

GLOBAL COMPONENT TECHNOLOGIES CORPORATION

EXECUTIVE ORDER U-L-059-0023 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 NAME	ENGINE DISPLACEMENT (liters)	FUEL TYPE			
2021	MNFXB02.548D	2.5				
DURABILITY HOURS		AL FEATURES & CONTROL SYSTEMS	TYPICAL EQUIPMENT USAGE			
5000	Converter,	ection, Three-Way Catalytic Heated Oxygen Sensor	Forklift			
	NE MODELS er 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).

(g/kW-hr)	HC+NOx	со		
Exhaust Standards	0.8	20.6		
Certification Levels	0.3	7.2		

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).

Ī	Evaporative Certification Method	HC Certification Level (g/gallon)	HC Certification Standard (g/gallon)		
	Design Based	N/A	0.2		

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 at El Monte, California on this 2574 day of February 2020.

Allen Lyons, Chief

Emissions Certification and Compliance Division

AMACHMENT B lot 2

Model Year: 2021

Manufacturer Name: Global Component Technologies Corporation
Engine Family: MNFXB02.548D

OFF-ROAD LSI ENGINE SUPPLEMENTAL INFORMATION

Page: issued: 01/21/2020 Revised: 02/06/2020

E.O.#: 4-1-059-0023

S12. MODEL SUMMARY (For K25) (Use an asterisk (*) to identify worst-case engine model used for certification testing.)

S13.	S14.	S15.			S16.	S17.	649	S19.	620
Engine Model	Engine	Sales Codes (Check ALL appropriate)		Eng.	Rated	S18. Rated	Peak	S20. Peak	
Lingino moto.	Code			appropriate) Displ.	Displ. (Liters)	Power (kW)	Speed (RPM)	Torque (Nm)	Torque Speed
		Calif. Only	49- State	50- State	(Elicia)	(800)	(ra wi)	((411)	(RPM)
K25 N-2				٧	2.488	41.7	2700	182.9	1620
K25 M-2				٧	2.488	41.8	2700	182.7	1620
K25 K-2				٧	2.488	41.7	2700	183.4	1620
*K25 T-2				V	2.488	42.0	2800	182.9	1680
K25 D-2				٧	2.488	48.8	2600	191.0	1600
K25 H-2				٧	2.488	45.8	2700	187.0	1600
K25 D-5				٧	2.488	44.0	2600	180.2	1600

ATTACHMENT B Zof Z Page: Page: Issued:

Model Year: __2021__
Manufacturer Name: __Global Component Technologies Corporation__
Engine Family: __MNFXB02.548D__
OFF-ROAD LSI ENGINE SUPPLEMENTAL INFORMATION

01/21/2020 Revised: 02/06/2020 . E.O.#: 4-6-059 -0923

S12. MODEL SUMMARY (For GK25) (Use an asterisk (*) to identify worst-case engine model used for certification testing.)

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S13.	S14.	S15. Sales Codes (Check ALL appropriate)			Sales Codes	S16. Eng.	S17.	S18. Rated	S19. Peak	S20. Peak
Engine Model	Engine Code				Displ. (Liters)	Power (kW)	Speed (RPM)	Torque (Nm)	Torque Speed	
		Calif. Only	49- State	50- State	(Liters)	(800)	(IXP M)	(((())	(RPM)	
GK25 N-2				V	2.488	41.7	2700	182.9	1620	
GK25 M-2				V	2.488	41.6	2700	182.7	1620	
GK25 K-2				٧	2.488	41.7	2700	183.4	1620	
*GK25 T-2				٧	2.488	42.0	2800	182.9	1680	
GK25 D-2				V	2.488	46.8	2600	191,0	1600	
GK25 H-2				٧	2.488	46.8	2700	187.0	1600	
GK25 D-5				v	2.488	44.0	2600	180.2	1600	
GK25 Z-2				V	2.488	47.0	2700	188.0	1600	

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