

KUBOTA CORPORATION

EXECUTIVE ORDER U-L-016-0140

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	MKBXB01.9GFA	1.9	Gasoline, LPG, CNG, Gasoline-LPG Dual Fuel, LPG-CNG Dual Fuel
DURABILITY HOURS		IAL FEATURES & I CONTROL SYSTEMS	TYPICAL EQUIPMENT USAGE
5000	Heated Multiport F	ay Catalytic Converter, Oxygen Sensor (2), uel Injection (Gasoline), Fuel Mixer (LPG, CNG)	Forklift, Generator, Sweeper, Tractor/Tug, Pump
	INE MODELS ver 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	0.2	2.4

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 6th day of December 2020.

Állen ∕Lyons, Chief

Emissions Certification and Compliance Division

LSIE Exhaust Model Summary Template (rev. 2020)

Executive Order: U-L-016-0140 Attachment __1_ of __1_

For CARB Use Only

MKBXB01.9GFA Date: Engine Family:

Model Summary

Peak Torque Speed (RPM)			1800	1800	1800 1800 1800	1800	1800 1800 1800 1400	1800 1800 1800 1400	1800 1800 1800 1400 1400	1800 1800 1800 1400 1400 1200	1800 1800 1800 1800 1400 1400 1200
Peak Torque (FT-LB)		92.12		92.12	92.12	92.12 92.12 92.12	92.12 92.12 92.12 100.50	92.12 92.12 92.12 100.50	92.12 92.12 92.12 100.50 100.50	92.12 92.12 92.12 100.50 100.50 100.50	92.12 92.12 92.12 100.50 100.50 100.50 93.82
Rated Speed P (RPM)		2700	2700	0026	0017	2700	2700	2700 2700 2700	2700 2700 2700 2700	2700 2700 2700 2700 2700	2700 2700 2700 2700 2700 2700
Rated Power (kW)		32.59	32,59	32.59		32.59	32.59	32.59 32.59 32.59	32.59 32.59 32.59 32.59	32.59 32.59 32.59 32.59 30.62	32.59 32.59 32.59 32.59 30.62
Engine F	(Liters)	1.868	1.868	1,868		1,868	1.868	1.868	1.868	1.868 1.868 1.868 1.868	1.868 1.868 1.868 1.868 1.868
ck all	50-State	×	×	×	×		×	: × ×	× × ×	× × × ×	× × × × ×
les Codes (Check all appropriate)	49-State										
Sales	CA Only										
Engine Code		WG1903-G-ET01	WG1903-G-ET01L	WG1903-GL-ET01	WG1903-GL-ET01L		WG1903-L-ET01	WG1903-L-ET01 WG1903-L-ET01L	WG1903-L-ET01 WG1903-L-ET01L WG1903-LN-ET01	WG1903-L-ET01 WG1903-L-ET01L WG1903-LN-ET01 WG1903-N-ET01L	WG1903-L-ET01 WG1903-L-ET01L WG1903-LN-ET01 WG1903-N-ET01L WG1903-LN-ET01L
Engine Model (Use an asterisk (*) to identify	worst-case engine model used for certification testing.)	WG1903-G-ET	WG1903-G-ET01L W	WG1903-GL-ET W	WG1903-GL-ET01L* W				WG1903-L-ET W WG1903-L-ET01L W		