KUBOTA CORPORATION

EXECUTIVE ORDER U-L-016-0144

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		
2021	MKBXB03.8CFA	3.8	Gasoline, LPG, NG, Gasoline-LPG Dual Fuel, LPG-NG Dual Fuel		
DURABILITY HOURS		CIAL FEATURES & I CONTROL SYSTEMS	TYPICAL EQUIPMENT USAGE		
5000	Heated Gas	ay Catalytic Converter, I Oxygen Sensor (2), seous Fuel Mixer, port Fuel Injection	Forklift, Aerial Lift, Generator, Sweeper, Pump, Tractor/Tug		
	GINE MODELS wer 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	0.3	3.1		

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	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 <u>30th</u> day of December 2020.

Allen Lyons, Chief

Emissions Certification and Compliance Division

For CARB Use Only

Executive Order: U-L-016-0144

Attachment __1_ of __1__

Date:

Engine Family: MKBXB03.8CFA

Model Summary

S13. Engine Model (Use an asterisk (*) to identify worst-case engine model used for	S14. Engine Code	S15. Sales Codes (Check all appropriate)		S16. Engine Displacement	S17. Rated Power (kW)	S18. Rated Speed (RPM)	S19. Peak Torque (FT- LB)	S20. Peak Torque Speed (RPM)	
certification testing.)		CA Only	49-State	50-State	(Liters)				
WG3800-G-ET	WG3800-G-ET01			X	3.770	58.04	2600	189.36	1100
WG3800-GL-ET	WG3800-GL-ET01			Χ	3.770	60.70	2600	199.88	1200
WG3800-L-ET*	WG3800-L-ET01			Χ	3.770	62.63	2600	203.40	1200
WG3800-L-EW	WG3800-L-EW01			Х	3.770	62.63	2600	203.40	1200
WG3800-LN-ET	WG3800-LN-ET01			Χ	3.770	62.63	2600	203.40	1200
WG3800-N-ET	WG3800-N-ET01			Χ	3.770	54.31	2600	163.01	1400
WG3800-N-EW	WG3800-N-EW01			X	3.770	54.31	2600	163.01	1400