EXECUTIVE ORDER U-W-002-0177-1 New Spark-Ignition Marine Engines

O Air Resources Board

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43013, 43018, 43101, 43102 and 43104; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following new spark-ignition marine engine and emission control systems (ECS) produced by the manufacturer are certified as described below. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR ENGINE FAMILY		FUEL TYPE	DISPLACEMENT (cc)	LEVEL OF CLEANLINES		
2017	HSKXM2.872K8	Gasoline	2867	Ultra Low Emission ("Three Stars")		
EQUIPMENT	APPLICATION		CIAL FEATURES	ENGINE TYPE		
Outboard		Multiport	Exygen Sensor Fuel Injection	4-Stroke		
ENGINE MODELS (rated power in kilowatts, kW)			See Attachment			

BE IT ORDERED AND RESOLVED: That the listed engines are certified to a hydrocarbon plus oxides of nitrogen (HC+NOx) family emission limit (FEL) and a carbon monoxide (CO) direct standard in accordance with a plan submitted by the manufacturer to, and approved by, the Executive Officer for compliance with the exhaust emission standards on a corporate average basis pursuant to Title 13, California Code of Regulations, (13 CCR) Section 2442(a). The HC+NOx FEL and the CO standard shall be the applicable emission standards for this engine family for determining compliance of any engine within this engine family pursuant to 13 CCR Sections 2444.1 (in-use compliance) and 2446 (audit testing). The standards and certification emission levels in grams per kilowatt-hour (g/kW-hr) for this engine family are as follows. Engines in this engine family shall have closed crankcases in conformance with Part I, Section 18(h) of the "California Exhaust Emission Standards and Test Procedures for 2001 Model-Year and Later Spark-Ignition Marine Engines."

*=not applicable	HC+NOx (g/kW-hr)	CO (g/kW-hr)
STANDARD	*	300.0
FAMILY EMISSION LEVEL	16.30	*
CERTIFICATION LEVEL	13.80	101.1

Compliance with the emission standards on a corporate average basis shall be determined pursuant to 13 CCR Section 2442(a) based on the sales-weighted average power of all engines produced for sale in California that are included in the approved corporate average compliance plan for the model-year.

BE IT FURTHER RESOLVED: That for the listed engines, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Sections 2443.1, 2443.2 and 2443.3 (emission control, consumer, and environmental labels), and Sections 2445.1 and 2445.2 (emission control system warranty).

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

Quarterly reports of engines produced in this engine family for sale in California shall be submitted to the Executive Officer no later than 45 days after the end of each calendar quarter pursuant to 13 CCR Sections 2442(a)(2)(B) and 2446.

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.

This Executive Order hereby supersedes Executive Order U-W-002-0177 dated July 20, 2016.

Executed at El Monte, California on this & day of October 2016.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

ATTACHMENT (page 1 of 2)

Model Year: 2017

Manufacturer Name: Suzuki Motor Corporation

Engine Family: <u>HSKXM2.872K8</u>
SI MARINE ENGINE SUPPLEMENTAL INFORMATION

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S09. PROJECTED SALES AND PRODUCTION PERIO	RIOD
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CONFIDENTIAL Projected 50 State Sales (units)

a. Projected California Annual Sales (units):

b. Estimated Production Period: Start Date:

End Date: c. Estimated Introduction into Commerce Date:

S10. MODEL SUMMARY (Use an asterisk (*) to identify "worst-case" engine model used for certification testing.)

S11. Engine Model	S12. Engine Code	S13. Sales Codes (Check ALL appropriate)		S14. Eng. Displ.	S15. Rated Power	S16. Rated Speed	S17. Peak Torque	S18. Peak Torque	
	Code	Calif. Only	49- State	50- State	(cc)	(kW)	(RPM)	(N-m)	Speed (RPM)
DF150TL/ DF150TL2 DF150TLW/ DF150TLW2/ DF150TX/ DF150TXZ/ DF150TXW/ DF150TXZ/ DF150TXZ/ DF150TXZ/ DF150TXZW/ DF150TXZW/ DF150TXZW/ DF150TXZW/ DF150TXSS/ DF150TLSS/ DF150TXSS/				x	2,867	110	5,500	235	4,500
DF175TL/ DF175TLW/ DF175TLW/ DF175TLW2/ DF175TX2/ DF175TXW/ DF175TXW/ DF175TXZ/ DF175TXZ/ DF175TXZ/ DF175TXZ/ DF175TXZW/ DF175TXZW/ DF175TXZW/				х	2,867	129	5,800	245	4,500
DF150APL/ DF150APL2/ DF150APLW/ DF150APLW2/ DF150APX/ DF150APX2/ DF150APXW/ DF150APXW/				х	2,867	110	5,500	249	4,000

ATTACHMENT (page 2 of 2)

Model Year: 2017
Manufacturer Name: Suzuki Motor Corporation
Engine Family: HSKXM2.872K8
SI MARINE ENGINE SUPPLEMENTAL INFORMATION

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DF175APL/ DF175APL2/ DF175APLW/ DF175APLW2/ DF175APX/ DF175APX2/ DF175APXW DF175APXW	x	2,867	129	5,800	249	4,000
*DF200ATL/ DF200ATLA/ DF200ATLW/ DF200ATLW/ DF200ATX/ DF200ATXW/ DF200ATXW/ DF200ATXW/ DF200ATXZ/ DF200ATXZ/ DF200ATXZ/ DF200ATXZ/ DF200ATXZW DF200ATXZW DF200ATXZW DF200ATXZW DF200ATXZW2 DF200ATXSS2	x	2,867	147	5,800	249	4,000
DF200APL/ DF200APL2/ DF200APLW/ DF200APLW2/ DF200APX/ DF200APX2/ DF200APXW/ DF200APXW/	x	2,867	147	5,800	249	4,000