

 CALIFORNIA AIR RESOURCES BOARD	JOHN DEERE	EXECUTIVE ORDER U-L-055-0010 New Off-Road Large Spark-Ignition Equipment
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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 equipment produced by the manufacturer is certified as described below. Production equipment shall be in all material respects the same as those for which certification is granted.

ENGINE DESCRIPTION			
MANUFACTURER	ENGINE FAMILY (E.O. NUMBER)	ENGINE SIZE (cc)	FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)
KOHLER COMPANY	LKHXB.8242KG (U-L-021-0074) KKHXB.8242KG (U-L-021-0069)	824	Gasoline
POWER SOLUTIONS INTERNATIONAL, INC.	KPSIB.9982GA (U-L-011-0084)	970, 998	Gasoline
YAMAHA MOTOR CO., LTD.	KYMXB.8242EK (U-L-024-0011) LYMXB.8242EK (U-L-024-0013) KYMXB.8242EH (U-L-024-0010) LYMXB.8242EH (U-L-024-0012)	824	Gasoline
S.A. = See Attachment; TBC = To Be Certified			
EQUIPMENT DESCRIPTION			
MODEL YEAR	EVAPORATIVE FAMILY	FUEL TANK NOMINAL CAPACITY (liters)	EQUIPMENT APPLICATION
2021	JDXCC2	30.8, 42.3	ZTR – Commercial, Other
EMISSION CONTROL SYSTEMS (ECS)		ENGINE and/or EQUIPMENT MODEL	
Canister/Co-extruded		See Attachment	
A. ECS TYPE (Venting Control Type/Tank Barrier Type): 1. Venting Control Type and Code :- Canister=C Sealed Tank=S Other=O 2. Tank Barrier Type and Code :- Metal=M Treated HDPE or PE=P Co-extruded=C Selar=L Nylon=N Acetal=A Other=O B. EVAPORATIVE FAMILY 2-Letter CODE (Venting Control Codes =C, S, O); (Tank Barrier Codes = M, P, C, L, N, A, O). Note: Always list venting control type or code first before tank barrier type or code. Do not use abbreviations for ECS types.			

The following are the evaporative emission standard (Title 13, California Code of Regulations, Section 2433(b)(4)(B), as applicable), and certification level in g organic material hydrocarbon equivalent·day⁻¹. The running loss emissions control has been demonstrated by the manufacturer.

*=not applicable	DIURNAL EMISSION STANDARD (g organic material hydrocarbon equivalent·day ⁻¹)		
STANDARD	EVAPORATIVE FAMILY EMISSION LIMIT DIFFERENTIAL (EFELD)	EVAPORATIVE MODEL EMISSION LIMIT (EMEL)	CERTIFICATION LEVEL
1.20 + 0.056 × Nominal Capacity (L)	3.0	= (STANDARD) – (EFELD)	0.6

BE IT FURTHER RESOLVED: That the evaporative model emission limit (EMEL), as applicable, is the diurnal emissions level declared by the manufacturer based on diurnal test results for a worst-case engine or equipment model within an evaporative family. No engine or equipment emissions within the evaporative family could be closer to its respective standard than the evaporative family emission limit differential (EFELD) calculated from the declared EMEL for the worst-case engine or equipment.

BE IT FURTHER RESOLVED: That the evaporative family emission limit differential (EFELD), as applicable, is an emission level differential between the effective standard level for a specific model representing the entire evaporative family and the EMEL declared for the specific model. It serves as the applicable evaporative emission standard for determining compliance on a corporate average basis of any equipment within this evaporative family under 13 CCR Sections 2754.1.

BE IT FURTHER RESOLVED: That for the listed equipment, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Section 2433(d) (certification and test procedures), 13 CCR Section 2759 (labeling), Section 2774 (bond requirements) and 13 CCR Sections 2760 and 2764 (emission control system warranty).

Equipment certified under this Executive Order must conform to all applicable California emission regulations.



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AIR RESOURCES BOARD

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New Off-Road Large Spark-Ignition
Equipment

This Executive Order is only granted to the evaporative family and model-year listed above. Equipment in this family that is produced for any other model-year is not covered by this Executive Order.

Executed on this 28TH day of June 2020.

Allen Lyons, Chief
Emissions Certification and Compliance Division

SUPERSEDED

Large Off-Road Evaporative Certification Database Form

MODEL SUMMARY

S1. Worst Case (Check One)	S2. Model	S3. Sales Codes (check all appropriate)		S4. Engine Class (I or II)	S5. Fuel System (FI or CARB)	S6. Fuel Tank Volume (Liters)		S7. Fuel Tank Internal Surface Area (m ²)	S8. Fuel Line Type (e.g. Single or Multi-layer)	S9. Nominal Fuel Line Length ⁽¹⁾ (mm)	S10. Fuel Line Inside Diameter (mm)	S11. Engine Family	S12. Fuel Tank Executive Order	S13. Fuel Line Executive Order	S14. Carbon Canister (or Working Capacity (g/L))/ Other Venting Control Executive Order
		CA Only	50-State			Total	Nominal								
	2020A		X	II	FI	35.2	30.8	0.68	Multi-Layer	1619	6.35	KPSIB.9982GA	See Certification Data	Q-19-002	Q-19-064
	Z945M		X	II	FI	48.3	42.3	1.2	Multi-Layer	855	6.35	KKHXB.8242KG LKHXB.8242KG	See Certification Data	Q-19-002	Q-19-056
X	Z955M Z955R		X	II	FI	48.3	42.3	1.2	Multi-Layer	855	6.35	KYMXB.8242EK LYMXB.8242EK	See Certification Data	Q-19-002	Q-19-056
	Z965M		X	II	FI	48.3	42.3	1.2	Multi-Layer	855	6.35	KYMXB.8242EH LYMXB.8242EH	See Certification Data	Q-19-002	Q-19-056
	Z955M Z955R		X	II	FI	48.3	42.3	1.2	Multi-Layer	855	6.35	KKHXB.8242KG LKHXB.8242KG	See Certification Data	Q-19-002	Q-19-056

(1) The nominal fuel line lengths can be grouped into increment of ± 3 inches (76 mm)