## **KUBOTA CORPORATION**

EXECUTIVE ORDER U-L-016-0154

New Off-Road Large Spark-Ignition
Engines Above 19 Kilowatts

Pursuant to the authority vested in the 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	NKBXB02.5HFA	2.5	Gasoline, LPG, CNG, Gasoline-LPG Dual Fuel, LPG-CNG Dual Fuel, Gasoline-LPG-CNG Multi-Fuel		
DURABILITY HOURS		IAL FEATURES & I CONTROL SYSTEMS	TYPICAL EQUIPMENT USAGE		
5000 Heated Multiport F		/ay Catalytic Converter, d Oxygen Sensor (2), Forklift, Aerial Lift, Sweeper, Compressor, Tractor/T Fuel Injection (Gasoline), Fuel Mixer (LPG, CNG)			
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	0.4	6.7		

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	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 on this /9th day of December 2021.

Allen Lyons, Chief

Emissions Certification and Compliance Division

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

S13. Engine Model	S14. Engine Code		\$15.						
		CA Only	Codes (Check all ar 49-State	propriate) 50-State	S16. Engine Displacement	S17. Rated Power (kW)	S18. Rated Speed (RPM)	S19. Peak Torque (FT-LB)	S20. Peak Torque Speed (RPM)
					(Liters)	Rated Power (kW)	касей эреей (кРМ)	reak lorque (FI-LB)	Peak Torque Speed (KPM)
WG2503-G-ET	WG2503-G-ET01			X	2.491	43.10	2700	168.1	1800
WG2503-GL-ET	WG2503-GL-ET01			Х	2.491	43.80	2700	172.4	1400
WG2503-GLN-ET*	WG2503-GLN-ET01			Х	2.491	43.80	2700	172.4	1400
WG2503-L-ET	WG2503-L-ET01			Х	2.491	43.80	2700	172.4	1400
WG2503-LN-ET	WG2503-LN-ET01			Х	2.491	43.80	2700	172.4	1400
WG2503-N-ET	WG2503-N-ET01			X	2.491	40.70	2700	161.6	1200

For CARB Use Only Executive Order: U-L-016-0154

Attachment \_\_1\_\_of\_\_1\_