MERCURY MARINE

EXECUTIVE ORDER U-W-001-0066-1 New Spark-Ignition Marine Engines

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code Sections 43013, 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-02-003;

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 CLEANLINESS		
2004	4M9XM06.2GME	Gasoline	6200	Ultra Low Emission ("Three Stars")		
EQUIPMENT APPLICATION Inboard & Sterndrive		ECS & SPE	ENGINE TYPE			
		Multiport	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) in accordance with a plan submitted by the manufacturer to, and approved by, the Executive Officer for compliance with the exhaust emission standard on a corporate average basis pursuant to Title 13, California Code of Regulations, (13 CCR) Section 2442(b). The FEL shall be the applicable emission standard for this engine family for determining compliance of any engine within this engine family pursuant to 13 CCR Sections 2444.1 (in-use compliance). The FEL and certification emission level 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."

	FAMILY EMISSION LIMIT (g/kW-hr)	CERTIFICATION LEVEL (g/kW-hr)			
HC+NOx	16.0	12.3			

Compliance with the emission standard on a corporate average basis shall be determined pursuant to 13 CCR Section 2442(b) based on the sales-weighted average 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.

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-001-0066 dated July 21, 2003.

Executed at El Monte, California on this 13 day of December 2004.

Allen Lyons, Chief

Mobile Source Operations Division

ATTACHMENI 10F2

Model Year:

2004

Engine Family: 4M9XM06.2GME

Manufacturer Name: Mercury MerCruiser

Page:

Issued: 1/21/03

SI MARINE ENGINE SUPPLEMENTAL INFORMATION.

Revised: 12/9/104 N. E.O.#: U-W-001-0066-

S11. MODEL SUMMARY (Use asterisk to identify worst-case engine model used for certification testing)

S12 Model	S13 Engine	S14 Sales Codes (Check all appropriate codes)		S15 Eng.	. S16 Rated	S17 Rated	S18 Peak	S19 Peak	
Designation	Code			Disp.	Power (kW)	Speed (RPM)	Torque (N-m)	Torque Speed	
		Calif.	49				. *	(11)	(RPM)
		Only	State	50-State	•				
*44R42227RS				X	6200	238.6	5200	488.2	3500
44R4222RRS				X	6200	238.6	5200	488.2	3500
44R4222LRS				X	6200	238.6	5200	488.2	3500
44R42237RS				Χ	6200	238.6	5200	488.2	3500
44R4223RRS		,		X	6200	238.6	5200	488.2	3500
44R4223LRS				X	6200	238.6	5200	488.2	3500
44R42257RS				Х	6200	238.6	5200	488.2	3500
44R4222HRS				Х	6200	238.6	5200	488.2	3500
44R4223HRS				X	6200	238.6	5200	488.2	3500
440620001S				Х	6200	238.6	5200	488.2	3500
44R4225LRS				Х	6200	238.6	5200	488.2	3500
440620003S				X	6200	238.6	5200	488.2	3500
44R4225HRS				Х	6200	238.6	5200	488.2	3500
330620063S				X	6200	238.6	5000	488.2	3500
330620077S				X	6200	238.6	5000	488.2	3500
330620065S		. 1		X	6200	238.6	5000	488.2	3500
330620070S				Х	6200	238.6	5000	488.2	3500
330620073S				X	6200	238.6	5000	488.2	3500
330620144S				Х	6200	238.6	5000	488.2	3500
330620159S	· · · · · · · · · · · · · · · · · · ·			X	6200	238.6	5000	488.2	3500
330620172S		·		X	6200	238.6	5000	488.2	3500
330620174S				X	6200	238.6	5000	488.2	3500
330620180S				X	6200	238.6	5000	488.2	3500
330620175S				X	6200	238.6	5000	488.2	3500
330620179S				X	6200	238.6	5000	488.2	3500
330620173S				X	6200	238.6	5000	488.2	3500
330620165S		· · · · · · · · · · · · · · · · · · ·	-	X	6200	238.6	5000	488.2	3500
330620131S				X	6200	238.6	5000	488.2	3500
330620133S				X	6200	238.6	5000	488.2	3500
330620162S				$\frac{x}{x}$	6200	238.6	5000	488.2	3500
330620167S				X	6200	238.6	5000	488.2	3500
30620150S		 		X	6200	254	5200	477	3700
30620151S				$\frac{\lambda}{X}$	6200	254	5200	477	3700
330620136S		 		X	6200	238.6	5000	488.2	3500
330620168S				X	6200	254	5200	477	3700
4P52227TH		+		$\frac{X}{X}$	6200	260.9	5200	530.1	4400

TTACHMENT 20FZ

Model Year:

2004

Manufacturer Name: Mercury MerCruiser

Page:

Issued: 7/21/03 Revised: 12/9/04

Engine Family: 4M9XM06.2GME ROSI MARINE ENGINE SUPPLEMENTAL INFORMATION.

E.O.#: 1) - W - 001 - 0066-1

S11. MODEL SUMMARY (Use asterisk to identify worst-case engine model used for certification testing)

Model Designation	S13 Engine Code	S14 Sales Codes (Check all appropriate codes)		S15 Eng. Disp. (cc)	S16 Rated Power (kW)	S17 Rated Speed (RPM)	S18 Peak Torque	S19 Peak Torque	
		Calif. Only	49 State	50-State		(117)		(N-m)	Speed (RPM)
*MX 6.2 MPI Bravo				Х	6200	239	5200	488.2	3500
MX 6.2 MPI Bravo &				X	6200	239	5200	488.2	3500
MX 6.2 MPI Inboard &		_		Х	6200	239	5000	488.2	3500
MX 6.2 MPI Inboard				Х	6200	239	5000	488.2	3500
MX 6.2 MPI Black Scorpion				Х	6200	254	5200	488.2	3500
MX 6.2 MPI Tow Sport				Х	6200	239	5200	488.2	3500
				:					