State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-W-1-20
Relating to Certification of
New Spark-Ignition Marine Engines

MERCURY MARINE

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: 2002

Fuel Type: Gasoline Engine Type: 4-Stroke

Level of Cleanliness: Ultra Low Emission ("Three Stars")

Equipment Application: Outboard

Engine Family: 2M9XM01.62G0

Displacement: 1596 cc

Exhaust Emission Control Systems and Special Features:

Engine Modification

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 hydrocarbons plus oxides of nitrogen (HC+NOx) exhaust emission standard described below, expressed in grams per kilowatt-hour (g/kW-hr) under Section 2442(b) of Title 13, California Code of Regulations (13 CCR).

HC + NOx (estimated) Standard	Certification Level
16.90	14.12

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 4th day of April 2001.

R. B. Summerfield, Chief
Mobile Source Operations Division

Model Year: _2002_____
Manufacturer Name: ____Mercury Marine_____
Engine Family: ____2M9XM01.62G0_____
SI MARINE ENGINE SUPPLEMENTAL INFORMATION.

Page: _____
Issued: _____
Revised: _____
E.O.#: U-W-120

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

S11 Model Designation	S12 Engine Code	S13 Sales Codes (Check all appropriate codes)			S14 Eng. Disp. (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					
1F75412ZD				X	1596	55.95	5000	207	3500
1F75412ZN				X	1596	55.95	5000	207	3500
1F75412ZR				X	1596	55.95	5000	207	3500
7F75412LD				X	1596	55.95	5000	207	3500
7F75412LR				X	1596	55.95	5000	207	3500
1F90412ZD				X	1596	67.14	5500	271	4500
1F90412ZN				X	1596	67.14	5500	271	4500
1F90412ZR				X	1596	67.14	5500	271	4500
1F90422ZY				X	1596	67.14	5500	271	4500
7F90412LD				X	1596	67.14	5500	271	4500
7F90412LR				X	1596	67.14	5500	271	4500
7F90422LY				X	1596	67.14	5500	271	4500