Joseph J.

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-W-7-1
Relating to Certification of
New Spark-Ignition Marine Engines

KAWASAKI HEAVY INDUSTRIES, LTD.

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

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following new spark-ignition marine engine and exhaust emission control system produced by the manufacturer are certified as described below.

Model Year: 2001

Fuel Type: Gasoline Engine Type: 2-stroke

Level of Cleanliness: Low Emission ("One Star")

Equipment Application: Personal Watercraft

Engine Family: 1KAXM1.074CA

Displacement: 1071 cc

Exhaust Emission Control Systems and Special Features:

Direct Fuel Injection

Engine models are listed on the attachment. Production engines shall be in all material respects the same as those for which certification is granted.

BE IT FURTHER RESOLVED: That the manufacturer has opted to certify, and has certified the listed engines to the hydrocarbon plus oxides of nitrogen (HC+NOx) exhaust emission standard described below, expressed in grams per kilowatt-hr (g/kW-hr) under Section 2442(b) of Title 13, California Code of Regulations (13 CCR).

HC + NOx (estimated) Standard	Certification Level
46.05	39.86

Compliance with the standard under 13 CCR Section 2442(b) shall be determined based on the sales-weighted average power of the engine family based on engines produced in this family for sale in California. This engine family shall not be used to determine compliance through corporate averaging.

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 the following California emission regulations and requirements. Engines certified under this Executive Order shall conform to all applicable California emission regulations and requirements:

- All applicable requirements in the "California Exhaust Emission Standards and Test Procedures for 2001 Model Year and Later Spark-Ignition Marine Engines"

- Emission Control Labeling and Consumer/Environmental Labeling (13 CCR, Sections 2443.1, 2443.2 and 2443.3)

- Emission Control System Warranty (13 CCR, Sections 2445.1 and 2445.2)

- Closed Crankcases (Part 1, Section 18.(h) of the "California Exhaust Emission Standards and Test Procedures for 2001 Model Year and Later Spark-Ignition Marine Engines")

- Quarterly reports of engines produced in this family for sale in California shall be submitted to the Executive Officer no later than 45 days after the end of each calendar quarter.

Executed at El Monte, California this 12th day of April 2001.

Raphael Susnowitz

for R. B. Summerfield, Chief
Mobile Source Operations Division

Model Year: 2001
Manufacturer Name: KAWASAKI
Engine Family: 1 KAXM 1.074 CA
SI MARINE ENGINE SUPPLEMENTAL INFORMATION

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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. (cc)	S15. Rated Power (kW)	S16. Rated Speed (RPM)	S17. Peak Torque (N-m)	S18. Peak Torque Speed (RPM)
		Calif. Only	49-State	50-State					
JT1100-F*				✓	1071	95.60	7000	144	6250
JH1100-B				✓	1071	95.60	7000	144	6250