

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-W-1-18
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: 2-Stroke

Level of Cleanliness: Very Low Emission ("Two Stars")

Equipment Application: Outboard

Engine Family: 2M9XM02.52C0

Displacement: 2507 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 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).


<u>HC + NOx (estimated) Standard</u>	<u>Certification Level</u>
36.50	22.34

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: 2001
 Manufacturer Name: Mercury Marine
 Engine Family: 2M9XM02.52C0
 SI MARINE ENGINE SUPPLEMENTAL INFORMATION.

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 Revised: 1/23/02
 E.O.#: U-W-1-18

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					
1150D73ZT				X	2507	111.9	5500	522	3000
1150D73ZY				X	2507	111.9	5500	522	3000
1150D83ZD				X	2507	111.9	5500	522	3000
1150D73ZD				X	2507	111.9	5500	522	3000
1150D83ZY				X	2507	111.9	5500	522	3000
1150D84ZY				X	2507	111.9	5500	522	3000
7150D73LD				X	2507	111.9	5500	522	3000
7150D83LY				X	2507	111.9	5500	522	3000
7150D84LY				X	2507	111.9	5500	522	3000
1175D73ZD				X	2507	130.55	5500	510	3250
7175D73LD				X	2507	130.55	5500	510	3250
1920361ZH				X	2507	149	6500	553.25	4000
1920362ZH				X	2507	149	6500	553.25	4000
1920371ZH				X	2507	149	6500	553.25	4000
1920375ZH				X	2507	149	6500	553.25	4000
1175D83ZD				X	2507	130.55	5500	510	3250
1150D83ZC				X	2507	111.9	5500	522	3000
1150D84ZC				X	2507	111.9	5500	522	3000
1175D83ZC				X	2507	130.55	5500	510	3250

Originally 1175D73ZD which
 already listed above.