

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER U-W-6-1  
Relating to Certification of  
New Spark-Ignition Marine Engines

OUTBOARD MARINE CORPORATION

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: Very Low Emission ("Two Stars")

Equipment Application: Outboard

Engine Family: 11PXM0158220

Displacement: 2589 cc

Exhaust Emission Control Systems and Special Features:

Electronic Control Module  
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-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>
36.63	31.04

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.

BE IT FURTHER RESOLVED: That the certification to 13 CCR Section 2443.3 described herein is conditioned on approval of that section by California's Office of Administrative Law pursuant to Government Code Section 11349.4.

Executed at El Monte, California this 15<sup>TH</sup> day of June 2000.

Handwritten signature of R. B. Summerfield in black ink, with the initials "FOR" written to the right of the signature.

R. B. Summerfield, Chief  
Mobile Source Operations Division

ATTACHMENT

Model Year: 2001  
 Manufacturer Name: Outboard Marine Corporation  
 Engine Family: 11PXM0158220

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 Issued: \_\_\_\_\_  
 Revised: \_\_\_\_\_  
 E.O. #: U-W-6-L

SI Marine Engine Model Summary Form

45. Model Designation	46 Sales Codes			47. Disp. (cc)	48. Bore/Stroke (mm)	49. Basic Ignition Timing (deg @ idle)	50. Power (kW)	51. Rated Speed (RPM)	52. Rated Torque (N·m)	53. Torque Speed (RPM)	54. ECS
	Call. Only	49-State	50-State								
E135FSLSF			X	2589	91.44/65.74	Determined by ECM	100.7	5000	357.1	5000	ECM,DFI
E135FPLSF			X	2589	91.44/65.74	Determined by ECM	100.7	5000	357.1	5000	ECM,DFI
E135FPXSIF			X	2589	91.44/65.74	Determined by ECM	100.7	5000	357.1	5000	ECM,DFI
E135FCXSIF			X	2589	91.44/65.74	Determined by ECM	100.7	5000	357.1	5000	ECM,DFI
RE135FLSIF			X	2589	91.44/65.74	Determined by ECM	100.7	5000	357.1	5000	ECM,DFI
RE135FXSIF			X	2589	91.44/65.74	Determined by ECM	100.7	5000	357.1	5000	ECM,DFI
RE135FCSIF			X	2589	91.44/65.74	Determined by ECM	100.7	5000	357.1	5000	ECM,DFI
E150FPLSIF			X	2589	91.44/65.74	Determined by ECM	111.9	5000	396.7	5000	ECM,DFI
E150FSLSIF			X	2589	91.44/65.74	Determined by ECM	111.9	5000	396.7	5000	ECM,DFI
E150FPXSIF			X	2589	91.44/65.74	Determined by ECM	111.9	5000	396.7	5000	ECM,DFI
E150FCXSIF			X	2589	91.44/65.74	Determined by ECM	111.9	5000	396.7	5000	ECM,DFI
RE150FLSIF			X	2589	91.44/65.74	Determined by ECM	111.9	5000	396.7	5000	ECM,DFI
RE150FSSIF			X	2589	91.44/65.74	Determined by ECM	111.9	5000	396.7	5000	ECM,DFI
RE150FXSIF			X	2589	91.44/65.74	Determined by ECM	111.9	5000	396.7	5000	ECM,DFI
RE150FCSIF			X	2589	91.44/65.74	Determined by ECM	111.9	5000	396.7	5000	ECM,DFI

Note: The Rated Torque (Item 52) is the calculated propeller shaft torque based on the gear ratio of the gearbox and the Rated Power (Item 50) and the Rated Speed (Item 51) of the engine.