0DD2	2.953	Diesel	8000
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION
Exhaust (c Direct Injection, Electro Gas Recirculation, Diese Periodic Trap Oxidizer, T	l Oxidation Catalyst,	Forklift	

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 CATEGORY		NMHC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
19 <u><</u> kW < 56	Tier 4 Final	STD	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A
		CERT			2.3	0.02	0.002			

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 for the listed engine models, the manufacturer has complied with the more stringent set of standards from the various power categories in conformance with Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for 2008 and Later Tier 4 Off-Road Compression-Ignition Engines, Part I-C" adopted October 20, 2005 and last amended October 25, 2012.

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 July 2015.

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

Global Component Technologies Corp Engine Model Summary Template

Nonroad CI

Attachment page 1 of

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				4.Fuel Rate:	5.Fuel Rate:		7.Fuel Rate:			
			3.BHP@RPM	mm/stroke @ peak HP (lbs/hr) @ peak HP 6.Torque @ RPM	(lbs/hr) @ peak HP	6. Torque @ RPM	mm/stroke@peak	8.Fuel Rate:	9. Emission Control	er 2
Engine Family	1.Engine Code	Engine Family 1.Engine Code 2.Engine Model	(SAE Gross)	(for diesel only) (for diesels only) (SEA Gross)	(for diesels only)	(SEA Gross)	torque	(lbs/hr)@peak torqueDevice Per SAE J1930	evice Per SAE J1930	
GNFXL03.0DD2	ZD30K04N	ZD30	73.8@2400	56.5		180.7@1800	61.5		DDI,EM,ECM,EGR, POC, PTOX.	POC, PTOX.
GNFXL03.0DD2	ZD30K05N	ZD30	63.0@2400	50.1		157.8@1900	55.0		DDI,EM,ECM, EGR, POC, PTOX	ouc, PTOX.
GNFXL03.0DD2	ZD30K06N	ZD30	48.3@1600	54.4		157.8@1600	54.4		DDI, EM, ECM, EGR, BCC, PTOX.	DC. PTOX.