CALIFORNIA AIR RESOURCES BOARD	GLOBAL COMPONENT TECHNOLOGIES CORPORATION	EXECUTIVE ORDER U-L-059-0025 New Off-Road Large Spark-Ignition Engines Above 19 Kilowatts

Pursuant to the authority vested in California Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapters 1 and 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

IT IS ORDERED AND RESOLVED: That the following new large spark-ignition engines and emission control systems produced by the manufacturer are certified for use in off-road equipment as described below. 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
2022	NNFXB02.147D	2.1	LPG

DURABILITY HOURS	SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT USAGE
5000	Throttle Body Injection, Three-Way Catalytic Converter, Heated Oxygen Sensor	Forklift

ENGINE MODELS (rated power in kilowatt, kW)	See Attachment

The following are the hydrocarbon plus oxides of nitrogen (HC+NOx) and carbon monoxide (CO) exhaust certification emission standards (Title 13, California Code of Regulations, (13 CCR) Section 2433(b)(1)) and certification emission levels for this engine family in grams per kilowatt-hour (g/kW-hr). Engines within this engine family shall have closed crankcases in conformance with 13 CCR Section 2433(b)(3).

	HC+NOx (g/kW-hr)	CO (g/kW-hr)
EXHAUST STANDARD	0.8	20.6
CERTIFICATION LEVEL	0.5	2.1

The following is the evaporative hydrocarbon emission standard (13 CCR Section 2433(b)(4)) and certification emission level for this engine family in grams per gallon of fuel tank capacity (g/gallon).

Evaporative Certification Method	HC Certification Level (g/gallon)	HC Certification Standard (g/gallon)
Design Based	N/A	N/A

BE IT FURTHER RESOLVED: That for the listed engines for the aforementioned model-year, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Section 2433(c) (certification and test procedures), 13 CCR Section 2434 (emission control labels), and 13 CCR Sections 2435 and 2436 (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 on this 21st day of November 2021.

Allen Lyons, Chief
Emissions Certification and Compliance Division

LSIE Exhaust Model Summary Template (rev. Aug 2021)

For CARB Use Only

Executive Order: U-L-059-0025
Attachment _1_of_1_

Date: September 16, 2021
Engine Family: NNFXB02.147D

Model Summary
(Use an asterisk (*) to identify worst-case engine model used for certification testing.)

		S15. Sales Codes (Check all appropriate)							
S13. Engine Model	**S14. Engine Code**	**CA Only**	**49-State**	**50-State**	**S16. Engine Displacement (Liters)**	**S17. Rated Power (kW)**	**S18. Rated Speed (RPM)**	**S19. Peak Torque (FT-LB)**	**S20. Peak Torque Speed (RPM)**
K21 N-2				✓	2.065	37.4	2700	145.4	1800
K21 M-2				✓	2.065	37.3	2700	145.1	1800
*K21 K-2				✓	2.065	38.8	2700	146.2	1800
K21 T-2				✓	2.065	37	2700	144.9	1800
K21 D-2				✓	2.065	37.2	2450	151.6	1600
K21 H-2				✓	2.065	40	2700	150	2000
GK21 N-2				✓	2.065	37.4	2700	145.4	1800
GK21 M-2				✓	2.065	37.3	2700	145.1	1800
*GK21 K-2				✓	2.065	38.8	2700	146.2	1800
GK21 T-2				✓	2.065	37	2700	144.9	1800
GK21 D-2				✓	2.065	37.2	2450	151.6	1600
GK21 H-2				✓	2.065	40	2700	150	2000